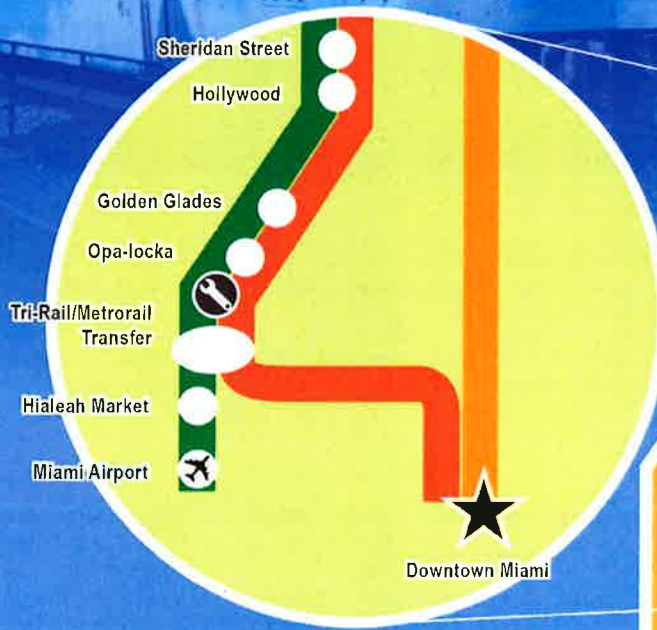
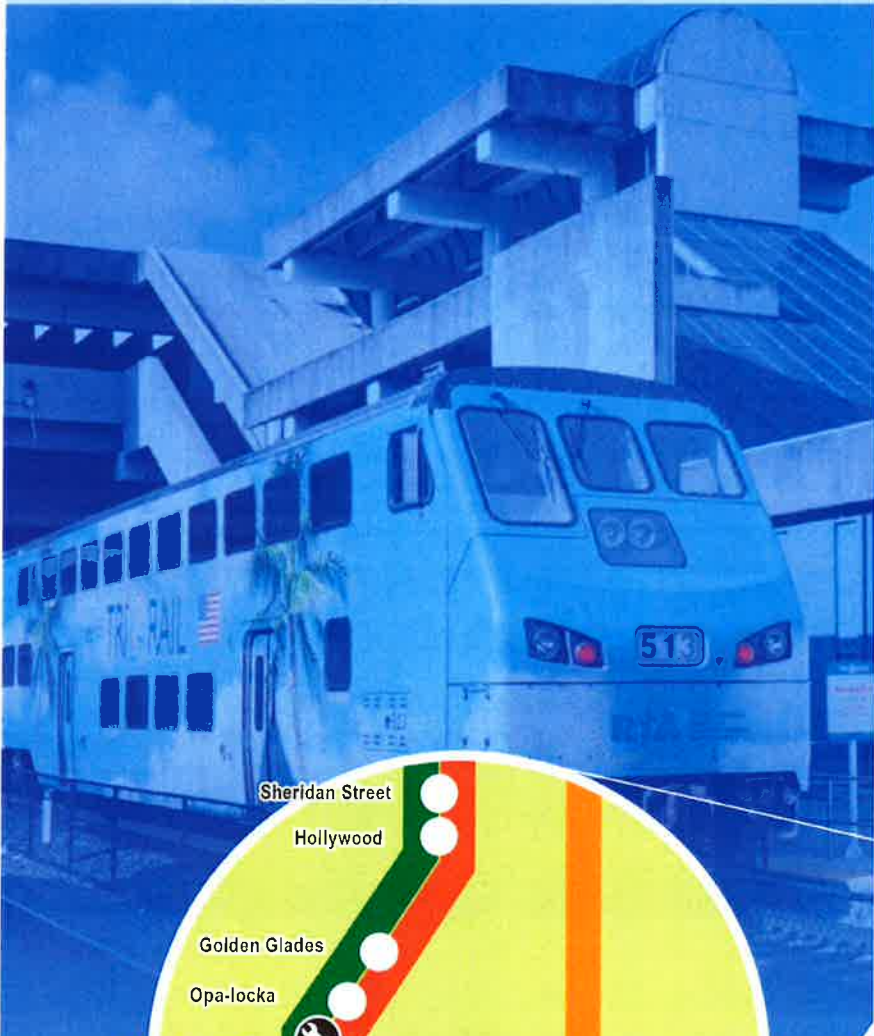


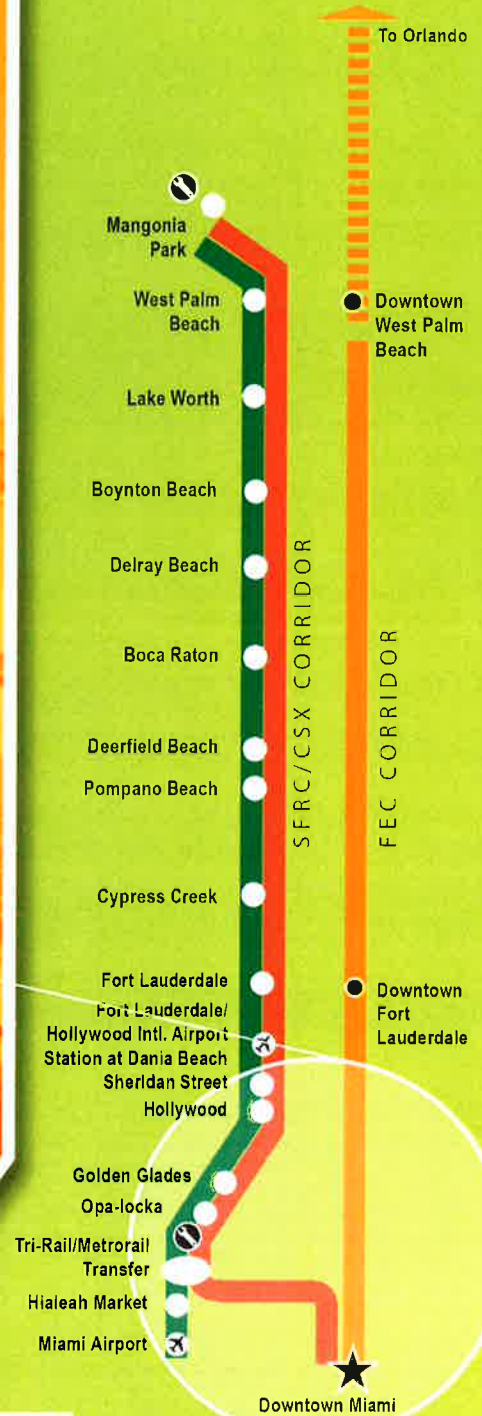


Tri-Rail Downtown Miami Link

SFRTA Environmental Technical Analysis



- KEY**
- █ Existing Tri-Rail
 - █ Tri-Rail Downtown Miami Link
 - █ All Aboard Florida Phase I
 - ▤ All Aboard Florida Phase II
 - Existing Station
 - ★ Downtown Miami Station
 - Proposed All Aboard Florida Station
 - ⊙ Maintenance and Layover Facility
 - ✈ Airport



JANUARY 2018

Project Sponsor: South Florida Regional Transportation Authority (SFRTA)

Proposed Project: Tri-Rail Downtown Miami Link (TRDML)

Date: November 2017

**INFORMATION REQUIRED FOR NON-FEDERAL
 SFRTA ENVIRONMENTAL TECHNICAL ANALYSIS**

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Project Description

Executive Summary

South Florida Regional Transportation Authority (SFRTA) is a tri-county public transit authority serving Miami-Dade, Broward and Palm Beach counties. The organization was created on July 1, 2003 by the Florida Legislature. SFRTA operates the Tri-Rail commuter rail line linking service to the Cities of Miami, Fort Lauderdale, and West Palm Beach, Florida. The existing 72-mile-long system has 18 stations along the South Florida Rail Corridor (SFRC) running north and south, and connects directly to Amtrak at numerous stations, and to Metrorail at the Tri-Rail Metrorail Transfer Station and at the Miami Airport Station.

SFRTA plans to initiate a passenger rail service extension into Downtown Miami with revenue operations upon completion of track and signal work and substantial completion of the downtown station. The project also known as "Tri-Rail Downtown Miami Link (TRDML)", will utilize a nine (9.05) mile segment of existing railroad right-of-way (ROW) in the City of Hialeah, Miami-Dade County and the City of Miami, using sections of the SFRC and the Florida East Coast Railway (FECR) Corridor. The project will utilize SFRTA's existing rolling stock on existing rail to implement the service expansion to Downtown Miami without disruption to current revenue operations. Using a modified service plan, SFRTA will maintain 20-minute peak headway service and hourly off-peak service on the SFRC.

For the TRDML service, 26 passenger trains will operate initially from the SFRC directly into the All Aboard Florida (Brightline) MiamiCentral Station in Downtown Miami via the FECR. Specifically, a total of 50 revenue trains will operate on the SFRC between the Mangonia Park Tri-Rail station (north terminus) and the Metrorail Transfer Station. Of the 50 trains, 24 trains will remain on the SFRC and continue to the Miami Airport Station (south terminus) and 26 will continue to MiamiCentral Station. Additionally, the trains traveling to the Miami Airport Station will be supplemented with 26 rail shuttles operating from the Metrorail Transfer Station to the Miami Airport Station, ensuring no disruption to current revenue operations. Ultimately, up to 30 passenger trains are anticipated to operate on the TRDML route as service demand warrants increased passenger service.

The TRDML will improve rail mobility in the South Florida region and provide enhanced connectivity from the existing Tri-Rail service area to the Downtown Miami Central Business District (CBD). TRDML traverses areas of Miami-Dade County that are comprised primarily of minority and low-income populations. Tri-Rail's service expansion would not result in neighborhoods being physically split or separated. TRDML is not expected to result in socioeconomic impacts to communities within the area that have developed and grown along the existing active railroad tracks. The project is anticipated to result in a benefit to existing communities by providing improved access to Downtown Miami businesses, services and entertainment destinations.

Additionally, the Cultural Resources Assessment Survey (CRAS) and the Determination of Effects Case Study Report indicated no direct or indirect impacts to potential significant historic

resources. Since the project takes place along existing rail lines, there will be no subsurface disturbances. Therefore, no involvement with archaeological resources is anticipated.

TRDML is proposed to operate within a heavily urbanized area within existing rail corridors where very few natural environment resources exist within a 500-foot buffer of the ROW. As such, TRDML is not anticipated to result in adverse effects to any natural environment resources.

As compared to the No-Build condition, the proposed TRDML trains will not result in significant traffic delays or queue lengths. The traffic analysis indicated the queues will not result in significant impacts to traffic operations at adjacent cross streets.

Minor construction may occur within the existing ROW to implement a new rail crossover or improve crossing signals and would take place in accordance with the SFRTA System Safety Program Plan. In addition to no adverse air quality impact and minimal contamination potential, no adverse impacts are anticipated due to minor construction. The project will incorporate all Federal Railroad Administration (FRA) and Federal Transit Administration (FTA) security and safety measures during construction activities and operations.

TRDML will provide an important link to enhance connectivity and modal options for increasing populations and tourists in the Southeast Florida region.

Description of the Proposed Action

The proposed action is to extend existing Tri-Rail commuter rail service and provide new direct commuter rail service to/from Downtown Miami. This extension, known as the TRDML, would provide a new passenger service connection via the existing FEC Little River Connection, which is a 4.5 mile east-west rail segment of the corridor from the SFRC on the west where Tri-Rail operates today to the FECR on the east.

The expanded Tri-Rail service area begins at the existing Tri-Rail Metrorail Transfer Station at NW 80th Street in Hialeah and extends to Downtown Miami in Miami-Dade County, Florida, a total of nine (9.05) miles (shown in Figure 1). The proposed action does not increase the number of passenger trains or implement infrastructure on the SFRC north of the Metrorail Transfer Station or south of the Little River Connection.

The TRDML proposed action involves new passenger service (additional trains on existing freight rail corridors) and minor infrastructure improvements (signal equipment and a potential crossover) within the existing railroad ROW. The proposed service will not require any additional railroad track sidings or proposed ROW. The majority of the new passenger rail service is within an existing industrial area in northern Miami-Dade County adjacent to the Little River Connection. The portion of the FECR that will be used for the TRDML service is an active freight rail corridor today.

The project will improve rail mobility in the South Florida region and provide enhanced connectivity from the existing Tri-Rail service area to the Downtown Miami CBD. The proposed project is a non-federal action. The SFRTA Environmental Technical Analysis (Environmental Analysis) is being conducted in compliance with state regulations that require engineering and environmental analysis to document the environmental effects of the proposed action.

The TRDML service would utilize existing infrastructure as part of other committed transportation projects, including the proposed *All Aboard Florida (Brightline)* intercity passenger rail service and the *South Florida Freight and Passenger Rail Enhancement Project (IRIS NE Connection)*. The proposed TRDML route would use the following existing rail corridors:

- SFRC from the existing Tri-Rail Metrorail Transfer Station located at NW 80th Street in Hialeah, Florida
- Proposed IRIS Northeast Rail Connection as part of the *South Florida Freight and Passenger Rail Enhancement Project (FPID 433514-1)* that provides a single-track connection within the existing FDOT ROW between the SFRC and FECR. The environmental clearance for this project was previously completed and approved in June 2014.
- Existing FECR Little River Connection between the SFRC and the FECR (East-West segment)
- Existing FECR from the Little River Connection to Downtown Miami (known as the Port Lead track) (North-South segment)
- The proposed TRDML service would terminate at the MiamiCentral Station (under construction as part of the proposed Brightline service).

For the purposes of the Environmental Analysis, the affected area will begin at the Metrorail Transfer Station on the SFRC at NW 80th Street and end at the MiamiCentral Station at NE 1st Street (shown in Figure 1). The MiamiCentral Station will serve as Downtown Miami's multimodal hub, providing connections to Brightline, Tri-Rail, existing Miami-Dade Transit bus system, Metrorail, and Metromover. While TRDML would enhance passenger rail service by providing new service between the SFRC and the FECR, this proposed action does not expand existing Tri-Rail service on the SFRC corridor north of the Little River Connection.

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY
TRI-RAIL DOWNTOWN MIAMI LINK
SFRTA ENVIRONMENTAL TECHNICAL ANALYSIS

Figure 1. Project Location and Project Vicinity Map



Purpose and Need for the Project

The purpose of the project is to provide the expansion of Tri-Rail commuter service onto the FECR corridor to Downtown Miami. The TRDML will provide intercity passenger rail service that addresses South Florida's current and future needs to enhance the transportation system by providing transportation alternatives, improved rail mobility, improved access in the South Florida region and enhanced connectivity from the existing Tri-Rail service area to the Downtown Miami CBD. The project will establish a direct connection between Downtown Miami and 16 of the 18 existing Tri-Rail stations located on 72 miles of the SFRC. TRDML will provide a safe and reliable extension to the existing Tri-Rail transit system without impacting existing freight or passenger operations.

The project need is based on the following:

- the need for alternative transportation options to accommodate growth;
- the need for improved regional connections and access in the South Florida region; and
- the need to provide travel alternatives and travel time savings to significant roadway congestion on major highways.

There is a need to reduce highway congestion and travel time savings by developing additional transportation alternatives for the region. Between 2000 and 2010, the Miami Dade-Broward-Palm Beach, Florida metropolitan area experienced approximately 11.1% population growth and as of the 2010 Census, the population in the tri-county region was more than 5.5 million. Rapid population growth is expected to continue to increase in the Miami-Dade County metropolitan area. Residential costs to live downtown are significantly higher than in nearby communities and more people are living greater distances from major centers of employment. TRDML is needed to improve mobility options, travel times and transit service for commuters, residents, and visitors who choose not to drive.

TRDML is proposed to meet the high anticipated demand for new commuter rail service between the Metrorail Transfer Station and Downtown Miami. There are many people who commute to Downtown Miami from areas further north, along the I-95 Corridor, using Tri-Rail and transferring to Metrorail. With Metrorail departing the transfer station once every 30 minutes during non-peak hours, there are instances of Tri-Rail riders having to wait that entire duration for a connection to Downtown Miami. TRDML will provide another mobility option and a one seat ride for passengers therefore, providing a faster connection between the Metrorail Transfer Station and downtown.

TRDML also provides a connection between Downtown Miami and the nearest Amtrak station, which is the Metrorail Transfer Station. This connection will reduce travel time for Amtrak passengers with an ultimate destination in Downtown Miami by reducing the need for multiple transit connections.

Project Site Plan/Corridor

The project corridor, for the purposes of the Environmental Analysis, begins at the Metrorail Transfer Station on the SFRC at NW 80th Street and ends at the MiamiCentral Station at NE 1st Street as shown in Figure 1.

The TRDML proposed action involves additional passenger trains on existing freight corridors and minor infrastructure improvements within the existing railroad ROW. The TRDML infrastructure improvements involve:

- Construction of a new #20 left-hand (LH) rail crossover between the existing, active Little River Connection mainline tracks east of both NW 37th Avenue and the right-hand (RH) crossover being installed as part of the *South Florida Freight and Passenger Rail Enhancement Project* for the IRIS Connection improvements. Implementation of this LH crossover will complete the universal crossover and allow operational flexibility for TRDML service. However, the LH crossover is not being built as part of the infrastructure to accommodate Brightline or initial TRDML service. The LH crossover is anticipated to be constructed in the future for the TRDML service as an ultimate improvement when needed for operational flexibility.
- Implementation of new signal equipment at the grade crossings along the FEC Little River Connection between NW 37th Avenue and the FECR at NW 79th Street. The determination of specific signal equipment to be installed at the grade crossings will be determined in the design phase. For the purposes of the Environmental Analysis, the existing gate arms are assumed to remain. For the purposes of the Environmental Analysis, no subsurface improvements are anticipated for new TRDML signal equipment.

The TRDML service will utilize the existing Tri-Rail fleet of passenger trains, for the Build scenario; the proposed TRDML initial service will consist of 26 revenue trains per weekday (13 in each direction) with the potential for up to 30 revenue trains per weekday (15 in each direction) in the future. Up to two additional non-revenue trains (for a total of 32 trains) will operate daily during off-peak hours (one train per direction) without passengers for deadhead movements to facilitate train transfers to service start and end locations.

TABLE 1.

Existing and Proposed Train Service

Location	Existing Tri-Rail Trains	Proposed TRDML Service	Proposed Tri-Rail Service Changes
Existing SFRC from Mangonia Park to Metrorail Transfer Station	50 total revenue trains (both directions)	No additional revenue trains	TRDML service will begin at NW 79th Street
Existing SFRC from Metrorail Transfer Station to IRIS Connection	50 total revenue trains (both directions)	Total of up to 30 additional revenue trains for TRDML (15 per direction)	Up to 80 total revenue trains on SFRC for approximately ½ mile; Assumes 24 revenue trains (12 per direction) maintained that continue south to Miami Airport Station; 26 rail shuttles to Miami Airport Station (13 per direction) and up to 30 TRDML trains
Existing SFRC from IRIS to Miami Airport Station	50 total revenue trains (both directions)	N/A – TRDML service ends at IRIS Connection	50 total revenue trains (both directions) to be maintained; 24 revenue trains (12 per direction) to the Miami Airport Station and 26 shuttles (13 per direction) to/from the Miami Airport Station south of 79th Street
Proposed IRIS NE Connection	N/A	Up to 30 additional revenue trains for TRDML (15 per direction)	Tri-Rail extension from Metrorail Transfer Station to MiamiCentral Station
Existing Little River Connection	N/A	Up to 30 additional revenue trains for TRDML (15 per direction)	Tri-Rail extension from Metrorail Transfer Station to MiamiCentral Station
FEC Railway from Little River Connection to Downtown Miami	N/A	Up to 30 additional revenue trains for TRDML (15 per direction)	Tri-Rail extension from Metrorail Transfer Station to MiamiCentral Station

Environmental Conditions and Effects

Several environmental support documents were prepared to document detailed information on the existing conditions and potential effects associated with the proposed action. Appendix B contains the following supporting documents referenced in this Environmental Analysis report and the impact summaries below:

- *Existing Environmental Conditions Technical Memorandum*
- *Grade Crossing Technical Analysis (Traffic)*
- *Contamination Technical Memorandum*
- *Cultural Resources Assessment Survey*
- *Determination of Effects Case Study Report*
- *Noise and Vibration Technical Memorandum*

Social Impacts

Land Use Changes

The historical rail corridor is typically 100 feet wide throughout the project limits and continues to serve freight and/or passenger service today. The existing corridor traverses established and heavily developed areas of Miami, many of which were developed along and around the railroad. Adjacent land uses include high-density, urban areas (such as the CBD), medium-density residential, industrial and commercial uses. Little vacant and/or undeveloped land exists along the corridor. Due to the age of the existing corridor, established neighborhoods and communities have evolved in conjunction with the corridor.

The project would not have a significant impact on land use, zoning consistency or property acquisition. Proposed improvements to the rail line are occurring within existing ROW and the existing corridor is identified as a transportation land use.

Community Cohesion

The existing railway currently bifurcates 3.0 miles of unincorporated Miami-Dade County and 5.8 miles of the City of Miami. The City of Hialeah is adjacent to the western end of the study corridor; 1.3 miles of SRFC rail and 0.5 miles of the FEC Little River Connection rail are within the city limits. The TRDML will not alter accessibility to community facilities and services in the community based on the traffic analysis prepared for this study.

This project does not involve proposed rail sidings or ROW acquisition and does not create or eliminate any physical barriers to existing social relationships, movement, or interactions within the communities. No impacts to community cohesion are anticipated within the project area or beyond.

Relocation Potential

No new ROW acquisition is proposed; therefore, relocations or displacements will not be necessary to facilitate the additional trains.

The proposed project will not displace any residences or businesses within the community.

Environmental Justice Considerations

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations, 1994, directs federal agencies to take 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 communities within the project area were analyzed using recent data available from the US Census Bureau (2010) and the American Community Survey (2014). The vast majority of community residents within 0.25-mile buffer zone at each of the existing Tri-Rail stations and at the proposed MiamiCentral Station were identified as minority populations and low income (below Federal poverty level). As there are minority populations greater than 50 percent within the proposed service area and no direct impacts to properties adjacent to the railroad corridor are anticipated, there are no disproportionate or adverse effects anticipated to the environmental justice communities. As shown in the *Tri-Rail Stations Minority Maps* and *Tri-Rail Stations Poverty Maps* in Appendix A, 16 of the 18 existing Tri-Rail stations throughout the length of the service area are in areas with minority populations that exceed 50 percent and provide transportation access to these environmental justice populations. The MiamiCentral Station, the proposed terminus for the TRDML service, is also located in an area with a minority population which exceeds 50 percent and will provide enhanced access to the minority populations. The project is anticipated to result in a benefit to the minority communities by expanding the service area and enhancing mobility.

Based on the above discussion and analysis, the TRDML project will not cause disproportionately high and adverse effects on any minority or low-income populations in accordance with the provisions of Executive Order 12898. No further Environmental Justice analysis is required.

Additionally, a Title VI Fare Equity Analysis and a Service Equity Analysis (refer to Appendix B) were completed for SFRTA separate from this analysis, to document that no fare changes or service changes will result in disparate impacts on Title VI protected populations. The Fare Equity Analysis was approved by the SFRTA Governing Board in August 2015 and the Service Equity Analysis was approved by the SFRTA Governing Board in July 2017.

Controversy Potential

No controversy is anticipated due to the project benefits of enhanced passenger mobility to the communities surrounding these active freight railroads.

Bicycles and Pedestrians

There is one designated bicycle trail that crosses the rail ROW at NW 22nd Avenue. However, at this point on the Model Cities Trail, trail users are on the sidewalk along NW 22nd Avenue, which currently has four-quad gates at the rail crossing. No additional changes will occur at this or other grade crossings. According to the Grade Crossing Technical Analysis, wait times will increase between 40 seconds and 135 seconds per vehicle during the evening peak event analyzed, which is nominal.

For bicyclists and pedestrians, the wait time for a train crossing is similar to waiting for a traffic signal. Based on this nominal increase during the evening peak event, the additional trains proposed will have a negligible effect on bicycles and pedestrians.

Utilities and Railroads

No impacts are anticipated to utilities. The project is utilizing existing railroad ROW that is currently in use. Improvements to existing tracks (in the future) and signals will represent an improvement to the railroad facilities.

Location and Zoning

The project is not constructing any new facilities or acquiring any new ROW, only a change in service. The associated changes to zoning that may occur when adding or deleting stations are not part of this project.

There are no anticipated changes or effects to zoning.

Traffic

Traffic conditions are often evaluated for two periods. One period is when a project is constructed and open for traffic (known as the opening year). The second period is the design year which corresponds to a predetermined time after the opening year (typically 20 years). The design year analysis is intended to ensure an infrastructure investment will continue to perform acceptably in the future and is consistent with locally adopted future growth, goals, and policies. The Grade Crossing Technical Analysis concluded that for both the opening year (2017) and the design year (2037), the additional vehicular queues and delay incurred at the rail crossings because of the proposed TRDML trains can be accommodated without significantly impacting roadway traffic operations at adjacent locations. Queue increases resulting from the proposed additional TRDML train crossings during the evening peak period range from 173 feet to 1,153 feet per new crossing event, while average vehicular delays will increase between 40 seconds per vehicle and 135 seconds per vehicle for each new evening peak event. Based on this nominal increase during the evening peak event, the additional trains proposed will have a negligible effect on traffic.

Aesthetics

The existing viewshed of the rail corridor from the surrounding land uses will be maintained in the proposed condition. Because minimal to no construction will be occurring, it is not anticipated that the project would cause significant impacts to aesthetic considerations.

Cultural Impacts

Historic Sites / District

In June 2017, a Cultural Resources Assessment Survey (CRAS) was prepared following a Cultural Resources Methodology coordination meeting with the State Historic Preservation Office/Florida Division of Historic Resources (SHPO/FDHR). A desktop analysis and field survey of the IRIS Northeast Connection and the FECR resulted in identification of 15 previously

recorded significant historic resources and 30 newly identified historic resources in the study area (see CRAS in Appendix B for details). The CRAS resulted in the identification of two potentially National Register–eligible historic resources within the study area, for a total of 17 significant resources.

Potential effects on the identified 17 significant historic resources were evaluated and documented in the Determination of Effects Case Study Report (refer to Appendix B). Direct and indirect impacts, which could result in an adverse effect on these identified resources, are not anticipated based on the following:

- The setting, aesthetics, and viewsheds will not be altered as the significant resources are currently adjacent to the existing, active railroad.
- No significant traffic queues that affect land use and/or access to the significant resources are anticipated at this time as the maximum increase in trains is four crossings (two per direction) per hour.
- No significant noise and vibration impacts are anticipated.
- The improvements to the three significant historic railroad corridors, the SFRC/CSX Railroad, the FECR, and FEC Railway Little River Connection, have been cleared through previous evaluations, and the current work is limited so that the integrity and characteristic elements or features will not be compromised to such a degree so that the linear resources will no longer be eligible for the National Register.

Archaeological Sites

Due to the nature of this project, taking place along existing rail lines, there will be no subsurface disturbances. Therefore, no involvement with archaeological resources is anticipated. As such, SHPO/FDHR agreed that the scope of this project be limited to documentation of historic resources. Therefore, archaeology resources were not addressed as part of the CRAS.

Recreational Areas

While there are parks and one recreational trail within the 500-foot buffer of the TRDML, no ROW acquisition or construction activity is expected, so no direct impact is expected.

Based on data discussed in the Traffic, Noise and Vibration sections of this document, no direct or indirect effects are anticipated to access or use of existing recreational facilities.

Natural Environment

Wetlands

The project area was evaluated for the presence of wetlands and other surface waters using previous reports, Geographic Information System (GIS) databases including the current National Wetlands Inventory (NWI) and South Florida Water Management District (SFWMD) mapping, the FDOT Efficient Transportation Decision Making (ETDM) tool, aerial imagery, and field reviews on July 13 and 15, 2016.

Standard federal and state definitions were utilized for the identification of wetlands in the project areas in accordance with the “Federal Manual for Identifying and Delineating Jurisdictional Wetlands” (United States Army Corps of Engineers, 1987), “The Florida Wetlands Delineation Manual” (Florida Department of Environmental Protection (FDEP), 1995), the Florida Land Use Cover Classification System, (1999), and the United States Fish and Wildlife Service (USFWS) classification system as described in “Classification of Wetlands and Deepwater Habitat of the United States” (1979).

No jurisdictional wetlands or surface waters exist within the existing rail ROW or within a 500-foot buffer. No wetlands or other surface water will be directly or indirectly impacted by the project.

Based on the desktop analysis and field reviews, no involvement with wetlands is anticipated for this project.

Aquatic Preserves

No aquatic preserves are identified within the study area limits.

Water Quality

There are no protected waters of special quality or concern present within the 500-foot buffer of TRDML. All of Miami-Dade County is within the boundary of the Biscayne Sole Source Aquifer and the project is within FDEP Identified Impaired Florida Waters. However, no additional ROW and no additional impervious surfaces are anticipated for the project. Due to the nature of the project, no additional surface water or stormwater will be generated. Therefore, the project, once completed, will not result in additional runoff and will not change existing drainage or groundwater recharge patterns in the area.

No long-term negative impact on local groundwater or surface water quality will occur because of the additional rail service on the existing infrastructure.

Outstanding Florida Waters

No Outstanding Florida Waters are identified within the study area limits.

Wild and Scenic Rivers

No Wild and Scenic Rivers are identified within the study area limits.

Floodplains

In accordance with Executive Order 11988 and Federal-Aid Policy Guide, 23 CFR § 650 A, an analysis of Federal Emergency Management Agency floodplain data within the 500-foot buffer of the TRDML identified 100-year floodplains. However, no infrastructure improvements are proposed that would involve encroachment into floodplains. For this reason, floodplains are classified as “None” or “No Involvement.”

Although this project involves work within the horizontal limits of the 100-year floodplain, no work is being performed below the 100-year flood elevation and, as a result, this project does not encroach upon the base floodplain.

Coastal Barrier Islands

No Coastal Barrier Islands or resources covered by the Coastal Barrier Resources Act (CBRA), Public Law 97-348 (96 Stat. 1653; 16 U.S.C. 3501 et seq.), enacted October 18, 1982, are within the study area limits.

Wildlife and Habitat

The project area was evaluated for the presence of listed species and their associated habitat. The study methodology included reviewing data from previous reports; GIS databases; USFWS Environmental Conservation Online System; USFWS NWI maps; USFWS Wood Stork Colonies map tool; Florida Natural Areas Inventory; Florida Fish and Wildlife Conservation Commission (FWCC) databases; FWCC Bald Eagle Nest Locator; FWCC's Strategic Habitat Conservation Areas; SFWMD data; ETDM tool; aerial imagery; and field reviews on July 13 and 15, 2016.

No habitat or mapped resources were found. No designated critical habitat occurs within the 500-foot buffer of the TRDML.

Adjacent vacant parcels, the storm water pond, and recreational areas are highly fragmented from one another and surrounded by heavy urbanization; therefore, it is not likely that listed species would utilize these areas.

Due to the nature of the project, no involvement with listed species or their critical habitats is anticipated.

Prime and Unique Farmlands

No prime and unique farmlands are identified within the study area limits.

Essential Fish Habitat

There are no Essential Fish Habitat or Habitat Areas of Particular Concern identified within the study area limits.

Physical Impacts

Noise and Vibration

As documented in the Noise and Vibration Technical Memorandum (refer to Appendix B), potential noise impacts were analyzed at 49 representative noise sites along the corridor. The potential effects are based on the net increase in cumulative noise exposure using FTA's Noise Impact Criteria. The results of the noise impact assessment indicated that the future noise levels from the passenger trains are anticipated to be lower than the existing noise levels from freight trains and surrounding industrial land uses. With the additional passenger trains, the overall cumulative noise exposure level (Ldn) increase ranges from 0 dB(A) to 2 dB(A) at the closest noise sensitive sites along the FEC Little River Connection and from 0 dB(A) to 1 dB(A) along the FECR and the SFRC. None of the representative receptor sites exceed FTA's Severe Impact Criteria or result in a 3 dB(A) increase in the cumulative noise exposure level at any of noise sensitive sites along the project corridor.

Potential mitigation measures, including wayside horns and quiet zones, were evaluated for the 121 residences where moderate noise impacts are anticipated (refer to Noise and Vibration Technical Memorandum). The analysis indicated noise abatement measures are not feasible and reasonable at the majority of the impacted locations as they would not reduce the future noise levels by at least 5 dB(A). For noise mitigation measures to be considered feasible they must reduce the build condition noise levels by at least 5 dB(A). Based on the noise analysis, only 13 of the residences along the corridor would result in noise level decreases of more than 5 dB(A) with the implementation of quiet zones. Due to their substantial costs and limited number of benefited residences, noise mitigation is not considered reasonable or feasible and no quiet zones are recommended for implementation the TRDML project.

The project is not expected to result in any significant ground-borne vibration or ground-borne noise impacts at any of the vibration sensitive sites or at any of the historically significant sites along the FECR project corridor.

Air Quality

FTA requires an air quality report or technical memorandum only when an Environmental Assessment or Environmental Impact Statement are prepared therefore, no separate air quality analysis was completed as part of this report. However, locally, emissions associated with locomotives and idling vehicles are expected to increase due to the proposed up to 30 additional daily commuter rail trains. Regionally, the project is anticipated to reduce the overall vehicle traffic and congestion by improving mass transit.

The project area is within Miami-Dade County, which is currently designated as being in attainment for all the National Ambient Air Quality Standards (NAAQS) criteria air pollutants. Therefore, the Clean Air Act conformity requirements do not apply to the project.

The project is not expected to result in an increase in emissions or lead to the establishment of a new non-attainment area or exceed any of the NAAQS.

Construction

Minor construction may occur to enhance existing rail to support TRDML. Any construction on rail improvements or crossing signals are anticipated to be completed in a short duration of time and in coordination with normal rail construction and SFRTA's System Safety Program Plan, described below.

The construction would occur in existing ROW; therefore, it will have no impacts on local resources.

Contamination

A Contamination Screening Evaluation identified 59 potential contamination sites, of which 32 sites were risk ranked as "Low," 6 sites were risk ranked as "Medium" and 11 were risk ranked as "High." Locations with a risk ranking of "Medium" or "High" typically require additional field screening prior to construction. These field screenings, known as Level II Assessments, may be required for the work within the ROW depending on the level of ground disturbance identified in the final design for track improvements, foundations for new signal/safety equipment, and the

crossover track. As no ROW acquisition is expected, Level II Assessments would only be required for offsite sites if dewatering activities are needed for construction that may affect the site.

Given that minimal construction is expected to add trains on the existing rail tracks, minimal to no involvement for contamination is expected.

Navigation

No navigable waterways under jurisdiction of the US Coast Guard are identified within the study area limits.

Safety and Security

According to SFRTA's System Safety Program Plan (SSPP) - June 2016, the mission is to provide safe, secure and reliable service for its passengers, employees and contractors and anyone coming in contact with the system. The primary purpose for the transit system is to move people safely – to accomplish this, SFRTA must identify all hazards associated with TRDML to eliminate, minimize or control them. SFRTA safety-related responsibilities are identified and responsibilities delegated to the proper units within the organization to help mitigate the hazards. The TRDML extension will be incorporated into the current System Safety Program and the SSPP will be updated to continue promoting the culture of safety outlined in the goals of the SFRTA SSPP.

In accordance with the risk guidance provided in the National Infrastructure Protection Plan (2013) and the Transportation Systems Sector-Specific Plan (2015), transit agencies should conduct a Threat and Vulnerability Assessment (TVA). The SFRTA TVA identifies and assesses risks associated with a variety of threats (malevolent acts, natural hazards, and others) to critical infrastructure. SFRTA will update the TVA of the TRDML extension, and then include the information in the TVA for the overall system. This information will be updated with any changes to the system or every five years.

SFRTA is committed to making the transit system safe. The cab and signaling system will be installed on the locomotives that will communicate with the All Aboard Florida/FECR Positive Train Control (PTC) system. This installation will occur about the time of the planned start of TRDML revenue service.

SFRTA will also update the existing Memorandum of Understandings with FEC and FERC for operations as well as with Miami-Dade County for emergency response that may be required on TRDML. FERC has overall responsibility for safety and security at the MiamiCentral Station as the owner, however SFRTA has safety and security responsibility for its platform, tracks and equipment on which TRDML service will operate in the station.

The project is in a heavily industrialized area. No aspects of the project will adversely impact the safety and security of the railroad and/or railroad operations.

Public Outreach

The project's public involvement process is consistent with the SFRTA Public Participation Plan approved August 2016. A website (www.tri-raildowntownmiamilink.com) was created to provide

the public with a project overview, project details and project contact information. SFRTA will post the TRDML Environmental Analysis to the SFRTA website and the TRDML website.

In addition, SFRTA has committed to additional public outreach prior to and after the revenue service date. As part of this outreach, SFRTA will provide a job fair to be hosted at the new MiamiCentral station.

The following public meetings and/or presentations to public audiences have occurred. The public was notified of public meetings via website and/or by notice of advertisement.

- Biz Now – June 15, 2017
- Citizens Independent Transportation Trust – May 11, 2017
- Urban Land Institute (ULI) Presentation Digging Deeper into Mobility – April 19, 2017
- Palm Beach Metropolitan Planning Organization (MPO) – February 18, 2017
- South Florida Regional Planning Council (SFRPC) Tri-Rail Coastal Link Update – December 16, 2016
- SFRTA Board Update – December 9, 2016
- Private Non-Profit Business Organization - Broward County Workshop – December 7, 2016
- TRDML Presentation, South Florida Regional Planning Council – September 12, 2016
- SFRTA Planning Technical Advisory Committee – August 17, 2016
- Proposed TRDML Presentation to FDOT Secretary Boxold – March 30, 2016
- North Miami City Council – March 16, 2016
- Miami-Dade County Black Affairs Advisory Board – March 16, 2016
- Proposed TRDML Presentation-North Miami City Council – January 12, 2016
- Miami-Dade Black Affairs Advisory Board Presentation – February 3, 2016
- Miami-Dade MPO Presentation – November 3, 2015
- Citizens Independent Transportation Trust (CITT) Presentation – October 21, 2015
- North Miami Downtown Action Plan Advisory Committee – October 9, 2015
- Miami Downtown Development Authority Presentation – Sept 16, 2015
- City of Miami – July 9, 2015
- Miami-Dade County Commissioners – June 30, 2015
- Citizens Independent Transportation Trust – June 17, 2015
- Miami-Dade Transit and Mobility Committee – June 10, 2015
- City of North Miami Beach – June 2, 2015
- Neat Streets Miami – May 27, 2015

- Conference of Minority Transportation (COMTO) Fort Lauderdale Chapter – April 15, 2015
- South Florida Regional Planning Council – March 2, 2015
- Miami-Dade Transportation Summit – January 22, 2015
- Public Hearings for Tri-Rail Coastal Link Study – September 2010 (addressed overall service expansion not TRDML specifically)

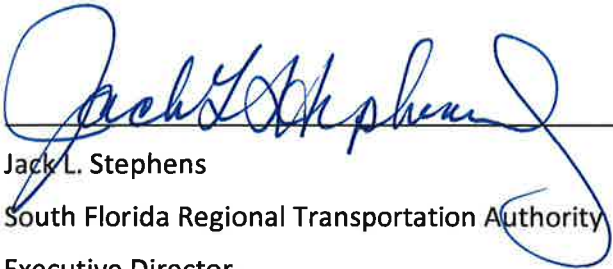
Based upon this project evaluation, it has been determined that a public hearing is not required, therefore, approval of this SFRTA Environmental Technical Analysis constitutes acceptance of the location and design concepts for this project.

Signature Page

Environmental Finding:

The SFRTA Environmental Technical Analysis is attached.

Based on this project evaluation, and its associated supporting documents, the South Florida Regional Transportation Authority finds that there are no significant impacts on the environment associated with the proposed Tri-Rail Downtown Miami Link project.



Jack L. Stephens
South Florida Regional Transportation Authority
Executive Director

Date: 1/8/18