



CENTRAL FLORIDA COMMUTER RAIL COMMISSION

Quarterly Update

May 31, 2018



Central Florida Commuter Rail Commission

Date: May 31, 2018
Time: 10:00 a.m.
Location: MetroPlan Orlando
250 S. Orange Avenue, Suite 200
Orlando, Florida 32801

PLEASE SILENCE CELL PHONES

- I. Call to Order and Pledge of Allegiance**
 - II. Confirmation of Quorum**
 - III. Announcements**
 - A. Commission Chairman – Commissioner Viviana Janer
 - B. SunRail Chief Executive Officer – Ms. Nicola Liquori
 - IV. Agenda Review**
 - V. Public Comments on Agenda Items**

Comments from the public will be heard pertaining to items on the agenda for this meeting. People wishing to speak must complete a “Speakers Introduction Card”. Each speaker is limited to two minutes. People wishing to speak on other items will be acknowledged under Agenda Item XI.
 - VI. Action Items**
 - A. Approval of Minutes from the March 29, 2018 meeting
 - VII. Reports**
 - A. SunRail Customer Advisory Committee – Ms. Karla Keeney
 - B. SunRail Technical Advisory Committee – Mr. James Harrison
 - i. Status of Proposed Amendments to Interlocal Agreements
 - C. Agency Update – Ms. Nicola Liquori
 - i. Southern Expansion Update
 - ii. PTC Status Update
 - D. Title VI Update – Ms. Sandra Gutierrez
-



Central Florida Commuter Rail Commission

VIII. Information Items

- A. Federal Transit Administration (FTA) Quarterly Progress Meeting Summary
- B. Federal Railroad Administration (FRA) PTC Quarterly Meeting Summary

IX. Discussion Item

- A. October Town Hall Meeting

X. Board Member Comments

XI. Public Comments (General)

Comments from the public will be heard pertaining to General Information on the agenda for this meeting. People wishing to speak must complete a "Speakers Introduction Card" at the reception desk. Each speaker is limited to two minutes.

XII. Next Meeting – August 30, 2018 10:00 a.m. MetroPlan Orlando

XIII. Adjournment

Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability or family status. Persons who require accommodations under the Americans with Disabilities Act or persons who require translation services (free of charge) should contact Mr. Roger Masten, FDOT Contracts Administrator, 801 SunRail Drive, Sanford, FL 32771, or by phone at 321-257-7161, or by email at roger.masten@dot.state.fl.us at least three business days prior to the event.

Central Florida Commuter Rail Commission Meeting

March 29, 2018

10:00 a.m.

MetroPlan Orlando

250 South Orange Avenue

Orlando, Florida 32801

Attendees: Chair Bob Dallari, Vice Chair Viviana Janer, Secretary Pat Patterson, Board Members Mayor Teresa Jacobs and Mayor Buddy Dyer

Minutes

Meeting was called to order by Chairman Bob Dallari at 10:02 a.m.	
Pledge of Allegiance and Confirmation of Quorum	
Commission Chair's Announcements	Bob Dallari
<ul style="list-style-type: none">The Chair stated that it has been a pleasure to serve as Chair the past year and looking forward to continuing as a Board member of the Central Florida Commuter Rail Commission.	
SunRail CEO Announcements	Nicola Liquori
<ul style="list-style-type: none">Ms. Liquori stated she had no announcements nor changes to the Agenda.She did point out the informational items included in the meeting materials: the FTA Quarterly Progress Meeting summary and the FRA / PTC Quarterly Meeting summary	
<ul style="list-style-type: none">The Chairman recognized Secretary Pat Patterson<ul style="list-style-type: none">Mr. Patterson stated that he had 2 Motions that he would like to have placed on the Agenda related to the proposed Amendments to the Interlocal Operating Agreement, Interlocal Funding Agreement, and Interlocal Governance Agreement.The Chair noted that without objection the Commissioner's items would be heard in Board Comments.Mr. Patterson expressed he would prefer the items be heard as Action items.The Chair stated the items could become Action items if Motions are made.	
Public Comments On Agenda Items:	
<ul style="list-style-type: none">David Bottomley stated that SunRail should have been running on Saturday March 24th for the "March for our Lives".<ul style="list-style-type: none">Discussion by Board members ensued with regard to funding for special service, competing events being held in the local jurisdictions, and the resources that were focused on safety surrounding the event.	
Action Items:	
<ul style="list-style-type: none">Adoption of meeting minutes from December 1, 2017. Motion to adopt minutes passed unanimously.Transition Consultant Selection:<ul style="list-style-type: none">Jim Harrison provided that an Interlocal Agreement has been discussed to hire a consultant to assist the CFCRC through the transition process with FDOT. The Agreement was approved by the participating local funding partners. The lead agency, Seminole County, issued a RFP for consultant services. Two firms responded to the RFP and the committee determined both were qualified and responsive. A committee comprised of representatives from the partners to the Interlocal Agreement: evaluated each firm based on qualifications, similar experiences, approach, and cost. The initial ordinal ranking resulted in a tie score between the firms. The committee's recommendation was to select one of the consultants as the selected consultant and one as the alternate. The lead agency	

together with the committee would begin negotiations with the selected consultant. Should negotiations fail, begin negotiations with the alternate consultant. As a final recommendation, the Chair of the CFCRC could be authorized to execute the final contract for terms that are consistent with the Interlocal Agreement.

- Discussion of the Board members ensued with regard to local preference due to the cost of travel and the scope of service.
- **Motion** was made for lead agency together with the committee negotiate with the selected firm. If negotiations failed, begin negotiations with the alternate firm. The Chair of the CFCRC is to be authorized to execute the final contract for terms that are consistent with the Interlocal Agreement. Motion was seconded.
- Under discussion, the Board member representing Volusia County noted they were not in favor of the process and would be voting against the Motion.
- The Chair called for the vote. The **Motion** passed with 4 in favor and 1 opposed.

Agenda Item: Customer Advisory Committee Update

Presenter: Karla Keeney

- Meeting held March 1, 2018
 - Ms. Keeney introduced herself as the new Chair of the CAC
 - At the meeting, the first order of business was election of officers:
 - Chair, Karla Keeney
 - Vice Chair, Liz Sturgeon
 - The Committee received a new member, Catherine Sterba, Orange County representative
 - Current membership consists of 2 Volusia County members, 1 Seminole County member, 1 Orange County member. The Committee should have 2 members from Orlando, 1 additional member from Seminole and Orange Counties
 - The Committee received public comments regarding Phase III service to the airport and the preliminary schedule for Phase II South
 - Ms. Liquori provided an Agency update to the Committee
 - The members requested a draft of the new service schedule be provided to the Committee prior to finalization in order for the members to review and make comments
 - The Committee made a recommendation to modify the service schedule to include holidays that fall during the week to serve those employees that do work on holidays; expand service for weekends and holidays; close the mid-day service gaps
 - Commissioner Patterson inquired as to whether the Committee has discussed the completion of SunRail to Volusia for their potential number of riders
 - Ms. Keeney responded the Committee has discussed that Phase
 - Commissioner Dallari provided the Board continues to support Phase II North per the original Agreement and works with FDOT to explore funding opportunities

• **Agenda Item:** Technical Advisory Committee Update

Presenter: Jim Harrison

- Meeting held March 7, 2018
 - The Committee received an Agency update from Ms. Liquori
 - The Committee discussed the Agreement and proposed amendments; the working group that has been meeting to review those documents; and the process pertaining to the selection of a transition consultant;
 - Discussion ensued regarding the status of the working group's review of the Agreement and proposed amendments, the attendance by Volusia County at the working group's meetings, and the allocation of costs should Phase II North not be completed.
 - Ms. Liquori was asked to provide information concerning the allocation of costs.
 - Ms. Liquori stated that in accordance with the Governance Agreement which FDOT is not a party to, the allocation of the system operating costs are allocated based on boarding share. There is a calculation that relates to track miles; however, that is tied to capital projects, as defined in the Agreements.
 - The Chair recognized Daniel Eckert, Volusia County Attorney. With respect to the capital allocation, the Commission is not relieved of the responsibility of the 11 miles track and the capital costs associated would be allocated among the five local partners.
 - Ms. Liquori was asked to provide clarification.
 - Ms. Liquori provided that the Interlocal Agreements are fairly clear as to what system revenues are, what system operating costs are, and what capital costs are.

In accordance with that Agreement, system operating costs are allocated based on boarding share. Therefore, should there not be a boarding share, there is no allocation. As outlined in the current Agreements, when the FDOT funding period ends, the entirety of the 61 miles can be conveyed.

Agenda Item: Agency Update

Presenter: Nicola Liquori

- Quarterly Highlights
 - Special Service
 - When requested, SunRail does run some special service. Since we last met we have run:
 - Camping World Stadium Bowl on Thursday, December 28th, a regular service day but modified the schedule to run a late train to accommodate the end-of-event.
 - The Commission asked for staff to look at running service for the Citrus Bowl on Monday, January 1st. Service was operated for that event.
 - Ms. Liquori spoke to a comment earlier in the meeting regarding the challenges having crews available for special services. At the time of these special services, SunRail was not involved in crew training and crew certification; however, from now until the opening of the Southern Expansion these opportunities will be more difficult to fulfill.
 - Honorary Conductor
 - On January 19th, James, was named an Honorary Conductor. This young man has Autism. His family reached out and shared how much enjoys riding SunRail. The Business Development and Marketing team created a program for him. What was learned, is there is a special connection with young men with Autism and trains: the rigidity of the schedules, the movement, the shape, and the size of the trains. Staff will be looking for other outreach opportunities within the Autism community.
 - Onboard Quiet Zones
 - As a follow-up to the Commission's meeting discussion on December 1st regarding the noise on the trains and the ability to hear the announcements that are being made, Ms. Liquori reported that certain areas of the trains are designated as "Quiet Zones". The zones are located in the mid-level near the Engineer and meant to be a quiet area with limited conversations.
 - Members suggested changing the name from Quiet Zones to perhaps Quiet Areas as Quiet Zones refers to areas of the track.
 - Onboard Statistics
 - Average ridership from December to February is approximately 3,400. Looking at the ridership for March, it appears it will be close to 3,800 daily riders. The Winter Park Art Festival was held during mid-March and on the Friday, there was ridership of 5,577
 - The on-time-performance for the period was 97% as always with a goal of 95% or better.
 - The boardings by station for July through February of the current Fiscal Year is consistent with prior years
 - Discussion ensued regarding total ridership consistently being 19% lower than anticipated and what is being done to increase ridership
 - Ms. Liquori noted that the DeBary Station is an exception to that. The Station is out-performing original projections. Staff continues to meet with employers along the corridor and provide what employee benefits can be offered, participate in on-boarding sessions, participate in informational sessions on transfers from rail to bus, and focus on Southern Expansion. The Southern Expansion is going to change the ridership and boarding shares not only in Osceola County but in Orange County and the City of Orlando. Survey results indicate with small changes to the operating schedule, there may be an opportunity to capture more riders at both Florida Hospital and Orlando Health.
 - Safety & Security
 - Outreach with law enforcement partners continuing to provide information that Engineers and staff may see along the corridor and provide feedback to their first responders. Staff attends the Community Traffic Safety Team meetings.

- Customer Service
 - Service disruptions occur occasionally and a subject brought forward by the Customer Advisory Committee. When the texting service began, the CAC provided feedback on the wording and terminology. While staff is dealing with the incident itself, we are also working with the customers on board the affected train, and making the information available to the balance of the travelling public.
 - A text alert survey was sent out to get feedback after some modifications proposed by the CAC were made.
 - 96% stated the text alerts were excellent or good
 - 92% stated the text alerts were useful when making travel decisions
 - 69% stated they would like to receive text information about Southern Expansion
 - 94% stated they would use a mobile app if available
 - Mobile App is anticipated to be rolling out soon. Additional testing is in process. The App will provide a user-friendly way to plan a trip, estimate fares, station information, amenities in and around the station, connecting bus information, and update account information.
- Finance
 - The system operating revenues and the grant funds associated with the system for Fiscal Year-to-Date (July 2017 through February 2018)
 - The system operating costs for the same period. Notable: Insurance premiums are paid one time a year and the actual reflects that full year allocation.
 - Discussion ensued regarding operating deficits that appear to be five-times more than projected and what is being done to adjust.
 - Ms. Liquori asked where the calculation of five-times more is coming from.
 - The Chair recognized Daniel Eckert, Volusia County Attorney. The number which it is being compared is the operating deficit that was in the original Agreement. This Fiscal Year was to be in the \$7 million range and it has increased to \$35/\$40 million this Fiscal Year.
 - Ms. Liquori stated that the clarification that needs to be made is gross versus net. Operating costs are offset by operating revenues such as farebox revenue usage fees and federal funding.
 - There was further discussion regarding the funds available to the Commission after transition and specifically the availability of the 5307 grant funds.
 - Ms. Liquori provided that the allocation of the 5307 funds is made to LYNX specifically because there is a Commuter Rail System and is designed to be used for preventative maintenance.
- Southern Expansion (formerly known as Phase II South)
 - Construction is almost 90% complete. Double tracking is fully operational and train traffic with tenant systems are running through the corridor. The balance of the construction activities is completing the stations and the Vehicle Storage and Light Maintenance (VSLM) facility.
 - Current work consists of: system integration testing; updating plans and procedures; etc.
 - Marketing. Events are being planned with the Osceola partners, City of Kissimmee, Tupperware, and others. Staff has been attending Chamber events and a full calendar of community events starting in May through the Opening around the end of July.
 - Staff is working with the local communities promoting safety and they are familiar with the changes with Commuter Rail service coming. As well as working with first responders to familiarize them with the equipment and operations.
- Business Development
 - Staff has been working with major employers, Tupperware, hospitals, OIA to establish new programs.
 - Reaching out to community of leisure riders providing information and promoting final destination connections.
 - All of the focus is on growing ridership – bridging the gap between the original projections and the potential for the system.
- Operating Schedule
 - The current schedule is 18-round trips and to ensure we maintain the peak period service we will converting to a 20-round trip schedule (40 train schedule). The first Southbound train will continue to begin at 5:00 am and the first Northbound train will begin at 5:45 am.

- Consistent feedback has been received regarding the Southbound mid-morning gap between 8:00 am and 10:00 am. The draft schedule will include a 9:00 am departure.
- Title VI Update
 - The Title VI Plan requires there is no discrimination based on race, color, or national origin. As a federal system, we are required to have a Plan and Policies in place.
 - Before opening Phase I, the Plan and Policies were required. The fare policy and service policy were established and adopted in 2014.
 - With the opening of Phase II South we are required to relook at the Plan for any changes.
 - The fare structure that was put in place is the same fare structure that exists today. There are currently 3 zones in operation. Once the Southern Expansion opens, the 4th zone will be implemented.
 - Our expanded service will eliminate LYNX route 208. Route 208 is a duplicative route that currently runs from the Sand Lake Station to the Kissimmee Intermodal Station. The train will now run that route. This requires the Plan to be documented and republished.
 - A presentation will be made at the May Commission meeting as well as the Technical Advisory Committee meeting. The Plan will be posted on SunRail.com for a thirty (30) day period to allow for public comment. Both the Committee and the Commission will be asked to acknowledge the change and FDOT will formally adopt.
- Positive Train Control (PTC)
 - SunRail is required to install PTC as federally mandated. Four milestones must be met by December 2018. Meeting those milestones allows for the full implementation by December 2020. These dates are achievable.
 - One of the milestones to be met by December 2018 is the acquisition of the radio frequency licensing needed for the communications system. The acquisition has been fully executed. Hardware and software must be installed. Installation of the hardware has begun on the locomotives.
 - Another milestone to be met is to have approximately 115 people trained.
 - Revenue Service Demonstration on a test territory is also a milestone to be met. A 15-mile test territory within Phase 1 has been selected. The territory has been approved by the FRA.
 - In January, staff went to Washington, D.C. and met with the Federal Railroad Administrator, Ron Batory. Information on the SunRail project, implementation plan, and time-lines were provided.
 - We meet with the FRA quarterly and provide written updates. The next meeting is in April.

Information Items:

- Federal Transit Administration (FTA) Quarterly Progress Report
- Federal Railroad Administration (FRA) PTC Quarterly Meeting Summary

Board Member Comments:

- Commissioner Janer reiterated the importance of the marketing effort focusing on constituency rather than large employers with generalized information such as where can they ride the train to. The Commissioner also expressed the importance of having fixed route bus service to the Tupperware and Poinciana Stations.
- Mayor Jacobs noted that Orange County will be hosting a health summit in the fall. Puerto Rico's Secretary of Health is scheduled to attend. The venue has not been formalized but the County is considering the Convention Center. She invited Commissioner Janer and Osceola to talk about the event together with their partners, LYNX and SunRail, to ensure Osceola residents have access to the event and mass transit to accommodate it.
- Commissioner Dallari noted after conversation with Ms. Liquori, he would recommend a Town Hall style meeting take place in the month of August.
 - Commissioner Janer expressed the meeting take place in either September or October providing riders an opportunity to experience the new Osceola Stations and schedule and bring questions to the Town Hall.

- There was no objection to moving the Town Hall meeting to September or October and requested a date and location be selected and given to the Commission at their next meeting.
- Commissioner Patterson brought forward two separate motions for consideration:
 - First, Volusia County moves that the Commission recognize that under Section 6.09 of the Operating Agreement changed circumstances made portions of the Agreement impractical and unenforceable against Volusia County. That Section 6.09, therefore, requires modification of the Agreement. That Phase II in Volusia will not proceed through construction and commissioning. That 6.02(b)(5) of the Operating Agreement, therefore, requires that FDOT and the Commission to renegotiate the Operating and Funding Agreements; and that the Commission approve Volusia's proposed Amendment to the Operating Agreement, forward it to FDOT for its approval, and forward it to other member local governments for their consent.
 - The Chair called for a Second to the Motion. Hearing none, the Motion died for lack of a Second.
 - Members asked to have the Motion reconsidered at the next meeting in order that all members would have the opportunity to review the Agreements for the Sections outlined in the Motion and to re-review the proposed Amendment.
 - Secondly, Volusia County moves that the Commission recognize that the FTA has not approved FDOT's entry into final design for Volusia County and that Phase II in Volusia County will not proceed through construction and commissioning. That Section 4.02(b) of the Funding Agreement, therefore, requires FDOT and the local government parties to renegotiate the Funding Agreement. That because Phase II will not occur in Volusia County, the Governance Agreement, therefore and likewise, should be renegotiated. That the Commission forward Volusia County's proposed Amendment to Funding Agreement to FDOT and the other member governments with a recommendation for approval and that the Commission forward Volusia County's proposed Amendment to the Governance Agreement to the other member local governments with a recommendation for approval.
 - The Chair called for a Second to the Motion. Hearing none, the Motion died for lack of a Second.
 - Discussion ensued regarding the consideration of Volusia's Amendments, the other local government partner's Amendments, and FDOT's Amendment being considered holistically; that the Technical Advisory Committee should have the opportunity to review all proposed Amendments; that the Technical Advisory Committee has been tasked with bringing back a recommendation to the Commission.

Public Comments:

- Joanne Counelis - requested weekend, holidays, and 24-hour train service
- Stephen Bacon, Commission DeBary Council, recommended SunRail expansion to Daytona Airport, the Race Track and the Beaches, St. Augustine, South Beach in Miami, on I-4 funded by the President's infrastructure program.
- Jeff Piggrem, MetroPlan Community Advisory Committee, asked for information on Phase III to OIA. MPO identifies the route as the number 1 transit priority for the region. Will the project qualify for the \$300 million Small Start Grant and will a public hearing on the project be scheduled?
 - The Chair recognized Ms. Liquori. Ms. Liquori provided that the project's estimated cost is \$250 million. The Grant criteria did change but the amount of \$300 million is correct. The cap for the grant would not be exceeded; however, there is language that an application cannot exceed \$100 million. Funding for the balance of the \$150 million has not been identified. Also, the Phase III to OIA project is not part of the 61-mile rail corridor and there is nothing that identifies what the state and local financial commitments would be. Those commitments must be identified prior to a grant submission.
 - Mayor Jacobs provided information regarding the efforts by Orange County, City of Orlando, Central Florida Expressway Authority, Orlando International Airport, and FDOT to look at a Public/Private Partnership. While this effort may have stalled, it remains a prime corridor for a partnership with the private sector. This Commission's core mission is to complete the corridor's northern section.

Action Items:

- Election of Officers. The Chair passed the gavel to Nicola Liquori to open the elections.
 - Commissioner Janer was nominated for the position of Chair. The nomination received a second. The nomination was approved with 4 in favor and Commissioner Patterson opposing.
 - Mayor Dyer was nominated for the position of Vice-Chair. The nomination received a second. The nomination was approved with 4 in favor and Commissioner Patterson opposing.
 - Commissioner Dallari was nominated for the position of Secretary. The nomination received a second. The nomination was approved with 4 in favor and Commissioner Patterson opposing.

Next Meeting: Thursday, May 31, 2018 @ 10:00 AM

MetroPlan Orlando

250 S. Orange Ave., Suite 200

Orlando, Florida 32801

Adjournment: Meeting adjourned at 12:08 p.m.

Central Florida Commuter Rail Transit Project

Phase 1 / Phase 2 South



QUARTERLY PROGRESS REPORT

January 1, 2018 – March 31, 2018



Florida Department of Transportation
District 5

TABLE OF CONTENTS

TABLE OF CONTENTS	ii
LIST OF ACRONYMS	v
PHASE 1 IOS PROJECT	7
1 FRA Coordination	7
1.1 Inspections and Violations.....	7
1.2 State Safety Oversight (SSO) Reportable Incidents	7
2 Project Administration.....	7
2.1 Ridership	7
3 Safety and Security	9
3.1 Open Items Hazards Assessments	9
4 Project Finance/Budget	11
4.1 Total Project Expenditures to Date (by SCC)	11
5 Environmental/NEPA.....	11
6 Before and After Study	11
PHASE 2 SOUTH PROJECT.....	12
7 Project Administration/Development.....	12
7.1 FTA Coordination	12
7.1.1 Management Plans for Testing and Revenue Service	12
7.1.2 Staffing	13
7.1.3 Disadvantage Business Enterprises (DBE) Participation	13
7.2 FRA Coordination.....	15
7.2.1 PTC Implementation Status.....	15
7.3 Amtrak/CSX Construction Coordination.....	16
7.4 Local Coordination	16
8 Safety and Security	17
8.1 Safety Certification	17
8.1.1 Hazard Analysis.....	17
8.1.2 Safety and Security Certification Activities.....	18
8.1.3 Threat and Vulnerability Analysis.....	21
8.1.4 First Responder Familiarization Training and Emergency Drills.....	21
8.1.5 System Integration Testing	22
8.2 Construction Incidents.....	24
9 Project Design	25

9.1	D/B Contract – Civil Corridor, Stations and Wayside Signals	25
10	Project Construction	25
10.1	Utility Relocation.....	25
10.2	Corridor/Trackwork.....	25
10.3	Structures	26
10.4	Stations.....	26
10.5	VSLMF	27
10.6	Wayside Signals.....	27
10.7	Fare Collection System	27
11	Project Schedule.....	28
12	Project Budget	29
12.1	Construction Cost.....	31
12.2	Supplemental Agreements (SA)	34
13	Risks	37
13.1	Top Ten Risks	37
14	Quality Assurance / Quality Control	40
14.1	QA Audits	40
14.2	Non-conformances.....	40
14.3	Buy America Field Verification	40
15	Environmental/NEPA.....	43
16	Community Outreach	43
16.1	Public Opening for Revenue Service	43
16.2	Safety Outreach Activities	43
17	ACTION ITEMS	44
18	UPCOMING MEETINGS	45

List of Tables

Table 1 – Phase 1 Open Items – Hazard Assessment ¹	10
Table 2 – Phase 2 South Project Staff Loading	14
Table 3 – Contractor Project Staff Loading	15
Table 4 – DBE Participation	15
Table 5 – Preliminary Hazard Analysis Summary, March 2018	17
Table 6 – Operating Hazard Analysis Summary, March 2018	18
Table 7 – Safety and Security Certification Activities, March 2018	19
Table 8 – Master Certifiable Items List, March 2018	20
Table 9 – Threat and Vulnerability Analysis Summary, March 2018	21
Table 10 – System Integration Testing Summary, March 2018	23
Table 11 – Middlesex/Herzog II JV Construction Incident Summary	24
Table 12 – Sources of Capital Funding & Expenditures, March 2018	29
Table 13 – Funding and Expenditures by SCC Code, March 2018	30
Table 14 – Construction Cost Summary, March 2018	32
Table 15 – Design Build Supplemental Agreement Log	34
Table 16 – Phased Cost Contingency	36
Table 17 – Top 10 Project Risks	37
Table 18 – Mitigation and Monitoring Deliverables	39
Table 19 – Tentative Audit Schedule	40
Table 20 – Audit Report & Findings	41

List of Attachments

Attachment A – Phase 1 Project Cost Summary by SCC Code
Attachment B1 – Phase 2 South Integrated Project Schedule (As-Built)
Attachment B2 – Phase 2 South Critical Path Schedule (As-Built)
Attachment C – Phase 2 South Environmental Mitigation Monitoring Plan

LIST OF ACRONYMS

AA.....	Alternatives Analysis
ADA.....	Americans with Disabilities Act of 1990
BFMP	Bus Fleet Management Plan
BOS.....	Back Office Server
CCC.....	Construction Conformance Checklist
CEI	Construction, Engineering and Inspection
CFCRC.....	Central Florida Commuter Rail Commission
CFCRT	Central Florida Commuter Rail Transit Project (the Project)
CFOMA	Central Florida Operating and Management Agreement
CFRC	Central Florida Rail Corridor
CIL.....	Certifiable Items List
CPAM.....	Construction Project Administration Manual
CRT	Commuter Rail Transit
CSXT.....	CSX Transportation
CWR.....	Continuous Welded Rail
DBB.....	Design-Bid-Build Contractor
DBE	Disadvantaged Business Enterprise
DBM	Design-Build-Maintain Contractor
DCC.....	Design Conformance Checklist
DHS.....	Department of Homeland Security
ERP.....	Emergency Response Plan
FCEN	Florida Central Railroad
FDOT	Florida Department of Transportation
FFGA.....	Full Funding Grant Agreement
FRA	Federal Railroad Administration
FTA.....	Federal Transit Administration
FTE.....	Full Time Equivalents
FY	Fiscal Year
ILA.....	Interlocal Agreement
IOS	Initial Operating Segment
KM.....	Kinder Morgan
MOU	Memorandum of Understanding
MOW	Maintenance of Way
MPI.....	Motive Power Inc.
MPO	Metropolitan Planning Organization
NEPA	National Environmental Policy Act
NTP	Notice to Proceed
OHA.....	Operational Hazard Analysis

PE.....	Preliminary Engineering
PHA.....	Preliminary Hazard Analysis
PMC	Project Management Consultant
PMOC	Project Management Oversight Contractor
PMP.....	Project Management Plan
PTC	Positive Train Control
QA	Quality Assurance
QAPP	Quality Assurance Program Plan
QA/QC.....	Quality Assurance/Quality Control
QC	Quality Control
RAP.....	Rail Activation Plan
RAMP	Real Estate Acquisition and Management Plan
RCMP.....	Risk and Contingency Management Plan
RFC.....	Released for Construction
RFMP	Rail Fleet Management Plan
RFP	Request for Proposal
ROW	Right-of-Way
RSD.....	Revenue Services Date
SA.....	Supplemental Agreement
SCC.....	Standard Cost Category
SCIL	Safety and Security Critical Item Lists
SEA	Supplemental Environmental Assessment
SFWMD.....	South Florida Water Management District
SHPO	State Historic Preservation Office
SITP	System Integration Testing Plan
SS.....	Small Starts
SSCC	Safety and Security Certification Committee
SSCP	Safety and Security Certification Plan
SSMP	Safety and Security Management Plan
TMOP	Transportation and Maintenance Operations Plan
TSP	Technical Special Provisions
TTX.....	Table Top Exercise
TVA	Threat and Vulnerability Assessment
TVU	Ticket Validator Unit
TVM.....	Ticket Vending Machine
VSMF	Vehicle Storage and Maintenance Facility
VSLMF	Vehicle Storage and Light Maintenance Facility
WO	Work Order
YOE.....	Year of Expenditure

PHASE 1 IOS PROJECT

1 FRA Coordination

1.1 Inspections and Violations

For the 1st Quarter of 2018, the CFRC participated in 33 FRA inspections, including Drug & Alcohol Testing Programs, Mechanical, Operating Practices and a four-day, multiple-inspector corridor review for Signal Systems. Twelve violations were assessed to the signal department by the FRA. Remediation for all cited violations occurred immediately or within 7 days of the inspection. All defects cited in each of the FRA inspections were corrected and written remedial action reports were provided to the FRA in keeping with the CFRC's internal practice.

1.2 State Safety Oversight (SSO) Reportable Incidents

A summary tracking log of the SunRail SSO reportables for this reporting period is provided below.

Day	Date			Time	MP	Type of Reportable	Location
1 st Quarter 2018							
Wed	1	17	2018	11:43	785.90	Suicide	Near S. New York Ave & Lyman Ave grade crossings (Winter Park)
Mon	3	5	2018	20:16	773.50	Trespasser Fatality	Near Country Club Rd grade crossing (Lake Mary)
Fri	3	16	2018	16:50	790.49	Grade Crossing	South St grade crossing (Orlando)

2 Project Administration

2.1 Ridership

- Average Daily Ridership by Month for the IOS is reported as follows (*excluding special service on January 1st and January 28th*):
 - January – 3,246
 - February – 3,553
 - March – 3,754
- Average Daily ADA Boardings by Month
 - January – 6
 - February – 8
 - March – 9

- Average Daily Bicycle Boardings by Month
 - *January – 137*
 - *February – 174*
 - *March – 163*
- Monthly Snapshot of Station Parking Utilization

Station	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>
DeBary	<i>45%</i>	<i>47%</i>	<i>48%</i>
Sanford	<i>16%</i>	<i>16%</i>	<i>17%</i>
Lake Mary	<i>34%</i>	<i>35%</i>	<i>37%</i>
Longwood	<i>21%</i>	<i>17%</i>	<i>18%</i>
Altamonte Springs	<i>13%</i>	<i>14%</i>	<i>13%</i>
Maitland	<i>61%</i>	<i>60%</i>	<i>62%</i>
Sand Lake Rd	<i>23%</i>	<i>24%</i>	<i>25%</i>

Note: Parking utilization is determined based on a physical observation of occupied parking spaces compared to total parking spaces during a weekday in the reporting month.

3 Safety and Security

3.1 Open Items Hazards Assessments

Permanent Mitigations Implementation Status: Table 1 provides an update of the permanent mitigation measures that were originally included as part of the completed SSCVR for Phase 1. A brief synopsis of these ongoing projects is provided below.

- Short Queuing Lengths and Traffic Signals:
 - Pedigo Pt.: Work is complete.
 - CR 427/Georgia Ave: Remaining work is to sod median separator.
 - Station St./Leonard St: Remaining work is the completion of handrail *which is currently being fabricated*.
 - CR 427/Palmetto Signal: *Contractor completed paving and cutting in the loops. Drilled shafts for mast arms have started. Coordination with Duke for placement of the mast arms is ongoing.*
 - CR 427/Leonard Signal: *Contractor completed paving and cutting in the loops. Drilled shafts for mast arms have started. Coordination with Duke for placement of the mast arms is ongoing.*
 - Anticipated completion for this work is *late May 2018*.
- Signal Crossing Upgrades: Final design is *complete*. Construction activities (*i.e., installation of foundations, gates*) are underway. Anticipated completion is 4th Quarter 2019.
- Fencing & Trespassing Abatement Measures: *Project status is as follows:*
 - FDOT and the City of Winter Park have agreed on vegetation around the Winter Park Station and sidewalk and fencing to be installed in specified areas extending south from New England Avenue to Fairbanks Avenue. *NTP was issued on February 5, 2018. Installation of the vegetation, sidewalk and fencing was completed by March. This work was funded utilizing the existing Winter Park earmark.*
 - *The Fencing and Sign Installation Contract was awarded to KMG Fence. The contract was executed and NTP was issued on January 5, 2018. Mobilization and survey work began in February and signage installation on the south end began in March. Work is anticipated to continue through 3rd Quarter 2018.*
- VSMF Track Shift and Noise Wall: *For details regarding the status of this project, refer to Section 6 of this report.*

Table 1 – Phase 1 Open Items – Hazard Assessment ¹

HA Item	Hazard Description	NTP Issued/ Anticipated Start Date	Anticipated Completion Date	Cost Estimate	Basis of Estimate or Contract	Notes
14	Crossing Surfaces/Panels/ Track Upgrades	1/2016	8/2017(A)	\$12,376,538	BTNA Contract Amendment	Former RFP #1; additional services by BTNA under O&M Contract; includes CEI services
2 4 5	Short Queuing Lengths - Pedigo Point - Georgia Ave - Leonard St	4/2017	5/2018	\$143,650	Middlesex- Herzog JV Contract	Former RFP #3; within P2S Corridor & Stations DB Contract
20	Traffic Signals - CR 427 at Palmetto Ave - CR 427 at Leonard St	4/2017	5/2018	\$668,628	Middlesex- Herzog JV Contract	Former RFP #3; within P2S Corridor & Stations DB Contract
11	Signal Crossing Upgrades	6/2017	12/2019	\$9,609,172	Herzog Contract Agreement	Former RFP #2; additional services by Herzog under Signal MOW Contract
12	<i>Fencing & Signage Installation</i>	1/2018	7/2018	\$252,021	KMG Fence Contract	1,000 ft/yr included in BTNA contract; total length of fencing est. 9,676 ft.
13	<i>VSMF Track Shift and Noise Wall</i>	1/2018	9/2019	\$5,757,000	Southland Construction Contract ²	Noise Wall with track shift included (contractor's price).
Grand Total:				\$28,807,009		

(A) Actual

Notes

1. FDOT submitted 4-23-2017 a draft Budget Revision #4 that includes the items listed above plus some additional Open Hazards (e.g. SJRB 140 ft of walkway). FTA responded with comments in November 2017. FDOT replied to FTA in December 2017.
2. Item 13 - The Design Build procurement documents for the VSMF Environmental Mitigation (1700' long x 22' high Noise Wall) will include a 2,000TF mainline track shift to make room for the wall, temporary works for construction and soft costs. There is approximately \$2.4 million remaining in FFGA line item SCC40.04 for Environmental Mitigation. Capital cost budget is currently \$7.0 million. Therefore, estimate may need \$7.0 – \$2.4 = \$4.6 million from remaining contingency.

4 Project Finance/Budget

4.1 Total Project Expenditures to Date (by SCC)

- Total project expenditures to date for Phase 1 as broken out by SCC code is summarized in **Attachment A**.

5 Environmental/NEPA

- VSMF Noise Wall Implementation:
 - *The Design Build contract was awarded to Southland Construction and executed on January 25, 2018. Construction NTP was issued February 19, 2018.*
 - *The DB Contractor is in the process of developing the required design, permits and documentation for submittal. Based on the accepted schedule, track work is anticipated to begin in mid-June and the project is expected to be completed in the Fall of 2019.*

6 Before and After Study

- *Ongoing coordination with FTA. The final Draft Before and After Report is scheduled to be submitted to the FTA by mid-April. With respect to ridership, FDOT completed ridership on-board surveys (OBS) with LYNX, Votran and SunRail and analysis was completed in March.*
- *FDOT has completed documentation for Transit Service Levels based on the SunRail O&M model.*

PHASE 2 SOUTH PROJECT

7 Project Administration/Development

7.1 FTA Coordination

7.1.1 Management Plans for Testing and Revenue Service

Provided below is a status of the various Management Plans currently in progress:

QAPP – FTA formally accepted the QAPP Rev. 16 for the Construction phase in a letter dated January 17, 2018. No update is anticipated for the Testing and PRO phase of the project.

RFMP – FTA formally accepted the RFMP Rev. 15 in a letter dated August 9, 2017. No update is anticipated for the Testing and PRO phase of the project.

TMOP – An updated TMOP Rev. 13 was submitted for review on August 4, 2017. Subsequently, additional comments from the PMOC were received September 7, 2017. TMOP Rev. 14 was submitted to the FTA/PMOC on January 12, 2018. *One comment will remain open until System Integration Testing is complete. Travel times will be confirmed during SIT and the plan will be revised, accordingly.*

SSMP – FTA formally accepted the SSMP Rev. 6 for the Construction phase in a letter dated August 9, 2017. SSMP Rev. 7 updated for Testing and PRO phase was provided to the FTA/PMOC on February 9, 2018. Subsequently, comments from the PMOC were received February 26, 2018. CFRC is in the process of evaluating the comments and a resubmittal is anticipated in April.

SSCP – FTA formally accepted the SSCP Rev. 3 in a letter dated December 21, 2017.

Risk Register – A March 2018 refresh of the Risk Register was completed and provided to the FTA/PMOC on April 9, 2018.

PMP – Rev. 3 of the PMP was submitted to the FTA/PMOC on March 30, 2018 in support of the PMOC's OP-54 documentation review. This update covers the Testing and PRO phase of the project. Revisions include but may not be limited to: organizational changes (staffing, organizational charts, and resumes); additional PHA transfer of responsibility language; verbiage to address the process for documenting billing for ECHO drawdowns; incorporates testing and PRO activities; and addresses the PMOC's comments from the previous submission.

SITP – The SITP Volume I (Management Approach) was submitted to the FTA/PMOC on October 31, 2017 for their review. The SITP Volume II (Test Plan Summary) was also issued to the FTA/PMOC on November 21, 2017. Comments from the PMOC were provided on both Volumes I and II on January 11, 2018. Volume I of the SITP Rev. 1 was resubmitted to the FTA/PMOC on February 16, 2018. Subsequently, the PMOC advised FDOT that all comments had been closed on Volume I on February 20, 2018. Volume II of the SITP, Rev. 2 was

submitted on March 30, 2018. Subsequently, the PMOC advised that all comments had been closed on Volume II on April 5, 2018.

RAP – In support of Pre-Revenue Operations for Phase 2 South, FDOT developed an original Rev. 0 that was provided to the FTA/PMOC on March 9, 2018. Shortly thereafter, the PMOC provided comments to FDOT on March 20, 2018. Appropriate changes were made and Rev. 1 of the RAP was resubmitted to the FTA/PMOC for their review on March 30, 2018.

7.1.2 Staffing

There are currently no open positions. CFRC/SunRail is fully staffed at this time.

CEI Inspectors – The CEI onsite inspection staff has been reduced to *nine* total inspectors: (4.5) civil/structural, (1) Information Technology Systems (ITS), (1) signal, and (2.5) track inspectors *by the end of 1st Quarter*. As construction *continues to wind down*, CEI inspection staff *will also be reduced*.

Planned and actual project staffing for management of the Phase 2 South Project is presented in Table 2. There were 43.75 FTEs contributing to the *1st Quarter of 2018*. This total includes not only FDOT staff but also the CFRC/SunRail Program Management Team, the Design Consultant, and the CEI.

The DB Contractor shows 275 FTEs contributing to the *1st Quarter of 2018* as presented in Table 3. It should be noted that this staff does not include any MOW personnel.

7.1.3 Disadvantage Business Enterprises (DBE) Participation

The D/B Contractor's (Middlesex-Herzog JV) current DBE commitments are 4.07%. A summary of the DBE participation by contract is presented in Table 4.

The team currently meets monthly to discuss status of DBE participation and potential opportunities; however, there are very few remaining opportunities to find new DBE firms on the project. The JV is continuing to track all their efforts to solicit DBE firms in a log. There have been small incremental increases in the JV's commitment to DBE participation.

Table 2 – Phase 2 South Project Staff Loading

Staffing Category	Full Time Equivalents (FTEs)																			
	Status	2014				2015				2016				2017				2018		
		1 st Qtr	2 nd Qtr	3 rd Qtr	4 th Qtr	1 st Qtr	2 nd Qtr	3 rd Qtr	4 th Qtr	1 st Qtr	2 nd Qtr	3 rd Qtr	4 th Qtr	1 st Qtr	2 nd Qtr	3 rd Qtr	4 th Qtr	1 st Qtr	2 nd Qtr	3 rd Qtr
Project Management	Planned	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	Actual	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		
Internal FDOT Resources*	Planned	2	2	2	2	3	3.5	3.5	3.5	3.5	2	2	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75
	Actual	1.5	1.5	2	3	3	3.5	3.5	3.5	3.5	2	2.75	2.75	2.75	2.75	2.75	2.75	2.75		
Design Consultant – AECOM Team	Planned	17.5	17.5	22	17.5	10	8	2	2	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
	Actual	20	22	24	21	7.5	6	0.25	0	0	0.5	1.5	2.5	2.5	2.5	2.5	2.5	2.5		
FDOT Project Controls*	Planned	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1
	Actual	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Public Involvement/Business Dev. & Marketing *	Planned	2	2	2	2	2	2	2.5	3	3	3.5	3.5	3.5	4	4	4	4	4	4	4
	Actual	2	2	2	2	2	2	2	1.5	1.5	2	2	3	3.5	4	4	4	4		
PMC (AECOM) Track / Systems / Structures / Utilities / Comms / Design	Planned	2.5	2.5	2.5	2.5	1.5	1.5	0.25	0.25	0.25	0.25	0.25	0.5	1	1	1	1	1	1	1
	Actual	2.5	2.5	2.5	2.5	1.5	1.5	0.5	0	0	0.25	0.25	0.5	0.5	1	1	1	1		
PMC (WSP) Rolling Stock/ Design QA	Planned	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
	Actual	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25		
PMC (HNTB) Comms / Systems Integration / Design QA / Procurement	Planned	0.5	0.5	0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Actual	0.5	0.5	0.5	1	1	1	0.5	1	1	1	1	1	1	1	1	1	1		
PMC (CTG) Operations Planning/Fare Collection	Planned	0.5	0.5	0.5	0.5	0.5	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
	Actual	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25		
FDOT Construction Office*	Planned	2	2	2	2	2	2	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
	Actual	1	1	1	2	2	2	2	2	2	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5		
CFRC Operations Office	Planned	1	1	1.5	2	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.5	2.5	2.5	2.5	2.5
	Actual	0.5	0.5	1.5	2	1.5	1.5	1.5	1.5	0.5	1.5	1.5	1.5	1.5	1.5	2.5	2.5	2.5		
CEI Consultant	Planned				2	4	2	2	6	10	18	20	22	26	26	26	26	23	16	2.5
	Actual				2	4	2	3	6	9	15	18	22	23	23	27	27	23		
Total FTEs per Quarter	Planned	33.5	47.5	52.5	51	45	33.25	21	25.5	29.75	36.75	38.75	41.75	46.75	45.75	46.75	46.75	43.75	36.75	23.25
	Actual	31.75	47.75	52.25	54.25	33.25	28.25	18	20.25	22	29.25	34	40.25	41.75	42.75	47.75	47.75	43.75		

*Note: These staffing categories are outside of the FFGA.

Table 3 – Contractor Project Staff Loading

Staffing Category	Full Time Equivalents (FTEs)										
	Status	2016			2017				2018		
		2 nd Qtr	3 rd Qtr	4 th Qtr	1 st Qtr	2 nd Qtr	3 rd Qtr	4 th Qtr	1 st Qtr	2 nd Qtr	3 rd Qtr
M/H II JV	Actual	70	220	315	300	300	300	325	275		

Table 4 – DBE Participation

Prime Contractors	Contract Type	FDOT Payments to Prime Contractors		Prime Contractor Payments to DBE Subcontractors		Cumulative % DBE Participation to Date
		Period	Cumulative	Period	Cumulative	
M/H II JV	DB*	\$9,449,720	\$148,490,783	\$1,751,447	\$5,015,157	3.38%
HNTB	CEI**	\$1,708,498	\$10,834,727	\$160,488	\$997,235	9.20%

* DBE payments to subs are approximately 30 days behind estimate due to reporting payments in EOC.

**Total CEI cumulative dollars was corrected to reflect TWO #1, TWO #6 and TWO #7.

7.2 FRA Coordination

7.2.1 PTC Implementation Status

Plans

- CFRC prepared a Request for Amendment (RFA) to the PTCIP and uploaded it to the SIR site on December 29, 2017. Received FRA approval for this RFA on March 30, 2018.
- A joint PTC Meeting with FRA is scheduled for April 11, 2018 in Pompano Beach with SFRTA.

Installation

The Implementation deadline for PTC allows an extension for full implementation to December 31, 2020 if the following criteria are met:

- Install all PTC hardware and acquires all spectrum necessary to implement its PTC system by December 31, 2018;
- Submit an alternative schedule and sequence providing for implementation of positive train control system as soon as practicable, but not later than December 31, 2020;
- Notify the Associate Administrator in writing that it is prepared for review of its alternative schedule and sequence under 49 U.S.C. 20157(a)(3)(B); and
- Receive FRA approval of its alternative schedule and sequence.

The CFRC is currently in the process of completing the installation of PTC hardware and expects to be complete by the end of the year. The spectrum necessary for implementation has already been acquired. The CFRC will meet the requirements for the extension, and the current project schedule indicates full implementation of PTC along the 61-mile corridor by December 2019.

7.3 Amtrak/CSX Construction Coordination

- Bi-weekly coordination meetings are ongoing with CSX and monthly with Amtrak to discuss the progress of the construction activities related to Phase 2 South.

7.4 Local Coordination

LYNX: A meeting occurred with LYNX and Osceola County to discuss adjustments to the feeder bus plan on February 28 and March 5, 2018. FDOT is in the process of developing an amendment to the existing Joint Participation Agreement (JPA) with LYNX to add the feeder bus service for Phase 2 South.

Central Florida Commuter Rail Commission (CFCRC) and Subcommittees:

- A Customer Advisory Committee (CAC) meeting occurred on March 1, 2018. The next meeting is tentatively set for May 3, 2018.
- A Technical Advisory Committee (TAC) Meeting was held on March 7, 2018. The next meeting is tentatively set for May 17, 2018.
- A Central Florida Commuter Rail Commission occurred on March 29, 2018. The next meeting is tentatively set for May 31, 2018.

Municipalities: A summary of the ongoing safety improvement projects by the local municipalities is provided below.

- Pleasant Hill Road Traffic Signal (Osceola County): Design plans were completed and submitted for review in late March. A work order was issued to the contractor to order materials and install the temporary signal. Anticipated completion is scheduled for late April.
- Neptune Road Traffic Study (City of Kissimmee): Due to a grade crossing field review held with FRA, FTA, PMOC, and FDOT/CFRC staff in December 2017, a consultant was hired by the City of Kissimmee to evaluate concerns regarding the vehicles queuing up onto the tracks at the Neptune Road grade crossing. The city's consultant is in the process of collection traffic counts with field verification to follow in April. Completion of the study is anticipated to occur by June 2018.
- Striping/RPM Installation Project at Grade Crossings (City of Kissimmee): City staff has implemented a striping and RPMs installation project at the Neptune Road and Clay Street grade crossings. This work is similar to the striping project that was implemented in downtown Orlando (Jefferson and Washington Streets in December 2016) in close coordination with the FRA. Since these improvements have proven to be effective in reducing the number of vehicle incursions onto the tracks, it was recommended that these improvements be considered at the two grade crossings in Kissimmee. Work is in progress and expected to be completed by late April.

8 Safety and Security

8.1 Safety Certification

8.1.1 Hazard Analysis


Preliminary Hazard Analysis

As presented in Table 5, 443 hazards, or approximately 99% are now closed. All the remaining pavement markings have been refreshed and closed out. An update to the PHA was issued on March 12th to the FTA, FRA and the PMOC.

The remaining open items are as follows:

- Queuing – Pleasant Hill Rd (late April completion) and Neptune Rd Traffic Study (ant. June completion)
- Crossing Surfaces – Landstreet Road and Pine Street (April completion)

Table 5 – Preliminary Hazard Analysis Summary, March 2018

	Preliminary Hazard Analysis (PHA) - Collision Hazard Analysis (CHA)								
	Central Florida Rail Corridor - Phase 2 South SunRail Commuter Rail Operations							Date: March 12, 2018	
Category	Queuing	MUTCD	Pedestrian Crossings	Crossing Surfaces	Key Down	Trespassing	VSLMF	Bridges	Total Items
Open Items	3	0	0	2	0	0	0	0	5
Closed Items	34	48	31	24	31	24	57	0	443
Close Pending	0	0	0	0	0	0	0	0	0
Item Totals	37	48	31	26	31	24	57	0	448
Category	Signal Design	Station Platforms	Platform Amenities	Parking Lots	Utility Yard	Drainage	Communications	Track	
Open Items	0	0	0	0	0	0	0	0	
Closed Items	66	29	37	23	2	2	26	9	
Close Pending	0	0	0	0	0	0	0	0	
Item Totals	66	29	37	23	2	2	26	9	

Operating Hazard Analysis



The OHA continues to be updated with the appropriate disciplines when hazards are identified. As presented in Table 6, the OHA has 42 open items. Open items are being tracked to closure. An update to the OHA is being prepared based on the PMOC's comments dated February 1, 2018. A resubmission to the PMOC is anticipated in April.

The status of open items is summarized as follows:

- VSLMF – Awaiting completion of environmental plans
- Station Amenities – SOP required for operation of trains *when second train malfunction occurs*.
- Training Programs – Local governments and O&M maintenance crews requiring familiarization training is scheduled to be completed by the end of April.

- O&M Procedures – Letter to be issued to Amtrak in April about loading of luggage to ensure awareness of increased train trips.
- Pedestrian Crossings – Two pedestrian crossing issues that have been identified:
 - Crestridge Grade Crossing – CFRC/SunRail staff is working with the local government to resolve the issue of children walking over the grade crossing to catch the bus on Old Tampa Highway. *Anticipated resolution in April.*
 - Pleasant Hill Grade Crossing – Children will now be crossing over the tracks to proceed to the adjacent school using the newly constructed sidewalk. Crossing Guards to be provided at this location. *Anticipated resolution in April.*
 - Park Street Grade Crossing – This item has been resolved. Osceola Schools verified that the bus *that was witnessed on a previous PMOC site visit was not on its proper route. It was confirmed, that no children will be walking over this grade crossing after being dropped off by the school bus.*
- Grade Crossings – Signal visibility issue was identified for approaching motor vehicle traffic at Oak Street. A new cantilever *was procured and installed on April 2nd.*
- Trespassing – The operational issues which are graffiti and public outreach have been transferred from the PHA to the OHA, resulting in 31 additional items. Public Outreach is ongoing and will continue well after revenue operation. *For graffiti, FDOT has scheduled the local governments to paint over graffiti on their roadway bridges in late May/early June timeframe.*

Table 6 – Operating Hazard Analysis Summary, *March 2018*

<div style="display: flex; align-items: center;">  <div> Operating Hazard Analysis (OHA) Central Florida Rail Corridor - Phase 2 South FDOT Commuter Rail </div> <div style="margin-left: auto; text-align: right;"> Date: March 31, 2018 </div> </div>								
Category	Signals	VSLMF	CFRC Dispatching Systems	Station Amenities & Platforms	Adjacent Structures	Training Programs	O&M Procedures	Total Items
Open Items	0	6	0	1	0	1	1	42
Closed Items	3	25	1	7	0	1	44	147
Other Items	0	0	0	0	0	0	0	0
Item Totals	3	31	1	8	0	2	45	189
Category	Bridges	Communication s	Track	Pedestrian Crossing	Grade Crossings	Trespassing		
Open Items	0	0	0	2	2	29		
Closed Items	13	9	41	1	0	2		
Other Items	0	0	0	0	0	0		
Item Totals	13	9	41	3	2	31		

8.1.2 Safety and Security Certification Activities

The Safety and Security Certification activities that are currently underway are summarized in Table 7 below.

Table 7 – Safety and Security Certification Activities, *March 2018*

<u>SunRail Phase 2 South Safety and Security Certification Activities</u>								
Updated as of March 2018								
Safety and Security Certification Tasks	Status	2017				2018		
		Q1	Q2	Q3	Q4	Q1	Q2	Q3
<u>Identify Certifiable Elements</u>								
SSCC Approval of Certifiable Elements List	Approved			Reviewed & Updated			Review & Update	
SSCC Approval of Certifiable Items Lists	Under Review							
<u>Develop and Complete Conformance Checklists</u>								
Submittal of Design Conformance Checklists (DCCs) to SSCC	Completed							
Submittal of Construction Conformance Checklists (CCCs) to SSCC	Completed							
Completed Construction Conformance Checklists (CCCs) Field Verification	In Progress							
<u>System Integration Testing</u>								
System Integration Testing	In Progress							
SIT Plan Approval by SITC	Completed						Completed	
SIT Plan Tests Results - Approval by SSCC	Scheduled						April Review	
<u>Drawing Reviews</u>								
Drawing Reviews	On-Going							
<u>Hazard Analysis & Threat and Vulnerability Assessment</u>								
Preliminary Hazard Analysis	In Progress					O&M Review CFRC Review		
SSCC Approval of Preliminary Hazard Analysis	Approved		Reviewed in April			March Review		
Operating Hazard Analysis	In Progress					O&M Review CFRC Review		
SSCC Approval of Operating Hazard Analysis	Approved		Reviewed in June		O&M Review	March Review		
Threat and Vulnerability Assessment	Approved					O&M Review CFRC Review		
SSCC Approval of Threat and Vulnerability Assessment	Approved		Reviewed in June		CEI Review	March Review PMOC Approved		
Manage Open Items	On-Going							
<u>Committees & Drills</u>								
Safety and Security Certification Committee	Held Weekly							
Fire Life Safety Committee (FLSC)	Activated					Held on 1/11 and 3/27 Osceola County Fire/Rescue (Feb) & Kissimmee Police & Fire Depts. (Mar)	Osceola County Fire O&M	
Familiarization Training	Activated			LFD: 8/11, 8/18, 8/25				
Drills	Activated					Table Top: 3/30 On-Scene: 4/19, 4/25, 5/6	Table Top: 4/5 On-Scene: 4/19, 4/25, 5/6	
<u>Public Outreach</u>								
Safety Public Outreach Coordination	On-Going							
Temporary Use Permits • Saturday, May 19 Poinciana Station • Thursday, June 14 Tupperware Station for Tupperware employees • Saturday, June 16 Tupperware Station • Saturday, June 23 Meadow Woods Station • Saturday, June 30 Kissimmee Station	Scheduled						Train Station Tours	
<u>Plans</u>								
Safety and Security Management Plan (SSMP)	Approved			Accepted 8/9		Received PMOC Comments (Feb)		
Safety and Security Certification Plan (SSCP)	Submitted		Received PMOC Comments (Aug)	Submitted Final 9/1	PMOC Rec. Approval (Sep) Accepted for Construction: 12/21			
Verify Operational Readiness (Hold Point Documents)	Scheduled					SIT Hold Points PRO Hold Point Submission by mid-May	Revenue Hold Point	
Safety and Security Certification Verification Report	Scheduled							

Master Certifiable Items List Progress

As of *March 2018*, the Phase 2 South Safety and Security Certification Committee (SSCC) approved the descriptions for all 2,755 Design Conformance Checklist (DCC) items or 100% complete. The SSCC approved the design verification for 2,748 of the DCC items. No additional design verifications have been approved since the last reporting period. Overall, final approval of the DCCs stands at 99.7% complete.

The SSCC approved all 2,951 certifiable item descriptions for the Construction Conformance Checklist (CCC) items or 100%. The verification process continues, as the items are reviewed, verified and tracked to closure. Open items from all cutovers are also being tracked to completion with the closures formally approved at the SSCC meetings. The SSCC approved the construction verification for 2,079 of the CCC items which is an increase of approximately 28.3% from the last reporting period. Overall, final approval of the CCCs stands at approximately 70.5% complete.

A summary of the detailed DCC and CCC progress is provided in Table 8 below.


Table 8 – Master Certifiable Items List, *March 2018*

SunRail Phase 2 South Master CIL DCC-CCC PROGRESS TABLE - March 26, 2018	Design Conformance Checklists Status									Construction Conformance Checklists Status								
	Description Approval SSCC			Final Design Verification CEI			Final Approval SSCC			Description Approval SSCC			Construction Verification CEI			Final Approval SSCC		
	Approved	Total	% Approved	Submitted	Total	% Submitted	DCCs Completed	Total Number of DCCs	DCC % Completed	Approved	Total	% Approved	Submitted	Total	% Submitted	CCCs Completed	Total Number of CCCs	CCC % Completed
TOTAL DCC & CCC ITEMS	2755	2755	100.0%	2748	2755	99.7%	2748	2755	99.7%	2951	2951	100.0%	2079	2951	70.5%	2079	2951	70.5%
1.0 ROLLING STOCK	106	106	100.0%	106	106	100.0%	106	106	100.0%	106	106	100.0%	102	106	96.2%	102	106	96.2%
2.0 SIGNALS	927	927	100.0%	927	927	100.0%	927	927	100.0%	1049	1049	100.0%	1049	1049	100.0%	1049	1049	100.0%
3.0 COMMUNICATIONS	322	322	100.0%	317	322	98.4%	317	322	98.4%	349	349	100.0%	161	349	46.1%	161	349	46.1%
4.0 FARE COLLECTION EQUIPMENT	8	8	100.0%	8	8	100.0%	8	8	100.0%	424	424	100.0%	0	424	0.0%	0	424	0.0%
5.0 TRACK AND STRUCTURES	662	662	100.0%	662	662	100.0%	662	662	100.0%	446	446	100.0%	366	446	82.1%	366	446	82.1%
6.0 STORAGE AND LAYOVER YARD (VSLMF)	84	84	100.0%	54	84	64.3%	54	84	64.3%	92	92	100.0%	0	92	0.0%	0	92	0.0%
7.0 STATION PLATFORMS (INCLUDING MINI-HIGHS)	196	196	100.0%	196	196	100.0%	196	196	100.0%	144	144	100.0%	116	144	80.6%	116	144	80.6%
8.0 STATION PLATFORMS STRUCTURES AND AMENITIES	172	172	100.0%	172	172	100.0%	172	172	100.0%	132	132	100.0%	120	132	90.9%	120	132	90.9%
9.0 STATION PARKING/PLAZA/STATION BOUNDARY	212	212	100.0%	212	212	100.0%	212	212	100.0%	172	172	100.0%	132	172	76.7%	143	172	83.1%
10.0 STATION UTILITY YARD	60	60	100.0%	60	60	100.0%	60	60	100.0%	48	48	100.0%	46	48	95.8%	48	48	100.0%
12.0 BUS SHELTERS (BUS STRUCTURES AND SIGNAGE PROVIDED BY LYNX)	6	6	100.0%	6	6	100.0%	6	6	100.0%	9	9	100.0%	0	9	0.0%	0	9	0.0%
TOTAL PLANS & PROGRAMS										0	54	0.0%	0	54	0.0%	0	54	0.0%
11.0 TEST PLAN										0	5	0.0%	0	5	0.0%	0	5	0.0%
13.0 FRA PLANS AND PROGRAMS										0	18	0.0%	0	18	0.0%	0	18	0.0%
14.0 OPERATING AND MAINTENANCE PROGRAM										0	31	0.0%	0	31	0.0%	0	31	0.0%
TOTAL PROJECT PROGRESS	2755	2755	100.0%	2748	2755	99.7%	2748	2755	99.7%	2951	3005	98.2%	2079	3005	69.2%	2079	3005	69.2%

8.1.3 Threat and Vulnerability Analysis

The Threat and Vulnerability Analysis (TVA) was issued to the PMOC for review on March 13, 2018. Subsequently, the PMOC closed out and provided acceptance on March 16, 2018. The previously remaining open items were all mitigated through procedures. As presented in Table 9, all items have been closed.

Table 9 – Threat and Vulnerability Analysis Summary, March 2018

	Threat and Vulnerability Analysis - Open Items List								
	CFRC- Central Florida Rail Corridor FDOT Commuter Rail						Date: March 12, 2018		
Category	Signals	Communications	TVMs	Track & Structures	VSLMF	Station Platforms	Platform Amenities	Station Parking Lots	Total Items
Open Items	0	0	0	0	0	0	0	0	0
Closed Items	9	7	4	8	5	18	4	11	75
Item Totals	9	7	4	8	5	18	4	11	75
Category	Utility Yard	Drainage Pond	O&M Program						
Open Items	0	0	0						
Closed Items	5	1	3						
Item Totals	5	1	3						

8.1.4 First Responder Familiarization Training and Emergency Drills

First Responder Familiarization

Emergency responders through the four-county area were invited to attend hands-on Equipment Familiarization Training sessions at the VSMF, at which time the Phase 2 South service was emphasized. Invitations were extended at trespass meetings with police departments and repeated at each county's Community Traffic Safety Team (CTST) monthly meeting, at all events for first responders, such as the Amtrak Railsafe™ Workshop in January 2018, and whenever the CFRC/SunRail COO meets with community stakeholders, such as LYNX, Amtrak or the local funding partners. Familiarization of CFRC/SunRail infrastructure, including right-of way, VSMF, VSLMF, rolling stock, and existing and new SunRail stations is integral to ensuring a successful response by emergency responders during an incident.

The following familiarization sessions as shown below have been conducted and will continue in the coming months, as needed.

SunRail Southern Expansion - Fire Life Safety Committee Meetings & Familiarization Training		
Date(s)	Purpose	Location
10/19/2016	SunRail Phase 2 South Roll out and Safety Seminar	Osceola County Emergency Operations Center 2586 Partin Settlement Road, Kissimmee, Florida 34744
3/30/2017	Familiarization Training with Orange County Special Operations	SunRail Operations Control Center 801 SunRail Drive, Sanford, Florida 32771
12/9/2017	Kissimmee Christmas Parade Law Enforcement Job Briefing	Kissimmee Police Department 8 N. Stewart Avenue, Kissimmee, Florida 34741
1/11/2018	Fire Life Safety Committee Meeting SunRail Phase 2 South	Osceola County Emergency Operations Center 2586 Partin Settlement Road, Kissimmee, Florida 34744
2/19/2018 - 2/23/2018 & 2/26/2018 (two sessions daily)	Familiarization Training with Osceola County Fire/Rescue Department	SunRail Operations Control Center 801 SunRail Drive, Sanford, Florida 32771
3/27/2018	Familiarization Training with Kissimmee Police & Fire Departments	SunRail Operations Control Center 801 SunRail Drive, Sanford, Florida 32771

Emergency Drills

In addition to the familiarization training, exercises and drills have been scheduled with the emergency responders in preparation for the start of revenue service. This includes both discussion-based (tabletop) drills and operations-based drills (on-scene exercises).

Type of Exercise	Safety & Security Hazard Addressed
Internal Tabletop	Active Shooter – completed March 29, 2018
External Tabletop	Suspicious Package/IED – completed April 5, 2018
External On-Scene Drill	Engine Fire with Train Evacuation at the VSLMF – April 19, 2018
External On-Scene Drill	ECB Activation at Stations – ant. April 25, 2018
External On-Scene Drill	Emergency Evacuation of VSLMF Crew Building – ant. May 6, 2018

8.1.5 System Integration Testing

The System Integration and Testing Committee (SITC) holds regular bi-weekly meetings. The SITP has been divided into three volumes:

Volume I – Management Approach

Volume I of the System Integration Test Plan (SITP) was submitted to the PMOC on October 31, 2017 to obtain initial feedback prior to formal approval by the SSCC. PMOC comments were received on January 11, 2018. The DB Contractor has continued to refine its schedule, which has allowed Project Integration Schedule to become more refined with respect to execution of integration tests. With substantial completion of Volume I, the SITC has focused efforts on honing the placement of integration tests within that test schedule so that it can be incorporated into Volume II. Furthermore, each significant craft (Track, Signal, and Stations) was tasked with refreshing detailed test procedures of the individual test plans. *Rev. 1 of SITP, Volume I incorporating the PMOC's comments, was submitted on February 16, 2018. Closure to those items were received from the PMOC on February 20, 2018.*

Volume II – Test Plan

Volume II was submitted to the FTA/ PMOC on November 21, 2017, to obtain initial feedback prior to formal approval by the SSCC. PMOC comments were received January 11, 2018. *Following acceptance by the PMOC of the individual test procedures, Volume III, Rev. 2 was revised and resubmitted to the FTA/PMOC on March 30, 2018. Closure and acceptance by the PMOC was received on April 5, 2018.*

Volume III – Test Execution and Reporting

Volume III test procedures were previously submitted to the SITC and were used to populate the Volume II summary sheets. Volume III test procedures were submitted individually to the PMOC and all 14 procedures were accepted by the PMOC during February/March 2018. Individual test procedure review status is presented in Table 10.

Table 10 – System Integration Testing Summary, March 2018

Test ID No.	Test Name	Submittal Date	PMOC Review Status
SI-001	Track Alignment Clearance	09 MAR 2018	Closed
SI-002	Signal Visibility Verification	12 FEB 2018	Closed
SI-003	Vehicle Shunt and Interlocking	14 FEB 2018	Closed
SI-004	Crossings Integration	13 FEB 2018	Closed
SI-005	SCADA/Station Systems Integration	01 MAR 2018	Closed
SI-006	Two-Way Radio	12 FEB 2018	Closed
SI-007	Vehicle Track Interaction	20 MAR 2018	Closed
SI-008	Safe Braking	09 MAR 2018	Closed
SI-009	Dynamic Noise	01 MAR 2018	Closed
SI-010	Ride Quality	19 MAR 2018	Closed
SI-011	Headway Verification	19 FEB 2018	Closed
SI-012	Travel Time	26 FEB 2018	Closed
SI-013	OCC/CP Integration	12 FEB 2018	Closed
SI-014	PA/VMS Integration	12 FEB 2018	Closed

All test procedures were presented and formally approved by the System Integration Test Committee in March. Testing is anticipated to begin the last week of March and continue through April.

As the project continues to evolve, the SITP will continue to be refined as it is a living document.

8.2 Construction Incidents

Table 11 – Middlesex/Herzog II JV Construction Incident Summary

Event	Dec 2017 – Feb 2018	Cumulative Project to Date
Hours Worked*	208,913	733,924
First-Aid Cases	1	10
Medical Cases	0	18
FRA Reportable Cases	0	18
OSHA Recordable Cases	0	18
Lost Time Cases	0	3
Lost Time Days*	0	52
Property Damage Claims (\$1,500.00)	2	21
Incident Investigation Report	4	129
Utility Hits	0	31
Vehicular Accidents	1	15

Employee Injury:

- On 12/03/2017 at approximately 1:30 PM an employee sprained his ankle while exiting on-track equipment. The incident occurred at MP 808.0. Employee was examined and released, no prescription provided. (Not Reportable, No Lost Time)

Property Damage:

- On 2/21/2018 at approximately 8:06 AM a northbound SunRail train struck the inter-track fence at Meadow Woods Station. One panel of the fence had become dislodged and was fouling the track.
- On 2/23/2018 at approximately 9:00 AM a third party being pursued by Police drove a pickup truck through the ROW fence. The truck drove down the tracks a short distance before becoming stuck.

Vehicle Accident:

- On 2/6/2018 at approximately 3:50 PM the operator of a loader struck a pickup truck. A spotter was being utilized but positioned the loader close to the parked pickup and when the operator pivoted the loader it struck the vehicle.

9 Project Design

9.1 D/B Contract – Civil Corridor, Stations and Wayside Signals

All plans have been Released for Construction except for the VSLMF TSP's. A comment resolution meeting was held and resubmittal issued on March 18, 2018. The Contractor is working on plan revisions as required.

Summary of design status is as follows:

Design – Percent Complete	
Earthwork RFC'd	100%
Drainage RFC'd	100%
Structures RFC'd	100%
Roadway (RFC'd)	100%
Track (RFC'd)	100%
Fiber Optic Backbone (RFC'd)	100%
Signals (RFC'd)	100%
VSLMF (RFC'd)	98%

10 Project Construction

10.1 Utility Relocation

The JV continues to coordinate with utility providers as utility conflicts are identified for the ongoing construction work within the CFRC limits of *Phase 2 South*. *Coordination meetings are held, as needed, to resolve any potential conflicts. Currently, we are working with KUA to relocate a utility pole at the Magnolia Ave. grade crossing for improved signal visibility.*

10.2 Corridor/Trackwork

- Final test trains were completed to get track up to speed over the new east Shingle Creek bridge.
- JV worked on welds from the track shift at Sand Lake Road to mitigate crashwall.
- Contractor *worked* on completing ped crossings at the stations.
- Intertrack and R/W fence installation *completed*.
- Contractor *completed* the final pipe 5 liners for the crossdrains – 2 partial and 3 full length.
- Reworking the swales between Ruby and Beaumont.
- *Monument Ave grade Crossing Work was completed.*
- *Contractor completed swale right of track opposite of the VSLMF.*
- Completed grade work east and west of tracks for the sidewalk connection from Poinciana Blvd. to the station.

- Contractor is working on worklist for both track and drainage in all zones.

10.3 Structures

Shingle Creek Bridge

- Working on worklist items.

Box Culvert at 805.9

- Working on worklist items.

Boggy Creek Bridge

- Working on worklist items.

10.4 Stations

Meadow Woods Station

- Performed grounding work for the parking lot lighting.
- Continued to work on irrigation and landscaping at the site.
- Installed the Meadow Woods art in transit.
- *Performed pavement repairs to parking lots.*
- *Working on worklist items.*

Tupperware Station

- *Completed* lighting installation throughout the site.
- Completed tie into TOHO water and reclaimed line.
- Completing the guardrail installations around the platform.
- Corrected the top ball of the art in transit flag poles.
- Completed installation of the station wayfinding signs, except for the entrance sign.
- Completed installation of the benches and waste receptacles.
- *Completed sidewalk pouring.*
- *Working on worklist items.*

Kissimmee Station

- Installing VMS displays and testing.
- Placing the finish coat on left of track platform canopy and intermediate coat on right of track canopy.
- Continued to pour sidewalk for connections from the platform to parking lot and Neptune.
- *Working on worklist items.*

Poinciana Station

- Continued to work on Poinciana Blvd. turn lanes and South Rail Avenue.
- Installed joint in the bus loop concrete pavement.
- Painted bollards.
- Installed skateboard deterrent clips on seatwalls.
- *Working on worklist items.*

Stations Communications

- *Completed installation of station communications and initial testing.*
- TVM/TVU installation has been completed.

10.5 VSLMF

- Grading swales along the south side of the site.
- *Completed installation of limerock for service road and performed paving.*
- *Completed curb installation.*
- *Completed lighting installation.*
- *Completed air and water stations for site.*
- Tied in the water line to TOHO line at Poinciana Blvd.
- *Completed trackwork except for derails, bumper posts and worklist items on switches.*
- *Fencing installation on-going.*
- *Fire Marshal inspection passed.*
- *Generator testing completed.*

10.6 Wayside Signals

- The Contractor is currently working on “As-In Service Drawings” and work list items throughout the corridor.

Construction – Percent Complete	
Trackwork	99%
Fiber Trunk Line	100%
Structures	99%
Meadow Woods Station	98%
Tupperware Station	98%
Kissimmee Station	98%
Poinciana Station	98%
VSLMF	93%
Wayside Signals	99%

10.7 Fare Collection System

- *Conduent has completed installation of the TVMs and TVUs at the Phase 2 South stations. All equipment has been wrapped and a QC check is in progress. Testing is underway.*
- For the Phase 1 equipment, maintenance releases are ongoing and continue to be deployed *with the next expected in April*. These releases include functionality for LYNX’s usage of the Conduent system. *The current maintenance contract includes the Phase 2 South equipment and goes through 2019.*
- FDOT is *continuing to work* with a vendor to develop a SunRail mobile application that offers the functionality available on the current SunRail website via a mobile device. *The app development and testing has been completed. The roll-out of the mobile application to the public is expected in the second quarter.*
- FDOT continues to monitor progress with weekly progress reports and weekly management updates.

11 Project Schedule

The Contractor's Schedule Update #20 (with a data date of *January 21, 2018*) was submitted and reviewed by the Department *but was not accepted*. The Contractor's Ready for Revenue Service date is *May 22, 2018* as presented in Update #20. However, it is our opinion that the Contractor's Ready for Revenue Service date is inaccurate.

Per the Contractor's schedule, the critical path now runs through South Rail Avenue at the Poinciana Station. The Contractor did not consistently change durations at the Tupperware and Poinciana Station resulting in South Rail Avenue showing as being critical. If the durations were changed consistently, the Tupperware Station would continue to remain critical. As a result, the schedule was rejected. The VSLMF and other station sites are near critical.

The As-Built CPM Integrated Schedule was revised on April 9, 2018. The As-Built CPM Integrated Schedule is showing a CFRC Ready for Revenue Service date of July 5, 2018. System Integration and Testing is the critical path leading to OP-54 review and approval. The team is focused on achieving the delivery dates to ensure Revenue Service begins on July 30, 2018, as previously discussed with the FTA and the PMOC.

The As-Built CPM Integrated Schedule (with a data date of 4/9/18) and the Critical Path Schedule is included as **Attachment B1 and B2**, respectively.

12 Project Budget

Table 12 – Sources of Capital Funding & Expenditures, March 2018

Sources of Capital Funding	Agreement Number	Total	Expended to Date	Percent Fund Source Expended to Date ⁵	Remaining	Federal Reimbursement to Date ²
Full Funding Grant Agreement	FL-03-0344-00	\$93,434,665	\$78,138,977.74	83.63%	\$15,295,687	\$49,706,221
Local Funds	Local - Agreement	\$43,400,000	\$35,752,157	83.63%	\$7,647,843	N/A
STTF	State - Contribution above Interlocal Agreement	\$6,634,665	\$6,634,665		\$0	N/A
STTF	State - Agreement STTF	\$43,400,000	\$35,752,157		\$7,647,843	N/A
Sub-Total	FFGA Amount	\$186,869,329	\$156,277,955	83.63%	\$30,591,374	
STTF	State - Contribution to Bid Overage ^{1,2,3}	\$42,942,248	\$42,437,298	98.82%	\$504,950	N/A
STTF	Additional 5% un-allocated contingency to Bid Overage ⁴	\$2,147,112	\$0	0.00%	\$2,147,112	N/A
TOTAL PROJECT COST		\$231,958,689	\$198,715,254	85.67%	\$33,243,436	\$49,706,221

STTF: State Transportation Trust Fund

Notes:

1. FDOT carries an additional standard 8% contingency on the entire project budget for Construction (8% of \$146M)
2. Federal Reimbursement to Date as of August 31, 2017.
3. State contribution in Table 11 reduced by \$987,122 for FFGA Project Funding (FTA & FDOT). The JV actual pricing for Non-Phase 2 South FFGA Funded Work in Table 12 below increased by \$987,122. This resulting in a reduction in P2S JV YOY FFGA budget items in Table 13 below. The change is from previous budget item of \$43,929,369 to \$42,942,248.
4. In March 2017 MPR Budget Tables were modified to show an increase in the State contribution to Bid Overage of 5% for additional Un-allocated contingency of 5% x \$42,942,248 = \$2,147,112. This results in an increase to the Total Project Cost budget = \$231,958,689.
5. Adjustment to column "Percent Fund Source Expended to Date" to match 50/50 for FFGA amount.
6. FDOT Drawdown = \$32,228,104 completed in December 2017.

Table 13 – Funding and Expenditures by SCC Code, *March 2018*

SCC Code	Description	BUDGET FUNDING SOURCE		BUDGET ALLOCATION		YOE FFGA + FDOT Budget	Total Expended to Date	YOE Estimate at Completion
		Baseline Budget SCC Workbook dated 4/22/15	P2S JV YOE FDOT Funding	P2S JV YOE FFGA Budget Items	Other FFGA Line Items			
10	Guideway & Track Elements	\$29,286,985	\$9,531,684	\$35,822,284		\$38,818,669	\$38,736,356	\$38,818,669
	Long Lead Materials: Supply/Delivery Ties				\$1,350,260			
	Long Lead Materials: Supply/Delivery Rail				\$1,646,126			
20	Stations, Stops, Terminals, Intermodal	\$8,799,563	\$5,038,231	\$13,837,794	\$0	\$13,837,794	\$13,621,827	\$13,837,794
30	Support Facilities, Yards, Shops, & Admin Bldgs.	\$3,877,885	\$2,033,171	\$5,911,056	\$0	\$5,911,056	\$5,598,124	\$5,911,056
40	Sitework & Special Conditions	\$29,324,128	\$13,901,050	\$39,199,157	\$4,026,021	\$43,225,178	\$38,376,044	\$43,225,178
50	Systems	\$34,527,265	\$592,223	\$33,255,497		\$35,119,488	\$32,981,388	\$35,119,488
	SCC 50.06 Fare Collection System Contract				\$1,417,899			
	SCC 50.06 Fare Collection System remaining budget				\$446,092			
60	ROW, Land, Existing Improvements	\$11,714,049	\$0	\$0	\$11,714,049	\$11,714,049	\$11,752,225	\$11,714,049
70	Vehicles Total	\$15,999,164	\$0	\$0		\$15,999,164		\$15,999,164
	- Locomotive Procurement				\$4,826,156		\$4,826,156	
	- Coach & Cab Car Procurement				\$10,442,532		\$10,422,141	
	- Vehicles remaining budget				\$730,476			
80	Professional Services	\$26,993,366	\$11,845,889	\$14,407,500	\$24,431,755	\$38,839,255	\$38,624,275	\$38,839,255
90	Unallocated Contingency ⁵	\$25,362,781	\$2,147,112	\$3,220,781	\$24,289,112	\$27,509,893	\$3,776,717	\$3,220,781
100	Finance Charges	\$984,143	\$0	\$0	\$984,143	\$984,143	\$0	\$984,143
	Total Project Cost	\$186,869,329	\$45,089,360	\$145,654,069	\$86,304,621	\$231,958,689	\$198,715,254	\$207,669,577
		\$231,958,689		\$231,958,690				

Notes:

1. FFGA YOE total Contingency = allocated + unallocated contingency = \$25,362,781 + \$6,298,992 = \$31,661,773
2. Remaining Contingency at Project Milestone: D/B Construction Contract NTPs = \$22,144 k. Therefore, Market Risk = \$9,517 k
3. The JV actual pricing for Non-Phase 2 South FFGA Funded Work in Table 13 below increased by \$987,122. This resulting in a reduction in P2S JV YOE FFGA budget items in Table 12 to \$229,811,577. Previously was \$230,798,698.
4. In March 2017 MPR Budget Tables were modified to show an increase in the State contribution to Bid Overage of 5% for additional Un-allocated contingency of 5% x \$42,942,248 = \$2,147,112. This results in an increase to the Total Project Cost budget = \$231,958,689
5. Revised YOE "At Completion" SCC90 to be \$3,220,781 covering a portion of JV FFGA SCC 40.
6. SCC90 Total Expended to date includes inside FFGA Change Orders shown in Table 14.

12.1 Construction Cost

A total of \$144,191,972 for contract work *for scope* inside the FFGA has been paid to the DB Contractor which is based on Pay Estimate #24 (*March 2018*). These payments reflect invoices paid for design, mobilization, stockpiled materials, and construction. This payment total includes the reduction for the \$987,122 increase in non-FFGA funded work.

The total Phase 2 South FFGA Scope Contract Value is \$147,801,180 including \$2,147,112 contingency *and funded change orders*. It should be noted that the CEI weekly contract summary includes an additional \$150,000 of contingency funding that can be authorized as needed and the \$5,194,455 for out of scope (non FFGA funded) work paid by FDOT/Local Stakeholders. This reflects the \$987,122 increase in non FFGA funded work (\$4,207,333 + \$987,122). Therefore, the current total JV contract budget (FFGA + non FFGA) is \$153,654,630.

Table 14 – Construction Cost Summary, *March 2018*

Phase 2 South FFGA Funded Work 423446-9-52-01 and 423446-9-52-02				
SCC Code		P2S JV YOЕ FFGA Budget Items	Expended Total To-Date	Remaining
10	Guideway & Track Elements	\$26,290,600	\$26,230,188	\$60,412
20	Stations, Stops, Terminals, Intermodal	\$8,799,563	\$8,662,228	\$137,335
30	Support Facilities, Yards, Shops, & Admin Bldgs.	\$3,877,885	\$3,672,589	\$205,296
40	Sitework & Special Conditions	\$25,298,107	\$24,766,892	\$531,215
50	Systems	\$32,663,274	\$32,394,047	\$269,227
80	Professional Services (Note 1)	\$2,561,610	\$2,252,012	\$309,598
90	Unallocated Contingency	\$3,220,781	\$3,220,781	\$0
	Total Phase 2 South FFGA	\$102,711,820	\$101,198,737	\$1,513,083

Phase 2 South FFGA Funded Work 423446-9-52-01 and 423446-9-52-02				
90	Unallocated Contingency (Note 2)	\$658,995	\$555,936	\$103,059

Notes

- 1 SCC80 budget for JV includes funding from SCC line items for Survey, Start-up, Design
- 2 Inside FFGA Change Orders drawn down against SCC 90 in Table 13

Phase 2 South FDOT Funded Work				
SCC Code		P2S JV YOЕ FDOT Funding	Expended Total To-Date	Remaining
10	Guideway & Track Elements	\$9,531,684	\$9,509,782	\$21,902
20	Stations, Stops, Terminals, Intermodal	\$5,038,231	\$4,959,599	\$78,632
30	Support Facilities, Yards, Shops, & Admin Bldgs.	\$2,033,171	\$1,925,535	\$107,636
40	Sitework & Special Conditions	\$13,901,050	\$13,609,153	\$291,897
50	Systems	\$592,223	\$587,341	\$4,881
80	Professional Services	\$11,845,889	\$11,845,889	\$0
90	Unallocated Contingency (5% x \$42,942,248)	\$2,147,112	\$0	\$2,147,112
	Total Phase 2 South FFGA	\$45,089,360	\$42,437,298	\$2,652,062

	TOTAL P2S FFGA + FDOT Contract²	\$148,460,175	\$144,191,972	\$4,268,203
--	---	----------------------	----------------------	--------------------

Phase 2 South FDOT/Local Stakeholder Funded Work (non FFGA Work)			
Project	Current Amount (note 1)	Total Paid To-Date	Remaining
Total for Projects funded outside FFGA	\$5,194,455	\$4,228,147	\$966,308
Total Contract E5W96³	\$153,654,630	\$148,420,118	\$5,234,511

Notes:

1. Non FFGA funded work has increased by a total of \$987,122 due to JV actual pricing for original 6 non FFGA work line items.
2. In March 2017 MPR Budget Tables were modified to show an increase in the State contribution to Bid Overage of 5% for additional Un-allocated contingency of $5\% \times \$42,942,248 = \$2,147,112$. This resulted in an increase in the E5W96 construction contract Phase 2 South FFGA + State funded work to \$147,801,180 (was \$145,654,067).
Note executed SA#3 and #4 are not included in above JV budget totals. FFGA funded change orders = \$658,995 increased the FFGA + State funded work to \$148,460,175 for in scope FFGA work.
3. *Total JV Contract budget amount (FFGA + additional FDOT Funded FFGA + non FFGA funded) = \$148,460,175 + \$5,194,455 = \$153,654,630.*

12.2 Supplemental Agreements (SA)

A summary of fully executed and pending Supplemental Agreements with the JV Contractor is presented below in Table 15.

Table 15 – Design Build Supplemental Agreement Log

SA No.	Status	FIN	Description	Funding Source	Approved Amount	Pending Amount	Executed Date
#1	Executed	423446-9-52-01	Phase II South Signals	FFGA	\$35,080,107.55		02/12/16
#2	Executed	Multiple	Move Funds between FINS	N/A	\$0.00		06/27/16
#3	Executed	423446-9-52-02	CAD Systems Modification	FFGA	\$218,865.00		03/20/17
		423446-9-52-01	Oak Street Scope Credit	FFGA	(\$71,122.00)		
		423446-9-52-01	Rail Unloading Credit	FFGA	(\$28,000.00)		
		423446-9-52-01	Storm Water Detention System (Tupperware) Credit	FFGA	(\$102,375.00)		
		436014-1-52-10	Quiet Zone at Clyde Ave	State	\$130,072.00		
		423446-9-52-01	Extended Overhead from SA 1 (111 Days, \$1 Mill Max)	State	\$1,000,000.00		
		433041-2-52-01	Pleasant Hill Quiet Zone (Signal Work and Track)	State	\$89,395.00		
		423446-9-52-11	Repair to Shingle Creek Bridge	State	\$111,128.00		
		423446-9-52-01	DCE Memo 09-15	FFGA	(\$438.00)		
			SA #3 Total		\$1,347,525.00		
UP #4	Executed	423446-9-52-13	Design of Load Transfer Structure	State	\$18,933.00		03/22/17
#5	Executed	433041-2-52-01	Pleasant Hill LAP Project (Civil Work)	Local	\$22,685.00		06/08/17
#6	Executed	423446-9-52-11	Contingency Fund for Project	State	\$150,000.00		05/15/17
#7	Executed	423446-9-52-15	CAD System Modifications (RWIC and Time Table)	State	\$111,026.30		06/08/17
#8	Executed	423446-9-52-11	Existing Culvert Cleaning	State	\$44,517.94		11/15/17
		423446-9-52-02	Temporary Signal Relocation at Taft	FFGA	\$68,501.27		
			SA #8 Total		\$113,019.21		
#9	Executed	442415-1-G2-01	Hurricane Irma Recovery	State	\$177,762.71		04/09/18
#10	Executed	423446-9-52-01	Contingency Fund for Project	FFGA	\$150,000.00		11/15/17

SA No.	Status	FIN	Description	Funding Source	Approved Amount	Pending Amount	Executed Date
#11	Pending	423446-9-52-11	S. Rail Ave Revised for Sidewalk	Local		\$69,467.73	
#12	Executed	423446-9-52-01	Poinciana Concrete Panels	FFGA	\$204,133.23		03/05/18
		423446-9-52-01	Wetherbee Grade Crossing credit	FFGA	(\$115,475.26)		
		423446-9-52-01	Class V Finish credit	FFGA	(\$17,028.90)		
			SA #12 Total		\$71,629.07		
#13	Executed	433041-2-52-01	Added Ped Signal at Hoagland Blvd	Local	\$10,055.14		03/21/18
		423446-9-52-13	Design of Load Transfer Structure (Close out UP)	State	\$10,700.43		
			SA #13 Total		\$20,755.57		
#14	Executed	423446-9-52-XX	Hurricane Matthew/Tropical Storm Colin Bonus Date	State	\$0.00		01/25/18
#15	Pending	423446-9-52-11	Oak Street Cantilever additions	State		\$173,972.62	
		423446-9-52-01	Monument Grade Crossing Upgrade	FFGA		\$156,111.58	
		423446-9-52-01	Tupperware Station Entry Credit	FFGA		(\$43,408.01)	
		423446-9-52-01	Hazard Gravel at Meadow Woods and Kissimmee	FFGA		\$27,261.06	
			SA #15 Total			\$313,937.25	
#16	Executed	423446-9-52-01	Contingency SA Fund for Project	FFGA	\$150,000.00		04/06/18
#17	Pending	423446-9-52-01	Pine St ML1 and ML2 Crossing Upgrade	FFGA		\$217,824.32	
		423446-9-52-01	Landstreet ML1 Crossing Upgrade	FFGA		\$228,948.53	
		423446-9-52-01	Landstreet Ramp Lead Crossing Upgrade	FFGA		\$232,733.49	
			SA #17 Total			\$679,506.34	
#18	Pending	423446-9-52-01	Additional Wayside Fencing	FFGA		TBD	
			Total Supplemental Agreements		\$37,413,443.40	\$1,062,911.32	

Table 16 – Phased Cost Contingency

Project Milestone	Milestone Timeframe	Phase Contingency (x1000)	Contingency Used to Date (x1000)	Remaining Contingency (x1000)
FFGA	3Q2015	\$3,163	\$3,163	\$0
D/B Construction Contract NTPs	1Q2016	\$3,163	\$3,163	\$0
Utility Relocation Complete, Issue Signal Drawings for Construction	3Q2016	\$3,163	\$3,163	\$0
Complete Shingle Creek Bridges	3Q2016	\$3,720	\$3,720	\$0
Complete Track	2Q2017	\$2,388	\$2,388	\$0
Complete Signal Systems Testing	3Q2017	\$2,388	\$2,388	\$0
Complete Test and Start-up	4Q2017	\$1,582	\$0	\$1,582
Target Revenue Service Date	4Q2017	\$5,738	\$0	\$5,738
FFGA Revenue Service Date	3Q2019	\$3,163	\$0	\$3,163
TOTAL		\$28,471	\$17,985	\$10,485

13 Risks

13.1 Top Ten Risks

The Top 10 Risks for the Phase 2 South Project have been rescored based on the *March 2018 refresh* of the Risk Register. The risks below are in no particular order. Their primary mitigation and status is summarized below.

Table 17 – Top 10 Project Risks

Risk No.	Risk Category		Risk Description	Status/Recommended Actions	Change in Risk Status
	Cost Risk	Sched Risk			
R-1	X	X	<i>Hazard Analysis may identify additional scope items not currently in estimates (e.g. additional fencing, additional active warning devices, upgrading of existing crossing surfaces/track panels, short storage). There may also be station related safety items.</i>	<i>Fencing and upgrades to two crossings (Landstreet and Pine St) were added to the PHA. Construction work is scheduled to be completed at these crossing locations by the end of April.</i>	<i>New risk</i>
C-41	X	X	Coordination between the D/B Contractor, CFRC Operations, potential PTC Contractor, CEI, and CFRC Operations (O&M Contractor Project Coordination Manager) for providing On-Track Protection (Operating Rule 704 and 707) on the corridor.	CEI Consultant manages coordination effort to mitigate construction and operations conflicts. <i>As construction activities wind down, this risk will continue to be reduced.</i>	<i>Reduced</i>
C-36	X	X	Failure of the CFRC O&M and Signal Maintenance contractors and the D/B Contractor to coordinate access for the track maintenance activities with construction activities.	CEI Consultant manages coordination effort to mitigate construction and maintenance conflicts. <i>As construction activities wind down, this risk will continue to be reduced.</i>	<i>Reduced</i>
C-45	X	X	Failure to fully integrate Phase 2 South station communications system into Phase 1 operations control center.	The CFRC Manager of Communications will provide oversight of D/B Design activities as well as will provide oversight of communication system construction and system integration. <i>Communication systems have been integrated into the OCC.</i>	<i>Reduced</i>
C-44	X	X	<i>Insufficient staffing for Phase 2 South System integration and testing (e.g. train crews).</i>	<i>System integration testing is in progress.</i>	<i>New risk</i>
C-33	X	X	Coordination between the D/B contractor, CFRC Operations (OCC) and CEI may place severe limitations on when the D/B contractor may work on interfacing new equipment to existing servers and work stations.	CEI Consultant to mitigate construction and operations conflicts. <i>All signal cutovers complete, communication systems are fully connected to the OCC, etc.). As construction activities wind down, this risk will continue to be reduced.</i>	<i>Reduced</i>

Risk No.	Risk Category		Risk Description	Status/Recommended Actions	Change in Risk Status
	Cost Risk	Sched Risk			
S-3	X	X	<i>Start-up budget costs may be underestimated.</i>	<i>Incremental costs for Phase 2 South operations were estimated in the 2015 Finance Plan at approximately \$9.7 million for the first full year of operations. The CFRC expects that actual costs will be lower than the Finance Plan.</i>	<i>New risk</i>
D-61	X	X	<i>Trespasser mitigations developed as a result of the PHA are still open and may result in additional costs not currently in estimates.</i>	<i>The trespass hazards continue to be tracked and monitored. Trespass hazards are still open and the safety and education outreach program is ongoing and will continue through the start of revenue operations.</i>	<i>New risk</i>
R-24	X	X	There is a cost and schedule risk until all utility agreements are finalized.	<i>All utility agreements are complete. The only exception is the relocation of KUA's signal pole at Magnolia which is scheduled for completion by the end of April.</i>	<i>Reduced</i>
D-38	X	X	Construction operations creating delays to train traffic which causes monetary impacts to the CFRC and delays to the operation schedules for Amtrak and CSX.	<i>All signal cutovers, trackwork, and grade crossings are complete as included in the original scope. The only new work is the crossing upgrades at Landstreet and Pine St. This work is scheduled to be completed by the end of April.</i>	<i>Reduced</i>

The Mitigation and Monitoring Deliverables table is summarized below and shows the current status.

Table 18 – Mitigation and Monitoring Deliverables

No.	Mitigation Deliverable	Status
1	Resolve Kinder Morgan pipeline conflicts (no agreement – just plans)	Complete
2	Joint Use Agreements for Stations	Complete
3	Revised Project Budget for FFGA	Complete
4	Submit application for FFGA	Complete
5	Receive FFGA	Complete
6	Stations 100% Design Signed and Sealed Documents	Complete
7	Permitting with SFWMD – Stations	Complete
8	Corridor 100% Design Concept Documents	Complete
9	SFWMD approval of revised bridge designs	Complete
10	Permitting with SFWMD – Corridor	Complete
11	Advertise Corridor/Station Contract	Complete
12	Corridor/Station Contractor Bids Received	Complete
13	Corridor/Station Contractor NTP	Complete
14	Corridor/Station Contractor Baseline Schedule	Complete
15	Signal 100% Design Concept Documents	Complete
16	Advertise Wayside Signals Contract	Complete
17	Signals Contractor Bids Received	N/A
18	Signals Contractor NTP	Complete
19	Signals Contractor Baseline Schedule	Complete
20	CFRC (Non-FFGA) PTC Construction Schedule	On-going
21	Integrated Contractor Project Schedule (CEI-controlled)	On-going
22	Adv. for Advanced Procurement of Ties, Rail & Special Trackwork	Complete
23	Issue Purchase Order for Ties, Rail & Special Trackwork	Complete
24	Ties, Rail, & Special Trackwork Delivered	Complete
25	Shingle Creek Bridge – IFC Design Documents	Complete
26	Shingle Creek Bridge Construction Complete	Complete
27	Signal Design IFC Drawings Complete	Complete
28	Complete Taft Yard (5 CPs, Track, Grade Crossings)	Complete
29	Complete Station System Integration Testing	In progress
30	Complete Corridor System Integration Testing	In progress
31	Master Project Schedule – Status Update	On-going
32	FDOT Monthly Progress Report – including Top Project Risk Status	Monthly
33	Grade Crossing / Hazard Mitigation Update	Monthly
34	Risk Register Update / Top 10 Risk Refresh	Quarterly
35	Joint Preliminary Hazard Analysis and Mitigation Log Update	Quarterly

14 Quality Assurance / Quality Control

14.1 QA Audits

A Tentative Audit Schedule (subject to change) is presented in Table 19 and a summary of Audit Report and Findings is presented in Table 20.

Table 19 – Tentative Audit Schedule

DB CONTRACT						
DB DESIGN						
Quarter	Audit Date	Completion Date	Organization	Discipline	Joint Audit	Lead
2018 – 1	n/a	n/a	HTI/XORAIL	Signals**	N	AS
2018 – 1	3/30/2018	3/30/2018*	VHB	VSLMF (RFC-resubmittal)	N	AS
2018 – 1	3/27/2018	3/27/2018*	Jacobs	Drainage, Rail, Roadway, Structures	N	AS
2018 – 2	n/a		HTI/XORAIL	Signals***	N	AS
2018 – 2	n/a		VHB	VSLMF***	N	AS
2018 – 2	n/a		Jacobs	Drainage, Rail, Roadway, Structures***	N	AS
DB CONSTRUCTION						
Quarter	Audit Date	Completion Date	Organization	Discipline	Joint Audit	Lead
2018 – 1	1/26/2018	1/26/2018	DB - Middlesex / Herzog II JV	Category 12 - Railway Structures (Orange Ave Bridge)	N	SP
2018 – 1	2/27/2018	3/16/2018	DB - Middlesex / Herzog II JV	Category 7B - Asphalt Paving	N	SP
2018 – 2	n/a		DB - Middlesex / Herzog II JV	Category TBD ***	N	SP

Note: This schedule is subject to change.

* Required Correction Action items are listed in Table 18.

** No QC activity / design submittals this quarter

*** No QC activity / design submittals anticipated, audit may be cancelled.

14.2 Non-conformances

Remaining open item is the unapproved Class I concrete mix that was used on some of the curbing at the Poinciana Station. Cores were taken and the compressive strength measured at greater than 5200 psi (exceeds specification requirements). FDOT has requested the tickets for the concrete and is currently reviewing to determine if the material can remain in place.

14.3 Buy America Field Verification

Irrigation Sprinkler Heads: The Contractor and the CEI were unable to locate a Buy America compliant product as required per contract for the 12" pop up sprinklers. As a result, smaller sprinkler heads have been located that would comply and meet the requirements. This requires a change to the contract to allow for the use of smaller sprinkler heads to mitigate the Buy America issue.

Table 20 – Audit Report & Findings

DB CONTRACT													
DB DESIGN													
Quarter	Audit Date	Compilation Date	Org.	Discipline	Finding	Issue ID #	Issue Description	Response Date	Due Date	Required Corrective Action	Status	Verified Corrective Action	Verification Date
2017-3	8/31/17	9/1/17	JACOBS	General	Item of Note	J4-01	Most FDOT submittals were not entered in ERC for comments. No documentation of accept and/or “no comment” by FDOT for 14 submittals from April to Aug 2017	11/27/17	11/13/17	Provide documentation for submittal acceptance	Open	Email documentation provided for 3 of 14 submittals.	3/29/18
2017-4	11/27/17	11/28/17	JACOBS	General	Item of Note	J5-01	FDOT submittals were not entered in ERC for comment. No documentation of accept and/or “no comment” by FDOT for 13 submittals from Aug – Nov 2017	3/29/18	2/26/17	Provide documentation for submittal acceptance	Open	Email documentation provided for 7 of 13 submittals	3/29/18
2018-1	3/27/18	3/27/18	JACOBS	General	Item of Note	J6-01	FDOT submittals were not entered in ERC for comment. No documentation of accept and/or “no comment” by FDOT for 3 submittals from Nov 2017 – Mar 2018	4/2/18	4/10/18	Provide documentation for submittal acceptance	Open	Status update provided for 1 of 3 submittals	4/2/18
2018-1	3/27/18	3/27/18	JACOBS	Roadway	Deficiency	J6-02	Zone 4 Crossings Design Speed Variation (RFC - March): Checkset does not include updater or rechecker marks on pdf page 14/22.	4/2/18	4/10/18	Provide completed checkset and/or clarify checker /back-checker marking.	Closed	Completed checkset provided.	4/2/18
2018-1	3/30/18	3/30/18	VHB	VSLMF	Item of Note	V6-01	Missing documentation of FDOT review comment resolution.		4/13/18	Provide FDOT review comment resolution documentation.	Open		

DB CONSTRUCTION													
Quarter	Audit Date	Compilation Date	Org.	Discipline	Finding	Issue ID #	Issue Description	Response Date	Due Date	Required Corrective Action	Status	Verified Corrective Action	Verification Date
2017-4	11/17/17	11/27/17	DB - Middlesex / Herzog II JV	ADA / Sidewalk	Deficiency	P2SC-004	ADA requirements not met for the following: Meadow Woods Station (cross slope for 2 panels), Poinciana Station (cross slope for 3 panels, and crowns in various locations).	3/8/18	1/26/18	Correct cross slopes and crowns in sidewalk to meet ADA requirements.	Closed	Both locations have been corrected, photos of revised cross-slopes provided. Crowns were verified under the 12:1 limit.	3/9/18

15 Environmental/NEPA

The mitigation measures and other Project features that reduce adverse impacts, to which FTA and FDOT committed in the original EA and FONSI, the 2008 SEA and Addendum to the FONSI and 2010 Second SEA and Second Addendum to the FONSI, which six documents serve as the environmental record for the Project, is summarized in **Attachment C**. The Phase 2 South Mitigation Monitoring Plan is intended to serve as a mechanism for monitoring the implementation of the mitigation measures by FTA and FDOT.

16 Community Outreach

16.1 Public Opening for Revenue Service

Currently, the Department is working with the local community on the opening events for revenue service on Monday, July 30th. As this is an extension of an existing system, the event will focus on the concept of connecting communities in Central Florida and will include local community partners.

16.2 Safety Outreach Activities

January 2018

- *1/3 Meeting with CSX officials discussing how both agencies can work together to mitigate trespassing on the corridor and work together to enforce safety*
- *1/10 Onboard safety presentation with 12 students and teachers from Jewish Academy of Orlando*
- *1/10 Delivered safety materials and literature to Lake Mary High School*
- *1/12 Meeting with Sheriff Chitwood and Chief Morgan discussing trespassing mitigation in Volusia County*
- *1/19 Meeting with Chief Smith of Sanford PD discussing trespassing mitigation in Sanford*
- *1/24 Meeting with Orange County School Transportation officials discussing short storage length concerns and setting up outreach opportunities for their drivers*
- *1/29 Meeting with Orlando PD officials discussing homeless trespassing at Lynx Central station as well as trespassing mitigation along the corridor*

February 2018

- *2/2 Meeting with SunRail officials and Sailforth discussing SunRail 101 videos and creating a new rail safety video*
- *2/3 Attended Aging Tree Winter Fest event with safety materials and Southern Expansion materials*
- *2/4 Meeting with local Winter Park MS support group that requested a safety presentation for their members*
- *2/14 Tabling event at Osceola County School Transportation facility speaking with current school bus drivers about rail safety*
- *2/14 Spoke at new hire orientation teaching new Osceola County School Bus Drivers about the significance of rail safety*
- *2/20 Held safety presentation for the Eco Club at Millennia Gardens Elementary School*

March 2018

- 3/1 Conference call with Orange County School Transportation officials reviewing how Cypress High School students who live in the Meadow Woods community travel to and from school
- 3/1 Attended Science Night at Millennia Gardens Elementary School with rail safety table
- 3/12 Safety presentation for all Kindergarten students at Catalina Elementary School
- 3/13 Meeting with Osceola County School Transportation officials discussing current bus stop at Old Tampa Hwy and Crestridge Drive and the needs for it to be moved to the near side of the tracks
- 3/14 conference call with Osceola County School for the Arts Vice Principal setting up school wide safety presentation on 5/16
- 3/15 Attended Meadow Woods Town Hall meeting delivering rail safety and Southern Expansion information to the community
- 3/27 Meeting with Denn John Middle School Principal providing rail safety presentation to be distributed to home room classes

17 ACTION ITEMS

Action Items from Quarterly Meeting – January 25, 2018

Phase 1

- FTA and FDOT to review and coordinate for Phase 1 final budget and remaining contingency determination. FDOT provided the budget information in form of a Draft Budget Revision #4 on February 25, 2017 and followed up via teleconference with FTA on March 7, 2017. FDOT provided another update to Budget Revision #4 on March 13, 2017. FTA is reviewing the budget revision including the scope of work with FTA Headquarters and anticipates approval by July 31, 2017. FTA provided additional comments on November 2, 2017. FDOT responded to comments and resubmitted Budget Revision #4 with requested information on December 28, 2017. *FTA provided a response on February 7, 2018.*
- FDOT to review and update TMOP based on the updated RFMP. FDOT submitted the TMOP for review on February 3, 2017. The PMOC provided comments to the TMOP for FDOT review. FDOT submitted an updated TMOP, Revision 13 on August 4, 2017; the PMOC provided additional comments on September 7, 2017. *TMOP Revision 14 was submitted by FDOT on January 12, 2018. PMOC comments have been received and FDOT will close out the TMOP after SIT testing is complete to satisfy the remaining open comment.*

Phase 2 South

- FDOT to update the PMP to include the Wayside Signals DB scope in the Corridor and Station DB Contract. Ongoing, FDOT will also update the PMP to include additional PHA transfer of responsibility language, organization revisions and resumes. PMP to include revised FFGA budget *once approved by FTA* and process for documenting billing for Electronic Clearing House Operation (ECHO) drawdown. FDOT to incorporate testing and

pre-revenue operations procedures with the next PMP submission. *FDOT submitted an update of the PMP, Revision 3 for Testing and PRO on March 30, 2018.*

- FDOT committed to working on the budget reconciliation between the FFGA and actual cost, and methodology for FFGA and non-FFGA scope of work and funding verifications, and will follow-up with the FTA and PMOC in the first quarter of 2017. The budget reconciliation between FFGA, FDOT Funded and Non-FFGA Funded items is reflected in Section 14 of the November 15, 2016 – February 15, 2017 QPR. Additional cost breakdown information was provided to FTA and the PMOC on March 14, 2017. FDOT submitted the Phase 2 South Budget Memorandum on June 20, 2017. FTA to review and provide a response. FTA to coordinate a meeting with FTA/PMOC to review the revised project budget reconciliation. *FDOT to provide actual close-out costs (non-DB Contractor) to the PMOC. FTA to share FMOC recommendations and setup an exit conference with FDOT.*
- FDOT to determine and provide to FTA which potential line items to allow FDOT to drawdown against. FDOT to propose the SCC items for drawdown against the \$2.4 million in the Phase 1 grant allocated to Phase 2 South; the Phase 2 South items outside of the DB Contract and the Phase 2 South items included in the DB Contract. *The FMOC recommended a maximum drawdown amount based on its review. FDOT confirmed it made a drawdown of \$32.2 million at the end of December 2017. At this time, FDOT does not intend to request another drawdown until the project is complete.*
- FDOT to review and update Amendment to Finance Plan based on the revised FFGA budget. The Amendment to the Financial Plan will be reviewed once the revised FFGA budget is accepted by FTA.
- **Closed** – FDOT to submit SITP by the end of October 2017 to the FTA/PMOC.
- FDOT and FTA/PMOC to coordinate the OP-54 schedule in conjunction with the CPM Update 15/Recovery Schedule, SITP and OP-54 documentation submissions. *FDOT submitted an updated SIT schedule on February 7, 2018.*
- *FDOT to follow-up with Osceola County regarding the relocation of the school bus pick-up/drop-off on Crestridge Drive.*
- FDOT to provide a memo detailing the locations of the current Phase 2 South fencing locations in the DB Contract, the additional fencing proposed and identified in the PHA, and a cost estimate for this additional fencing. FTA also requested a copy of the Fencing and Signage Contract to determine whether the additional Phase 2 South fencing can be added to the contract. *Subsequently, this information was sent to FTA on February 3, 2018.*
- FDOT to provide SA numbers #8 and #12 for PMOC review. FDOT to provide the work orders issued against the contingency fund executed in SA #10 for PMOC review. *SA #8 was issued February 5, 2018 including the initial contingency work orders. SA #12 was provided on March 13, 2018. Once the CSA #10 work orders have been fully executed, FDOT will also provide.*

18 UPCOMING MEETINGS

- Next Quarterly Progress Review Meeting: anticipated July 2018 (Orlando, FL)

Quarterly Progress Report Form – Positive Train Control Implementation

To effectively monitor each railroad's progress implementing a positive train control (PTC) system, the Federal Railroad Administration (FRA) is requiring the submission of quarterly progress reports on this form, beginning June 30, 2016, under its investigative authorities. *See, e.g.*, 49 U.S.C. §§ 20107, 20902, 20157(c)(2); 49 C.F.R. § 236.1009(h). Railroads must use this form to report PTC implementation progress data quarterly, by the due dates set forth in the table below. Each railroad should select the correct quarter and year for each quarterly report.

Quarterly PTC Progress Reports must be submitted electronically to FRA via the FRA Secure Information Repository (SIR) at <https://sir.fra.dot.gov>.

Key Dates for PTC Implementation Quarterly Progress Reporting:

Period	Coverage Period	Progress Report Due Date
Q1	January 1 – March 31	April 30
Q2	April 1 – June 30	July 31
Q3	July 1 – September 30	October 31
Q4	October 1 – December 31	January 31

General Instructions:

- References to a railroad's PTC Implementation Plan (PTCIP) in this form refer to the railroad's revised PTCIP submitted under the Positive Train Control Enforcement and Implementation Act of 2015, or the most current amended PTCIP FRA has approved, if any;
- If a particular category listed in a table does not apply to the railroad's technology, please indicate "N/A"; and
- For Sections 2, 4, and 6, please select a "Status" option from the drop-down menus provided.

Name of Railroad or Entity Subject to 49 U.S.C. § 20157(a):	
Railroad Code:	
Quarterly PTC Progress Report for:	
Date:	

Quarterly Progress Report Form – Positive Train Control Implementation

1. Summary

Category	Cumulative Quantity Completed To Date	Total Quantity Required for PTC Implementation
Locomotives Fully Equipped and PTC Operable		
Installation/Track Segments Completed		
Radio Towers Fully Installed and Equipped		
Employees Trained		
Territories ¹ Where Revenue Service Demonstration Has Been Initiated		
Route Miles in Testing or Revenue Service Demonstration ²		
Route Miles in PTC Operation		

Provide a narrative summary of overall PTC implementation progress during the applicable quarter:

¹ A territory is an entire installation/track segment as identified in the railroad's PTCIP (*e.g.*, a track segment, territory, subdivision, district, etc.).

² Enter the cumulative number of route miles where PTC technology is *currently* undergoing field testing or Revenue Service Demonstration. Railroads must only identify in the "Route Miles in Testing or Revenue Service Demonstration" field any route miles that are still currently undergoing PTC field testing or Revenue Service Demonstration (*e.g.*, in a case where FRA granted a railroad provisional revenue service operations authorization for only a portion of its network but the railroad is still conducting field testing or Revenue Service Demonstration elsewhere in its network). Once a railroad has received written authorization from FRA to operate its PTC system in revenue service (through either provisional operations authorization under 49 U.S.C. 20157(h)(2) or PTC System Certification under 49 U.S.C. 20157(h)(1), the railroad must identify any miles where a PTC system is being operated in revenue service in the "Route Miles in PTC Operation" field. If a railroad is operating the PTC system in revenue service and has completed all field testing and Revenue Service Demonstration, it may write "Complete" in the "Route Miles in Testing or Revenue Service Demonstration" fields.

Quarterly Progress Report Form – Positive Train Control Implementation

2. Quarterly Update on Spectrum

[illegible]

³ If the railroad reported in its PTCIP that all necessary spectrum had been acquired and was available for use, or the railroad's technology does not require the use of spectrum, please indicate "N/A" in this table.

Quarterly Progress Report Form – Positive Train Control Implementation

Provide any additional narrative for Spectrum below:

--

3. Quarterly Update on Major Milestones

3.1 Locomotive Status

Category/Installation Feature	Q1 – Quantity Installed	Q2 – Quantity Installed	Q3 – Quantity Installed	Q4 – Quantity Installed	Sum of Quarterly Totals	PTCIP Year End Goal (if applicable)	Cumulative Quantity Installed	Grand Total Reported in PTCIP (if applicable)
Locomotive (Apparatus) ⁴								
Locomotives with On-board Computers (e.g., Train Management Computer) Installed								
Locomotives with PTC Displays Installed								
Locomotives with PTC-Capable Event Recorders Installed								
Locomotives with Locomotive Radios Installed – Primary Communications (e.g., 220 MHz radios)								
Transponder Readers (e.g., for non I-ETMS systems)								

⁴ If a particular category listed in this table does not apply to the railroad's technology, please indicate "N/A." A railroad may add categories or subcategories if it wants to provide more detail.

Quarterly Progress Report Form – Positive Train Control Implementation

PTC Software: Describe 1) the railroad's approach to installation of PTC software on its locomotive fleet, and 2) any issues the railroad is experiencing with installed versions of train management software (e.g., reverting back to previous software versions due to errors in the current version):

Provide any additional narrative for Locomotive Status below:

3.2 Infrastructure/Back Office Status

Infrastructure – Back Office Systems	
How many physical back office locations are required for PTC operations, as reported in the PTCIP?	
How many physical back office locations have been constructed with all necessary equipment installed?	
Are the Back Office Location(s) fully operable with PTC?	
Are the Dispatching Location(s) fully operable with PTC?	

Quarterly Progress Report Form – Positive Train Control Implementation

Provide any additional narrative for Infrastructure/Back Office Status below:

3.3 Infrastructure/Wayside Status

Category/Installation Feature	Q1 – Quantity Installed	Q2 – Quantity Installed	Q3 – Quantity Installed	Q4 – Quantity Installed	Sum of Quarterly Totals	PTCIP Year End Goal ⁵	Cumulative Quantity Installed	Grand Total Reported in PTCIP (if applicable)
Infrastructure – Wayside Installations (Systemwide) ⁶								
Wayside Interface Units								
Communication Towers or Poles								
Switch Position Monitors								
Wayside Radios								
Base Station Radios								
Are all necessary communication backbone utilities (including fiber, copper, ground wiring etc.) installed and ready for operation?								

⁵ Unlike the heading in table 3.1, this heading is not qualified with “(if applicable)” because each railroad was required to provide year-end goals for these particular hardware categories under the PTC Enforcement and Implementation Act of 2015.

⁶ If a particular category listed in this table does not apply to the railroad’s technology, please indicate “N/A.” A railroad may add categories or subcategories if it wants to provide more detail.

Quarterly Progress Report Form – Positive Train Control Implementation

Provide any additional narrative for Infrastructure/Wayside Status below:

4. Installation/Track Segment Progress – Current Status⁷

Segment Identification ⁸	Q1 Status – Current status of installation/track segment	Q2 Status – Current status of installation/track segment	Q3 Status – Current status of installation/track segment	Q4 Status – Current status of installation/track segment

⁷ For passenger rail operations, this information should be further segregated into those routes where it is a host or tenant.

⁸ Segment identification should be consistent with installation segments as listed in the railroad's PTCIP (e.g., by track segment, territory, subdivision, district, etc.).

Quarterly Progress Report Form – Positive Train Control Implementation

Segment Identification ⁸	Q1 Status – Current status of installation/track segment	Q2 Status – Current status of installation/track segment	Q3 Status – Current status of installation/track segment	Q4 Status – Current status of installation/track segment

If a railroad has more segments where PTC will be implemented, please use the additional rows provided in [Appendix B](#).

Provide any additional narrative for Installation/Track Segment Status below:

Quarterly Progress Report Form – Positive Train Control Implementation

5. Quarterly Update on Employee Training

Employee Category ⁹	Q1 – # Employees Trained	Q2 – # Employees Trained	Q3 – # Employees Trained	Q4 – # Employees Trained	Sum of Quarterly Totals	PTCIP Year End Goal	Cumulative # of Employees Trained	Grand Total Reported in PTCIP
Employees who Install, Maintain, Repair, Modify, Inspect, and Test the PTC System								
Employees who Dispatch Train Operations								
Train and Engine (Operations) Employees								
Roadway Worker Employees								
Direct Supervisors of the Above Employees								

Provide any additional narrative for Employee Training below:

⁹ See 49 C.F.R. § 236.1041(a).

Quarterly Progress Report Form – Positive Train Control Implementation

6. Quarterly Update on Interoperability Progress and Other Formal Agreements

This section is provided to help railroads describe interoperability information. Please provide any additional information (e.g., an appendix) as appropriate.

Required content:

- For host railroads: provide updates to any agreements and key milestones for all tenant operations
- For tenant railroads: provide updates to any agreements and key milestones for all operations over tracks hosted by another railroad

Host and Tenant Railroads: Provide a general update on interoperability in the textbox below:

Host Railroads Only: For each tenant, provide additional tenant information below:

Tenant Identification	Estimated Quantity of Tenant Rolling Stock to be Equipped with PTC (if the tenant does not have a separate PTCIP on file)	Current Tenant Implementation Status

OMB Approval Granted 8/15/2017
OMB Approval Expires 8/31/2018

Quarterly Progress Report Form – Positive Train Control Implementation

Public reporting burden for this information collection is estimated to average 21.60 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for this information collection is **2130-0553**. All responses to this collection of information are mandatory. Send comments regarding this burden estimate or any other aspect of this collection, including suggestions for reducing this burden to OMB’s Office of Information and Regulatory Affairs, Attn: FRA OMB Desk Officer.

Quarterly Progress Report Form – Positive Train Control Implementation

Appendix A: Additional Rows for Quarterly Update on Major Milestones

Category/Installation Feature	Q1 – Quantity Installed	Q2 – Quantity Installed	Q3 – Quantity Installed	Q4 – Quantity Installed	Sum of Quarterly Totals	PTCIP Year End Goal (if applicable)	Cumulative Quantity Installed	Grand Total Reported in PTCIP (if applicable)

Quarterly Progress Report Form – Positive Train Control Implementation

Appendix B: Additional Rows for Installation/Track Segment Progress – Current Status

[illegible]

OMB Approval Granted 8/15/2017
OMB Approval Expires 8/31/2018

Quarterly Progress Report Form – Positive Train Control Implementation

[illegible]

Quarterly Progress Report Form – Positive Train Control Implementation

[illegible]

Quarterly Progress Report Form – Positive Train Control Implementation

[illegible]

Quarterly Progress Report Form – Positive Train Control Implementation

[illegible]

Quarterly Progress Report Form – Positive Train Control Implementation

[illegible]

Quarterly Progress Report Form – Positive Train Control Implementation

[illegible]

Quarterly Progress Report Form – Positive Train Control Implementation

[illegible]

Quarterly Progress Report Form – Positive Train Control Implementation

[illegible]

UPCOMING MEETINGS

Commission Meetings (MetroPlan Boardroom)

Thursday August 30 10:00 am – 12:00 noon

Thursday November 29 10:00 am – 12:00 noon

Customer Advisory Committee (LYNX Open Space – 2nd Floor)

Thursday August 2 5:00 pm – 6:00 pm

Thursday November 1 5:00 pm – 6:00 pm

Technical Advisory Committee (LYNX Open Space – 2nd Floor)

Wednesday August 8 1:00 pm – 2:00 pm

Wednesday November 7 1:00 pm – 2:00 pm

Train Tours

Saturday June 16 10:00 am – 2:00 pm Tupperware Station

Saturday June 23 10:00 am – 2:00 pm Meadow Woods Station

Saturday June 30 5:00 pm – 9:00 pm Kissimmee Station