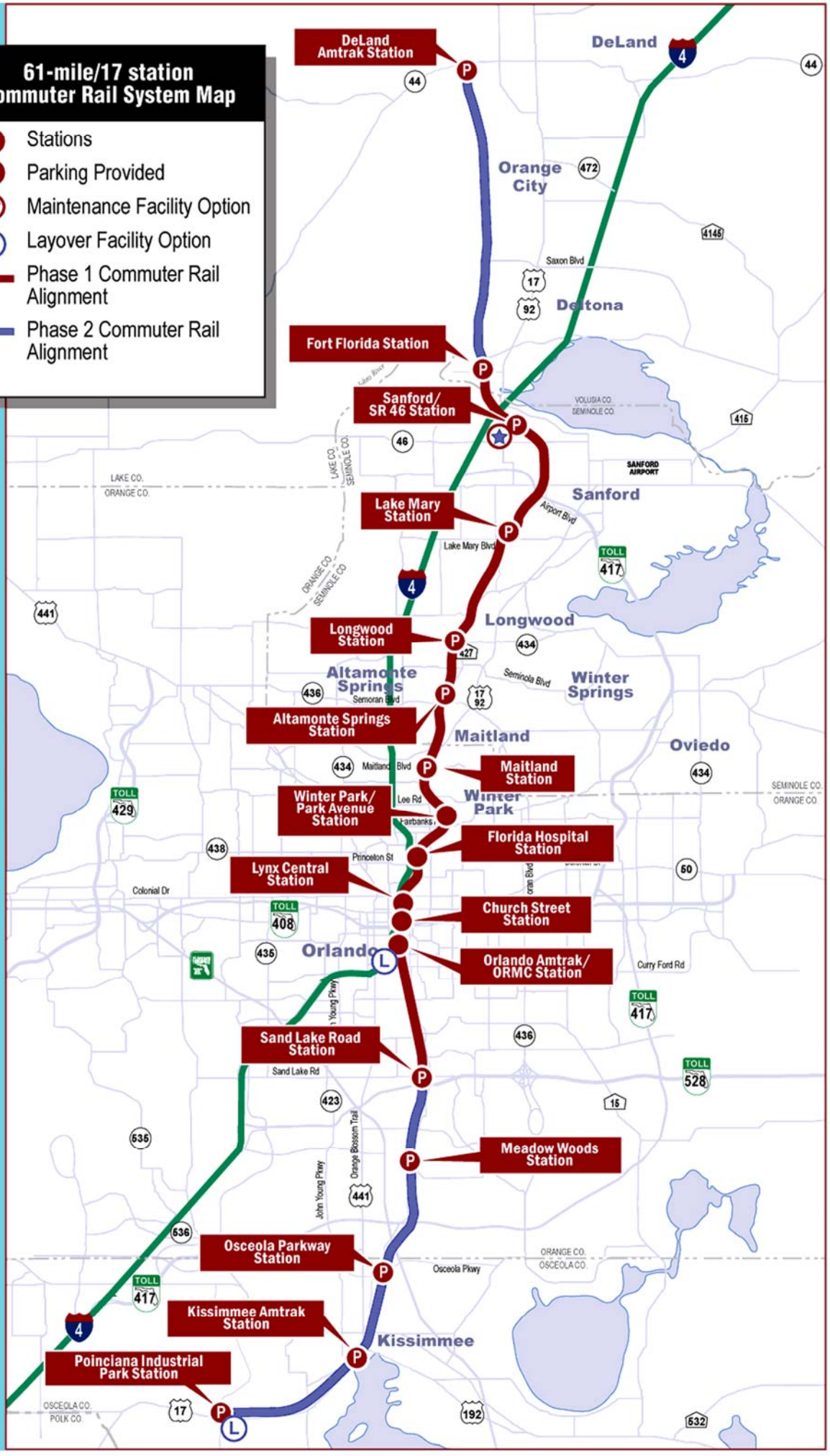

Central Florida Commuter Rail Transit

...Quality Time

Central Florida Commuter Rail Transit

SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT

JUNE 2008

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

CENTRAL FLORIDA COMMUTER RAIL TRANSIT

SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT

Prepared by

U.S. DEPARTMENT OF TRANSPORTATION (US DOT)
FEDERAL TRANSIT ADMINISTRATION (FTA)

And

FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT)

In cooperation with

VOLUSIA, SEMINOLE, ORANGE, AND OSCEOLA COUNTIES
METROPLAN ORLANDO (MPO) and VOLUSIA COUNTY MPO;
CENTRAL FLORIDA REGIONAL TRANSPORTATION AUTHORITY/LYNX;

Pursuant to

National Environmental Policy Act of 1969, (42 U.S.C. 4332 (2)(c) and 49 U.S.C. 303; and
In compliance with 23 CFR Part 771

Date: May 8, 2008

For FTA: _____
Yvette G. Taylor
Administrator, Region IV

Date: May 8, 2008

For FDOT: _____
Noranne B. Downs, P.E.
Secretary, FDOT District Five

CENTRAL FLORIDA COMMUTER RAIL TRANSIT

SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT

Abstract

The Florida Department of Transportation (FDOT) in close coordination with the Federal Transit Administration (FTA) is proposing to introduce commuter rail transit service to the Central Florida area. The Central Florida Commuter Rail Transit (CFCRT) Project is proposed to operate on the existing CSX Transportation, Inc. (CSXT) A-Line rail corridor from the existing DeLand Amtrak Station in Volusia County, south through downtown Orlando and Kissimmee until its terminus at Poinciana Industrial Park in Osceola County. This 61-mile corridor is the same as the Central Florida Commuter Rail Transit North/South Corridor Project Environmental Assessment (EA) approved on December 15, 2006 and resultant Finding of No Significant Impact (FONSI) on April 27, 2007.

The purpose of this Supplemental EA is to assess the potential impacts of the proposed project scope changes to the Project's Full Build Alternative. The Full Build is the 61-mile corridor between DeLand Amtrak Station and Poinciana Industrial Park. The limits of the Full Build Alternative have not changed from the originally approved EA. However, the number of stations has changed from 16 to 17 stations. The revisions include a new station at Fort Florida Road (a station location that was originally in the project's Alternative Analysis); minor changes to the configuration of the park-and-ride lot at the Longwood Station; and a new station in the City of Maitland. In addition, the station park-and-ride lot previously located at the DeBary/Saxon Boulevard Extension has been dropped and will be excluded form any further analysis related to this project.

In close coordination with FTA, FDOT has conducted a general analysis of noise and vibration and grade crossing delay impacts associated with CSXT's plan to move freight traffic from the A-Line to the S-Line, which extends from Jacksonville through Ocala to Lakeland and portions of the A-Line from Lakeland to Auburndale.

FDOT and FTA recognize that the CFCRT project and the movement of freight are two independent projects. The CFCRT project does not cause the need for the movement of freight traffic from the A-Line to the S-Line, and further, CSXT's shifting of freight to the S-Line does not cause the implementation of the CFCRT. The two independent projects serve distinctly different purposes and they are not contingent upon each other.

Despite the fact that these two projects are separate, FTA and FDOT have decided to include in this Supplemental EA a general analysis of the impacts of moving freight from the A-Line to the S-Line, in part due to the inaccurate statements made to the public in the past. This analysis is being completed to provide the public with "information useful in restoring, maintaining, and enhancing the quality of the environment" in the spirit of Section 102(2)(G) of the National Environmental Policy Act. See 42 U.S.C. § 4332(G).The information is especially important because FDOT will not be performing its own environmental analysis on the relocation of freight, since this is not required under the State of Florida environmental review processes. Further, the analysis will contain no proposals for mitigation, as the proposal to move freight from the A-Line to the S-Line has been made by private entities with assistance from the State of Florida, and, as such, is outside the control and discretion of FTA.

For the purpose of the proposed scope changes analysis, the CRT service includes 17 stations with bi-directional service (on weekdays only) at 15-minute peak period and 60-minute midday and evening service frequencies in the year 2030. The Locally Preferred Alternative (LPA) includes 16 stations with 30-minute bi-directional service during weekday peak hours and 120-minute service during the midday. Commuter rail service would be operated with Federal Railroad Administration (FRA) compliant Diesel Multiple Unit (DMU) rail passenger cars.

Comments

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Comments on this document may be made orally at the public hearings or submitted in writing to Ms. Tawny H. Olore at the above address. A 30-day period has been established for comments on this document. Comments must be received by June 23, 2008.

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EXECUTIVE SUMMARY

S.1 Purpose and Need for Proposed Action

S.1.1 Proposed Action

The Commuter Rail Transit (CRT) Project is proposed to operate on the existing CSX Transportation, Inc. (CSXT) A-line rail corridor from the existing DeLand Amtrak Station in Volusia County, south through downtown Orlando and Kissimmee until its terminus at the Poinciana Industrial Park at the intersection of US 17-92 and the CSXT tracks in Osceola County. This 61-mile corridor is the same as the Central Florida Commuter Rail Transit (CFCRT) North/South Corridor Project Environmental Assessment (EA) approved in December 15, 2006 and resultant Finding of No Significant Impact (FONSI) of April 27, 2007. This corridor generally parallels Interstate 4 and US 17-92, and contains some of the area's most intensely and densely developed land use. The width of the study area generally includes the major north-south arterial roadways serving downtown Orlando and other major activity centers, principally Interstate 4, US Route 17-92, and SR 434/Forest City Road in the northern portion of the corridor and State Routes 421, 441, 423, 527, and the Florida Turnpike in the southern portion of the corridor.

The purpose of this supplement to the approved EA is to assess the potential impacts of the proposed Project scope changes to the Project's Full Build Alternative. This is the maximum project that would be built and operated, given the current limits of the CRT Project. The Full Build is the 61-mile line between DeLand Amtrak Station and Poinciana Industrial Park.

In July 2007, the five local funding partners including the counties of Volusia, Seminole, Orange, and Osceola as well as the City of Orlando voted unanimously to enter into Interlocal Agreements with each other and with the Florida Department of Transportation (FDOT). These Interlocal Agreements include commitments by FDOT and the local funding partners to fund 50% of the capital improvements; to fund the anticipated operations and maintenance deficit; and to create a governance structure for the Central Florida Commuter Rail system.

As a result of requests made by local funding partners and further coordination with Amtrak, several changes to the Project scope have occurred and the above referenced EA has been re-evaluated.

For the purpose of the proposed Project scope changes analysis, the CRT service includes seventeen station stops with a bi-directional service (on weekdays only) at 15-minute peak period and 60-minute midday and evening service frequencies in the Year 2030. The Locally Preferred Alternative (LPA) includes sixteen stations with 30-minute bi-directional service during weekday peak hours and 120-minute service during the midday. Commuter rail service would be operated with Federal Railroad Administration (FRA) compliant Diesel Multiple Unit (DMU) cars.

S.1.2 Purpose and Need for Action

There has been no change to the CRT purpose, needs, and goals identified in the approved EA. The Commuter Rail Transit Project proposes an alternative mode of transportation to improve the mobility of travelers along the study corridor, which is the

primary travel corridor in the region, is highly congested and experiences poor highway levels of service all during the day, especially in the morning, mid-day and afternoon peak hours. This traffic congestion inhibits travel mobility, causes longer and more frequent delays, emergency response time delays, impairs air quality, wastes fuel and personal time, stifles economic growth and diminishes the overall quality of life. The proposed CRT Project would connect the region's primary residential communities of Volusia, Seminole, and Osceola Counties, to the urban core in Orange County and the City of Orlando.

Proposed Project Scope Changes

Further coordination with local funding partners and Amtrak since the EA was approved has lead to some changes in the CRT Full Build Alternative. The limits of the Full Build Alternative alignment have not changed from the original approved EA. However, the number of stations has changed from 16 to 17 stations. The revisions include a new station at Fort Florida Road (a station location that was originally in the Project's Alternatives Analysis); minor changes to the configuration of the park-and-ride lot at the Longwood Station; and a new station in the City of Maitland. In addition, the station and park-and-ride lot located at the DeBary/Saxon Boulevard Extension has been dropped and will be excluded from any further analysis related to this project. Although other sites had been considered, the CRT Vehicle Storage and Maintenance Facility (VSMF) will be constructed within the limits of Rand Yard as evaluated in the approved EA. Preliminary Concept Plans for these above referenced changes are included as Appendix A of this document.

S.2 Alternatives

This supplement to the approved EA does not change the limits of the 61 mile Full Build Alternative from the original approved EA. A total of 17 stations are in the Full Build Alternative including the proposed Project scope changes and they would be located at: DeLand, Fort Florida Road (new), Sanford, Lake Mary, Longwood (reconfigured park-and-ride lot), Altamonte Springs, Maitland (new), Winter Park, Florida Hospital, LYNX Central Station, Church Street (in downtown Orlando), Orlando Amtrak/ORMC, Sand Lake Road, Meadow Woods, Osceola Parkway, Kissimmee Amtrak, and Poinciana Industrial Park.

As stated in the approved EA, the proposed service plan for the year 2030 would provide 15-minute bi-directional service during morning and evening peak periods and 60-minute service in the midday, Monday through Friday (approximately 260 days per year). The primary infrastructure improvements include a new signal system and 40 miles of new 2nd track bringing the total double track to approximately 59 miles in the 61 mile corridor.

S.3 Environmental Consequences

The proposed project would improve the 61-mile rail route within existing railroad rights-of-way. Table S-1 summarizes impacts to the natural and social environment that would result from the proposed Project scope changes. This supplement to the approved EA considers impacts associated with adding a new station at Fort Florida Road, Maitland, and minor changes to the park-and-ride lot at the Longwood Station. Also, the station at the DeBary/Saxon Boulevard Extension has been deleted.

S.3.1 Land Use and Zoning

Land use patterns vary across the Corridor and have not changed significantly since the approval of the EA.

Fort Florida Road Station:

The added Fort Florida Road Station site is located at the intersection of Fort Florida Road and US 17/92. This site is considered an origin station. While most of the potential riders will utilize the park-and-ride lot or access the station by feeder bus, many will come from new development surrounding the proposed site.

The population is projected to increase 56% by 2030 and employment is projected to increase by 74%. The continued growth in this area will be guided by the local comprehensive planning process, bolstered by the introduction of commuter rail.

The majority of land use within one-half mile of the station site is undeveloped. Currently, there is some residential near Lake Konomac and on the east side of the CSX tracks and north of the station site. The remaining land uses to the south of the station and on the east side of the CSX track are primarily commercial in the form of auto repair shops, golf cart and tire shops. Southwest of the proposed station and existing CSX right of way is the Florida Power and Light electric generating plant, and to the west and northwest is the system of surface water and channels for the power plant cooling water. These land uses are to the west of the CSX track and right of way on the opposite side of the tracks from the proposed park and ride facility. Refer to Appendix A for the proposed site plan for the Fort Florida Station.

The stormwater generated from the Fort Florida Station will be conveyed to an existing FDOT water retention pond located to the east side of US 17/92. The existing FDOT water retention pond stores stormwater collected from US 17/92. The existing pond has sifficient storage potential to accommodate the water from the Fort Florida Road Station.

Maitland Station:

The added Maitland Station is located on the west side of US 17/92 (Orlando Avenue) approximately ½ mile north of the new Maitland Downtown Center. The current land use is comprised of a mixture of commercial and vacant land uses. The owners of the land adjacent to the proposed station property are the Parker Lumber Company and VJR Properties. Refer to Appendix A for the proposed site plan for the Maitland station. Directly, to the west of the station is the Greenwood Gardens subdivision, a mixed multi-family and single family residential area. A new at-grade pedestrian crossing is planned from this neighborhood directly to the proposed station. This project will include the construction of the station platform. The City of Maitland will provide bus access and 250 park-n-ride spaces through a joint use development agreement with local developers.

Parker Lumber Company owns the northern half of the site and VJR Properties own the Northbridge Center on southern half of the site. Each has 125 transit parking spaces to be provided to the CRT station. The bus drop off is part of the public access to the site.

The Northbridge Center development order is in the amendment process to include the transit parking and bus access. Parker Lumber site plans are required to have the transit parking and bus access as part of their development order.

The City of Maitland has required both of the developers to provide this area for the public access and transit parking.

A total of 4.75 acres is needed for the public access/bus drop off and 250 parking spaces.

Currently, site work is being completed by The Northbridge Center developer. The Parker Lumber conceptual site is under plans review by the City of Maitland. If necessary, temporary surface parking will be provided until the structured parking is completed. The City of Maitland is prepared to construct the public access and bus drop off if necessary.

The area adjacent to the proposed station has the potential for Transit Oriented Development (TOD). The City of Maitland is establishing a TOD and TCEA that will both accommodate and encourage the use of the station. City of Maitland representatives have had preliminary discussions with several developers to establish this type of development. The current plan includes mixed-use development, structured parking adjacent and parallel to the rail tracks, a bike/pedestrian trail, plaza and bus turnaround and drop off at the station. This is considered an origin station. Due to the convenient location on US 17/92 and the interchange with Maitland Boulevard, the majority of the customers will utilize the park-n-ride lot or access the station by feeder bus. The City of Maitland has instituted a Connectivity committee for the purpose of increasing and enhancing alternative forms of connectivity within the City.

The population is projected to increase 18% by 2030 and employment is projected to increase 52% by 2030. The new employment is concentrated in the Maitland Office Park development adjacent to I-4.

Longwood Station:

The current land uses as described in the approved EA have not changed. The City of Longwood has requested some minor changes to the previously approved park-and-ride lot configuration in order to enhance the potential for transit oriented development. The approved EA indicated that the park-and-ride lot for the Longwood Station would be located immediately adjacent to the platform from Palmetto Street to Church Avenue. The land uses surrounding the new parking lot area are primarily comprised of the City of Longwood Public Works Facility and one residence. The existing City water plant and pump station will not be impacted by this change. Also, the new location encourages transit oriented mixed use development adjacent to the station. Refer to Appendix A for the proposed site plan for the Longwood station.

Vehicle Storage and Maintenance Facility (VSMF):

The approved EA identified Rand Yard as the preferred location for the VSMF (refer to Appendix A-6 for the proposed site plan for the VSMF) along with a recommendation to consider and further assess the suitability of using the Sanford Amtrak Auto Train yard and maintenance facility for heavy maintenance services. As a result of further coordination with Amtrak, a Memorandum of Understanding with Amtrak was reached in which Amtrak will provide intermediate/heavy vehicle maintenance services to the CRT vehicle fleet at their existing Sanford maintenance shop facility; and use of, with some minor modifications, the Amtrak vehicle wash facility at the same location. No CRT related construction or demolition would occur at the Sanford Yard, therefore no environmental impacts are anticipated.

S.3.2 Community Cohesion

The Full Build Alternative, including the Project scope changes, does not result in adverse impacts to community cohesion in neighborhoods along the corridor. No permanent impacts to the neighborhoods along the Corridor have been identified. The introduction of new station sites at Fort Florida Road and Maitland, and the revised configuration of the park-and-ride lot at the Longwood Station will not create physical barriers that will lead to community isolation/exclusion/separation. As a result, the two proposed stations will not adversely impact existing community cohesion and/or character.

S.3.3 Environmental Justice

The proposed scope changes to the Full Build Alternative do not result in disproportionate impacts to identified populations along the Corridor. There are no low-income, transit dependent or minority populations above the county average within the new station and VSMF areas, and no change for the existing Longwood Station area.

S.3.4 Public Safety, Security and Community Services

The addition of the stations at Maitland and Fort Florida Road does not change the approved EA finding that the Full Build Alternative will improve safety and security. Florida Power & Light and FDOT will coordinate construction requirements at the Fort Florida Road Station. FDOT is coordinating with FPL on a Dam Safety Plan that will be implemented prior to construction activities.

S.3.5 Economic Impacts

The economic impact does not significantly change with the addition of the station in Maitland as the approved corridor alignment remains the same and Fort Florida Road Station replaces Debary/Saxon Station. Materials and labor for construction will be purchased within the four-county region. The revenue from local purchases of material and labor would far outweigh possible taxable revenue lost.

S.3.6 Utilities

The positive economic impacts of the Project as a whole are documented in the original approved EA. There should be additional opportunities for TOD around the new Fort Florida Road and Maitland Stations and modified Longwood Station parking area.

Florida Power and Light has a generating plant that is located approximately .9 miles from the Fort Florida Road Station. The construction of the Fort Florida Road park-and-ride lot and platform is not expected to impact the Florida Power and Light canal.

S.3.7 Railroads

Passenger platforms at the new stations at Fort Florida Road, and Maitland will be designed to be compliant with applicable FRA regulations pertaining to rail lines with freight and passenger operations. This does not change from the original approved EA.

S.3.8 Displacements and Relocations

The acquisition and relocation program will be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as supplemental, and relocation resources will be available to all relocated business and residents without discrimination.

A total of 7.63 acres of right-of-way is required for the Fort Florida Road Station affecting one parcel owned by Florida Power and Light. In addition, one small field office will need to be relocated.

The right-of-way required for the Maitland Station park-and-ride lot is being provided by the City of Maitland through a development partnership with the property owners of the adjacent 4.7 acres. The parking being proposed by the City consists of two parking garages with 125 spaces each for use by commuter rail patrons. No relocations of buildings are expected at the proposed locations of the parking garages.

The revised location of the Longwood Station park-and-ride lot requires a total of 5.53 acres. This is approximately 1.15 acres additional right-of-way than what was originally documented in the approved EA. One residence and one City of Longwood property will need to be relocated.

Since the DeBary/Saxon Boulevard Extension Station has been removed there is a net reduction of 3.14 acres overall needed for the park-and-ride right-of-way associated with this project.

Appendix D contains a list of impacted parcels, relocations and easements that were cleared as part of the approved EA. However, since the approved EA, additional title and boundary survey information has further defined the ownership of these parcels.

S.3.9 Archaeological and Historic Resources

Additional historical/architectural and archaeological field surveys were conducted between October and December 2007 within the Project Area of Potential Effect (APE) defined as the zone within approximately 100 feet from the edge of each side of the existing CSXT ROW and the footprint and immediately adjacent property of each proposed station and other ancillary facility.

Fort Florida Road Station: Based on the results of background research and archaeological and historical/architectural field surveys[1] no archaeological sites or historic resources which are listed, determined eligible, or considered potentially eligible for listing in the NRHP are located within the proposed Fort Florida Road station location. Thus, station development will have no effect on significant cultural resources.

Maitland Station: Background research and field survey were conducted[2] at the proposed location of the park-and-ride parking lot at Maitland Station. Resources at the Parker Lumber Company were identified (one previously recorded structure and four additional historic structures). Due to numerous alterations and additions, none of the four newly recorded buildings is considered potentially eligible for listing in the NHRP, either individually or collectively. Archaeological survey yielded negative results.

Longwood Station: The new areas for the park-and-ride lot were assessed for their archaeological and historic resources[3]. A new site,8SE2339, was previously recorded

[1] Archaeological Consultants, Inc., Memo, *Central Florida Commuter Rail Transit (CFCRT), Fort Florida Road Station, Volusia County, Florida,* October, 2007
[2] Archaeological Consultants, Inc., Memo, *Central Florida Commuter Rail Transit (CFCRT), Maitland Station, Orange County, Florida,* December, 2007
[3] Archaeological Consultants, Inc., Memo, *Central Florida Commuter Rail Transit (CFCRT), Longwood Station, Seminole County, Florida,* October, 2007

and found to be not eligible for listing in the NRHP. It was determined that the station development will have no effect on significant cultural resources.

In a letter dated June 20, 2008 (Appendix C), SHPO has determined that the proposed scope changes as it relates to Fort Florida, Longwood and Maitland Station sites will have no effect on any significant historic structures or districts, including those properties listed, determined eligible, or considered potentially NRHP-eligible.

S.3.10 Recreation and Parkland Resources

Proposed station construction will not directly impact any identified park or recreation area. Temporary construction activities may affect access to and use of adjacent parks and recreational resources. Construction impacts that would temporarily affect park and recreational experiences include physical separation of parks and recreational resources from users (e.g., fencing of a street ROW); increased noise, dust, and truck traffic; and restricted or altered access.

S.3.11 Pedestrian and Bicycle Facilities/Access

The Full Build Alternative will result in benefits to pedestrian and bicycle facilities and access along the corridor, providing a transit alternative that will encourage commuters to walk and bike to transit as an alternative to driving. The Fort Florida Road Station will have improved access as future development occurs along US 17/92 to connect the station with the DeBary Town Center. Maitland Station would provide access to the bikeway that connects Maitland Community Park and the existing Maitland City Hall. An existing easement to the adjacent neighborhood (Greenwood Gardens) will be utilized to provide a pedestrian/bike path directly to the Maitland Station. Future plans for the new Maitland Town Center include strengthening the pedestrian connection along US 17/92 and expanding the bike trails to connect to Lake Lilly Park. Pedestrian and bicycle access will still be maintained with the revised configuration of the Longwood Station park-n-ride lot. In the vicinity of this station, sidewalks are currently provided along existing streets with handicap ramps at intersections. Existing sidewalks would be available for pedestrians accessing the site.

S.3.12 Visual and Aesthetic Resources

No negative visual impacts are anticipated, therefore, no specific mitigation measures are necessary.

S.3.13 Air Quality

As documented in the approved EA the CRT Project is not located in a Nonattainment Area, and accordingly the Transportation Conformity Rule and its air quality requirements do not apply to the Project. All estimated CO concentrations are less than applicable standards and this is not changed by the proposed Project scope changes in this supplement to the EA. The proposed Project scope changes have only minor net change in operation of the system compared to the system as defined in the approved EA. Therefore, no mitigation measures are required as a result of the proposed Project scope changes.

S.3.14 Noise and Vibration

A detailed noise and vibration assessment was performed along the Project Corridor, from DeLand in Volusia County to Poinciana Boulevard in Osceola County and is found in Sections 3.3.5 through 3.3.6 of the approved EA.

Noise

Fort Florida Road and Longwood Stations do not have any noise receptors. The Maitland Station has 5 noise impacted receptors and 1 severe noise impact receptor.

To further reduce the noise impacts near Maitland Station, the DMU warning horns could be modified using a sheet metal shroud technique discussed in the approved EA or re-designed to reduce the sideline noise while still maintaining the FRA's minimum noise requirement of 96 dBA Lmax measured at a distance of 100 feet from the centerline of the horn. Applying this mitigation technique or similar redesign of the horn to reduce sideline noise of the DMU warning horns can be expected to eliminate all moderate impacts and severe impacts of the CRT.

FDOT is committed to constructing a commuter rail project that will not have adverse noise impacts on a corridor community with existing high noise exposure. During the start-up period of commuter rail operations, FTA, with the assistance of FDOT, will prepare a detailed noise assessment. This assessment will verify the predicted Project noise levels in the EA and test the efficacy of its operational and horn noise analysis and mitigation measures to ensure that there will be minimal community noise impacts from this project. The sheet metal shroud and foam rubber insulation shall be installed on all locomotives as described in the Mitigation Section of the approved EA.

If noise monitoring during the start-up period reveals that the selected mitigation does not adequately control noise, the Project sponsor is committed to adopting additional measures to reduce noise. In this case, the goal will be to eliminate all impacts in the "severe" range and to minimize the number of impacts in the "moderate" range. Such an outcome is consistent with FTA's approved original EA for the Project.

Vibration

FTA criteria are related to ground-borne vibration levels expressed in VdB that are expected to result in human annoyance. These criteria were used to assess annoyance due to ground-borne vibration from the DMU transit operations. The proposed Project scope changes will not result in adverse vibration impacts along the corridor; therefore, no mitigation measures are required.

S.3.15 Ecosystems

No significant adverse impacts are anticipated to the regional populations of the federally or state-listed species protected by the Endangered Species Act of 1973, amended (16 U.S.C. 1531 et seq.) as a result of the proposed Project scope changes. However, all ecosystem commitments contained within the approved EA will be adhered to by FDOT.

S.3.16 Wetlands

The Project Corridor was evaluated for any wetlands that have potential involvement with the proposed improvements.

The maximum (worst case) wetland and other surface water feature impacts are estimated at 22.47 acres for the entire 61-mile corridor. Of these impacts, 18.01 acres are directly associated with station locations.

The Fort Florida Road Station has a 1.45 acre impact on wetlands. The Longwood Station has 0.8 acres of wetlands. There is no change from the approved EA as a result of the addition of the Maitland Station.

In the locations where new parking lots will be required, efforts would be made to avoid direct impacts to any extant wetland resources. Wetland impacts will be mitigated pursuant to S. 373.4137 FS to satisfy all mitigation requirements of Part IV Chapter 373, F.S. and 33 U.S.C.s. 1344 as indicated in the approved EA.

S.3.17 Water Quality

No change from the approved EA is anticipated with the addition of the two stations at Fort Florida Road and Maitland and the modification to the Longwood Station.

S.3.18 Contamination

A Contamination Screening Evaluation Report (CSER) addendum was prepared for the Fort Florida Road and Maitland proposed station sites. The CSER rated the proposed Fort Florida site Contamination Risk Potential Rating (CRPR) as High risk and the Maitland Station as Medium risk.

The original approved EA listed Longwood as Medium risk. The addition of the City of Longwood Public Works site changed this to High risk. This indicates that additional soil and groundwater sampling is warranted prior to land acquisition.

Depending upon the nature and extent of contamination impacts as determined by the Level I and/or Level II contamination assessment activities, risk analysis for impacts to the Project and the general public will be performed, cost estimates for remediation could be developed, and a communication plan with applicable regulatory agencies will be devised. Mitigation measures, dependent on the results of additional site specific assessments of soils and groundwater will be developed during Project design, as appropriate.

S.3.19 Farmlands

Through coordination with the Natural Resources Conservation Service (NRCS), it has been determined that the Project study area, which passes through the urbanized areas of Deltona, Orlando, and Kissimmee, does not meet the definition of farmland as defined in 7 CFR 658. Therefore, the provisions of the Farmland Protection Policy Act of 1984 do not apply to the Project.

S.3.20 Energy

Transportation is Florida's second largest energy use sector with 36 percent of the total. Automobile and truck use make up the vast majority of the transportation energy use total. Because the implementation of the Full-Build Alternative would result in a reduction in indirect energy usage in the Project study area, no mitigation measures are required.

S.3.21 Construction Impacts

The addition of the two stations would not change the impacts associated with construction, therefore there is no change from the approved EA.

S.4 Transportation Impacts

S.4.1 Traffic and Roadway

Traffic operations were evaluated for study intersections and roadways for the proposed Project scope changes. The Project will shift a small amount of traffic away from existing roadways to origin stations. The level of Project-related traffic is low compared with traffic on adjacent roadways. The Project will not adversely impact the major roadway movements at the station driveway locations.

The Fort Florida Road Station is estimated to generate 148 vehicle trips during the commuter peak hours and the Maitland Station is estimated to generate 200 vehicle trips during the peak hours.

Vehicle trip generation at the Longwood Station has not changed as a result of the parking layout reconfiguration.

The traffic volume screening analysis shows that Project-generated traffic volumes along the roadways adjacent to the Fort Florida Road and Maitland stations are below threshold criteria and do not require further analysis. There is no change from the original EA for the Longwood Station. In addition, no stations will divert traffic to sensitive areas such as residential neighborhoods, historic districts, or hospital zones.

In summary, the addition of the Fort Florida Road and Maitland stations will not have an adverse impact on the adjacent roadway system or sensitive areas. The Project will not adversely impact the major roadway movements at the station driveway locations. The reconfiguration of parking at the Longwood Station will not change traffic analysis findings from the original EA analysis.

The Full Build Alternative has no adverse impact on other existing and planned transit service. A limited number of existing bus routes will be slightly modified to serve the new stations. No new buses will be added. Fewer than 4 buses per hour will be added to the streets adjacent to the stations. Amtrak trains run in the off peak hours and will be scheduled between the CRT operations. The Full Build Alternative would attract substantial new transit ridership and in so doing reduce regional Vehicle Miles Traveled. By operating within an established active rail line with its own right-of-way, the commuter rail service will provide a highly reliable transit service free of the roadway congestion encountered by transit modes that share roadways with general traffic.

As described in the section above, the Full Build Alternative will have no adverse impact on truck or marine traffic.

S.4.2 Station Parking

Determining localized parking demand for station areas is a result of travel demand forecasting. FDOT bears the ultimate responsibility for parking mitigation, and is committed to working with local communities and developers for the provision of the necessary number of parking spaces at each station location.

The proposed parking spaces for both the Fort Florida and Maitland stations is sufficient to accommodate parking demand based on ridership projections and vehicle generation estimates.

The Fort Florida Road Station replaces the previously proposed DeBary/Saxon Boulevard Station which included a parking supply of 275 spaces to meet projected demand.

The provision of the proposed 250 park-and-ride spaces at the Maitland Station will be accommodated through a joint use development agreement between the City of Maitland and local developers. FDOT has begun discussions with the city and will continue to formalize agreement conditions as the Project progresses.

The reconfiguration of parking at the Longwood Station will improve access, egress, and circulation. As a result, the number of spaces will decrease by approximately 5%, to 354 spaces from what was originally proposed in the EA (375 spaces).

The Project will not reduce or impact parking supply for any businesses/residences that will continue to operate adjacent to the Project. In summary, the addition of the Fort Florida Road and Maitland stations does not change the finding of no significant impact on parking.

S.4.3 Intersections and Grade Crossing Improvements

There are no changes to this section of the approved EA. The CRT Full Build Alternative will have only a limited impact on intersections and roadways in the Study Corridor. The Fort Florida Road at-grade crossing will not increase traffic delay within the study corridor. The Longwood Station parking reconfiguration will not change results summarized in the approved EA. Elements that will be implemented as part of the CRT Full Build Alternative including the proposed Project scope changes, such as a new Constant Warning Time signal system, will reduce grade crossing delays and improve operations and safety throughout the Corridor.

S.5 Generalized S-Line Assessment

In close coordination with the Federal Transit Administration (FTA), FDOT has conducted a general analysis of noise and vibration and grade crossing delay impacts associated with CSXT's plan to move freight traffic from the A-Line to the S-Line, which extends from Jacksonville through Ocala to Lakeland and portions of the A-Line from Lakeland to Auburndale.

FDOT and FTA recognize that the CRT Project and the movement of freight are two independent projects. The CRT Project does not cause the need for the movement of freight traffic from the A-Line to the S-Line, and further, CSXT's shifting of freight to the S-Line does not cause the implementation of the CRT. The two independent projects serve distinctly different purposes and they are not contingent upon each other.

Despite the fact that these two projects are separate, FTA and FDOT have decided to include in this Supplemental Environmental Assessment a general analysis of the impacts of moving freight from the A-line to the S-line, in part due to the inaccurate statements made to the public in the past. This analysis is being completed to provide the public with "information useful in restoring, maintaining, and enhancing the quality of

the environment" in the spirit of Section 102 (2) (G) of the National Environmental Policy Act. See 42 U.S.C. § 4332 (G). The information is especially important because FDOT will not be performing its own environmental analysis on the relocation of freight since this is not required under state of Florida environmental review processes. Further, the analysis will contain no proposals for mitigation, as the proposal to move freight from the A-line to the S-line has been made by private entities with assistance from the State of Florida, and, as such, is outside the control and discretion of FTA."

S.5.1 S-Line Grade Crossing Analysis

As part of this supplement to the approved EA, the general S-Line grade crossing assessment was directed primarily at those crossings with the highest volume of vehicular traffic that could be potentially delayed by increased frequency of train operations. The assessment compares general roadway and railroad operating conditions at selected grade crossings "without freight relocation" to anticipated conditions "with freight relocation". The complete technical report with details of the analysis including maps and tables is found in Appendix E.

Of the 224 rail crossing on the S-Line, a total of 20 grade crossing locations were identified for further evaluation. All 20 grade crossings operate at LOS A during the peak hour and peak periods under the "Without freight relocation" scenario and will remain at LOS A under the "With freight relocation" scenario. The average delay per vehicle remains less than 10 seconds at all 20 study grade crossings during both peak hours (AM and PM) under the "With freight relocation" scenario. In addition to the delay calculations, a volume to capacity (v/c) ratio was determined for each study grade crossing location. The v/c ratio does not exceed 0.5 for any of the study crossings as a result of the freight relocation.

The traffic analysis results also include an estimation of the 95th percentile queue lengths for vehicles stopped at the grade crossings. It should be noted that these queues occur under existing conditions. Comparing the two scenarios shows that the 95th percentile queue length does not increase due to the freight relocation; however the frequency of the queues occurring will increase by one event, at most, during each peak hour.

S.5.2 Safety

Improvements to highway-rail grade crossing signal safety devices, crossing closures and a combination of public education and rail safety awareness have all been designed to reduce the opportunity for collisions, fatalities and injuries at rail crossings and on railroad property. Over the years, a significant decrease in vehicle/train accidents has been witnessed even as the State of Florida has rapidly grown to the 4th largest state in population and correspondingly shown tremendous density increases in vehicular traffic. The potential for vehicle/train conflict has risen significantly over the last 20 years with a 56.9% population increase and unknown quantities of out-of-state travelers and tourists. During this time the total accidents at highway-rail grade crossings has actually decreased by 8%.

The cause of this decrease in number of accidents and fatalities may be due in part to the Highway Railroad Grade Crossing Safety Improvement Program. FDOT continuously evaluates and identifies grade crossing locations that are potentially hazardous, and develops safety improvement projects to upgrade crossings and reduce the number of crashes at grade crossings. Approximately 95 percent of public crossings along the S-

Line have warning devices, and with most of the relocated trains occurring during off-peak hours when traffic volumes are lower, the relocation of some freight trains to the S-Line is not expected to have a significant impact on safety.

S.5.3 Emergency Response

This section identifies locations on the S-Line where existing train operations are of particular concern relative to their potential impact on emergency vehicle response time.

About eight hospitals that provide emergency care and 26 fire departments (including volunteer fire departments) were identified within five miles of S-Line for emergency response. Total gate down time per train is assumed to be same with relocation and without relocation scenarios. The comparison of gate down time in a 24-hour period varies from two to three percent for "With relocation" scenario and from three to four percent for "Without relocation". The percentage of gate down time remains the same in both scenarios for all the hospitals and fire departments except for the ones located in Bradford, Sumter and Polk Counties, where the gate down time for 24-hour period increases by one percent. Therefore, relocation of freight trains along the S-Line will not have significant impact on emergency response vehicles.

S.5.4 Noise

The S-Line has significant CSXT freight service along its entire length with an average of 27 trains daily through Wildwood to 18 trains daily through Auburndale. Due to the approximate 200 mile length and largely rural nature adjacent to the S-Line, this noise assessment does not include noise calculations at all receptors along the corridor. Instead, the assessment focused on cities and towns and developed detailed noise contours along the S-Line at 12 locations along the corridor where noise measurements were obtained. The complete technical report with details of the analysis including noise contour maps is found in Appendix F.

In accordance with FTA noise guidelines, although no transit vehicles will utilize the S-Line, a noise-monitoring program was conducted along the S-Line Corridor to (1) establish the existing ambient background levels within the Project area and (2) develop Project criteria noise limits. Noise measurements were obtained at 12 receptor locations along the corridor. The measurements at 11 of the locations consist of 24 hours of continuous noise monitoring at residential receptors. The remaining location was in a public park where hour-long noise measurements were collected. The results were used to establish baseline noise levels for both residential and non-residential receptors.

It should be recognized that many of these affected receptors are currently exposed to noise from warning horns from existing freight operations along the corridor. The horn soundings introduced by the additional freight operations will increase the cumulative horn noise exposure in the corridor by an insignificant amount.

The results of the noise assessment indicate that, in general, the increase in freight operations along the S-Line would result in a marginal increase in noise exposure to the communities along the S-Line. The noise assessment results indicate a range of 0.8 to 1.4 dBA increase in the average daily L_{DN} noise exposure level.

As a noise mitigation measure, CSX has committed to develop quiet zones in the downtown Lakeland area that will restrict the use of warning horns as the freight trains

approach the grade crossings. Since the warning horns are the major noise source from the freight trains, this will have a significant effect in reducing the overall noise levels in the downtown Lakeland area.

Vibration

Vibration levels from S-Line freight rail passbys at sensitive receptors along the Project corridor were determined using the FTA guidelines.

Although there will be an increase in daily freight train operations, the vibration levels from a freight train passby would be similar to those already experienced along the S-Line. Therefore, there would be no vibration impact from the additional freight rail operations on the S-Line.

S.6 Summary of Impacts

Table S-1 provides a summary listing of impacts identified in the supplement to the approved EA. As shown on Table S-1, the analysis indicates that no substantial changes have occurred in the social, economic, or environmental effects of the proposed action that would significantly impact the quality of the human environment.

None of the four actions described in this document occur in Osceola County. There is no change to the station impact summary for Osceola County that was provided in the previously approved EA.

Table S-1 Impacts Identified in the Supplemental Environmental Assessment

Measure	Impacts
Land Use	Development incompatible with local planning
Community Cohesion	Disruption to existing neighborhoods
Environmental Justice	Disproportionate impact to Environmental Justice populations
Public Safety, Security and Community Services	Delays in providing public safety services; impeded access to community services
Economic Impacts	Loss of tax revenue
Utilities	Relocation of major utility systems
Railroad	Impacts to existing rail traffic
Displacements and Relocations	Displacement of residencies and/or businesses
Historic and Archaeological Resources	No effect to eligible historic or archaeological resources
Recreation and Parkland Resources	Conversion of parklands and recreation areas to different use
Pedestrian and Bicycle Facilities/Access	Impacts to pedestrian and bicycle travel patterns and facilities
Visual and Aesthetic Resources	Negative visual impacts
Air Quality	Exceeds NAAQS
Noise	Exceeds FTA Noise Impact Criteria
Vibration	Exceedences of FTA vibration impact criteria
Ecosystems	Impacts to natural areas or T&E species and habitats
Wetlands	Impacts to jurisdictional wetlands
Water Quality	Point source impacts; impacts to floodplains
Contamination	Impacts caused by the presence of hazardous waste
Energy	Increase in energy consumption
Construction	Significant temporary impacts
Station Roadways	Increase in traffic volumes
Intersection LOS	Degradation in Level of Service
At-grade Crossing	Change in peak hour and daily delay
Station Parking	Displacement of existing parking or impacts to neighborhoods
Transit - Systemwide	Impact to other existing or planned bus transit services, and systemwide ridership
Transit - Other	Interference with existing Amtrak service
Freight Rail Traffic	Interference with freight rail services
Trucking	Interference with trucking routes
Marine	Reduction in openings of St. John's River Railroad Bridge

Table S-2 Station Impact Summary - Volusia

Measure	DeBary/Saxon Blvd. Extension Station (DELETED)	Fort Florida Road Station Impacts (ADDED)
Land Use	Rezoning allowed (DELETED)	Rezoning allowed
Community Cohesion	Vacant land (DELETED)	Vacant land
Environmental Justice	None (DELETED)	None
Public Safety, Security and Community Services	Some improvements (DELETED)	Some improvements
Economic Impacts	Positive impact in long term (DELETED)	Positive impact in long term
Utilities	Minor changes (DELETED)	Minor changes
Railroad	Maintains access to existing rail users (DELETED)	Maintains access to existing rail users
Displacements and Relocations	16.3 acres. No Relocations. (DELETED)	7.63 acres. One FPL parcel including small field office relocation
Historic and Archaeological Resources	NA (DELETED)	NA
Recreation and Parkland Resources	NA (DELETED)	NA
Pedestrian and Bicycle Facilities/Access	Improved access (DELETED)	Improved access
Visual and Aesthetic Resources	Minor (DELETED)	Minor
Air Quality	No exceedences (DELETED)	No exceedences
Noise	None (DELETED)	None
Vibration	None (DELETED)	None
Ecosystems	None (DELETED)	None
Wetlands	1.61 acres (DELETED)	1.45 acres
Water Quality	1.7 acre detention pond (DELETED)	Will use existing FDOT detention pond
Contamination	Low (DELETED)	High
Energy	Reduction in indirect energy usage (DELETED)	Reduction in indirect energy usage
Construction	Temporary (DELETED)	Temporary
Station Roadways	95 a.m. peak hour trips added (DELETED)	148 a.m. peak hour trips added
Intersection LOS	Minor change (DELETED)	Minor change
At-grade Crossing	Minor change (DELETED)	Minor change
Station Parking	275 spaces added (DELETED)	275 spaces added
Transit - Systemwide	Improved service (DELETED)	Improved service
Transit - Other	Interface with Amtrak (DELETED)	Interface with Amtrak
Freight Rail Traffic	Safer operation (DELETED)	Safer operation
Trucking	Minor change (DELETED)	Minor change
Marine	No change (DELETED)	No change

Table S-3 Station Impact Summary – Seminole and Orange

Measure	Longwood Station Impacts (MODIFIED)	Maitland Station Impacts (ADDED)
Land Use	Zoned for High Density Use	Zoned for mixed use development
Community Cohesion	Moderate disruption to neighborhoods	No disruption to neighborhoods
Environmental Justice	None	None
Public Safety, Security and Community Services	Some improvements	Some improvements
Economic Impacts	Positive impact in long term	Positive impact in long term
Utilities	Minor changes	Minor changes
Railroad	Maintain access to existing rail users	Maintain access to existing rail users
Displacements and Relocations	1 residence 1 City of Longwood property 5.53 acres needed for revised park and ride, which is 1.15 acre increase over approved EA	4.75 acres added for parking and bus access. ROW being provided by City of Maitland and joint use agreement with developers.
Historic and Archaeological Resources	Existing building determined not eligible for national register	Existing buildings determined not eligible for national register
Recreation and Parkland Resources	NA	Improved access
Pedestrian and Bicycle Facilities/Access	Improved access	Improved access
Visual and Aesthetic Resources	Minor	Minor
Air Quality	No exceedences	No exceedences
Noise	None	Impact mitigated
Vibration	None	None
Ecosystems	None	None
Wetlands	0.80 acres	None
Water Quality	0.6 acre detention pond	No change to existing drainage required
Contamination	High	Medium
Energy	Reduction in indirect energy usage	Reduction in indirect energy usage
Construction	Temporary	Temporary
Station Roadways	160 a.m. peak hour trips added	200 a.m. peak hour trips added
Intersection LOS	Minor change	Minor change
At-grade Crossing	Slight delay	Minor change
Station Parking	354 spaces added	250 spaces added
Transit - Systemwide	Improved service	Improved service
Transit - Other	Interface with Amtrak	Interface with Amtrak
Freight Rail Traffic	Safer operation	Safer operation
Trucking	Minor change	Minor change
Marine	No change	No change