Record of Decision

ALL ABOARD FLORIDA

Intercity Passenger Rail Project

Orlando to Miami, Florida

December 2017

Prepared by:
USDOT Federal Railroad Administration
1200 New Jersey Avenue SE
Washington, DC 20590
Proponent: All Aboard Florida

Table of Contents

List of Figures

List of Tables

1 Introduction

This Record of Decision (ROD) documents the U.S. Department of Transportation (DOT or Department) Federal Railroad Administration's (FRA) decision with regard to the All Aboard Florida Intercity Passenger Rail Project between West Palm Beach and Orlando, Florida (Project). In making its decision, FRA considered the information and analysis included in the Draft and Final Environmental Impact Statements for the Project and public and agency comments.

All Aboard Florida, LLC (AAF) is a subsidiary of Florida East Coast Industries, LLC (FECI), which is a transportation, infrastructure and commercial real estate company based in Coral Gables, Florida. Florida East Coast Railway (FECR), an affiliate of FECI, owns the right-of-way (ROW) and existing railroad infrastructure within the corridor between Jacksonville and Miami, over which FECR operates a freight rail service (FECR Corridor). AAF (the Proponent) has an exclusive, perpetual easement granted by FECR whereby AAF may develop and operate the proposed passenger service within the FECR Corridor. AAF would operate the proposed passenger rail service within the FECR Corridor in coordination with FECR's continued freight service.

As the agency with primary responsibility for passenger rail service matters within DOT, FRA served as the lead agency for compliance with the National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. § 4321, et seq.) and associated environmental laws, preparing the Draft and Final Environmental Impact Statements for the Project. FRA is issuing this ROD on behalf of the Department for any funding, financing, or other decisions that DOT may make on the Project, including a Railroad Rehabilitation and Improvement Financing (RRIF) program loan. This loan and loan guarantee program is now administered by DOT's Build America Bureau (the Bureau). (49 U.S.C. 116). The RRIF program provides direct loans and loan guarantees that may be used to acquire, improve, or rehabilitate rail equipment or facilities, or develop new intermodal or railroad facilities.

FRA has prepared this ROD in compliance with NEPA, the Council on Environmental Quality (CEQ) NEPA Regulations (40 C.F.R. Parts 1500-1508), the FRA Procedures for Considering Environmental Impacts (64 FR 28545 [May 26, 1999]), and FRA's update to NEPA Implementing Procedures (78 FR 2713 (January 14 2013)). The U.S. Army Corps of Engineers (USACE), U.S. Coast Guard (USCG) and Federal Aviation Administration (FAA) are involved with the development of the Project through the NEPA process as Cooperating Agencies in accordance with the CEQ regulations 40 C.F.R. 1508.5.

In accordance with NEPA, FRA, as the lead Federal agency, issued a Draft Environmental Impact Statement (DEIS) in September 2014 that evaluated the environmental impacts of three action (build) alternatives (Alternatives A, C and E) in comparison to the No-Action Alternative. FRA issued a Final Environmental Impact Statement (FEIS) in August 2015. In consideration of the analysis in the DEIS and FEIS and substantive agency and public comments, FRA selected the Preferred Alternative (herein referred to as the Selected Alternative).

1.1 Project Description

AAF is proposing to construct and operate a privately owned and operated intercity passenger railroad system that would connect Orlando and Miami, with intermediate stops in Fort Lauderdale and West Palm Beach, Florida.

AAF proposes to implement the Project through a phased approach. Phase I provides rail service on the West Palm Beach to Miami section while Phase II would extend service to Orlando. Phase I provides passenger rail service along the 66.5 miles of the FECR Corridor connecting West Palm Beach, Fort Lauderdale, and Miami. AAF has obtained private financing for Phase I and is proceeding to implement Phase I.

FRA and AAF conducted an environmental review of Phase I in 2012/2013, including preparing and issuing both an Environmental Assessment (EA) (*Environmental Assessment and Section 4(f) Evaluation for the All Aboard Florida Passenger Rail Project West Palm Beach to Miami, Florida*) and a Finding of No Significant Impact (FONSI) (AAF 2012; FRA 2013a). Phase I of the Project, as described in the 2012 EA, includes constructing three new stations (West Palm Beach, Fort Lauderdale and Miami), purchasing five train sets, adding a second track along most of the 66.5-mile corridor, and adding 16 new daily round-trip intercity passenger train trips (32 one-way trips) on the West Palm Beach to Miami section of the FECR Corridor. FRA concluded that Phase I has independent utility (that is, it could be advanced and serve a transportation need even if Phase II were not constructed).

FRA has also undertaken a NEPA review of the proposed Phase II extension from West Palm Beach to Orlando. Given that operations would cover the full corridor from Orlando to Miami, the FEIS analyzed the cumulative effects of completing both phases of the Project. However, the impacts exclusively from Phase I were addressed in the 2012 EA and 2013 FONSI, and were not restated in full in the FEIS.

Phase II of the Project, shown in Figure 1, includes:

- constructing a new railroad line parallel to State Road (SR) 528 between the Orlando International Airport (MCO) and Cocoa (the East-West Corridor),
- constructing a new Vehicle Maintenance Facility (VMF) on property owned by the Greater Orlando Airport Authority (GOAA),
- constructing track through MCO to connect the VMF to SR 528,
- adding a second track within 128.5 miles of the FECR Corridor between West Palm Beach and Cocoa (the North-South Corridor), and
- additional bridge replacement or rehabilitation between Miami and West Palm Beach.[1]

[1] The replacement/new construction of seven bridges within the West Palm Beach-Miami corridor segment are now excluded from the scope of this Project because AAF advanced those activities with private funds.

The proposed service would use a new intermodal facility at MCO that is being constructed by GOAA as an independent action. The Project includes purchasing 5 additional passenger train sets, and would add 16 new round-trip intercity passenger train trips (32 one-way trips) on the new railroad segment and on the FECR Corridor between Cocoa and West Palm Beach. No additional trips beyond those considered in the 2012 EA (16 round-trip intercity passenger train trips [32 one-way trips]) would be added on the West Palm Beach to Miami section.

Since issuing the FEIS, AAF has proposed the following minor modifications to the scope of the Project, including:

- Relocating the railroad crossing of I-95 approximately 800 feet to the south, resulting in minor changes to land use, noise and vibration and visual impacts.
- Minor modifications to the SR 528-Industrial Road Interchange at the request of Florida Department of Transportation (FDOT), to modify the ramps and improve vehicle safety.
- Shifting the anticipated first year of passenger service between West Palm Beach and Orlando to 2020, rather than 2016 as indicated in the FEIS.

FRA evaluated these proposed modifications to determine whether an additional environmental analysis, including a supplemental EIS, is required. Based on FRA's evaluation, FRA concluded that the proposed modifications do not warrant additional environmental evaluation.

FIGURE 1: Phase II of the Project

1.2 Federal Agency Roles and Responsibilities

FRA is the lead Federal agency. The FAA, USACE, and USCG are Cooperating Agencies, in accordance with NEPA and CEQ regulations (40 C.F.R. Part 1501.6). USACE's role focused on its requirements under Section 404 of the Clean Water Act (Section 404) and Sections 10, 12, and 14 of the Rivers and Harbors Act. USACE has also taken the lead role with respect to Endangered Species Act Section 7 and Magnuson-Stevens Fishery Conservation and Management Act consultation with U.S. Fish and Wildlife Service (USFWS) and National Marines Fishery Service (NMFS). Following AAF's withdrawal of its initial application for a RRIF loan in 2015, and FRA's determination that it was not making a decision on the Project at that time, the USACE assumed the lead role in Section 106 consultation to fulfil its obligations under Section 404, and the USACE and USCG executed a Programmatic Agreement under Section 106, which is included as Attachment A to this ROD. FAA's involvement focused on the effects at the Project's northern terminus at MCO. USCG's role focused on navigation and bridges requiring USCG Bridge Permits.

2 Purpose and Need

2.1 Purpose

The dual purpose of the Project is "to provide reliable and convenient intercity passenger rail transportation…by maximizing the use of existing transportation corridors" and "to provide intercity passenger rail service that addresses South Florida's current and future needs to enhance the transportation system by providing a transportation alternative for Floridians and tourists, supporting economic development, creating jobs and improving air quality."

2.2 Need

The Project is needed to provide a fast, sustainable, and reliable means of travel that responds to the transportation needs of the existing population as well as future population growth. The need for the Project stems from several factors: increasing congestion on the I-95 corridor and SR 528, long travel times, limited existing capacity, limited and constrained opportunities for corridor expansion, limited alternative modes of transportation, and increasing travel demand generated by growth in population and tourism. Transportation demand and travel growth in Florida is outgrowing the capacity available on the existing and future transportation network between Orlando and Miami (Louis Berger Group 2013). Increasing population, employment, and tourism continue to elevate travel demand between Orlando and Miami, as documented by population and employment forecasts from the Office of Economic and Demographic Research and Florida Department of Economic Opportunity (FDEO) (Office of Economic and Demographic Research 2013; FDEO 2013). Transportation options between these two cities have become more limited with the decline of air service in the Project corridor, limits on roadway expansions, and the lack of adequate, reliable alternative modes of transportation (Louis Berger Group 2013). As a result, AAF has concluded that there is a need for a safe, efficient, reliable transportation alternative to the dominant mode of travel (automobile). Finally, with funding at the state and national level being limited, there is a need for a privately operated passenger railroad project. FRA concurs that the Project could help address a need for improved transportation in the markets that would be served.

2.3 Project Objectives

The Proponent's objective for the Project is to provide an intercity rail service that is sustainable as a private commercial enterprise.

3 Alternatives

3.1 Alternatives Analysis Process

In order to identify and consider alternatives that satisfied the Project's purpose, including the Project's feasibility as a private enterprise, AAF provided FRA information that identified its primary objective to provide an intercity rail service that is sustainable as a private commercial enterprise. The two principal components of this objective are the basis for developing the criteria and framework for evaluating the Project alternatives. AAF's two primary goals are to:

- Provide a reliable and convenient intercity rail service between Orlando and Miami with an approximate 3-hour trip time between the terminal stations; and
- Provide an intercity rail service that is sustainable as a private commercial enterprise. Sustainable means that the rail service can attract sufficient riders to meet revenue projections and operate at an acceptable profit level.

As required by NEPA, FRA independently reviewed the alternatives analysis, required AAF to evaluate alternatives other than the proposed action, and verified the analyses.

Through the evaluation of the alternatives, FRA conducted a tiered alternatives analysis that first evaluated four route options to connect Orlando (at the planned GOAA Intermodal Station) with the planned West Palm Beach Station on the FECR Corridor and identified the existing north-south FECR Corridor Alternative as the only feasible route for the north-south component. This alternative would extend service from the West Palm Beach station north along the FECR ROW to the Cocoa area, then parallel SR 528 (the BeachLine Expressway) to MCO. In the second level of analysis, FRA identified and evaluated route modifications to connect the SR 528 corridor to the Intermodal Station on the west and with the FECR ROW on the east. The third level evaluated alignment alternatives parallel to SR 528. Three Action Alternatives were retained for detailed evaluation in the FEIS: Alternative A, Alternative C, and Alternative E (Figure 2). Each of these alternatives would use the existing FECR ROW to the Cocoa Area, then connect to the SR 528 corridor and construct new railroad infrastructure along the south side of SR 528 within the FDOT portion of the ROW. Within the Central Florida Expressway portion of the SR 528, three alignment modifications were evaluated.

Alternatives were evaluated under the primary screening criteria of meeting the Purpose and Need, feasibility to construct and operate, and impacts to the environment. Because AAF is a for-profit private enterprise, alternatives were evaluated primarily in light of whether they could be constructed and operated in accordance with AAF's financial model. AAF recommended the alternative that would deliver the targeted ridership and that would have acceptable construction and operating costs. AAF recommended the FECR Corridor as the preferred Level 1 Route Alternative

because this presented the most favorable construction and operating costs, with trip times that are predicted to yield high ridership. The FRA has reviewed AAF's analysis and validated the conclusions.

3.2 Alternatives Considered in the EIS Documents

The following sections describe the alternatives considered in the assessment of environmental consequences for the Project.

3.2.1 No-Action Alternative

The FEIS evaluated the No-Action Alternative as a baseline to compare the effects of the "build," or Action Alternatives. The No-Action Alternative involves no changes to the rail line within the FECR Corridor beyond regular maintenance and improvements that are currently planned and funded. Under the No-Action Alternative, existing freight operations and infrastructure would be maintained by FECR. The demand for freight capacity is expected to grow along the North South Corridor (N-S Corridor) regardless of the Project. Based on anticipated operations data for the 2016 target date for the Project, the average number of freight trains per day is expected to increase from 10 to 14 (in 2013) to 20, along with an increase in the average train length to 8,150 feet. The No-Action Alternative would also include future planned and funded roadway, transit, air, and other foreseeable intermodal improvements likely to be completed within the Project Study Area by the 2016 target date. AAF currently anticipates that passenger rail service would be operational in 2020. No additional transportation improvements within the Project Study Area are programmed for the 2016-2020 period and therefore, there have been no changes to the No-Action Alternative evaluated in the FEIS.

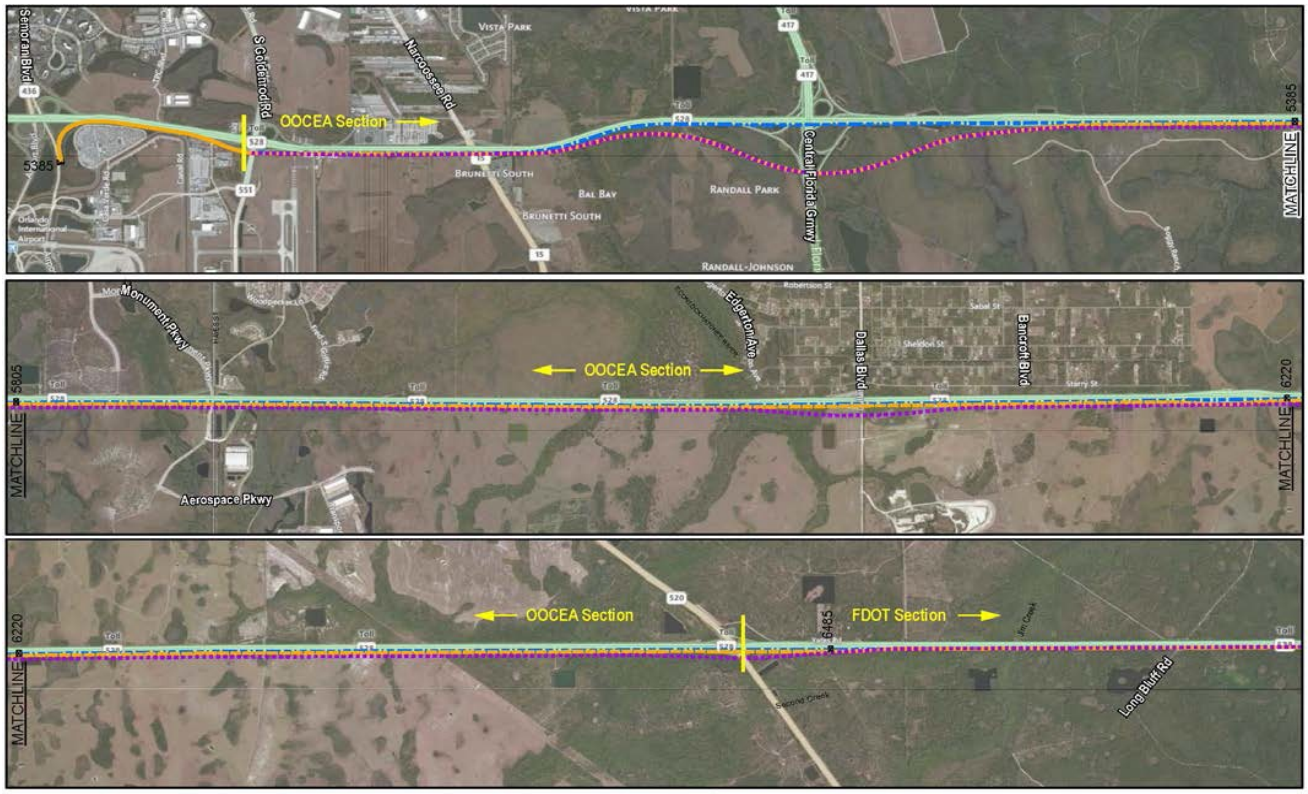
3.2.2 Action Alternatives

Operations and ridership would be the same for all three Action Alternatives (see Table 3-1). AAF would provide regularly scheduled, hourly service with an approximately 3-hour trip time. The intercity passenger rail service would operate with new diesel-electric locomotives and single-level coach trains. Passenger operations would include 16 round-trip passenger trains per day. Maximum operating speeds would range from 79 to 125 miles per hour (mph), depending upon the location along the route. Operating speeds would be greatest along the SR 528 corridor where there would be no highway-rail grade crossings. From the station at MCO to West Palm Beach, service would be non-stop, as there are no intermediate stations proposed. According to a ridership and revenue forecast commissioned by Florida East Coast Industries and prepared by Louis Berger Group for the Project, the most conservative total annual ridership would amount to approximately 3.5 million in 2019. Among the 2019 Project totals, approximately 2.0 million would be short distance trips (Ft. Lauderdale – Miami, West Palm Beach – Miami, West Palm Beach – Ft. Lauderdale) and 1.5 million would be long distance trips (Orlando – Southeast Florida). Total annual ridership is predicted to exceed 4.0 million by year 2030.

Each of the three Action Alternatives would include a new rail corridor extending north through MCO to SR 528 (the MCO Segment), including the proposed VMF; a new rail alignment along the East-West Corridor, which is on the south side of the SR 528 ROW owned by the Central Florida Expressway Authority (CFX) and FDOT from MCO to the FECR Corridor in Cocoa (the E-W Corridor); and would use the existing FECR ROW from Cocoa to West Palm Beach (the N-S Corridor). Within the N-S Corridor, the Project largely consists of restoring a second track, modifying several curves to accommodate higher speeds, and replacing or repairing bridges across waterways.

Each of the three Action Alternatives would include a new VMF located on GOAA property south of MCO. No new stations would be constructed as part of the Project. The Project would incorporate a new Positive Train Control system and associated infrastructure, and would install pole-mounted warning horns at 117 grade crossings where severe noise impacts would occur in the absence of mitigation. In addition, each alternative would improve at-grade crossings with new safety equipment in accordance with the FRA Diagnostic Team recommendations.

FIGURE 2: Alternative A, Alternative C, and Alternative E



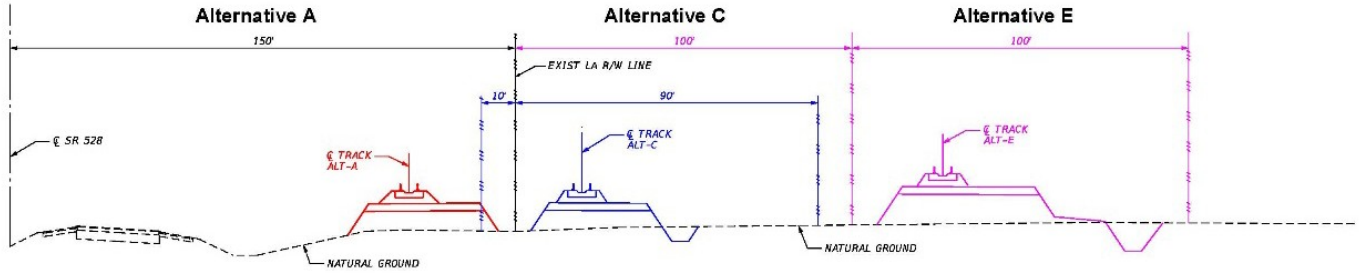
Explanation of Features

- E-W Corridor - Alternative A
- E-W Corridor - Alternative C
- E-W Corridor - Alternative E
- MCO Segment

Data Sources: ESRI 2012, NWI 2012, AMEC 2013

CFX Section of the E-W Corridor, Alignments Alternatives A, C, and E		
All Aboard Florida Intercity Passenger Rail Project		
N 0 0.25 0.5	U.S. Department of Transportation Federal Railroad Administration	2

Typical Section, Alignment Alternatives A, C, & E within CFX Section		
All Aboard Florida Intercity Passenger Rail Project		
NTS	U.S. Department of Transportation Federal Railroad Administration	2



Typical Section, Alternatives A, C, & E (Facing East)

Table 3-1 FEIS Alternatives – Phase II

Segment/Project Element	No-Action	Alternative A	Alternative C	Alternative E
MCO	No construction	4.5-mile new rail corridor	4.5-mile new rail corridor	4.5-mile new rail corridor
E-W Corridor	No construction	1.5-mile new rail corridor west of Narcoossee Road 17.5-mile new rail corridor within current SR 528 CFX ROW 15-mile new rail corridor within FDOT and utility ROWs 5 new bridges over water	1.5-mile new rail corridor west of Narcoossee Road 17.5-mile new rail corridor along boundary of current SR 528 CFX ROW 15-mile new rail corridor within FDOT and utility ROWs 5 new bridges over water	1.5-mile new rail corridor west of Narcoossee Road 17.5-mile new rail corridor 100 feet south of current SR 528 CFX ROW 15-mile new rail corridor within FDOT and utility ROWs 5 new bridges over water
N-S Corridor	No construction – Freight trips increase to 20 trips/day in 2016	128.5 mile corridor between Cocoa and West Palm Beach (WPB) 3-mile track improvements N of Cocoa connection Add second track, straighten curves, Reconstruct 18 bridges	128.5 mile corridor between Cocoa and WPB 3-mile track improvements N of Cocoa connection Add second track, straighten curves, Reconstruct 18 bridges	128.5 mile corridor between Cocoa and WPB 3-mile track improvements N of Cocoa connection Add second track, straighten curves, Reconstruct 18 bridges
VMF	No construction	New VMF on south portion of GOAA property Construct 1 new bridge	New VMF on south portion of GOAA property Construct 1 new bridge	New VMF on south portion of GOAA property Construct 1 new bridge
Passenger Trips	None	16 RT (32 trains)	16 RT (32 trains)	16 RT (32 trains)
2019 Ridership	0	3.5M	3.5M	3.5M

The three Action Alternatives are the same except for the portion of the E-W Corridor along the CFX section of SR 528. Alternative E, the Selected Alternative, would be a new rail alignment 100 feet south of the existing SR 528 CFX ROW, within land acquired by CFX for future highway expansion. The proposed alignment of Alternative E enables the railroad to be constructed at-grade within the SR 528 segment and would only require the perpendicular crossing of the main roadway for each of the interchanges along SR 528 instead of all of the roadway approaches and ramps. Alternative A differs from Alternative E within the SR 528 (CFX) ROW section of the E-W Corridor, from SR 417 to SR 520, where this alternative would be entirely within the existing SR 528 ROW. Alternative C differs from Alternative E within this section of the E-W Corridor, where the new rail alignment would run along the edge of the existing SR 528 CFW ROW. Alternatives A and C would require structures to cross all of the highway ramps and cross-streets.

3.3 Selected Alternative

Subsequent to the publication of the DEIS, AAF identified Alternative E as its proposed action. FRA reviewed the information provided by AAF and concurred that Alternative E is the only alternative that is feasible to construct. The CFX Board found that the land required for Alternatives A and C is not surplus and is therefore not available for the AAF Project. AAF has identified Alternative E as its proposed action because it is the only alternative that is reasonable and feasible to construct. This alternative would include a new rail corridor extending north through MCO to SR 528 (the MCO Segment); a new rail alignment 200 feet south of the SR 528 ROW (the E-W Corridor) from MCO to SR 520 and then within the SR 528 FDOT ROW to the FECR Corridor in Cocoa; and would use the existing FECR ROW from Cocoa to West Palm Beach (the N-S Corridor). AAF has secured lease agreements with GOAA, CFX, and FDOT to construct the MCO and E-W Corridors, and has an operating agreement with FECR to use the N-S corridor and construct the necessary infrastructure improvements. CFX would acquire the land south of the existing ROW limits to accommodate future highway widening and a transit corridor, and would grant an easement of an approximately 100-foot wide strip to AAF.

The location of the proposed Project should not impede the ability for FDOT or the CFX to expand SR 528 to an 8-lane facility extending from Orlando International Airport to I-95; CFX's conceptual plans to reconstruct the Dallas Boulevard interchange, which includes a southerly shift in the SR 528 mainline; nor the ability to extend the Osceola County Expressway Authority's proposed Northeast Connector Expressway to intersect with SR 528. As stated by the CFX Authority, Alternative E is the only acceptable alternative for CFX, and CFX is pursuing obtaining the ROW necessary to implement this option. FRA has evaluated AAF's analysis and concurs that Alternative E is the alternative that best satisfies the Project Purpose, Need and Objectives, minimizes impacts on the natural and human environment by utilizing existing transportation corridors where practicable, and incorporates the appropriate additional mitigation measures. Alternative E is therefore FRA's Selected Alternative.

3.4 Environmentally Preferable Alternative

Alternative A is the Environmentally Preferable Alternative. This alternative differs from the Selected Alternative in the 17.5-mile new rail corridor parallel SR 528 within the portion of the highway controlled by CFX. Alternative A was designed to be within the existing CFX ROW in this section and would have minimized new impacts to wetlands and plant communities. FRA did not select Alternative A as the Preferred Alternative because the CFX Board found that the land required for Alternatives A is not surplus, and therefore CFX would not make that land available for the AAF Project. Alternative E is identified as the Selected Alternative because it is the only alternative that is reasonable and feasible to construct.

4 Summary of Environmental Consequences

The Selected Alternative has the potential to adversely affect land use, transportation (particularly traffic at-grade crossings), noise and vibration, water resources, wetlands and floodplains, biological communities, protected species, social and economic conditions, cultural resources, parks and recreation areas, and utilities. However, mitigation measures would reduce these potential adverse effects. The Selected Alternative would also have beneficial environmental effects, such as traffic diversion from I-95 and other highways, economic growth, air quality improvements, and energy consumption improvements during operation.

4.1 Land Use

The land use analysis included an inventory of existing land use as well as the evaluation of local land use plans applicable to the Project Study Area. Potential direct effects include the potential for permanent land use conversions and consistency with local land use plans.

Direct impacts to land use along the MCO Segment and N-S Corridor are the same for all three Action Alternatives. AAF would lease land within MCO for the VMF and railroad ROW and would lease land from CFX and FDOT to construct the E-W Corridor. All construction along the N-S Corridor would occur within the FECR ROW and would not require any land acquisition. AAF would acquire an additional 105.7 acres of land along the E-W Corridor, including nine parcels of property in Orange County accounting for 45.1 acres that are zoned as residential; however, their acquisition and use would not result in residential displacements. Land acquisition in Brevard County includes three parcels zoned as commercial (21.2 acres), one parcel zoned as industrial (0.5 acres), and twelve residential properties. No commercial or industrial operations would be displaced due to property acquisitions or use in Brevard County. AAF has purchased all of the properties in Brevard County required for the Project. AAF is also in the process of acquiring a property interest from FECR in Brevard County that accounts for 26.9 acres and is zoned as locally accessed railroad property. The Project is conceptually consistent with land use plans and the plans of the transportation stakeholders (GOAA, CFX, and FDOT).

4.2 Transportation

The transportation analysis included Annual Average Daily Trips (AADT) obtained from FDOT for the two largest arterials, by volume, for each county through which the Project would pass. Highway capacity analysis for the 10 at-grade railroad crossings and intersections were conducted in accordance with the standard methodology presented in the Highway Capacity Manual (TRB 2010).

The Project would have the same transportation impacts under all three Action Alternatives, as they would include the same effects on existing rail and highway infrastructure, have the same ridership and effects on vehicle miles traveled, and would have the same number and locations of at-grade crossings.

There are no existing freight rail operations along the MCO Segment or E-W Corridor; therefore, no impacts to freight rail operations would occur along these segments. The N-S Corridor has been designed to cause no adverse impact on freight operations and has an assumed beneficial impact on freight operations. Infrastructure modifications and upgrades from a mostly single-track system to a mostly double-track system would improve freight efficiencies, as represented by increases in average operating speeds. The Project would have a beneficial impact on the passenger rail transportation network between Orlando and West Palm Beach by providing residents and tourists with an alternative means of transportation.

AAF expects riders to be primarily diverted from automobile modes (69 percent of forecast ridership). The Project would have the beneficial impact of removing 335,628 auto vehicle trips per year from the regional roadway network in 2016 and 1.2 million vehicles in 2019.

The proposed passenger rail service would divert 10 percent of its long-distance riders from private intercity motorbus services, which totals approximately 152,630 annual bus passenger trips per year. The proposed service would divert 10 percent of its riders from the air service market, which totals approximately 152,630 annual aviation passenger trips per year. About 2 percent of the AAF long-distance ridership is forecast to come from Amtrak passenger rail services. In 2019, this amounts to approximately 30,526 annual trips diverted from Amtrak, which is about 4 percent of Amtrak's 2012 ridership in South Florida.

The Selected Alternative would not impact local vehicular traffic along the MCO Segment or the E-W Corridor, as there would be no at-grade crossings. The N-S Corridor would result in some degradation in Levels of Service at the grade crossings and intersections studied, with greater percentages of time within an hour of operation under unacceptable roadway conditions than under the No-Action Alternative. With just three train crossings per hour, the majority of each hour of operation would not be affected by the introduction of passenger train service. Typical at-grade crossings (intersections of local roads with the FECR Corridor) would be closed an average of 54 times per day (three times per hour), with closure times ranging from 1.7 minutes (passenger) to 2.8 minutes (freight). The total hourly closure would range from 4.2 minutes per hour to 4.5 minutes per hour, an increase of approximately 2 minutes per hour in comparison to the No-Action Alternative.

4.3 Navigation

Impacts to navigable waters and navigation would be the same for Alternatives A, C, and E, as each would include the same bridge improvements. Existing fixed bridges would be replaced, or new fixed

bridges would be constructed to maintain the existing vertical and horizontal clearances and maintain existing navigation conditions. There would be no loss in existing clearance for the proposed new rail bridge over the St. Johns River and no change in the structure or the dimensions of the opening for the St. Lucie River or Loxahatchee (Jupiter) River bridges. Under all Action Alternatives, the moveable bridges (St. Lucie River and the Loxahatchee River) would be closed more frequently to accommodate the increased number of trains. AAF has developed an operating plan that minimizes the number and duration of closures; however, the total daily closure time at each bridge and vessel wait times would increase substantially in comparison to the No-Action Alternative, particularly on peak-season weekends. AAF will mitigate these increased closure times by implementing new measures to notify mariners of the bridge closure times and to make closure times more predictable. These mitigation measures would reduce delays and help to reduce queue lengths and times.

Subsequent to the publication of the DEIS and in response to public comment on the DEIS, AAF further evaluated the potential impacts of the No-Action Alternative and Action Alternatives with respect to closures of the St. Lucie and Loxahatchee Bridges and expected vessel wait times. Model simulation results on vessel queuing, non-zero wait time, average wait time, and boat arrivals show that the most likely vessel wait time would increase under the Project.

4.4 Air Quality

The air quality analysis evaluated the emission of air pollutants from the Selected Alternative, the resulting concentrations of pollutants in the regional areas, and carbon monoxide concentrations at intersections affected by changes in traffic patterns. This evaluation applied primary and secondary air quality standards identified by the National Ambient Air Quality Standards (NAAQS) to evaluate if the Selected Alternative might cause any new violation of the NAAQS, increase the frequency or severity of any existing violations, or delay attainment of any NAAQS.

As compared to the No-Action Alternative, air quality effects of the Selected Alternative would be identical, as each alternative would provide a similar travel time and would have the same ridership and vehicle miles traveled (VMT) reductions. All six counties crossed by the Selected Alternative are in attainment for all criteria pollutants. The Selected Alternative would provide a net regional air quality benefit as compared to the No-Action Alternative. Air quality in the region would be improved through the reduction of vehicles from the roads and highways as riders move instead to the proposed passenger rail service between Orlando and West Palm Beach. The Project would decrease emissions of carbon monoxide (CO), nitrogen oxides (NO_x), sulfur dioxide (SO_2), volatile organic compounds (VOCs), particulate matter less than 10 microns in diameter (PM_{10}) and particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) by 2016. By 2030, the Selected Alternative would reduce CO emissions by 1,654 tons, NO_x by 192 tons, VOCs by 59 tons and PM_{10} by 7 tons.

A detailed hot-spot modeling evaluation of intersections was not conducted as part of the air quality analysis because traffic volumes and congestion at grade crossings, and therefore CO emissions, would be lower than those evaluated as part of the 2012 EA for the West Palm Beach to Miami segment, which did not exceed air quality criteria. Analysis of CO emissions from vehicles queuing at grade crossings under proposed passenger train cycles produced an expected impact of less than 1 ton per day. The Project Study Area (Phase II) is located in Orange, Brevard, Indian River, St. Lucie, Martin, and Palm Beach Counties. All six counties are designated as attainment areas for all criteria pollutants. As the Project is in attainment areas, it is not subject to review under the EPA's General Conformity Rule.

4.5 Noise and Vibration

Noise and vibration have been assessed according to guidelines specified in FRA's *High-Speed Ground Transportation Noise and Vibration Impact Assessment* guidance manual, the Federal Transit Administration's (FTA) *Noise and Vibration Impact Assessment* guidance manual, and the Federal Highway Administration (FHWA) guidelines as defined for Florida application by FDOT for traffic operations (FRA 2012a; FTA 2006; FDOT 2011c).

There would be no adverse noise impacts in the MCO Segment. Along the E-W Corridor, noise impacts would be primarily due to the increased noise propagation from elevated portions of track. There is potential for 105 moderate and 9 severe noise impacts at residential receptors, and 1 moderate impact at an institutional receptor. Along the N-S Corridor, the use of wayside (pole-mounted) horns would eliminate any severe impacts and would reduce noise levels in comparison to the No-Action Alternative.

Noise mitigation along elevated portions of track may include sound barriers on the edge of the elevated structures to mitigate potential severe impacts. AAF is committed to mitigating impacts from the increased frequency of warning horn use at highway-rail at-grade crossings with the installation of stationary wayside horns at each of the grade crossings where severe, unmitigated impacts would occur. AAF is committed to cooperating with local jurisdictions should they seek to establish quiet zones and/or erect sound barriers in lieu of wayside horns.

A supplemental noise impact assessment was conducted for the two movable bridges along the N-S Corridor: St. Lucie River and Loxahatchee River. Following FTA/FRA guidelines, the supplemental noise analysis results and impact contours indicate no impact to any noise-sensitive land uses; therefore, no additional noise impacts were identified by this supplemental bridge noise impact assessment.

The greatest potential for vibration impact is along the N-S Corridor due to the increase (approximately doubling) of vibration events. There is no potential vibration impact along the MCO Segment as there are no sensitive receptors. Along the E-W Corridor, there is the potential for vibration impact at 122 residential and 12 institutional receptors. There would be potential vibration

impacts at 3,317 residential, 513 institutional receptors, as well as 18 other vibration-sensitive land uses (TV studios, recording studios, auditoriums, and theaters) along the N-S Corridor. AAF will minimize vibration impacts by wheel and rail maintenance that would control unacceptably high vibration levels. Vibration levels would be minor and would not exceed the threshold for structural damage to fragile buildings.

Noise and Vibration impacts for the north-south corridor relied on the FTA's General Noise and Vibration Assessment methodologies appropriate for the level of design of the alternatives evaluated in the FEIS. Because advanced engineering is now available for the north-south route, AAF will conduct an FTA Detailed Noise and Vibration Assessment throughout the corridor and to identify locations where any additional mitigation would be necessary.

Noise during construction would affect residences and other buildings close to the Project Area, particularly where pile driving is required for bridge construction.

4.6 Farmland Soils

Farmland soils within the Project Study Area with any level of designation by the Natural Resources Conservation Service (NRCS) were identified and mapped relative to the location of the Project. Direct impacts to prime and unique farmland soils from constructing the Project are limited to the E-W Corridor for all three Action Alternatives. Farmland Conversion Impact Rating forms were completed and submitted to NRCS. According to the results of the NRCS evaluation, there would be no significant impact to farmland soils.

4.7 Hazardous Materials and Solid Waste Disposal

Several potential sources of soil or groundwater contamination are within or adjacent to the Project. A contamination screening evaluation was performed and included a records search and review of historical aerials. A field reconnaissance was also conducted for sites rated medium and high-risk in proximity to the Project footprint.

The Project has the potential to encounter contaminated soils or groundwater, or to require the removal of waste material such as railroad ties, creosote-treated bridge timbers, or demolition material. The potential effects of the Action Alternatives would be the same. GOAA reported that no contaminated sites were located within 500 feet of the Project for the MCO Segment (including the VMF). The contaminated sites evaluation for the E-W Corridor identified 16 potentially contaminated sites within 500 feet of the Project. However, all of the potentially contaminated sites are outside the planned construction areas and impacts from the existing contaminated areas are not anticipated. A total of 337 potentially contaminated sites are within the 200-foot detailed search radius along the 128.5-mile N-S Corridor. As the proposed upgrades for this portion of the Project would be completely within the existing FECR Corridor and would result in minimal subsurface disturbance, there would be no impacts from existing contaminated areas. The Selected Alternative would not

substantially increase operational hazardous materials or hazardous waste. During construction, the Selected Alternative would include proper handling, use, and disposal of hazardous materials and waste and would be compliant within all appropriate tracking and reporting requirements. The Selected Alternative would not affect the transfer, storage, or transportation of pollutants.

4.8 Coastal Zone Management

The Project lies within the designated Florida Coastal Zone and requires a federal consistency determination under the Coastal Zone Management Act (CZMA). Direct effects to the "natural resources of the coastal zone," including both aquatic and marine resources, would result from all elements of the Selected Alternative, including construction of the VMF, bridge and rail construction along the E-W Corridor, and bridge construction along the N-S Corridor. Portions of the N-S Corridor are within or adjacent to Coastal and Aquatic Managed Areas. Bridge construction/reconstruction would affect small areas of aquatic resources within the Indian River and the Jensen Beach-Juniper Inlet Aquatic Reserve. The Selected Alternative is consistent with applicable coastal zone policies; however, several provisions of the Florida Coastal Management Program would require mitigation. The Florida State Clearinghouse concurred with this finding, as detailed in a letter to FRA dated March 3, 2015 (FDEP, 2015).

4.9 Climate Change

Florida faces direct, immediate, and severe impacts from climate change through rising sea level and the possibility of more intense storms. Calculations for emission of greenhouse gases carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O) show the Selected Alternative would decrease emissions as a result of decreased automobile VMT. CO_2 emissions would decrease by 19,617 tons/year in 2019 and 31,477 tons/year in 2030. CH_4 emissions would decrease by 4.7 and 5.7 tons/year, respectively, and N_2O emissions by 5.0 and 6.1 tons/year in 2019 and 2030. Sea level rise effects for the MCO Segment and E-W Corridor are anticipated to be minimal for the 2030 and 2060 planning horizons, as these segments of the Selected Alternative are at higher elevations and further from the coast. The N-S Corridor and WPB-M Corridor were assessed for vulnerability, as these corridors are along the coast and cross several coastal water bodies. Bridge structures would have increased vulnerability over time; potential infrastructure damage may result from flooding, tidal damage, and/or storms.

4.10 Water Resources

Surface water and groundwater resources, including navigable waters, Outstanding Florida Waters (OFWs), and impaired water bodies, were evaluated for potential impacts based on water availability, quality, use, and associated regulations.

Direct permanent impacts to waterways include installing concrete pilings and abutments within surface waters during bridge construction. Each of the alternatives would include constructing 31 new or replacement bridges over waterways, of which 6 would cross OFWs. New impervious surfaces (pavement and buildings) would be constructed in the MCO Segment for the VMF and would require stormwater management systems to protect surface and groundwater quality. Along the E-W Corridor, the proposed railroad would convert existing pervious land to a ballasted railroad bed and unpaved access road, resulting in minor changes to stormwater runoff and infiltration. AAF will implement best management practices (BMPs), which are often required as part of the environmental review permit process and would comply with all Florida Department of Environmental Protection (FDEP) and local ordinances. Therefore, there would be no significant impacts to surface waters and groundwater resources.

4.11 Wild and Scenic Rivers

The closest Wild and Scenic River designated segment of the Loxahatchee River is approximately four river miles upstream from the N-S Corridor in Palm Beach County. No impact would occur to Wild and Scenic Rivers from the Selected Alternative, which would not be located in or visible from a Wild and Scenic River segment. There are three rivers that are listed on the Nationwide Rivers Inventory (NRI) in the project area. The NRI is a listing of more than 3,400 free-flowing river segments in the United States that are believed to possess one or more "outstandingly remarkable" natural or cultural values judged to be of more than local or regional significance. These are the St. John's River, the Sebastian River, and the Econlockhatchee River. These structures have been located and designed to minimize impacts on their respective waterways. The analyses in the FEIS considered the effects of these structures on the natural, cultural and recreational values of the rivers, and FRA finds that the potential effects are minor would not alter the river's ability to meet the eligibility and classification criteria..

The Selected Alternative would cross the Econlockhatchee River immediately upriver of the existing SR 528 bridge, within the highway right-of-way. This segment of the Econlockhatchee River is listed on the NRI and originates 0.14 mile south of the project location. AAF proposes to construct a box culvert that will accommodate wildlife passage close to the existing SR 528 highway bridge. The river at this location is surrounded by private property and is not navigable by canoe or kayak during most times of the year. Fishing and recreational opportunities at this location are extremely limited. AAF completed a Cultural Resource Assessment Survey, and no cultural resources were identified at this location. The construction of the project would modify the visual nature of the river at this location, but is not expected to result in an adverse effect due to its proximity to the existing SR 528 bridge. With this inclusion of specifically designed wildlife crossing and compensatory mitigation for the loss of aquatic resource functions and values resulting from the discharge of fill the proposed crossing, the Selected Alternative would not adversely affect the Outstanding Remarkable Values which were considered in the designation of this river to the NRI.

The Selected Alternative would cross the St. Johns River abutting the SR 528 highway bridge, within the highway right-of-way. This segment of the St. Johns River is within the listed segment and is also designated a Florida Outstanding Water. Constructing a new bridge close to the existing highway bridge will not affect the visual environment, wildlife passage, or other uses of the river. AAF completed a Cultural Resource Assessment Survey, and no cultural resources were identified at this location. The river at this location is in public ownership; however, public access to the project location can only occur from navigating the river or trespassing within the SR 528 ROW. The river at this location is navigable by small boats, and the bridge would be constructed to minimize work in the river and to maintain existing clearances. Water depths at the project location fluctuate significantly throughout the year depending on seasonal changes. With compensatory mitigation for the loss of aquatic resource functions and values resulting from the discharge of fill at this location, the proposed crossing would not adversely affect the Outstanding Remarkable Values, which were considered in the designation of this river to the NRI.

The Selected Alternative would replace the existing railroad bridge over the Sebastian River, which is listed on the NRI. Through consultation with the SHPO, it was determined that the replacement of the existing bridge would result in an "adverse effect" provided by 36 CFR 800.5(a)(1). To mitigate this adverse effect, the USACE and USCG have completed a Programmatic Assessment (PA) that requires the implementation of a Bridge Advisory Group to evaluate the design of a new structure. AAF has not proposed a design for this bridge crossing; however, the FRA expects the new structure to have few pilings within the River.

4.12 Wetlands

The Selected Alternative would have moderate direct and indirect effects to wetlands. The quantified impacts, effects, and methodology for each Alternative is presented in Section 5.3.3 of the FEIS. Wetlands would be filled to construct portions of the N-S, VMF, and the E-W Corridor for all Action Alternatives. Wetland impacts at the VMF have largely been permitted by the USACE under a prior permit issued to GOAA. Bridge construction along the E-W and N-S Corridors would have minor effects on wetlands due to installing new pilings, abutments and riprap protection, and cutting mangrove vegetation beneath the bridges. The Selected Alternative would result in a total of 314 acres of loss (excavation, filling, and other impacts). The Selected Alternative would have indirect effects on wetland quality and functions along the E-W Corridor; however, these would be minor since the wetlands are already affected by proximity to the heavily traveled SR 528 corridor. All wetlands impacts would be mitigated through the purchase of appropriate mitigation bank credits from federally approved mitigation banks. AAF has completed functional assessments to ensure the compensatory mitigation is commensurate with the functional loss.

4.13 Floodplains

Impacts to areas subject to flooding were evaluated using the base flood elevation published on the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps.

The Selected Alternative would require construction within the mapped 100-year floodplain. The E-W Corridor crosses several floodplains, primarily those associated with the Econolockhatchee River and the St. Johns River. The N-S Corridor uses the existing FECR ROW, which crosses numerous floodplains primarily associated with coastal waters and estuaries. The Selected Alternative would affect approximately 239 acres of floodplains. These impacts are not avoidable due to the extent of floodplains throughout the Project footprint. The construction design would minimize potential harm to the floodplains by retaining existing elevations where feasible, constructing stormwater mitigation measures and retention ponds, and minimizing fill in sensitive areas.

4.14 Biological Resources and Natural Ecological Systems

Natural habitats within the Project Study Area support biological diversity, wildlife, and fish. Many of these natural habitats are directly adjacent to existing transportation facilities and have reduced habitat functions. Direct impacts to biological resources and natural ecological systems from the Selected Alternative would result from the loss of natural vegetation along the E-W Corridor, south of SR 528.

The Selected Alternative directly impacts approximately 109 acres of upland habitat. The greatest loss of upland habitat would be to forested plant communities. The potential loss of wildlife habitat could result in indirect or secondary effects to wildlife such as habitat fragmentation and associated "edge effects," the loss of genetic diversity of plant and animal populations, increased competition for resources, and physical or psychological restrictions on movements caused by features within a corridor that wildlife are unwilling or unable to cross. It is also possible that the operation of the Project could displace some individual wildlife populations that are sensitive to noise and vibration. However, these effects are negligible due to the existing effects of SR 528 and other transportation facilities.

Essential fish habitat (EFH) is defined as those waters and substrates necessary to support fish for spawning, breeding, feeding, or growth to maturity. Habitat Areas of Particular Concern (HAPC) are subsets of EFHs that are particularly important to the long-term productivity of populations of one or more managed species, or are particularly vulnerable to human induced degradation. The evaluation of EFHs and HAPC included potential impacts to fisheries. The Selected Alternative would have unavoidable minor impacts to EFH and HAPC. Direct impacts associated with the Project would result from placing rip-rap/fill for the bridge approaches, placing bridge pilings, and excavating where existing timber pilings would be replaced. The NMFS has concurred that the Project would not have a significant adverse effect on EFHs.

Impacts to biological resources and natural ecological systems have been minimized due to the fact that the E-W Corridor would be developed immediately adjacent to an existing transportation corridor and would not significantly increase fragmentation and noise impacts that do not already

exist in this area. The Selected Alternative includes a new wildlife crossing adjacent to the Tosohatchee Wildlife Management Area (WMA) to facilitate future movement along the Florida Wildlife Corridor.

Erosion and sedimentation would be controlled using BMPs, such as silt fences and turbidity curtains, in accordance with an approved Erosion and Sedimentation Control Plan, during construction of the bridges.

4.15 Threatened and Endangered Species

The Selected Alternative would potentially affect habitats used by federal and state listed wildlife and plant species. The Federal Endangered Species Act of 1973 (ESA) defines an endangered species as "any species which is in danger of extinction throughout all or a significant portion of its range." The ESA also defines a threatened species as "any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." The ESA protects species listed as endangered or threatened on a national basis.

The USFWS and NMFS, Office of Protected Resources Division (PRD), are the lead Federal agencies for ESA compliance. Both agencies have independently assessed the effects of the Selected Alternative on federally-listed species. The USFWS found that the Selected Alternative would result in adverse effects and take of the Florida scrub-jay and is likely to adversely affect the fragrant prickly-apple, but is "not likely to adversely affect" the West Indian manatee, Lakela's mint, Atlantic salt marsh snake, Audubon's crested caracara, blue-tailed mole skink, eastern indigo snake, Everglade snail kite, sand skink, and wood stork. USFWS has issued a Biological Opinion that includes Reasonable and Prudent Measures, Terms and Conditions, and Conservation Recommendations which AAF will be required to adhere to. AAF has purchased two scrub-jay credits with a USFWS-approved scrub-jay mitigation bank in accordance with Florida Statute Title XXVIII, Chapter 373.4135, *Mitigation Banks and Offsite Regional Mitigation*, and has conducted pre-construction surveys to locate populations of the fragrant prickly-apple. The USFWS Biological Opinion is included as Attachment B to this ROD.

NMFS has provided a letter of concurrence stating the proposed work is not likely to adversely affect: the smalltooth sawfish and sea turtles (loggerhead, Kemp's ridley, green, hawksbill, and leatherback). The Project would not affect Atlantic sturgeon, shortnose sturgeon, and Johnson's seagrass, or result in an adverse modification of Johnson's seagrass designated critical habitat. NMFS does not believe hawksbill or leatherback sea turtles will be present or affected because of their very specific life history, sheltering, and foraging requirements, which are not met in or near the action area-hawksbills are associated with coral reefs while leatherbacks are a deepwater, pelagic species. Smalltooth sawfish, loggerhead sea turtles (Northwest Atlantic Ocean distinct population segment), green sea turtles, and Kemp's ridley sea turtles may be found in or near the action area.

In addition, since the publication of the FEIS, the Nassau Grouper has been added to the list of threatened and endangered species (on July 29, 2016). When the USACE noted this and requested to reinitiate Section 7 consultation with the NMFS, NMFS responded that the Nassau Grouper is outside of the functional range of the permitted bridge USACE was permitting in the Biscayne Bay in an email dated September 6, 2017. Since NMFS closed out the consultation request with the USACE, FRA notes that the Nassau Grouper is outside of the range of the Project and would not be affected based on the communication to USACE from NMFS and will not reinitiate consultation under Section 7.

Potential impacts to state listed species and/or their habitats include the Sherman's fox squirrel, burrowing owl, Florida sandhill crane, limpkin, little blue heron, roseate spoonbill, snowy egret, the southeastern American kestrel, tricolored heron, white ibis, mangrove rivulus, gopher tortoise (and its associated eastern indigo snake, Florida mouse, Florida pine snake, short-tailed snake, and gopher frog habitat), wading bird rookeries, American oyster catcher, and reddish egret habitat.

AAF has proposed specific mitigation for potential temporary and permanent impacts to the habitat of state and federally-listed species, in addition to conducting pre-construction surveys for rare animal species (caracara, red-cockaded woodpecker, gopher tortoise, sand skink, and listed plants) and plant species that may occur within the construction area. A gopher tortoise relocation permit would provide authorization to move all commensal species other than the eastern indigo snake to an adjacent habitat outside construction limits.

4.16 Communities and Demographics

Information collected from the United States Census Bureau (USCB), county websites, and municipal websites were reviewed and incorporated, as appropriate, to describe the community structure and demographic profiles along the Project corridor. Adverse impacts to communities and demographics are those that involve long-term residential displacement and neighborhood fragmentation or the loss of continuity between neighborhoods.

The E-W Corridor would be predominantly within the SR 528 ROW between Orlando and Cocoa and would not cross any residential neighborhoods; therefore, no neighborhood fragmentation would occur. Six residential displacements would occur in the vicinity of the I-95 crossing and the Industrial Road interchange but would not disrupt or fragment communities. The N-S Corridor would not result in residential displacement, neighborhood fragmentation, or the loss of continuity between neighborhoods, as it is entirely within the existing FECR Corridor.

4.17 Environmental Justice

The environmental justice (EJ) evaluation included the use of demographic data collected from the 2010 U.S. Census and 2010 American Community Survey. The Project Study Area for this evaluation included census tracts within 1,000 feet of the proposed or existing railroad alignments. Thresholds to determine meaningfully greater high minority and low-income populations include census tracts

where minority populations are 10 percent higher than the combined total for the 6 counties crossed by the Project (37.4 percent) and census tracts where low-income populations are 10 percent higher than the combined total for the six counties crossed by the Project (22.4 percent).

There would be no disproportionate impacts to EJ communities along the MCO Segment, as there are no minority or low-income populations within the census tract encompassing this segment. Neither the E-W Corridor nor the N-S Corridor would result in residential displacement, job loss, or neighborhood fragmentation due to the use of property; therefore, there would be no disproportionate impacts to EJ communities from changes in land use. Although changes in noise would affect 109 residential parcels (105 moderate and4 severe impacts) along the E-W Corridor, none of these parcels are within EJ communities. Potential impacts resulting from changes to noise in EJ communities would not be appreciably more severe or greater in magnitude than the impacts experienced by non-EJ communities along the N-S Corridor. There would be no adverse vibration impacts to EJ communities along the E-W Corridor under the Project, and mitigation would limit any changes in vibration along the N-S Corridor such that there would be no resulting vibration impacts.

4.18 Economic Conditions

Impacts to economics are those that involve the displacement of businesses, changes in employment, and the loss of real estate taxes as well as beneficial effects from construction-period spending or long-term economic changes. With the Project, the MCO Segment and N-S Corridor would not result in the reduction of municipal property tax revenues. The E-W Corridor would require the acquisition of several privately-owned parcels outside the SR 528 ROW, but would not result in a significant loss of property tax revenues in Orange or Brevard Counties. The Selected Alternative would not result in any business or job losses.

An analysis of potential economic impacts associated with increased average vessel wait times for the three movable bridges at St. Lucie River and Loxahatchee River represented an impact of less than 0.1 percent daily cost increase as compared to the No-Action Alternative.

Phase I and Phase II of the Project would have long-term direct economic benefits through the creation of approximately 1,100 cumulative jobs through 2021 and labor income valued at nearly $294 million through 2021. Construction of the Project would have a direct total economic impact of $915.6 million, with the largest benefit to be had in Orange County at $302.2 million. Project operations would have a direct total economic impact of $507.2 million between 2016 and 2021, with an average direct economic impact of $84.5 million per year.

4.19 Public Health and Safety

The Selected Alternative would have an overall beneficial effect on public health, safety, and security in the rail corridor. While greater frequency of trains may increase the frequency of opportunities for conflict between trains and vehicles or people, safety improvements at crossings, an upgraded

Positive Train Control system, enhanced security, and improved communications among emergency responders would minimize potential conflicts and their consequences. The benefits resulting from decreased congestion and the potential for fewer vehicular crashes and fewer air emissions indicate that there would be no significant negative impacts on public health and safety.

In response to a Diagnostic Safety Review conducted by the FRA Office of Railroad Safety – Highway Rail Crossing and Trespasser Program Division, AAF has voluntarily agreed to incorporate recommended grade crossing safety improvements related to the introduction of passenger rail service, in conjunction with county and municipal execution of amendments to existing crossing license agreements as described in the On-Site Engineering Field Report Part 1 and Part 2 (referred also as the Diagnostic Report and is included as attachments to the FEIS).

The Selected Alternative is anticipated to benefit elderly and handicapped individuals by providing a transportation option that would enhance mobility and livability in their communities. The AAF trains and stations will comply with the Americans with Disabilities Act (ADA) requirements. Preliminary design plans indicate that AAF trains would be single level, fully accessible coaches, with no stairs or other obstacles to impede movement on board trains. Every coach car will have ADA compliant restrooms.

4.20 Historic Properties

The methodology for identifying cultural resources has been developed in conjunction with the State Historic Preservation Officer (SHPO) and is similar to previous SHPO-approved methodologies that have been applied to other large-scale transit projects.

Section 5.4.5 of the FEIS, *Historic Properties*, contains FRA's Findings of Effect under Section 106 of the National Historic Preservation Act of 1966, as amended. No National Register of Historic Places (NRHP) listed or eligible resources were identified within the MCO Segment. One NRHP-eligible resource has been identified in the direct effects area of potential effect (APE) for the E-W Corridor – the FECR Historic District, which is located at the east end of the E-W Corridor in Cocoa at the intersection with the N-S Corridor. FRA determined that constructing the E-W Corridor would have no adverse effect on the FECR Railway Historic District.

NRHP listed or eligible resources were identified within the N-S Corridor and include the FECR Railway Historic District and several historic railroad bridges. The Project would have no adverse effect on the historic district. SHPO has concurred that the use of the historic rail line and restoration of passenger rail service would not constitute an adverse effect (FRA 2013). The Selected Alternative would require that two historic bridges (Eau Gallie River and St. Sebastian River), which are individually eligible for the NRHP, be demolished; FRA has determined that the Project would have an adverse effect on these two bridges. Two additional bridges that are individually eligible for the NRHP would be rehabilitated, and seven bridges that are contributing elements would also be demolished and replaced with modern structures; FRA has determined that replacing the

contributing bridges has "no adverse effect" under Section 106 and represents a *de minimis* impact under Section 4(f) (49 U.S.C. 303/23 U.S.C. 138).

Based on the information available, FRA determined that the Project would have no adverse effect on archaeological sites within the APE for direct impacts for the N-S Corridor. The no adverse effect finding is based on the condition that AAF will continue to consult with SHPO through the design process, as needed, and will adhere to the stipulations of the MOA to ensure appropriate sensitivity to the previously recorded archaeological sites located within the APE.

The Selected Alternative would have no direct or indirect effects (noise, vibration, or change in setting) to the historic resources adjacent to the N-S Corridor. FRA made a conditional "no adverse effect" finding based on the condition that consultation with the SHPO would continue through the design process in order to ensure compatibility and appropriate sensitivity to the FECR Railway Historic District and bridge resources.

As part of the Section 106 process, FRA, USACE and USCG consulted with the SHPO, the Advisory Council on Historic Preservation (ACHP), the project sponsor, and the consulting parties to develop a Programmatic Agreement (PA) to resolve the adverse effects described above. FRA did not execute the PA at the time. However, USACE and USGC, relying on and adopting FRA's findings and consultations, independently evaluated and adopted the consultations completed between FRA, SHPO, and ACHP in accordance with 33 C.F.R. § 325 Appendix C Paragraph 2(c) and 36 C.F.R. § 800.2(a)(2). The USACE and USCG have consulted with the Florida Division of Historical Resources (FDHR), which is the SHPO, under 36 C.F.R. § 800.2(c)(1); the FRA, USACE, and USCG have considered the Consulting Parties' comments on the identification of historic properties within APE and on FRA's Determination of Effects to those historic properties and determined that all historic properties within the APE, respectively, have been identified consistent with Section 106 and its implementing regulations for Protection of Historic Properties (36 C.F.R. Part 800) and in compliance with the data analysis and reporting standards embodied in FDHR's Cultural Resource Management (CRM) Standards and Operational Manual (Florida Department of State 2002), and Chapter 1A 46 (Archaeological and Historical Report Standards and Guidelines), Florida Administrative Code,.

On September 13, 2017, the USACE, USCG, SHPO, and ACHP executed a PA that fulfills the responsibilities of the USACE and USCG under Section 106. The PA included the stipulation "In the event that another Federal agency is considering funding, permits, licenses, or other approvals or assistance for this Undertaking not covered by this PA as originally executed, and the Undertaking remains unchanged as set forth in this PA, that agency may fulfill its Section 106 responsibilities by stating in writing to the USACE, USCG, Florida SHPO, and the ACHP that it intends to do so and that it concurs with and will abide by the terms of this PA". FRA has now sent a letter to the USACE, USCG, Florida SHPO and the ACHP that it concurs with and intends to abide by the terms of the PA to satisfy its Section 106 responsibilities, as allowed in the text of the PA.

4.21 Park and Recreation Lands

The Selected Alternative would not adversely affect, or "use," any public parks, recreation areas, or wildlife refuges. Collectively, these properties are protected under Section 4(f) (49 U.S.C. 303/23 U.S.C. 138), as are historic properties and cultural resources. The MCO Segment is within the property boundaries of MCO and no parks or recreation lands are located on this property. The E-W Corridor (and SR 528) is adjacent to two recreational resources (the Tosohatchee WMA and the Canaveral Marshes Conservation Area); however, constructing the E-W Corridor would not require acquisition of new ROW within the property limits of these resources. Thirty-one recreational resources are along the N-S Corridor. The existing N-S Corridor bisects two of these recreation resources (the Hobe Sound National Wildlife Refuge and Jonathan Dickinson State Park). All construction would take place within the existing FECR-owned ROW and would not require acquisition of new ROW within Section 4(f) resource property limits. Two of the 31 identified recreation resources along the N-S Corridor are also Section 6(f) resources (properties invested in with Land and Water Conservation Funds including North Sebastian Conservation Area and Sawfish Bay Park). The N-S Corridor would not cross either resource and no land acquisition within either resource would be required.

The Selected Alternative would not affect parks or recreation resources adjacent to the rail corridor in regards to noise, vibration, aesthetics, or access. Noise and vibration generated by the rail operations would be compatible with the intended use of these parks and recreation resources. Existing viewsheds would be consistent with existing conditions at MCO, along the SR 528 ROW (E-W Corridor), and the FECR Corridor (N-S Corridor).

The E-W Corridor would be constructed as an overpass as not to interrupt the use of Long Bluff Road within the Tosohatchee WMA. Construction would avoid temporary road closures to the extent practicable. If temporary road or lane closures are necessary, AAF, in association with FRA, would coordinate with the land managing agencies of the Section 4(f) recreational resources (Florida Fish and Wildlife Conservation Commission [FWC]). To ensure the safety of the users of Jonathan Dickinson State Park, AAF would implement at-grade crossing improvements where the N-S Corridor crosses Southeast Jonathan Dickinson Way.

4.22 Visual and Scenic Resources

The Selected Alternative is anticipated to have only minor effects on visual and scenic resources, primarily associated with new bridges over waterways and new communications towers along the E-W Corridor. The existing viewshed of the MCO Segment and N-S Corridor would remain primarily

unchanged. Motorists traveling along SR 528 would generally be able to see the new railroad in the E-W Corridor to the south.

The viewshed of motorists traveling east on SR 528 crossing the St. Johns River would be somewhat obstructed because the rail bridge would be higher than the SR 528 bridge. The views for boaters on the St. Johns River looking north towards SR 528 would not change substantially as the rail bridge would be parallel to SR 528 and would be similar to the size and structure of SR 528 over the river.

The viewshed of motorists traveling on existing roads crossing SR 528, including motorists on I-95, would change minimally. The new rail overpasses would be constructed parallel to SR 528 and would be similar to the size and structure of the SR 528 Bridge over I-95.

4.23 Utilities and Energy Resources

The evaluation of utilities and energy resources included a review of county-developed interactive mapping services for current utility locations and urban service areas and national databases for the current locations of underground pipelines.

The Selected Alternative may require portions of existing utilities be relocated outside the track footprint where the proposed track crosses underground utilities. Where the proposed track crosses under overhead utilities, relocation or reconstruction may be necessary to provide the required vertical clearance over the tracks to accommodate utility lines and equipment.

Some buried utilities may be present in the MCO Segment. The proposed VMF is currently served by all necessary utilities (Orlando Utilities Commission 2013). Constructing the VMF would affect a large infiltration ditch originally constructed to serve the City of Orlando wastewater treatment facility, which is no longer functioning. Constructing the VMF, therefore, would not affect any utilities.

The E-W Corridor crosses several stormwater management features associated with SR 528. A new maintenance access road would be constructed south of the railroad and would be a shared maintenance road with AAF. The Project would intersect two existing pipelines.

Electrical transmission/distribution lines, above and below ground, are located along and within the FECR ROW in the N-S Corridor. In some locations, poles would require relocation in order to accommodate the new mainline track and upgraded crossings. Any relocation of poles is expected to be minimal.

The locomotives are planned as diesel-electric units and would not place any additional load on the existing electrical and utility services. Based on the estimated annual quantities of diesel consumption, the impact on energy resources would be negligible. The increase in electrical service/demand due to signals would be minimal, and no major changes or construction of electrical or other utility infrastructure would be required.

4.24 Cumulative Effects

Under NEPA regulations (40 C.F.R. 1508.7), a cumulative effect is defined as "the impact on the environment which results from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time."

The cumulative effects of the Project were analyzed as compared to the baseline condition (the No-Action Alternative). The evaluation was conducted for a selected set of resources within certain temporal and spatial boundaries, in reference to historical trends or effects from other specific projects and that are (for the most part) regulated by various governmental agencies. The cumulative effects evaluation focused on those resources that would be affected by the Project including:

- Land Use;
- Transportation;
- Air Quality;
- Noise;
- Water Resources;
- Floodplains;
- Wetlands;
- Protected Species; and
- Social and Economic Environment.

The other resources evaluated in the FEIS are expected to be little affected or not affected by of the Selected Alternative and/or would not be adversely affected by past or reasonably foreseeable actions in the Project Study Area. The Selected Alternative is not anticipated to result in cumulative impacts that would be collectively significant and adverse. With respect to transportation, air quality, and economic resources, the Selected Alternative would have beneficial cumulative impacts.

5 Mitigation

This section outlines the mitigation measures the Project Proponent will implement and that are intended to avoid, minimize, or compensate for potential adverse impacts of Project construction and operation. Mitigation measures are required for traffic and at-grade crossings, noise and vibration, water resources, navigation, wetlands, biological resources and natural ecological systems, essential fish habitat (EFH), threatened and endangered species, and historic properties. For each resource, the analysis describes efforts to avoid consequences, minimize impacts, and provide compensatory mitigation. Table 5-1 provides a summary of construction-period BMPs and mitigation measures proposed for environmental resources that would be affected by the Project. Table 5-2 provides a summary of project-level mitigation measures proposed for unavoidable impacts as a result of the Project.

Table 5-1 Project BMPs and Mitigation Measures – Construction Period

Environmental Resource	BMPs and Mitigation Measures
Transportation	• Implement traffic management BMPs during construction activities
Air Quality	• Implement BMPs (such as soil watering to reduce fugitive dust emissions) to keep emissions to a minimum • Keep construction equipment on site for duration of construction
Noise and Vibration	• Avoid nighttime construction in residential neighborhoods • Locate stationary construction equipment as far as possible from noise sensitive sites • Re-route construction-related truck traffic along roadways that will cause the least disturbance to residents • Monitor and maintain equipment to meet noise limits • Minimize the use of generators to power equipment • Limit use of public address systems • Limit or avoid certain noisy activities, such as aboveground jackhammering and impact pile driving, during nighttime hours • Use augers (as opposed to pile drivers) where practicable • Operate earthmoving equipment on the construction lot as far away from vibration-sensitive sites as practicable. • Phase demolition, earthmoving, and ground-impacting operations so as not to occur in the same time period • Select low-impact demolition methods where possible • Avoid vibratory rollers and packers near sensitive areas • Conduct detailed Noise and Vibration study throughout the north-south segment of the corridor to fine-tune any potential mitigation for severe impacts
Hazardous Materials and Solid Waste Disposal	• Use appropriate special waste handling techniques • Implement dust control measures • Use proper technique for management/disposal of contaminated soil/groundwater
Water Resources	• Implement sediment control BMPs (turbidity curtains and silt fences)
Essential Fish Habitat	• Use silt fences and turbidity curtains • Develop and implement an Erosion and Sedimentation Control Plan • In-kind compensatory mitigation at a federally-approved mitigation bank
Biological Resources and Natural Ecological Systems	• Revegetate cleared areas when required by standard BMPs and applicable laws • Reduce the potential for invasive species spread by using imported soil for fill material that has been certified free of invasive species seeds and rhizomes
Threatened and Endangered Species and Other Protected Species	• Adhere to the Reasonable and Prudent Measures, Terms and Conditions, and Conservation Recommendations of the Biological Opinion issued by USFWS • Make siltation/turbidity barriers of material to not entrap/entangle species, and not impede species movement • Operate water vessels at no wake/idle speeds at all times and in water depths where the draft of the vessel provides less than a 4-foot clearance from the sediment. Vessels to follow routes of deep water. • Instruct personnel in the potential presence of threatened and endangered species in the vicinity. Personnel to be advised of the civil and criminal penalties for harming species • Cease activities if a manatee comes within 50 feet of the construction area or barrier, including

	vessels being shutdown, until the animal has moved on its own volition beyond the 50-foot radius of the construction operation

Table 5-1 Project BMPs and Mitigation Measures – Construction Period (Continued)

Environmental Resource	BMPs and Mitigation Measures
Threatened and Endangered Species and Other Protected Species (Continued)	• Post signs regarding species before and during in-water construction activities • Do not subject feeding sites to water management practices • Comply with the Bald Eagle Management Plan with respect to all construction activities • Obtain a Bald Eagle Disturbance Permit • Submit an eastern indigo snake monitoring report to the appropriate federal and local field offices • Conduct construction activities during daylight hours in areas that might be visible from any sea turtle nesting beaches • Complete construction from the water utilizing floating barges and turbidity barriers • Use bubble curtains during pile driving to reduce noise impacts to swimming sea turtles and smalltooth sawfish • Complete Florida Fish and Wildlife Conservation Commission-compliant gopher tortoise surveys by a qualified gopher tortoise agent prior to ground disturbing activities • Conduct pre-construction surveys for listed plant species in coordination with USFWS and relocate individuals if necessary • Implement eastern indigo snake protection measures • Implement STANDARD MANATEE CONDITIONS FOR IN-WATER WORK – 2011 • Implement SEA TURTLE AND SMALLTOOTH SAWFISH CONSTRUCTION CONDITIONS March 2006 • Develop and implement a translocation plan for the fragrant prickly-apple
Historic Properties	• Implement Archaeological Monitoring Plan for all project work in the area of six identified archaeological sites (Hobe Sound National Wildlife Refuge #3 Site (8MT1287); the Fort Capron Site (8SL41); Vero Man/Vero Locality Site (8IRI/8IR9); Fort Pierce (8SL31); Railroad (8IR846); and Avenue A-Downtown Fort Pierce (8SL1772) and in any other areas designated by SHPO • Consult with SHPO for design for rehabilitation and construction of all bridges that are contributing resources to the Florida East Coast Railroad Historic District to avoid adverse effect to the district • Consult with SHPO in the design and construction of replacement and updated crossing gates at grade crossings within historic districts abutting the Florida East Coast Railroad Historic District or in proximity to historic properties • Consult with SHPO to assess and avoid potential adverse effects of construction activities identified outside of the existing APE for direct effects on historic properties or archaeological sites listed or eligible for listing in the National Register of Historic Places • Place communications towers in locations that have been determined to contain no above or below ground historic properties • Implement alternative construction methods such as vibratory or sonic pile driving to reduce vibration impacts from pile driving at archaeological sites located within 135 feet of locations where pile driving occurs
Section 4(f) Parks and Recreation Properties	• Develop a construction management plan to reduce and minimize the effects of grade crossing reconstruction in Jonathan Dickinson State Park on park uses. AAF, in association with FRA, will coordinate with the land management agency.

Table 5-2 Project Mitigation Measures for Unavoidable Permanent Impacts

Environmental Resource	Mitigation Measure
Traffic and Grade Crossings	• Work with State and local traffic officials to adjust traffic signal timing as needed in Project Area • Implement and fund initial grade crossing safety enhancements identified in the Diagnostic Team Report (see FEIS Section 5.4.4.2) and subsequently approved by FRA.
Noise and Vibration	• Install noise barriers along the E-W Corridor (see FEIS Section 7.2.4) where effective in reducing noise impacts near elevated structures (Narcoossee Road and I-95) • Maintain train wheels and rails to minimize vibration • Install pole-mounted horns at 117 grade crossings where severe noise impacts would occur in the absence of mitigation (FEIS Appendix 3.3.5-D) • Perform mitigation as needed based in results of more details Noise and Vibration study for the North-South section.
Water Resources	• Implement stormwater treatment BMPs (surface infiltration through swales, ditches, and over-land flow; installation of underground French drain systems; deep injection wells to drain water via gravity or pumping; and/or wet detention and retention ponds)
Navigation	• Manage train schedules to minimize bridge closures • Provide marine industry with bridge closure schedules to facilitate planning by boaters • Develop a set schedule for the down times of each bridge location. This schedule will include both freight and passenger rail service. • Provide that schedule of bridge closures in an internet-accessible format to offer the public with access to that information, including the boating community and marinas. This will be posted on the AAF website and/or the USCG website. • Implement a notification sign/signal at each bridge location with warning count downs to indicate the times at which the bridge will begin to close and open and how long before a train will arrive. • Develop formal contact with first responders and emergency personnel. • Develop coordination plans between AAF and local authorities during peak vessel travel times on holidays and major public events
Wetlands	• To compensate for impacts to waters of the United States (wetlands and surface waters) AAF will purchase in-kind mitigation bank credits from a federally-approved mitigation bank(s) whose service area covers the project, as stipulated in the Environmental Resource Permits and Section 404 Permit(s) issued for the project.
Biological Resources and Natural Ecological Systems	• Design and construct wildlife passage under bridges and through culverts in critical areas (Econolockhatchee River and Little Creek) • Install wildlife crossing within the Tosohatchee Wildlife Management Area
Threatened and Endangered Species and Other Protected Species	• Purchase two scrub-jay credits with a USFWS-approved scrub-jay mitigation bank in accordance with Florida Statute Title XXVIII, Chapter 373.4135, Mitigation banks and offsite regional mitigation • Develop and implement, for a minimum of 3 years, a monitoring program for at least 8 active scrub-jay territories, to verify that scrub-jay territories remain active under full operation • Develop a ROW maintenance plan that prevents the establishment of invasive species and protects listed plant species during maintenance activities • Develop educational material for passengers about native Florida species highlighting the Florida scrub-jay and fragrant prickly-apple. Educational material should be made available at train stations and on plaques on the trains.
Essential Fish Habitat	• Obtain Section 404 permit and follow wetland mitigation conditions • In-kind compensatory mitigation at a federally-approved mitigation bank in accordance with Florida Statute Title XXVIII, Chapter 373.4135, Mitigation banks and offsite regional mitigation

Table 5-2 Project Mitigation Measures for Unavoidable Permanent Impacts	
Historic Properties	• Prepare HAER documentation for the Eau Gallie River Bridge and the St. Sebastian River Bridge • Develop website focusing on and highlighting the contributions of Henry Morrison Flagler as well as the history of the Florida East Coast Railway and its passenger rail service along the corridor • Continue to consult with the SHPO regarding appropriate design elements for the replacement of NRHP eligible bridges and those bridges that are contributing elements to the FECR Historic District • Convene a Bridge Advisory Group to review the proposed design of the new replacement bridges at Eau Gallie River and Sebastian River and rehabilitation of other historic bridges listed in the Programmatic Agreement • Use alternative construction methods such as horizontal directional drilling to avoid adverse effects to known archaeological sites and areas of archaeological sensitivity listed in the PA • Develop and implement an Archaeological Monitoring/Unanticipated Discoveries Plan during ground-disturbing construction activities • Retain an Independent Archaeological Monitor as described in the PA as well as a Project Archaeologist. • Educate construction supervisors and crew involved in ground-disturbing activities.

6 Agency, Elected Official and Public Coordination

6.1 Public Involvement

FRA has involved the public throughout the EIS process, starting with scoping and continuing through the publication of the FEIS. FRA created a website (https://www.fra.dot.gov/Page/P0672) to communicate with the public during the development of the EIS, and publicized events and the availability of documents through newspaper ads, website updates, and emails.

Concurrently, AAF has employed a public outreach strategy including meetings, social media, and press releases to provide and solicit information relevant to the Project to and from agencies and the public. The public outreach strategy also served to keep local officials, community members, and other parties informed about the process and status of the EIS. AAF participated in numerous meetings with residents, businesses and community leaders, and public agencies throughout the state. AAF created a website (http://www.allaboardflorida.com/), a Facebook page, a Twitter account (@AllAboardFlorida), and email distribution list to increase outreach efforts to the public. AAF's public involvement effort has also included a series of press releases to Florida press outlets and over national wire services.

6.2 Scoping Period

FRA initiated the formal scoping process for the Project on April 15, 2013 by publishing a Notice of Intent (NOI) to prepare an EIS in the Federal Register. The NOI provided a description of the Project and outlined the environmental review process. The NOI also included an announcement of the FRA's intent to conduct public and agency scoping meetings. Comments were invited on the scope of the EIS, including the purpose and need, alternatives to be considered, effects to be evaluated, and methodologies to be used in the evaluation. Comments on the scope were requested by May 15, 2013.

6.2.1 Agency Scoping Meeting

Representatives of federal, state, regional, and county agencies, and Native American Sovereign Nations, were invited to participate in the scoping process and to participate in an agency/tribal scoping meeting on May 1, 2013 at the Renaissance Orlando Airport Hotel, in Orlando, Florida. Federal agencies invited to participate included the U.S. Departments of Agriculture, U.S. Department of Commerce, U.S. Department of Defense, U.S. Department of the Interior, U.S. Department of Transportation, and U.S. Environmental Protection Agency. State agencies invited included the Florida Department of Environmental Protection (FDEP), Fish and Wildlife Commission (FWC), and the State Historic Preservation Office (SHPO). Regional and county agencies invited to participate

included the St. Johns River Water Management District (SJRWMD), South Florida Water Management District, Greater Orlando Aviation Authority (GOAA), and Broward, Miami-Dade, and Orange Counties. Representatives from USACE, U.S. Environmental Protection Agency, USFWS, FAA, FDEP, FHWA, FWC, SJRWMD, Miami-Dade and Orange Counties, SHPO, National Park Service (NPS), USCG, and GOAA attended the agency scoping meeting.

At the meeting, FRA introduced the attendees, provided an overview of the Project with background information, and outlined the next steps in the NEPA process. Presentations by FRA and AAF provided the overview. The FRA also held a question-and-answer session, and solicited agency comments.

Agency comments on the DEIS scope were received from FAA, USCG, U.S. Department of Agriculture, NPS, Florida Department of Transportation (FDOT), and the Seminole Tribe of Florida Tribal Historic Preservation Office. The comments were reviewed by FRA. Comments from agencies pertained to land use and planning, Section 4(f) resources, surface transportation, and waterways.

6.2.2 Public Scoping Meetings

Following the publication of the NOI, in May 2013 five public scoping meetings were held in five different communities (Orlando, Miami, West Palm Beach, Fort Pierce, and Fort Lauderdale). Table 6-1 provides the locations, dates, number of attendees, and number of comments received at these public scoping meetings.

The first four public meetings were advertised in several newspapers and available in various locations near the Project Study Area, including *Florida Today, Orlando Sentinel, The Palm Beach Post, Sun Sentinel, St. Lucie News Tribune, La Voz, El Nuevo Herald, Miami Herald, el Sentinel, El Latino Semanal,* and *Haiti en Marche*. The last public meeting was advertised in the *Sun Sentinel* and *el Sentinel.* Notices were published on several dates between April 17, 2013 and April 27, 2013. The notices were published in English, Spanish, and Haitian Creole.

Table 6-1 Public Scoping Meetings

Public Scoping Meeting	Location	Date	Number of Attendees	Number of Comment Forms Received at the Meeting
Orlando	Renaissance Orlando Airport Hotel	May 1, 2013	135	61
Miami	Culmer Center	May 6, 2013	125	63
West Palm Beach	Gaines Park Community Center	May 7, 2013	138	67
Fort Pierce	Havert L. Fenn Center	May 9, 2013	75	38
Fort Lauderdale	Holiday Park Social Center	May 29, 2013	80	19
Total			553	248

Source: VHB, 2013.

Approximately 550 participants attended the 5 public scoping meetings. Attendees included elected officials, local government representatives, members of the business community, and residents from the communities in or near the Project Study Area. The meeting format was an open house style with attendees encouraged to view the various exhibits placed around the room. Questions were directed to representatives of FRA present at the meeting. A continuous loop visual presentation provided attendees with information about the Project, including the background and general information about NEPA and the scoping processes. Large aerial maps depicting the Project Study Area were also displayed at each scoping meeting.

Attendees wanting to submit a written comment were able to do so by filling out a comment form. Written comments could either be submitted during the public scoping meeting or mailed to the FRA. A total of 248 comment letters were received during the 30-day scoping period (April 15 to May 15, 2013). Each comment received was reviewed and analyzed, and was considered by the FRA during the preparation of this DEIS. Comments received from municipalities and the public pertained to alternatives, floodplains, hazardous materials, natural resources, noise and vibration, public outreach, safety, social, community, socio-economics, surface transportation, wetlands and waterways, wildlife, environmental justice, purpose and need, and water quality.

6.2.3 Post-Scoping Comments

Numerous members of the public submitted comments to FRA following the scoping comment period. More than 160 comments were received between July 2013 and the publication of the DEIS. The vast majority of the concerns have focused on quality of life (including noise and safety) and potential impacts to the boating community as a result of increased bridge closures.

6.3 Public Involvement Prior to the FEIS

FRA released the DEIS for public review by posting it on FRA's website on September 19, 2014 and publishing a Notice of Availability in the Federal Register on September 26, 2014 (Federal Register Vol. 79, No. 187). The DEIS was available to the public on the FRA's website (https://www.fra.dot.gov/Page/P0672) and at public libraries along the corridor. Copies were sent to elected officials, federal and state agencies, and municipalities. FRA requested all comments be submitted by December 3, 2014, a 75-day comment period.

During the comment period for the DEIS, FRA received approximately 15,400 comments. The comments covered a wide range of issues and represented viewpoints from government agencies, organizations, business groups, businesses, residents and property owners. Comments were submitted in several formats:

- By email
- By U.S. mail

- At public meetings (written)
- At public meetings (oral, transcribed by a court reporter).

FRA has reviewed all of the comments, many of which were form letters. More than 40 different form letters were received. Comments fell into several broad categories:

- Support
- General opposition
- Opposition based on specific concerns
- Detailed and substantive comments concerning information provided in the DEIS.

Approximately 5,960 of the submittals generally supported the Project, and 9,500 were generally opposed. Most comments came from individuals in the general public, living, working or having property interests in the Project area, particularly residents of Martin, St. Lucie and Indian River Counties. Most comments from the public indicated that individuals did not want passenger rail operating within the FECR Corridor along the Florida coast, and preferred that AAF select an alternative alignment further inland. A substantial number of people commented on the potential impacts on boaters associated with increased closures of the three moveable bridges along the corridor.

During the public comment period, FRA held eight public information meetings to provide the public with the opportunity to learn about the proposed project, ask questions, and obtain information about the project and the DEIS, and to comment on the DEIS. Comments were accepted at the meetings in writing or orally, with the assistance of a court stenographer. FRA provided information on display boards, handouts, a rolling PowerPoint presentation, and video simulations. Technical experts for most environmental categories (for example; alternatives, wetlands, navigation, noise and vibration, wildlife, cultural resources, and traffic) were present to answer questions. FRA chose this format to enable members of the public to become informed about the DEIS and the project, and to facilitate answering public questions. Representatives from USACE and USCG attended the majority of these meetings to answer questions from the public relevant to their areas of jurisdiction. Table 6-2 provides a list of the public meeting locations and attendance. Attendance numbers are based on the number of persons who registered on a sign-in sheet, and may therefore slightly underestimate the actual number of attendees. Based on this information, a total of 2,681 persons attended the public meetings and provided 1,565 comments at the meetings. Public notice of the meetings was posted on the FRA's website, AAF's website, and advertised in local newspapers (*Miami Herald*, *El Nuevo Herald*, *Sun Sentinel*, *Palm Beach Post*, *TC Palm*, *Orlando Sentinel*, *El Sentinel*, *Haiti en Marche*). Interpreters were present to translate Spanish and Haitian Creole.

Table 6-2 DEIS Public Information Meetings

Public Meeting	Location	Date (2014)	Number of Attendees[1]	Number of Comments Received at the Meeting
Miami	Miami-Dade College	October 27	190	109
Fort Lauderdale	Broward County Convention Center	October 28	271	151
West Palm Beach	West Palm Beach Marriott	October 29	272	155
Stuart	The Kane Center	October 30	784	555
Vero Beach	Indian River State College	November 5	462	236
Port St. Lucie	Port St. Lucie Civic Center	November 6	280	198
Cocoa	Cocoa Civic Center	November 12	180	68
Orlando	Wyndham Orlando Resort I-Drive	November 13	242	93
Total			2,681	1,565

1 Based on the number of individuals who registered on the sign-in sheets provided by FRA. Additional persons may have been present but did not choose to register.

Source: VHB, 2015

6.4 Public Involvement Subsequent to the FEIS

This FEIS was made available to the public by posting on FRA's website (https://www.fra.dot.gov/Page/P0672) and by publishing a Notice of Availability in the Federal Register. Copies of the FEIS were sent to public libraries throughout the Study Area, elected officials, federal and state agencies, and municipalities. Notice of availability was also sent by email to all parties who provided email addresses in their comments on the DEIS.

Following publication of the FEIS, a total of 31 comment letters were received. These included the U.S. Department of the Interior; U.S. Environmental Protection Agency; Martin County; the Indian River County Board of Commissioners; the City of Sebastian; the City of Vero Beach; the Town of St. Lucie Village; the Indian River County Historical Society; Citizens Against Rail Expansion; 2 homeowners' associations; and 20 citizens. The majority of comments from the Florida counties, municipalities, non-governmental organizations and citizens were in opposition to the Project, specifically to the use of the Florida East Coast Railway (FECR) ROW for passenger rail service (the N-S Corridor) based on the perception that the increased frequency of trains on this corridor would result in unacceptable community, noise, economic, traffic, and public safety impacts. In addition, Indian River County submitted additional comments to FRA and the DOT after news stories revealed AAF renewed its interest in a RRIF loan in 2017. Comments, and FRA's response to these comments, are provided in Attachment C.

6.5 Agency Coordination

AAF initially coordinated with federal, state, regional, and county agencies regarding the Project from March 2012 through April 2013. These preliminary efforts focused on satisfying requirements for the submittal of environmental permit applications. Through this process, AAF identified concerns of stakeholders and requirements of regulatory agencies that are relevant to the NEPA process. FRA coordinated with a range of federal agencies throughout this process. This coordination informed FRA regarding the regulatory requirements and critical environmental concerns of these agencies, as well as concerns of state and local authorities. Coordination included the agencies and entities listed below.

Federal agencies with which FRA coordinated include the Federal Aviation Administration, Federal Highway Administration, National Marine Fisheries Service, United States Army Corps of Engineers, United States Coast Guard, and United States Fish and Wildlife Service. State agencies included the Florida Department of Environmental Protection, Florida Department of Transportation, Florida Division of Historical Resources/State Historic Preservation Officer, and Florida Fish and Wildlife Conservation Commission.

6.6 Tribal Coordination

Native American Sovereign Nations were invited to participate in the scoping process and participate in the scoping meeting on May 1, 2013 along with federal, state, and county agencies. The Native American Sovereign Nations invited to participate were the Miccosukee Tribe of Florida, Muscogee Creek Nation, Poarch Band of Creek Indians, Seminole Nation of Oklahoma, and Seminole Tribe of Florida. Comments from the Native American Sovereign Nations were received and reviewed by FRA and were considered during development of the EIS.

7 Decision

This section summarizes FRA's decision on the Project, and the manner by which it reached its decision. The following sections summarize findings related to specific statutory responsibilities.

7.1 Section 106

Section 106 of the NHPA requires that any federal agency having direct or indirect jurisdiction over a proposed federal or federally-assisted undertaking take into account the effect of the undertaking on any district, site, building, structure or other object that is listed or eligible for listing on the NRHP.

On September 13, 2017, the USACE, USCG, SHPO, and ACHP executed a Programmatic Agreement (PA) that fulfills the responsibilities of the USACE and USCG under Section 106. The PA included the following stipulation: "In the event that another Federal agency is considering funding, permits, licenses, or other approvals or assistance for this Undertaking not covered by this PA as originally executed, and the Undertaking remains unchanged as set forth in this PA, that agency may fulfill its Section 106 responsibilities by stating in writing to the Corps, USCG, Florida SHPO, and the ACHP that it intends to do so and that it concurs with and will abide by the terms of this PA". The FRA has reviewed the PA and has sent a letter to the USACE, USCG, Florida SHPO and the ACHP that it concurs with and intends to abide by the terms of the PA to satisfy its Section 106 responsibilities.

7.2 Section 4(f) (49 U.S.C. 303/23 U.S.C. 138)

Section 4(f) protects from use certain resources when making transportation improvements. These resources, collectively referred to as Section 4(f) resources, include publicly owned parks, recreation areas, wildlife or waterfowl refuges, and historical properties of national, state, or local significance.

FRA included a Section 4(f) Determination in the FEIS because the All Aboard Florida Project would use two properties that are individually eligible for listing on the National Register of Historic Places: the Eau Gallie River Bridge and the St. Sebastian River Bridge. The Project would also have a *de minimis* impact on the FECR Historic District because of the demolition of nine bridges that are contributing elements.

FRA finds that there are no reasonable and prudent alternatives that avoid the use of the Eau Gallie River and St. Sebastian River bridges. These two individually eligible bridges (the Eau Gallie River and St. Sebastian River) must be replaced because they are currently single-track bridges and because AAF assessed the condition of each existing bridge and determined it was not feasible to rehabilitate the bridge superstructure due to its condition and the condition of the substructure. The proposed passenger trains would operate at 110 mph in this segment, and require a higher bridge loading factor than the existing freight trains, which operate at 28 mph. The existing substructure

and superstructure, even if rehabilitated, would not meet the required loading rating. Without replacing these bridges, AAF could not operate passenger trains over the bridges at the initially desired rates of speed. For each of the bridges that would be demolished and replaced, FRA evaluated several alternatives.

FRA determined that it is necessary to demolish each of the bridges and replace it with a new two-track structure. The SHPO has concurred that the proposed Project would have an adverse effect on these two bridges; therefore, a PA between the USACE, USCG, ACHP, the SHPO, and AAF has been executed that addresses construction of the Eau Gallie River and St. Sebastian River Bridges. As part of the PA, the signatories agree that the undertaking will be implemented in accordance with specific stipulations to minimize, and to the extent practical avoid effects to known historic properties listed or eligible for listing on the NRHP.

As described above, FRA has determined that there is no feasible and prudent alternative to the demolition of the Eau Gallie River and St. Sebastian River bridges and the project includes all possible planning to minimize harm. New bridges are required at these locations to upgrade these crossings to double track crossings, and retaining the bridges presents an unacceptable safety risk to navigation of vessels on the waterways below. To mitigate the loss of these historic resources, consistent with the Section 106 process to resolve adverse effects to these resources, AAF will document the existing Eau Gallie and St. Sebastian River bridges in accordance with Historic American Engineering Record (HAER) standards, and consult with SHPO regarding the replacement bridge design (See Section 6.7 of the FEIS).

7.3 General Conformity Determination

The Clean Air Act Amendments (CAAA) require that federal agency activities conform to the State Implementation Plan (SIP) with respect to achieving and maintaining attainment of NAAQS and addressing air quality effects. The EPA General Conformity Rule (40 CFR part 93, subpart requires that a conformity analysis be performed which demonstrates that a proposed action does not:

1) Cause or contribute to any new violation of any NAAQS in the area;
2) Interfere with provisions in the SIP for maintenance or attainment of any NAAQS;
3) Increase the frequency or severity of any existing violation of any NAAQS; or
4) Delay timely attainment of any NAAQS, any interim emission reduction, goals, or other milestones included in the SIP.

Provisions in the General Conformity Rule allow for exemptions from performing a conformity determination only if total emissions of individual nonattainment area pollutants resulting from the proposed action fall below the significant threshold values.

The Project Study Area (Phase II) is located in Orange, Brevard, Indian River, St. Lucie, Martin, and Palm Beach Counties. All six counties are designated as attainment areas for all criteria pollutants. As the Project is in attainment areas, it is not subject to review under the EPA's General Conformity Rule. However, FRA reviewed emissions of the criteria pollutants, as related to changes in new passenger trains and freight trains, and reductions in on-road VMT, to assess whether the passenger train emissions would affect regional air quality and to assess the effects of VMT reduction on regional air quality.

FRA finds that the Project would provide a net regional air quality benefit as compared to current conditions, and would reduce regional criteria pollutants, mobile source air toxics, and greenhouse gas emissions because motor vehicle use would decrease.

7.4 Section 7 Endangered Species Act (ESA) Finding

The USACE assumed the role of lead federal agency under Section 7 of the Endangered Species Act. Protected species coordination was initiated by the USACE on September 6, 2012, with a meeting at the USACE office in Cocoa, which included representatives from the USFWS offices for North Florida and South Florida, and NMFS. USFWS recommended the use of construction conditions to protecting manatees, and indigo snakes. As adjacency to Florida scrub-jay habitat was a concern, scrub-jay surveys were required to determine how the operation of the rail would affect the species. NMFS recommended the use of construction conditions to protect smalltooth sawfish and swimming sea turtles. NMFS required effects to Johnson seagrass and smalltooth sawfish be determined and provided an ESA checklist for the bridge locations and the EFH federal mandate.

On October 12, 2012, AAF requested that the USFWS confirm listed species occurrence and requirements for the Project Study Area. The South Florida Office of the USFWS provided a response on October 30, 2012 confirming the species of concern included: wood stork, Florida scrub-jay, Audubon's crested caracara, bald eagle, eastern indigo snake, and red-cockaded woodpecker. The North Florida Office of the USFWS confirmed the list of species of concern at a meeting at the USFWS Office in Jacksonville. The species list was confirmed to include: West Indian manatee, wood stork, red-cockaded woodpecker, eastern indigo snake, Audubon's crested caracara, Florida scrub-jay, and bald eagle.

BAs were completed and submitted in September 2013 for species under USFWS and NMFS jurisdiction. Based upon the BA submitted to the USFWS, the USACE issued an effects determination letter on September 19, 2013, for the South Florida portion of the Project extending from Miami north through Indian River County, and on September 24, 2013 for the northern section of the Project extending from Indian River County to Orlando. Within these areas USACE determined that the Project would have "no effect" to the Florida panther, Everglade snail kite, red-cockaded woodpecker, and piping plover based on the lack of suitable habitat, known species range within the Project Study

Area, and/or lack of visual confirmation during surveys. USACE has made the specific findings listed below. According to USACE, the Project is:

- Not likely to adversely impact the wood stork. This determination is based on the Project not being located within 2,500 feet of an active colony site. Although the Project includes construction within suitable foraging habitat and within the core foraging habitat of a colony site, prior to construction AAF would provide compensation in accordance with the Habitat Management Guidelines to replace lost foraging value.
- Not likely to adversely impact the eastern indigo snake. This determination is based on the Project not being located in open water, and the commitment by AAF to follow the USFWS's *Standard Protection Measures for the Eastern Indigo Snake* during construction.
- May affect, but is not likely to adversely impact the West Indian manatee. This determination is based on the fact that the Project is not located in an Important Manatee Area; does not include dredging; would have minimal adverse effects on aquatic vegetation or mangroves; and the commitment by AAF to follow standard manatee conditions for in-water work.
- May affect, but is not likely to adversely impact the blue-tailed mole skink or the Florida sand skink.
- Would have no effect to the Atlantic sturgeon or shortnose sturgeon based on the proposed work occurring outside of their known range.
- Would have no effect to Johnson's seagrass based on the absence of the species within the proposed work area.
- May affect, but is not likely to adversely impact swimming sea turtles based on AAF's agreement to follow the *Sea Turtle and Smalltooth Sawfish Construction Conditions* during construction.
- May affect, but is not likely to adversely impact smalltooth sawfish based on AAF's proposed compensatory mitigation for the loss of red mangrove habitat, absence of seagrass beds within the in-water work areas, and AAF's agreement to follow the Smalltooth Sawfish Construction Conditions during construction.

In an electronic letter dated November 6, 2014, the USFWS, Vero Beach Field Office stated the Project would result in adverse effects to and potential "incidental take" of the Florida scrub-jay, and recommended the USACE initiate formal consultation pursuant to Section 7 of the ESA. The USACE responded on November 21, 2014, in a letter in which it revised the effects determination for the scrub-jay to "may affect" and requested formal consultation. As a result, the USFWS prepared a Biological Opinion to determine if the Project would jeopardize the continued existence of the species. The completed USFWS analysis of the Project's impacts to the Florida scrub-jay indicated that the Project would not jeopardize the continuation of the species. According to regulations pursuant to the ESA, the applicant and the action agency are required to minimize the "take" resulting from a Federal action. Minimization of "take" may be accomplished by several methods including protection and conservation of currently unprotected scrub-jay habitat. This measure would benefit

the Florida scrub-jay by protecting occupied habitat for the species within its range that was previously not protected and managing this habitat in perpetuity.

The USFWS, in a Biological Opinion (Attachment B) issued on October 9, 2015 found that the Project would result in adverse effects and take of the Florida scrub-jay and is likely to adversely affect the fragrant prickly-apple. The USFWS also found that the Project is "not likely to adversely affect" the West Indian manatee, Lakela's mint, Atlantic salt marsh snake, Audubon's crested caracara, blue-tailed mole skink, eastern indigo snake, Everglade snail kite, sand skink, and wood stork. The Biological Opinion includes Reasonable and Prudent Measures, Terms and Conditions, and Conservation Recommendations which AAF would be required to adhere to. AAF has purchased two scrub-jay credits with a USFWS-approved scrub-jay mitigation bank in accordance with Florida Statute Title XXVIII, Chapter 373.4135, *Mitigation Banks and Offsite Regional Mitigation*, and has conducted pre-construction surveys to locate populations of the fragrant prickly-apple.

7.5 Wetlands Finding

Executive Order 11990, Protection of Wetlands, and DOT Order 5660.1A, Preservation of the Nation's Wetlands, require FRA to avoid providing assistance for new construction located in wetlands, unless there is no practicable alternative to such construction, and all practicable measures to minimize harm to wetlands are included in the action. As described in the FEIS and in Section 4, *Summary of Environmental Consequences*, of this ROD, development of the Project would result in the unavoidable loss of 314 acres of wetlands. Practicable means could not be found to eliminate impacts to wetlands and waterways caused by the Project. Alternative A would have a lesser wetlands impact than the Project, however Alternative A is not a practicable alternative to the Project because the required land is not available. The No-Action Alternative does not impact wetlands, but it is not practicable as it does not meet the transportation objectives contained in the purpose and need.

FRA finds that there is no practicable alternative to the Project's construction in 314 acres of wetlands and waterways. The Project's mitigation plan includes all practicable measures to minimize harm to wetlands that may result from this direct effect. This Project complies with Executive Order 11990 and DOT Order 5660.1A.

7.6 Floodplains Finding

Executive Order 11988 establishes a policy to avoid construction within a 100-year floodplain where practicable and, where avoidance is not practicable, to ensure that the construction design minimizes potential harm to or within the floodplain. U.S. Department of Transportation Order 5650.2, Floodplain Management and Protection, contains the Department's implementing procedures to fulfill the requirements of the Executive Order.

The Project would require construction in 195 acres within 100-year FEMA-designated floodplains, including the Econlockhatchee River, St. Johns River, and coastal floodplain. Disturbance of the

100-year floodplain is unavoidable, as all alternatives cross the Econolockhatchee and St. Johns River, and the existing FECR freight track is within the coastal flood zone.

Minimization efforts were undertaken and for unavoidable impacts, measures incorporated into the Project's design to minimize floodplain impact include providing compensatory flood storage and stormwater control ponds.

Compensation will be incorporated into the Project design. These floodplain impacts will be mitigated by providing flood storage within ROW to prevent flood impacts downstream of the Project. There is ample area available to mitigate the Project's floodplain impacts, and floodplain impacts will be mitigated as described in Section 5, *Mitigation*, of this ROD. With mitigation, the Project conforms to Florida's floodplain protection standards.

7.7 Coastal Zone Finding

The FEIS provided a draft Consistency Determination under CZMA Section 307, 15 CFR part 930 Sub-part C, Chapter 380 FS, Part II, Coastal Planning and Management. This federal consistency determination addressed the proposed extension of passenger rail service from Orlando to West Palm Beach, which would include the MCO Segment, the E-W Corridor, and the N-S Corridor. The FDEP, as the designated coastal agency for the state, would participate in consistency decisions on permits issued under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act through the state's ERP process. Both of these permitting processes are applicable to the Project. FRA finds that the Project is consistent with Florida's Coastal Zone Management Act. The Florida State Clearinghouse concurs with this finding, as detailed in a letter to FRA dated March 3, 2015 (FDEP, 2015).

7.8 Environmental Justice Finding

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations, signed by the President on February 11, 1994, directs federal agencies to take the appropriate and necessary steps to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. The AAF EIS incorporated the guidance provided in the *Environmental Justice Policy Guidance for FTA Recipients* (FTA Circular 4703.2). The FTA Circular was published in 2012 to provide potential recipients of FTA financial assistance with guidance in order to incorporate environmental justice principles into their plans, projects, and activities.

FRA has determined that the Selected Alternative would not have disproportionately high and adverse effects to environmental justice populations. There would be no disproportionate impacts to environmental justice communities along the MCO Segment, as there are no minority or low-income populations within the census tract encompassing this segment. Neither the E-W Corridor nor the

N-S Corridor would result in residential displacement, job loss, or neighborhood fragmentation due to the use of property; therefore, there would be no disproportionate impacts to environmental justice communities from changes in land use. Although changes in noise would affect 109 residential parcels (105 moderate and four severe impacts) along the E-W Corridor, none of these parcels are within environmental justice communities. Potential impacts resulting from changes to noise in environmental justice communities would not be appreciably more severe or greater in magnitude than the impacts experienced by non-environmental justice communities along the N-S Corridor. There would be no adverse vibration impacts to environmental justice communities along the E-W Corridor under the Project, and mitigation would limit any changes in vibration along the N-S Corridor such that there would be no resulting vibration impacts.

AAF conducted a thorough environmental justice public and agency outreach program throughout the EIS process. This included meetings with local community associations representing environmental justice communities such as the Broward County Association for the Advancement of Colored People and the African American Chamber of Commerce of Orlando. This outreach would continue through the design and construction phases.

7.9 Permits and Approvals

Table 7-1 below lists the permits and approvals required for Project construction.

Table 7-1 Permits or Approvals Required for the Project

Agency	Permit/Approval
Federal Highway Administration	Concurrence for Highway ROW Occupancy
U.S. Army Corps of Engineers	Clean Water Act Section 404 Permit Rivers and Harbors Act Section 10 Permit and Section 14 (33 USC § 408) modification approval
Federal Aviation Administration	Airport Layout Plan Modification approval Approval of air space and facility development stormwater ponds Review of lease agreements
U.S. Fish and Wildlife Service	Endangered Species Act Section 7 concurrence
National Marine Fisheries Service	Endangered Species Act Section 7 concurrence Magnuson-Stevens Fishery Conservation and Management Act – Essential Fish Habitat
U.S. Coast Guard	Bridge Permits Drawbridge Operation Regulatory changes (potential)
Florida State Historic Preservation Office	National Historic Preservation Act Section 106 Concurrence
Florida Department of Environmental Protection	Clean Water Act Section 401 Water Quality Certification Environmental Resource Permit (for the E-W and N-S Corridors) Sovereign Submerged Lands Approval for bridges Coastal Zone Management Act Consistency Determination
South Florida Water Management District	Clean Water Act Section 401 Water Quality Certification Environmental Resource Permit (for the MCO Segment) De Minimis Exemption for Upland Track Work ROW Permits for Work Over Canals under USCG Jurisdiction Coastal Zone Management Act Consistency
St. John's River Water Management District	Clean Water Act Section 401 Water Quality Certification Environmental Resource Permit De Minimis Exemption for Upland Track Work ROW Permits for Work Over Canals under USCG Jurisdiction Coastal Zone Management Act Consistency
Florida Department of Transportation	Occupancy and Use Permit ROW Permit
Florida Fish and Wildlife Conservation Commission	Gopher Tortoise Permit
Orange County	Wetland Conservation Area Impact Permit Wetland Conservation Area Determination Building Permit (for Vehicle Maintenance Facility)

8 Conclusion

FRA has reached a decision for the All Aboard Florida Project that most closely aligns with FRA's statutory mission and responsibilities, giving consideration to economic, environmental, technical, and other factors based on the information contained in the DEIS and FEIS documents. FRA selects its Preferred Alternative, Alternative E, for Project implementation. FRA has selected this alternative because it best satisfies the Purpose, Need and Objectives for the proposed action, and minimizes impacts on the natural and human environment by utilizing existing transportation corridors where practicable and incorporating other mitigation measures. Accordingly, Alternative E has been selected based on processes in compliance with NEPA and other applicable requirements.

Paul Nissenbaum — Date

Associate Administrator, Railroad Policy and Development

Federal Railroad Administration

Cover and back cover images courtesy of All Aboard Florida.