

**STIPULATION OF PARTIES FOR THE CLOSURE OF
NW 2ND STREET RAILROAD-HIGHWAY GRADE CROSSING,
CROSSING NUMBER 272554 D,
CITY OF FORT LAUDERDALE, FLORIDA**

The City of Fort Lauderdale, Florida (CITY), Florida East Coast LLC (RAILROAD), and Florida Department of Transportation (DEPARTMENT) agree to the following conditions:

1. The RAILROAD has filed an application with the DEPARTMENT for a permit to close a public railroad-highway grade crossing, pursuant to Section 335.141(1), Florida Statutes (F.S.) and Rule 14-57.012, Florida Administrative Code (F.A.C.), attached as EXHIBIT "A."
2. The public railroad-highway grade crossing, Crossing Number 272554 D, at Railroad Milepost 340.91, is located at NW 2nd Street, Fort Lauderdale, Florida, as shown on the map, attached as EXHIBIT "B." NW 2nd Street is a two-lane road, classified as a major collector.
3. The RAILROAD will notify the CITY a minimum of 72 hours prior to starting any work related to the closing of the subject crossing.
4. The RAILROAD, at its expense, will remove all evidence of the crossing and restore the RAILROAD right-of-way. The RAILROAD is responsible for removing the concrete paneled crossing surface, all crossing signs and signals, roadway pavement, and all crossing debris inside the RAILROAD's right-of-way.
5. Prior to the start of the subject crossing's closure, the RAILROAD, at its expense, will erect, on each side of the crossing, permanent closure signs and object markers as identified in the DEPARTMENT's Standard Index 17349 and shown in EXHIBIT "C".
6. The CITY, at the RAILROAD's expense, will remove any rail crossing advance warning signs and pavement markings pertaining to the subject crossing.
7. All work by the RAILROAD, DEPARTMENT, or CITY will be in compliance with the current Manual of Uniform Traffic Control Devices, incorporated by reference in Rule 14-15.010, F.A.C., the American Association of State Highway and Transportation Officials Policy, and the

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current Manual of Uniform Minimum Standards for Design, Construction, and Maintenance for Streets and Highways, incorporated by reference in Rule 14-15.002, F.A.C.

8. All work by the RAILROAD or CITY, within the railroad-highway grade crossing area, will be in accordance with all applicable railroad requirements, such as flagging, insurance, etc.

9. The RAILROAD will provide the DEPARTMENT's District Four Rail Coordinator with the scheduled date of work, the project completion date, and a completed U.S. DOT Crossing Inventory form identifying the updated crossing status as closed, as attached in EXHIBIT "D".

10. This Stipulation of Parties has been executed by all parties having an interest in this matter. The RAILROAD and CITY waive the right to request an administrative hearing, provided by Chapter 120, F.S., relating to the closure of the NW 2nd Street railroad-highway grade crossing by execution of this Stipulation of Parties.

11. The terms of this Stipulation of Parties may not be changed, waived, discharged or terminated orally, but only by an instrument or instruments in writing, signed by RAILROAD, CITY, and DEPARTMENT.

12. Any failure of any party to insist upon the strict performance of any terms or provisions of this Stipulation of Parties shall in no way constitute a waiver of future violations of the same or any other term or provision of this Stipulation.

13. This Stipulation of Parties is governed by, and shall be interpreted and construed in accordance with, the laws of the State of Florida.

14. The DEPARTMENT authorizes the closure of the NW 2nd Street railroad-highway grade crossing as evidenced by the execution of this Stipulation of Parties, provided all conditions of the Stipulation are met, the removal of the crossing surface and signs are completed within eighteen (18) months of the execution, and the completed closure project is inspected and approved by the DEPARTMENT.

(THIS CONCLUDES THE BODY OF THIS STIPULATION OF PARTIES)

FLORIDA EAST COAST LLC - RAILROAD

By: Robert B. Ledoux
(Authorized Signature)

Title: Senior Vice President

Printed Name: Robert B. Ledoux

Attest: [Signature]

Date: 6/27/14

CITY OF FORT LAUDERDALE - CITY

By: [Signature]
(Authorized Signature)

Printed Name: LEE FELDMAN

Title: CITY MANAGER

Attest: [Signature]
(Authorized Official)

Date: 7/14/14

APPROVED AS TO FORM:

[Signature]
ROBERT B. DUNCKEL
Assistant City Attorney

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

By: [Signature]
State Freight & Logistics Administrator

Date: 7/24/14

DEPARTMENT OF TRANSPORTATION
LEGAL REVIEW

By: [Signature]
Attorney, FDOT

Date: 7/24/14

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
RAILROAD GRADE CROSSING APPLICATION

EXHIBIT "A"

ROAD NAME OR NUMBER	COUNTY/CITY NAME
NW 2 nd Street	Broward / Fort Lauderdale

A. IDENTIFICATION

Submitted By:

Applicant: Florida East Coast LLC.
 Office: Engineering
 Telephone: (904) 279-3182
 Address: 7150 Phillips Highway
Jacksonville, Fl. 32256

Application For:

- Closing a public highway-rail grade crossing by:
 - roadway removal
 - rail removal
- Opening a public highway-rail grade crossing by:
 - new rail line construction
 - new roadway construction
 - conversion of private to public highway-rail grade crossing

B. CROSSING LOCATION

FDOT/AAR Crossing Number: 272654D

Jurisdiction for Street or Roadway by Authority of: City County State

Local Popular Name of Street or Roadway: NW 2nd Street

Railroad Company: Florida East Coast Railroad

Railroad Mile Post: 340.91

Submitted for the Applicant by: Andrew G. Fowler Jr. Chief Engineer DATE: 5/28/14
Name and Title Signals & Communications

Application FDOT Review by: J. Bardelo DATE: 6/9/14
Central Rail Office

REFERENCES:
 (Specific Legal Authority) 334.044 F.S., 120.57 F.S.
 (Law Implemented) 335.141 F.S.
 (Administrative Rule) 14-57.012 F.A.C.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
RAILROAD GRADE CROSSING APPLICATION

CLOSING APPLICATION QUESTIONNAIRE

Maps, aeriels, and supporting documentation must be provided with the application.

If all parties, Applicant, Railroad, and Department, fail to agree to the rail crossing closure through a Stipulation of Parties, the Applicant must establish the closure meets the criteria found in Rule 14-57.012, Florida Administrative Code. This questionnaire will assist the Department in evaluating the criteria and is not intended to be an exclusive list of factors.

Florida Administrative Code criteria:

A) Safety

- a-1. How will the crossing closure affect safety to drivers, pedestrians, cyclists, and rail personnel? The crossing closure will have minimum affect on the safety to drivers, pedestrians, cyclists and rail personnel. At NW 2nd Street the eastbound drivers, pedestrians and cyclists will need to travel north 700' along NW 5th Ave. to NW 4th Street to cross the tracks. The westbound drivers, pedestrians and cyclists will need to travel south 670' along NW 1st Ave. to Broward Blvd. to cross the tracks. The safety to the rail personnel will be improved due to the reduced potential for an incident occuring at the crossing.
- a-2. What, if any, safety measures are proposed for adjacent crossings? The signalization at the adjacent crossings are being upgraded to constant warning.
- a-3. Identify all highway traffic control devices and highway traffic signals at adjacent crossings that may be improved or upgraded if the subject crossing is closed. The adjacent crossing are at NW 4th St. and Broward Blvd. There are no highway traffic signals at the intersections near the NW 4th St. crossing. The highway traffic signals at the intersections west of the tracks on Broward Blvd. are relatively new and there are no planned upgrades for the highway signals or traffic control devices.
- a-4. What is the distance from the subject crossing to the nearest intersection? Identify the street. 670' to Broward Blvd.
- a-5. Are there structures, fences, or vegetation near the subject crossing that inhibits sight distance? No.
- a-6. Identify major traffic generators (i.e., businesses, shopping malls, recreational areas, special events, etc.) in this area. Specify type, location, and distance to subject crossing. Riverfront (shopping, 1,600' south), Downtown Fort Lauderdale (businesses/entertainment, 3,000' south and east), Broward Center for Performing Arts (entertainment, 2,300' south & west).
- a-7. Is the crossing located on a designated evacuation route? No.
- a-8. Provide a traffic operations and safety analysis, with traffic issues evaluated for the railroad crossing closure. This analysis should include all adjacent rail crossings and roadways in the immediate vicinity and the increase in traffic predicted on these roadways from rerouting. See attached "Traffic Impact analysisfor NW 2nd Ave Connector Fort Lauderdale, Florida & Traffic Reevaluation".

B) Necessity for rail and vehicle traffic

- b-1. Is the crossing necessary to access property? No.
- b-2. Provide description of land use on each side of the rail crossing. Mixed use but primarily Commercial on both sides.
- b-3. Are there any churches, schools, or hospitals within a mile or less of the subject crossing? Please list by name and location. Yes. See attached lists.
- b-4. Annual Average Daily Traffic (AADT) at the crossing? Per latest data available (2011) ADT=4,770.
- b-5. Level of service at the crossing? Level B
- b-6. Percentage of truck traffic? Estimated at less than the typical 2%.
- b-7. Do trucks carrying hazardous materials use the crossing? No info available. If so, approximately how many trips per day or week?
- b-8. How many school buses use the crossing daily? None.
- b-9. What is the estimated number of pedestrians and bike riders that use the subject crossing (daily/weekly)? Estimated at 5+/- per day and 30+/- per week.
- b-10. Is the subject crossing on a local transit route? No.
- b-11. Please provide any corridor studies or other preliminary traffic engineering studies that pertain to this crossing. See attached "Traffic Impact analysisfor NW 2nd Ave Connector Fort Lauderdale, Florida & Traffic Reevaluation".

C) Alternate Routes

- c-1. Are there access roads available to property owners if the crossing is closed? Yes.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
RAILROAD GRADE CROSSING APPLICATION

- c-2. Name routes that can be used if the crossing is closed? Eastbound traffic will travel north on NW 5th Ave. to NW 4th St., east on NW 4th St. to NW 1st Ave. then south to NW 2nd St. Westbound traffic will travel south on NW 1st Ave. to Broward Blvd. west on Broward Blvd. to NW 2nd Ave then north to NW 2nd St. Initially, a temporary road closure is proposed pending final roadway design and installation to be performed in conjunction with the station development (see attached Plan Sheet No. 118-A).
- c-3. Are there traffic signals on these routes? Only at NW 1st St. and Broward Blvd.
- c-4. How does the proposed crossing closure impact the AADT at nearby public crossings? Provide estimated traffic count changes. By 2035 the traffic counts along Broward Blvd. are estimated to increase between 96 and 337 above current levels (an impact of 0.17 % to 0.61%). Along NW 6th St. the estimated increase in traffic counts is between 48 and 77 above current levels (an impact of 0.13% to 0.29%).
- c-5. By driving alternate routes, during peak times, calculate the additional travel time and distance between two points (nearest intersection or major access) on either side of the subject crossing. Provide calculated times, routes, and distances. Travelling from NW 2nd St. on NW 5th Ave. to NW 4th St. to NW 1st Ave. to NW 2nd St. is 2,800' and will take approximately 6 min. (due to right turns). Traveling from NW 2nd St. on NW 1st Ave. to Broward Blvd. to NW 2nd Ave. to NW 2nd St. is 1,750' and will take approximately 5 min. (due to right turns).

D) Effect on rail operations and expenses

- d-1. Provide current number and type of rail tracks at the subject crossing. 2 Tracks
- d-2. Are there rail sidings or switches in the location of the subject crossing? No.
- d-3. Is there a nearby rail yard? No. If so, what is the distance of the yard to the subject crossing. N/A
- d-4. Provide the current number of daily train movements (number of switching or thru trains; number of passenger or freight trains). No current passenger or switching trains. Daily freight train movements are 12 (6 northbound and 6 southbound).
- d-5. Provide the approximate times during the day and evening that the crossing is blocked. On an average of once every 2 hours.
- d-6. Provide the approximate length of time (i.e., minutes) that the crossing is blocked. 5 Minutes.
- d-7. Provide minimum and maximum train speeds at the subject crossing. 60 mph maximum for freight.
- d-8. What is the anticipated expansion of tracks and/or train movements? 1 additional track.
- d-9. What is the distance from the subject crossing to adjacent public crossings? (Identify adjacent crossings by road name and crossing number.) 700' north to NW 4th St. (# 272553W) and 680' south to Broward Blvd (# 272556S).

E) Excessive restriction to emergency type vehicles resulting from closure

- e-1. Provide response from the Sheriff/Police Chief and Fire Chief to the proposed crossing closure. Forthcoming pending meeting with city officials.
- e-2. Based on observation, the response from the City/County, or traffic studies, is this a route that emergency rescue would typically use? No.
- e-3. How many emergency rescue vehicles have used the crossing to respond to calls in the past 2-3 years? Forthcoming pending meeting with city officials.

F) Design of the grade crossing and road approaches

- f-1. Identify and describe the condition of: crossing surface, rail warning devices (including pavement markings, signs, and highway traffic signals), sidewalks, bike lanes, and approaches on each side of subject crossing. The rail crossing surface, gate mechanisms and signs are in good condition. The pavement surface and markings approaching the crossing are in poor condition. Sidewalks in the area are in good condition, however the shoulder pavement between the ends of the sidewalks and the crossing is in poor condition.
- f-2. Is the crossing surface and track higher than either side of the road (i.e., hump crossing)? Yes. 15"+/- on each side.
- f-3. What is the vehicular design speed at the subject crossing? 25 mph.
- f-4. Number of lanes at the crossing? 2 lanes
- f-5. Width of crossing? 42'
- f-6. Condition of roadway? Fair.

G) Presence of multiple tracks and their effect upon railroad and highway operations

- g-1. Please confirm the number of tracks at the location and identify each track. 2 tracks for freight.
- g-2. How many train movements occur on each track and the types of trains that run on each track (passenger, thru freight, or switching freight and the number of cars)? 6 northbound and 6 southbound freight movements with approximately 150 cars each.

Railroad Grade Crossing Application

Location: NW 2nd Street, Ft Lauderdale, FL

Crossing Number: 272554D

Mile Post: 340.91

Documentation in response to Item b-3

Churches

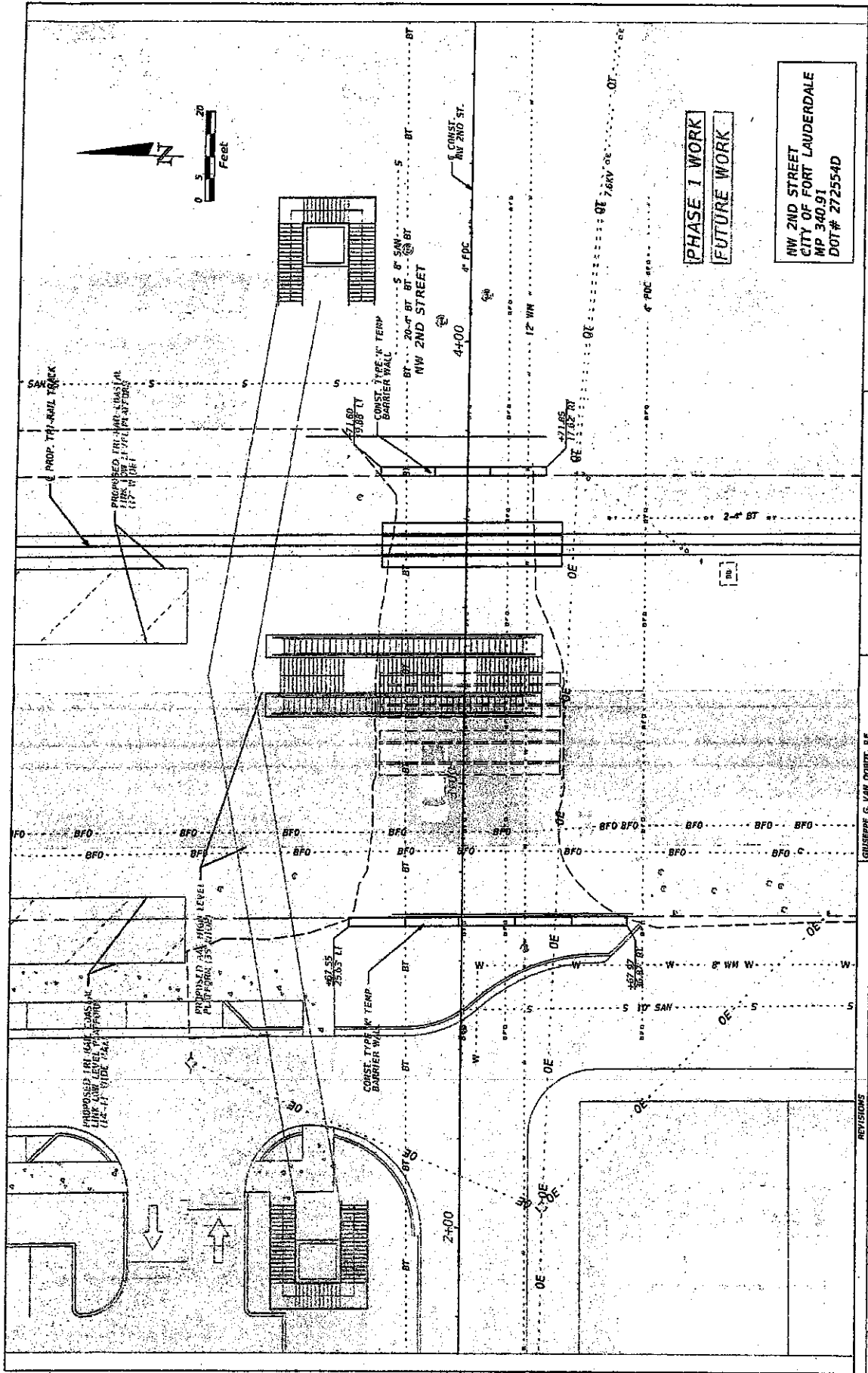
- 1) First Baptist Church, 301 E Broward Blvd. Fort Lauderdale, FL, 33301
- 2) First United Methodist Church, 101 SE 3rd Avenue, Fort Lauderdale, FL, 33301
- 3) Saint Anthony Catholic Church, 901 NE 2nd Street, Fort Lauderdale, FL 33301
- 4) First Lutheran Church ELCA, 441 NE 3rd Ave., Fort Lauderdale, FL , 33301
- 5) All Saints Episcopal Church, 333 Tarpon Dr., Fort Lauderdale, FL 33301
- 6) United Pentecostal Church of Hollywood, Broward Blvd, Fort Lauderdale, FL 33301
- 7) New Hope Baptist Church, NW 6th Street, Fort Lauderdale, FL, 33301
- 8) 5th Ave Temple Church of God, 211 NW 5th Ave, Ft Lauderdale, FL 33311
- 9) St Christopher Episcopal Church, 318 NW 6th Ave, Ft Lauderdale, FL 33311
- 10) St Luke Baptist Church, 210 NW 6th Ave. Ft Lauderdale, FL 33311
- 11) Mt Herman AME Church, 401 NW 7th Terrace, Ft Lauderdale, FL 33311
- 12) New Mount Olive Baptist Church, 401 NW 7th Terrace, Ft Lauderdale, FL 33311
- 13) Seven Day Adventist Church of Pompano Beach, NE 2nd Street, Ft Lauderdale, FL 33311
- 14) Downtown Jewish Center Chabad, 900 East Broward Blvd, Ft Lauderdale, FL 33301
- 15) Full Gospel Church of Living God, NW 6th Street, Ft Lauderdale, FL 33301
- 16) Shaw Temple AME Zion Church, 522 NW 9th Ave. Ft Lauderdale, FL 33311
- 17) Pompano Beach Presbyterian Church, NW 2nd Ave., Ft Lauderdale, FL 33311
- 18) First Ebenezer Missionary Church, 312 NW 7th Street, Ft Lauderdale, FL 33311
- 19) Grace Baptist Church, 812 NW 3rd Street, Ft Lauderdale, FL 33311
- 20) Emmaus Baptist Church, 701 NW 2nd Ave., Ft Lauderdale, FL 33311
- 21) Muhammad Mosque 82, 1021 NW 6th Street, Ft Lauderdale, FL 33311
- 22) Assembly of God-Evangel Church, NW 4th Street, Ft Lauderdale, FL 33311

Schools

- 1) **Stranahan High School, 1800 Southwest 5th Place, Ft Lauderdale, FL 33312**
- 2) **Broward College, 225 East Las Olas Boulevard, Ft Lauderdale, FL 33301**
- 3) **Florida Atlantic University, 111 East Las Olas Blvd Ft Lauderdale, FL 33301**
- 4) **St Anthony Catholic School, 820 Northeast 3rd Street, Ft Lauderdale, FL 33301**
- 5) **Ft Lauderdale High School, 1600 NE 4th Avenue, Ft Lauderdale, FL 33305**
- 6) **South Florida Montessori Academy, 642 NW 3rd Avenue, Ft Lauderdale, FL 33311**
- 7) **Walker Elementary School, 1001 NW 4th St, Fort Lauderdale, FL 33311**
- 8) **Virginia Shuman Young Elementary School, 1001 NW 4th St., Ft Lauderdale, FL 33311**
- 9) **Gospel Arena Christian School, 613 NW 3rd Ave, Ft Lauderdale, FL 33311**
- 10) **Barry University, 201 Southeast 1st Ave, Ft Lauderdale, FL 33301**
- 11) **Bethany Christian School, 615 SE 9th Street, Ft Lauderdale, FL 33316**

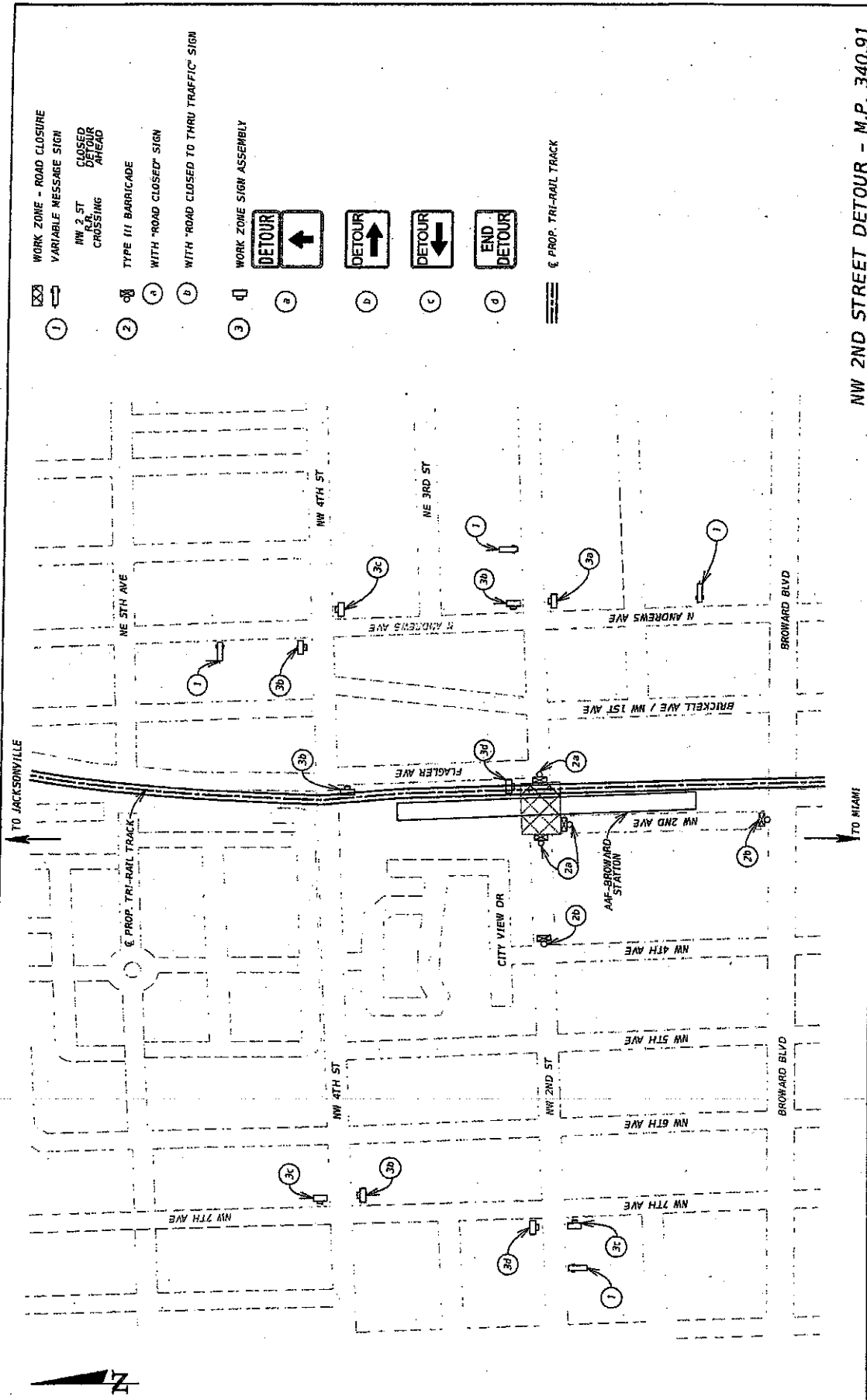
Hospitals

- 1) **Boca Raton Regional Hospital, 790 East Broward Blvd, Ft Lauderdale, FL 33301**



REVISIONS DATE DESCRIPTION		DESCRIPTION GUSMORO G. V. & CO., INC. P.E. LICENSE NUMBER 70923 URS CORPORATION SOUTHERN 7000 CONGRESS AVENUE, SUITE 200 BOCA RATON, FL 33487 CERTIFICATE OF AUTHORIZATION EB 00000002		Z&P CONTRACT SECTION 2ND BROWARD COUNTY		ROADWAY PLAN NW 2ND STREET CITY OF FORT LAUDERDALE MP 340.91 DOT# 272554D		SCALE: 1"=20' SHEET NO. 118-A 4/30/14	
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DATE		REVISIONS DESCRIPTION		PASTY FUSCHETTO, P.E. P.E. LICENSE NUMBER 70384 URS CORPORATION SOUTHERN 7800 CONGRESS AVENUE, SUITE 200 MIAMI, FL 33156 CERTIFICATE OF AUTHORIZATION EE 00000882		ALL ABOARD FLORIDA SECTION 2ND BROWARD		SCALE: INT.S. 4/27/2014	SHEET NO. 109
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NW 2ND STREET DETOUR - M.P. 340.91
 PHASE I
 TRAFFIC CONTROL PLAN

All Aboard Florida

Development of Passenger Rail Service from Downtown West Palm Beach to Downtown Miami

Traffic Reevaluation for the proposed Fort Lauderdale Station Location Change

1. Introduction

All Aboard Florida-Stations LLC and All Aboard Florida-Operations LLC (AAF) is proposing to develop passenger rail service from downtown West Palm Beach to downtown Miami. The service will include stations at West Palm Beach, Fort Lauderdale, and Miami. The rail service will provide intercity passenger service for business and leisure passengers with a new convenient, cost-effective, and environmentally friendly mode of transportation connecting South Florida with Central Florida. An evaluation of traffic impacts associated with the proposed rail service and each of the train station was documented in the Environmental Assessment (EA) completed approved by the federal agencies in October 2013.

Initially (in the EA) the Fort Lauderdale rail station was proposed along the east side of the Florida East Coast (FEC) rail corridor between Broward Boulevard to the south and NW 4th Street to the north. However the proposed station location has been moved to along the west side of the Florida East Coast (FEC) rail corridor between Broward Boulevard to the south and NW 4th Street to the north. Figures 1 and 2 shows the original proposed location and the revised proposed location for the Fort Lauderdale rail station. As seen from these figures the station is merely being shifted from one side of the FEC rail to the other side within 150 feet from the original proposed location.

The purpose of this memorandum is to document any new traffic impact resulting from this change and to demonstrate that the analysis and the impacts documented in the EA are still valid. Detailed evaluation is contained in the EA and no changes are proposed for the stations at West Palm Beach and downtown Miami. Although two alternative locations were studied for the Fort Lauderdale rail station in the EA, this reevaluation only refers to the preferred Fort Lauderdale-North station and compares it to the revised station location.

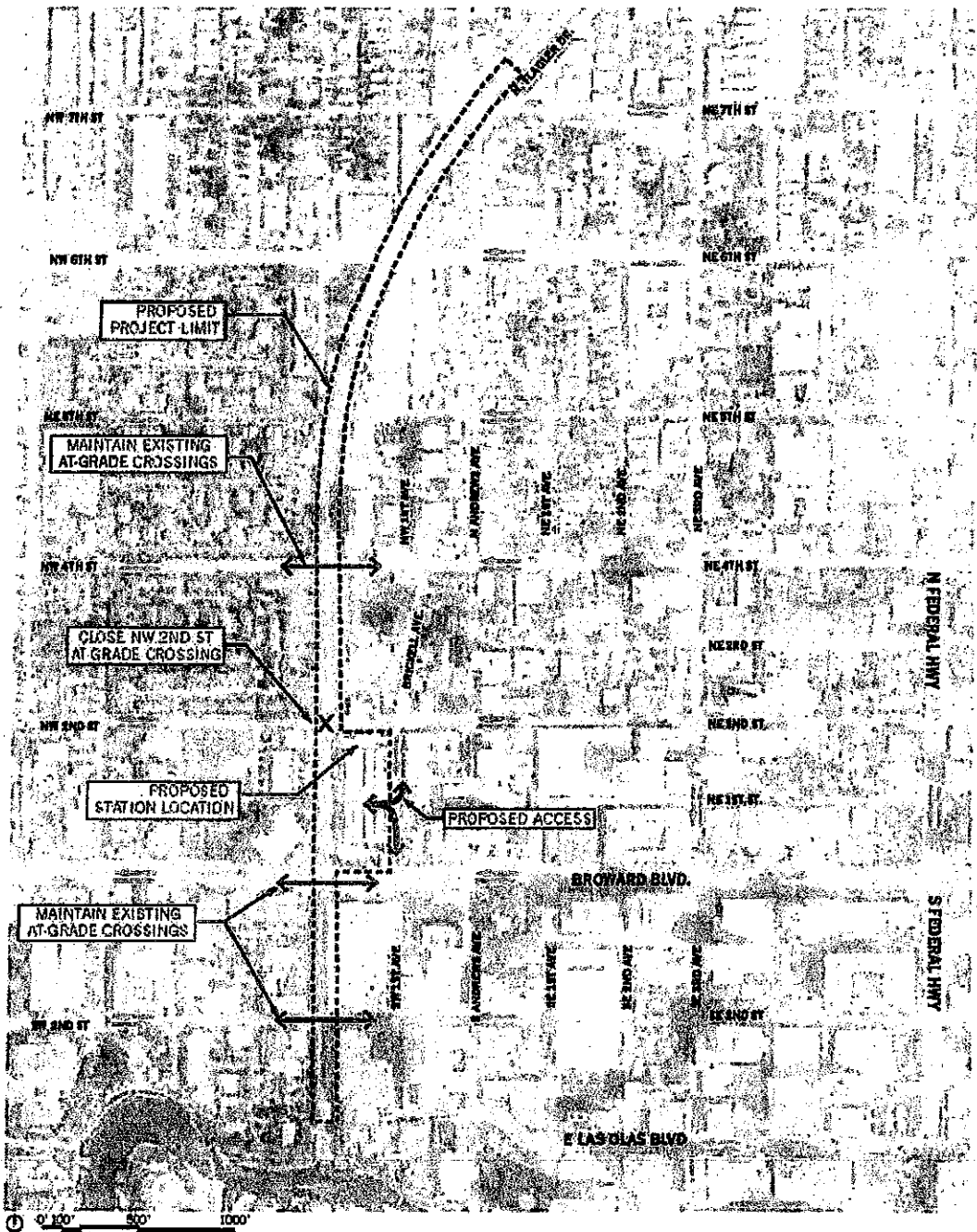


Figure 3
Original Proposed Ft. Lauderdale Station Location
Vehicular Circulation

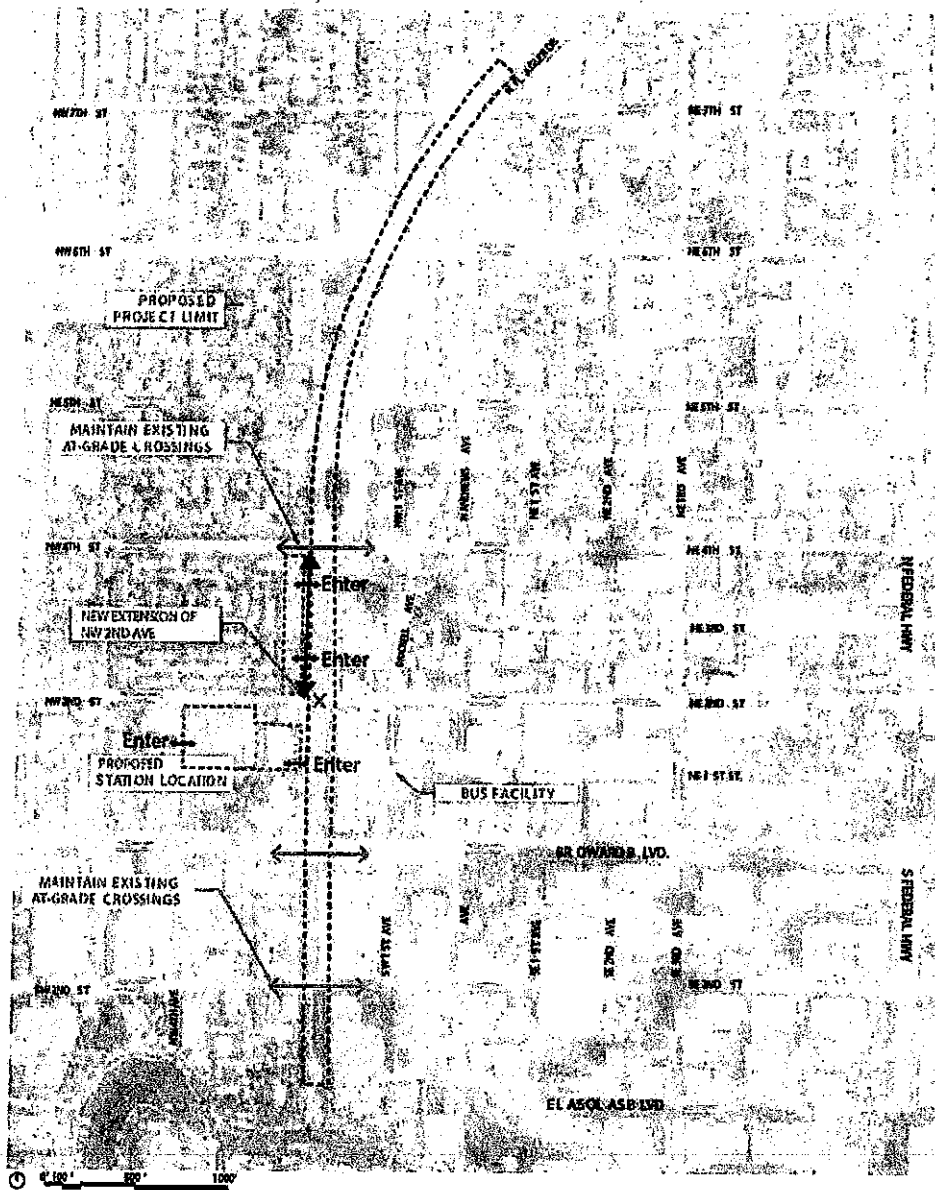


Figure 4
New Proposed Ft. Lauderdale Station Location
Vehicular Circulation

3. Daily Boarding and Ridership

No change to daily boarding and ridership is expected to result from the proposed revision to Fort Lauderdale Station location.

4. Trip Generation

No change to trip generation is expected to result from the proposed revision to Fort Lauderdale Station location.

5. Trip Distribution

The changes in trip distribution resulting from the proposed revision to Fort Lauderdale Station location are limited to NW 1st Avenue and NW 2nd Avenue. NW 1st Avenue, which provided direct access and served lot of the station related traffic in the original station location, will no longer serve it. Therefore the traffic impacts to 1st NW Avenue will be reduced. In the revised station location, most of the station related traffic is served by NW 2nd Avenue. FEC is proposing to extend NW 2nd Avenue to connect to NW 4th Street to the north. Please refer to the attached traffic study for detailed distribution of traffic in the vicinity of the revised station location.

6. Traffic Analysis

In the EA, roadway segments were analyzed for opening year 2015 and build out year 2035. Future background traffic volumes were obtained from the 2035 Southeast Florida Regional Planning Model (SERPM). Year 2015 background volumes were developed by interpolating existing and 2035 volumes. Once the background traffic was developed, the project trips based on distribution were added to background trips to obtain total future volume on each link. Reasonableness checks were completed to make sure the future volumes were higher than existing volumes for all roadway segments. Total daily volumes were compared to roadway capacities based on number lanes and Florida Department of Transportation *Generalized Service Volumes* applicable for urbanized areas. Level of service for each of the segment was determined by comparing the total daily volume on the segment to daily capacity from FDOT generalized tables.

To evaluate the impact of the station on each of the study area roadway segments, the percentage of the total capacity consumed by the project traffic was calculated. The segments along which project traffic consumes 5% or more of the capacity were identified as being impacted.

Since no changes are occurring to land use, boarding and ridership data, the traffic impact from the Fort Lauderdale Station to the adjacent roadway network are expected to be same as those documented in the approved EA. In addition, attached traffic impact study conducted specifically for the revised Fort Lauderdale Station location shows that all the intersections in the vicinity of the station would operate at or better than acceptable LOS.

7. Summary

Based on the assessment of the new location for the Fort Lauderdale Station and comparing it to the evaluation in the approved EA, it is apparent that the traffic impact from the station on the adjacent roadway network are consistent with those documented in the EA and the station will have no significant impact on the roadway network.

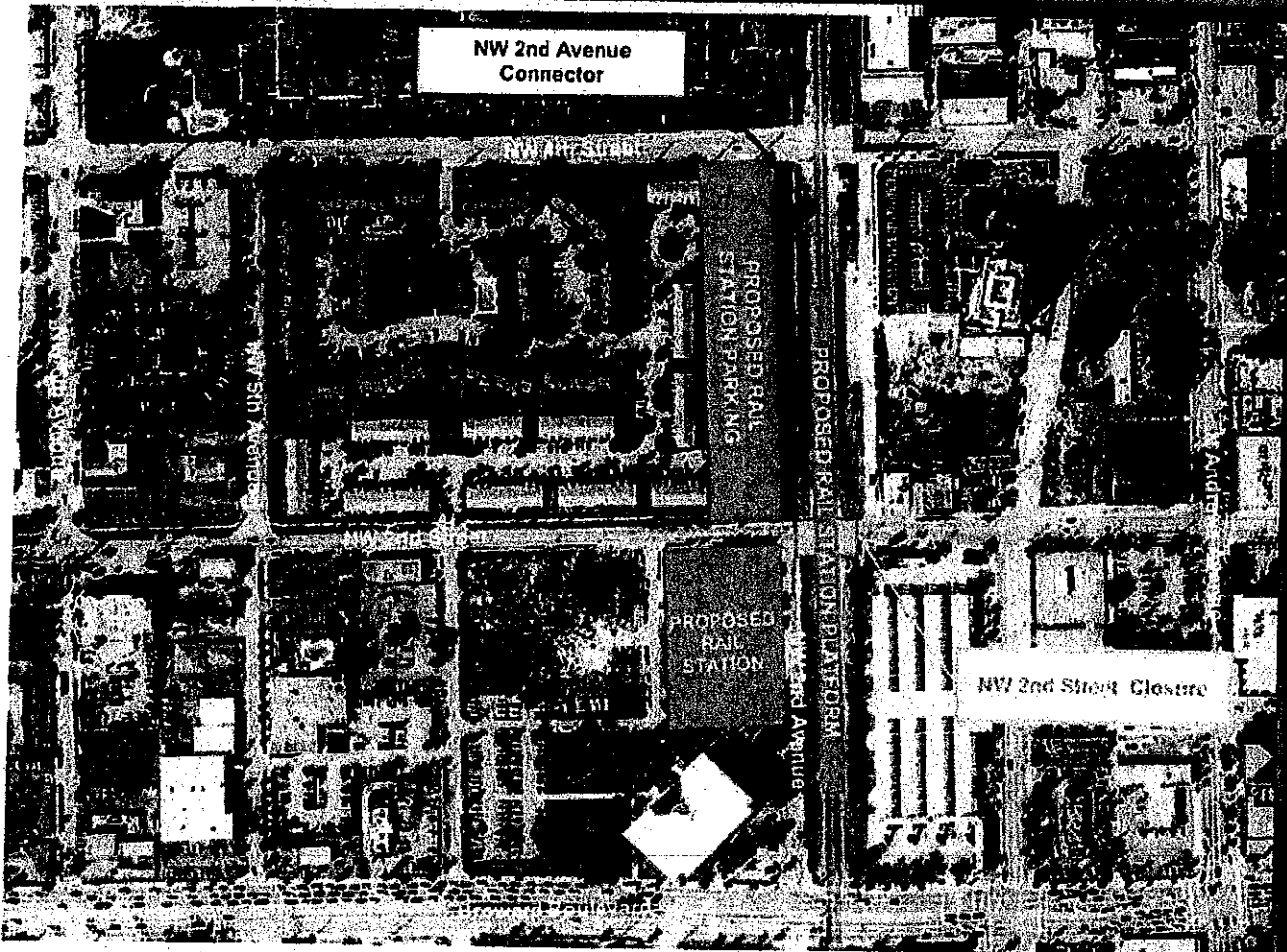
- There are no changes to land use and ridership projections, which makes the trip generation associated with the station to be same as what was presented in the EA.
- The proposed station location is being moved from east side of the FEC railroad to west side a mere distance of 150 feet. Therefore the difference in traffic assignment and circulation to the adjacent roadway network to be minimal except for the roads that are providing direct access to the station (NW 1st Avenue and NW 2nd Avenue).
- Consistent with the EA assessment the Fort Lauderdale Station would have no significant impact on the adjacent roadway network, even with the revised site location.
- A detailed traffic study conducted for the proposed station location shows that all the adjacent intersection are expected operate at or better than acceptable LOS even with the future background and station related traffic.

In addition FEC proposes to extend the NW 2nd Avenue to connect NW 4th Street and Broward Boulevard. This will improve roadway connectivity and access in the vicinity of the station especially since the at-grade crossing for NW 2nd Street is proposed to be closed. Furthermore, the NW 2nd Avenue connector is expected to provide Pedestrian and Bicycle Connectivity,

Enhance local vehicular circulation, complete the roadway grid network, and improve local resident and business mobility.

Traffic Impact Analysis

NW 2nd Avenue Connector Fort Lauderdale, Florida



**Kimley-Horn
and Associates, Inc.**

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September 2013

043537000

Traffic Impact Analysis

**NW 2nd Avenue Connector
Fort Lauderdale, Florida**

Prepared for:

All Aboard Florida, Inc.
Coral Gables, Florida

Prepared by:

Kimley-Horn and Associates, Inc.
Fort Lauderdale, Florida



Kimley-Horn
and Associates, Inc.

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September 2013
043537000

John J. McWilliams, P.E.
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Kimley-Horn and Associates, Inc.
5200 NW 33rd Avenue, Suite 109
Fort Lauderdale, FL 33309
CA # 00000696

EXECUTIVE SUMMARY

All Aboard Florida, Inc. is proposing the construction of a passenger train station in the City of Fort Lauderdale as part of the proposed All Aboard Florida passenger rail service connecting Miami, Fort Lauderdale, West Palm Beach, and Orlando. The rail service will provide intercity passenger service for business and leisure passengers with a new convenient, cost-effective, and environmentally friendly mode of transportation connecting South Florida with Central Florida.

The proposed Fort Lauderdale station is located along the west side of the Florida East Coast (FEC) Railway between Broward Boulevard to the south and NW 4th Street to the north. In order to accommodate the proposed station platform, the existing railroad grade crossing at NW 2nd Street will be closed. The impact of the closure on the area roadway network was analyzed as background conditions. To improve roadway connectivity and access in the vicinity of the station, an extension of NW 2nd Avenue between NW 2nd Street and NW 4th Street is being contemplated. The NW 2nd Avenue connector was analyzed as future total conditions.

All study intersections are expected to operate at LOS D or better during A.M. and P.M. peak hours under existing, background, and future total conditions. Furthermore, the NW 2nd Avenue connector is expected to have the following benefits on the local area:

1. **Pedestrian and Bicycle Connectivity** – Currently no pedestrian or bicycle route/path/sidewalk connects NW 4th Street and NW 2nd Street between NW 5th Avenue and FEC Railway. The NW 2nd Avenue connector will provide a connection for both pedestrians and bicyclists.
2. **Enhanced Local Vehicular Circulation** – The NW 2nd Avenue connector will provide connectivity for east-west traffic to connect to NW 4th Street as an alternative to Broward Boulevard, an already congested roadway.

3. **Completion the Roadway Grid Network** – The NW 2nd Avenue connector will complete a missing segment of the area roadway grid.
4. **Improved Local Resident and Business Mobility** – The rail station will provide improved mobility for local residents and will help local businesses by providing additional exposure and visibility to potential customers.

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INTRODUCTION

All Aboard Florida, Inc. is proposing the construction of a passenger train station in the City of Fort Lauderdale as part of the proposed All Aboard Florida passenger rail service connecting Miami, Fort Lauderdale, West Palm Beach, and Orlando. The rail service will provide intercity passenger service for business and leisure passengers with a new convenient, cost-effective, and environmentally friendly mode of transportation connecting South Florida with Central Florida.

The proposed Fort Lauderdale rail station is located along the west side of the Florida East Coast (FEC) rail corridor between Broward Boulevard to the south and NW 4th Street to the north. A project location map is included as Figure 1. In order to accommodate the proposed station platform, the existing railroad grade crossing at NW 2nd Street will be closed. To improve roadway connectivity and access in the vicinity of the station, an extension of NW 2nd Avenue between NW 2nd Street and NW 4th Street is being contemplated. The purpose of this analysis is to review the traffic impacts of the proposed connector on the local roadway network.

EXISTING TRAFFIC VOLUMES

Turning Movement Count Data

A.M. (7:00 to 9:00 A.M.) and P.M. peak period (4:00 to 6:00 P.M.) turning movement counts were collected in August 2013 at the following intersections:

- NW 5th Avenue at Broward Boulevard
- NW 2nd Avenue at Broward Boulevard
- NW 1st Avenue at Broward Boulevard
- NW 5th Avenue at NW 2nd Street
- NW 2nd Avenue at NW 2nd Street
- NW Flagler Avenue at NW 2nd Street
- NW 1st Avenue at NW 2nd Street
- NW 5th Avenue at NW 4th Street
- NW Flagler Avenue at NW 4th Street
- NW 1st Avenue at NW 4th Street

The volumes were collected in 15-minute intervals and the peak hour was determined for each intersection. The FDOT peak season conversion factor was applied to the traffic counts to adjust the traffic to peak season volumes. The appropriate peak season conversion factor for the weeks when the traffic counts were collected is 1.06. The turning movement counts, FDOT peak season factor category report, and signal timing data provided by Broward County Traffic Engineering Division are included in Appendix A. Figure 2 present the existing turning movement volumes at the study intersections during the weekday A.M. and P.M. peak hour.

Roadway Volume Data

Continuous 24-hour roadway counts were collected in August 2013 on NW 2nd Street between NW 2nd Avenue and Flagler Avenue, NW 2nd Avenue between NW 2nd Street and Broward Boulevard, and NW 4th Street just west of the FEC Railway. Table 1 summarizes the daily traffic volumes with the peak season conversion factor applied to the roadway segments. Roadway segment counts are provided in Appendix A.

Table 1: Daily Peak Season Roadway Segment Traffic Volumes

Roadway Segment	Peak Season Daily Volume
NW 2 nd Street between NW 2 nd Avenue and Flagler Avenue	5,095 vpd
NW 2 nd Avenue between NW 2 nd Street and Broward Boulevard	1,212 vpd
NW 4 th Street just west of the FEC Railroad	2,599 vpd

FUTURE BACKGROUND TRAFFIC VOLUMES

Future background traffic conditions are defined as the expected traffic conditions on the study roadway network in the Year 2016 (corresponding to total build-out year of the All Aboard Florida Fort Lauderdale station) with the closure of the railroad grade crossing at NW 2nd Street without the NW 2nd Avenue connector. The background traffic volumes are the sum of the existing traffic and additional "background" traffic to account for expected traffic growth in the study area.

Background Area Growth

Future traffic growth on the transportation network was determined based upon historic growth trends at nearby FDOT traffic count stations. Table 2 provides a summary of the analysis. The following FDOT count stations referenced for this analysis were:

- Count station no. 7367 – Broward Boulevard east of SW 7th Avenue
- Count station no. 200 – Broward Boulevard west of SW 7th Avenue
- Count station no. 7368 – Broward Boulevard west of SE 3rd Avenue
- Count station no. 7746 – Andrews Avenue south of Broward Boulevard
- Count station no. 9029 – NW 7th Avenue north of Broward Boulevard
- Count station no. 9026 – SW 7th Avenue south of Broward Boulevard

Table 2: Background Growth Rate Summary

FDOT Count Station	5-year Historical Trend Analysis
7367	-4.00%
200	-1.05%
7368	-4.35%
7746	1.41%
9029	0.91%
9026	-5.39%
Average	-2.08%

As indicated in Table 1, the 5-year growth rate at the nearby traffic count stations is negative. Therefore, to provide a conservative analysis, an annual compound growth rate of 0.50 percent (0.50%) was used in the analysis. Historical traffic count data and growth trend calculations are included in Appendix B.

Figure 3 present the A.M. and P.M. peak hour future background-intersection volumes. Volume development worksheets for the study intersections are included in Appendix C.

Committed Development

The City of Fort Lauderdale was contacted regarding approved developments in the immediate study area. The City did not identify any committed projects to be included as part of background conditions.

Background Traffic Reassignment

Traffic that crosses the FEC Railway on NW 2nd Street was reassigned to either Broward Boulevard or NW 4th Street. Based on the existing intersection turning movement counts along NW 2nd Street, currently over 90 percent (90%) of the traffic on NW 2nd Street between NW 5th Avenue and NW 1st Avenue travels through the corridor within the study area. Only a small portion of the traffic on NW 2nd Street is localized traffic with an origin or destination within the study segment.

Based on the assumption that the majority of traffic currently using NW 2nd Street has an origin or destination to the north of Broward Boulevard, seventy percent (70%) of the traffic crossing the FEC Railway on NW 2nd Street was reassigned to NW 4th Street between NW 5th Avenue and NW 1st Avenue. The remaining 30 percent (30%) of NW 2nd Street traffic was reassigned to Broward Boulevard. Background traffic reassignment volumes and volume development worksheets for the study intersections are included in Appendix D.

All Aboard Florida Station Traffic Assignment

Trip generation, trip distribution, and trip assignment was prepared for the All Aboard Florida Fort Lauderdale station accounting for the closure of the NW 2nd Street railroad grade crossing. Detailed trip generation, trip distribution, and trip assignment calculations are provided in Appendix D. Future traffic volumes with the NW 2nd Street closure and All Aboard Florida Downtown Fort Lauderdale station are provided as Figure 4.

Legend

- Study Roadway
- ⊕ Study Intersection
- XX A.M. Peak Hour Traffic
- (XX) P.M. Peak Hour Traffic

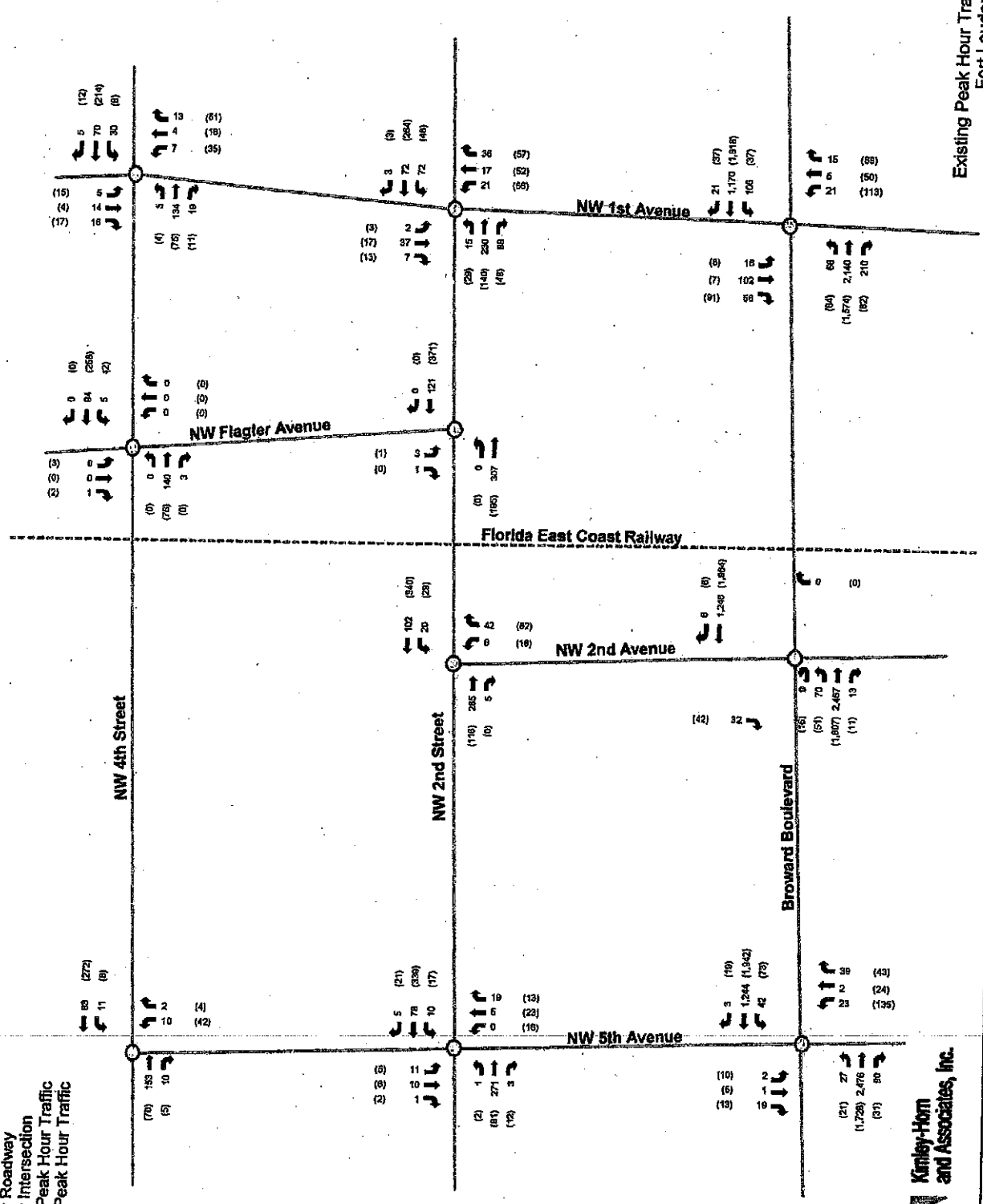
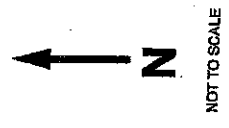


Figure 2
Existing Peak Hour Traffic Volumes
Fort Lauderdale, Florida



NOT TO SCALE

Legend

- Study Roadway
- ⊙ Study Intersection
- XX A.M. Peak Hour Traffic
- (XX) P.M. Peak Hour Traffic

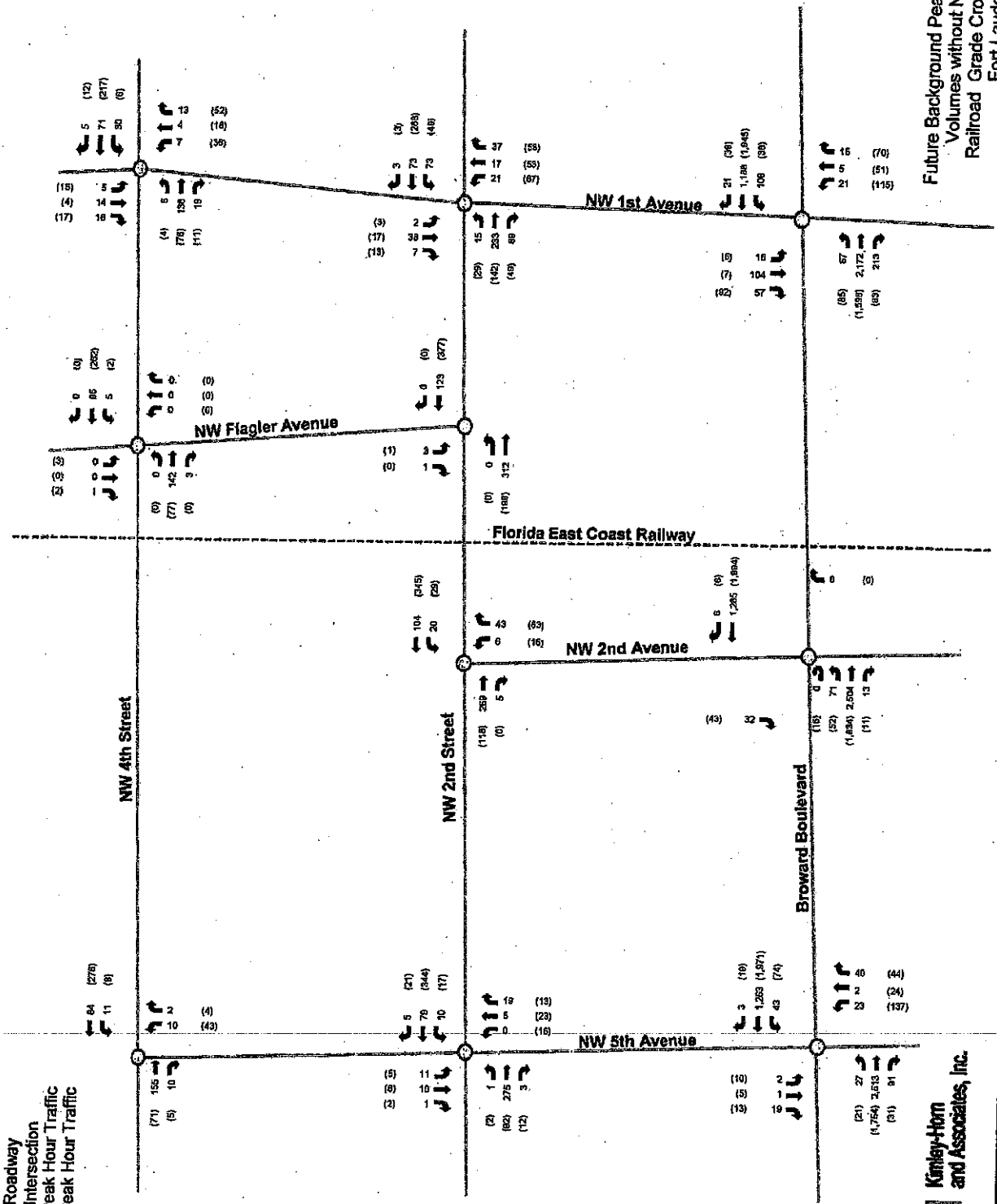


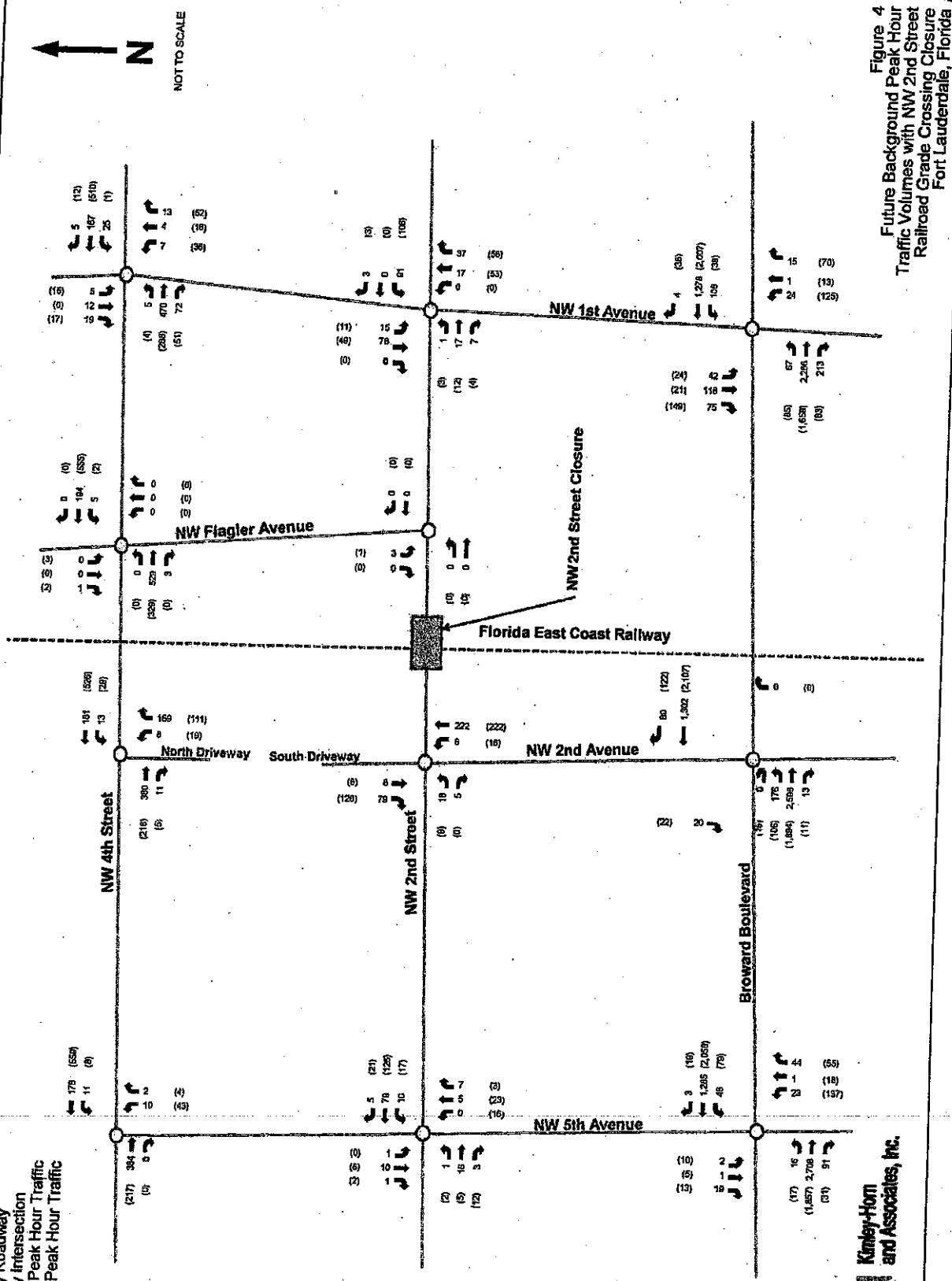
Figure 3
Future Background Peak Hour Traffic
Volumes without NW 2nd Street
Railroad Grade Crossing Closure
Fort Lauderdale, Florida



© 2013

Legend

- Study Roadway
- Study Intersection
- XX A.M. Peak Hour Traffic
- (XX) P.M. Peak Hour Traffic



NOT TO SCALE



Figure 4
Future Background Peak Hour
Traffic Volumes with NW 2nd Street
Railroad Grade Crossing Closure
Fort Lauderdale, Florida



© 2013

FUTURE TOTAL TRAFFIC VOLUMES

A new roadway (NW 2nd Avenue) between NW 2nd Street and NW 4th Street is being contemplated to improve roadway connectivity and access in the vicinity of the proposed All Aboard Florida station. Future total traffic volumes are defined as future background traffic volumes with the closure of the railroad grade crossing at NW 2nd Street and with the NW 2nd Avenue connector.

Traffic Reassignment

The NW 2nd Avenue connector is expected to be utilized by traffic that was previously reassigned to NW 4th Street in future background conditions. All reassigned traffic in future background conditions to NW 4th Street between NW 5th Avenue and NW 1st Avenue was rerouted back to NW 2nd Street via the NW 2nd Avenue connector. Traffic reassignment volumes and volume development worksheets for the study intersections are included in Appendix E.

All Aboard Florida Station Traffic Reassignment

Trip redistribution, and trip reassignment was prepared for the All Aboard Florida Downtown Fort Lauderdale station assuming that NW 2nd Street closure and construction of the NW 2nd Avenue connector. Detailed trip redistribution, and trip reassignment calculations are provided in Appendix E. Future traffic volumes with the NW 2nd Street railroad grade crossing closure, NW 2nd Avenue connector, and All Aboard Florida Downtown Fort Lauderdale station are provided as Figure 5.

INTERSECTION CAPACITY ANALYSIS

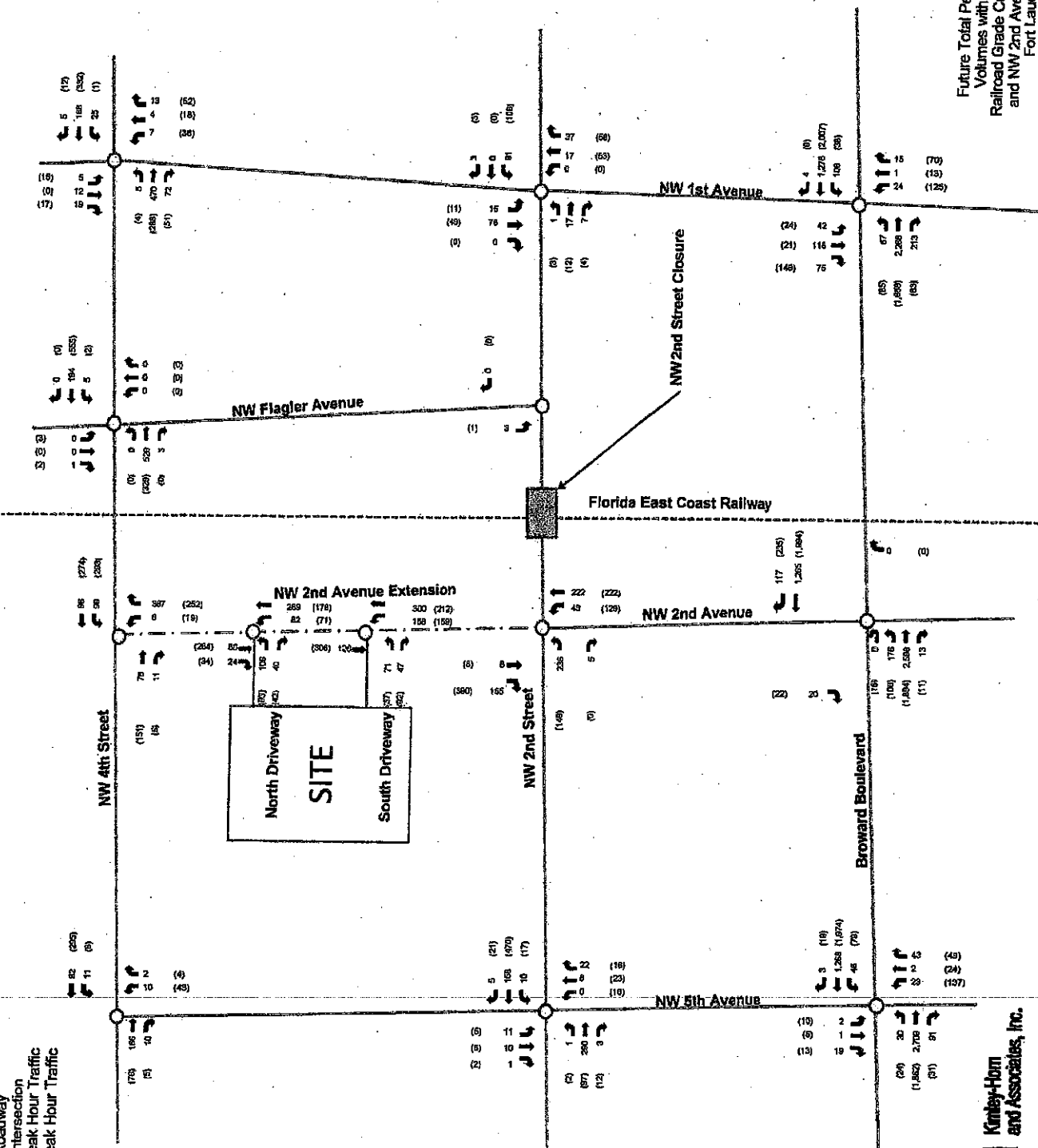
The operating conditions for the study intersections were analyzed for three (3) scenarios (existing conditions, future background conditions [with NW 2nd Street railroad grade crossing closure], and future total conditions [with NW 2nd Street railroad grade crossing closure and NW 2nd Avenue connector]). Operating conditions were analyzed using Trafficware's *SYNCHRO 8.0* software, which applies methodologies outlined in the *Highway Capacity Manual, 2010* Edition. Synchro worksheets for the study intersections are included in Appendix F. A summary of the intersection analyses during the A.M. and P.M. peak hours is presented in Table 3. All study intersections are expected to operate at LOS D or better during A.M. and P.M. peak hours under existing, background, and future total conditions.



NOT TO SCALE

Figure 5
Future Total Peak Hour Traffic
Volumes with NW 2nd Street
Railroad Grade Crossing Closure
and NW 2nd Avenue Connector
Fort Lauderdale, Florida

Legend
Study Roadway
Study Intersection
XX A.M. Peak Hour Traffic
(XX) P.M. Peak Hour Traffic



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Table 3: A.M. and P.M. Peak Hour Intersection Capacity Analysis

Intersection	Traffic Control	Overall LOS/Deby (sec)				Approach LOS				Overall LOS/Deby (sec)	Approach LOS				Overall LOS/Deby (sec)	Approach LOS									
		EB	WB	NB	SB	EB	WB	NB	SB		EB	WB	NB	SB		EB	WB	NB	SB						
Broward Boulevard at NW 5 th Avenue	Signalized	B/13.9 (A/5.5)	(B)	(B)	(D)	A (A)	D (D)	D (D)	D (D)	B/15.7 (A/5.8)	(B)	(B)	(B)	(D)	C (A)	D (D)	D (D)	D (D)	B/15.8 (A/10.0)	(B)	(B)	(A)	(A)	(D)	(D)
Broward Boulevard at NW 2 nd Avenue	Two-Way Stop-Controlled	(A)	(B)	(B)	(D)	(A)	(A)	(A)	(D)	(A)	(A)	(A)	(A)	(D)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(D)
Broward Boulevard at NW 1 st Avenue	Signalized	A/4.6 (A/7.3)	(A)	(A)	(E)	(A)	(E)	(E)	(D)	A/5.3 (A/8.7)	(A)	(A)	(A)	(E)	(A)	(A)	(A)	(E)	A/5.3 (A/8.7)	(A)	(A)	(A)	(A)	(E)	(E)
NW 2 nd Street at NW 5 th Avenue	Two-Way Stop-Controlled	(A)	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(A)	(A)	(A)	(A)	(B)	(A)	(A)	(A)	(B)	(A)	(A)	(A)	(A)	(B)	(B)	(E)
NW 2 nd Street at NW 2 nd Avenue	One-Way Stop-Controlled	(A)	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(A)	(A)	(A)	(A)	(B)	(A)	(A)	(A)	(B)	(A)	(A)	(A)	(A)	(B)	(B)	(E)
NW 2 nd Street at NW Flagger Avenue	One-Way Stop-Controlled	(A)	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(A)	(A)	(A)	(A)	(B)	(A)	(A)	(A)	(B)	(A)	(A)	(A)	(A)	(B)	(B)	(E)
NW 2 nd Street at NW 1 st Avenue	Two-Way Stop-Controlled	(A)	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(A)	(A)	(A)	(A)	(B)	(A)	(A)	(A)	(B)	(A)	(A)	(A)	(A)	(B)	(B)	(E)
NW 4 th Street at NW 5 th Avenue	One-Way Stop-Controlled	(A)	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(A)	(A)	(A)	(A)	(B)	(A)	(A)	(A)	(B)	(A)	(A)	(A)	(A)	(B)	(B)	(E)
NW 4 th Street at NW Flagger Avenue	Two-Way Stop-Controlled	(A)	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(A)	(A)	(A)	(A)	(B)	(A)	(A)	(A)	(B)	(A)	(A)	(A)	(A)	(B)	(B)	(E)
NW 4 th Street at NW 1 st Avenue	Two-Way Stop-Controlled	(A)	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(A)	(A)	(A)	(A)	(B)	(A)	(A)	(A)	(B)	(A)	(A)	(A)	(A)	(B)	(B)	(E)
NW 2 nd Avenue at North Driveway	One-Way Stop-Controlled	(A)	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(A)	(A)	(A)	(A)	(B)	(A)	(A)	(A)	(B)	(A)	(A)	(A)	(A)	(B)	(B)	(E)
NW 4 th Street at NW 2 nd Avenue	One-Way Stop-Controlled	(A)	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(A)	(A)	(A)	(A)	(B)	(A)	(A)	(A)	(B)	(A)	(A)	(A)	(A)	(B)	(B)	(E)
NW 2 nd Avenue at North Driveway	One-Way Stop-Controlled	(A)	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(A)	(A)	(A)	(A)	(B)	(A)	(A)	(A)	(B)	(A)	(A)	(A)	(A)	(B)	(B)	(E)
NW 2 nd Avenue at North Driveway	One-Way Stop-Controlled	(A)	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(A)	(A)	(A)	(A)	(B)	(A)	(A)	(A)	(B)	(A)	(A)	(A)	(A)	(B)	(B)	(E)
NW 2 nd Avenue at South Driveway	One-Way Stop-Controlled	(A)	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(A)	(A)	(A)	(A)	(B)	(A)	(A)	(A)	(B)	(A)	(A)	(A)	(A)	(B)	(B)	(E)

Notes: (1) Overall Intersection LOS is not defined, as intersection operates under stop-control conditions.
 (2) When an intersection operates as free-flow, therefore, approach level of service is not provided.
 (3) With NW 2nd Street railroad grade crossing closure, eastbound approach is stop controlled.
 (4) With NW 2nd Street railroad grade crossing closure and NW 2nd Avenue Connector the intersection will operate under all-way stop-controlled conditions.
 (5) Based on the Wayne Streetcar project, the eastbound and westbound approaches will operate under stop-control conditions in the future after the NW 2nd Street railroad grade crossing closure.
 (6) Intersection not part of analysis scenario

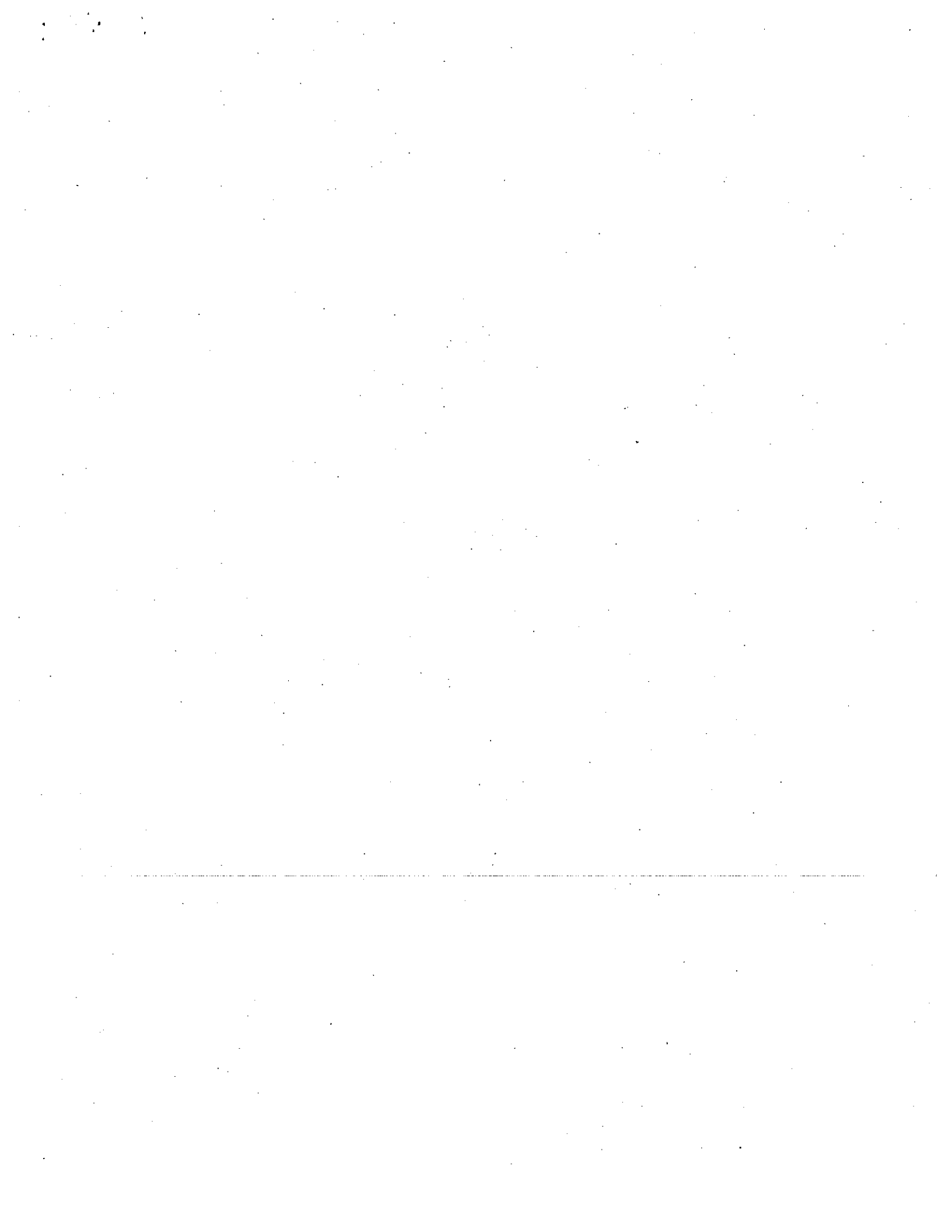
CONCLUSIONS

This traffic operations analysis assesses operational benefits of the proposed NW 2nd Avenue connector between NW 2nd Street and NW 4th Street. The proposed All Aboard Florida Fort Lauderdale station will provide intercity passenger service for business and leisure passengers with a new convenient, cost-effective, and environmentally friendly mode of transportation connecting South Florida with Central Florida.

In order to accommodate the proposed station platform, the existing railroad grade crossing at NW 2nd Street will be closed. The impact of the closure on the area roadway network was analyzed as background conditions. To improve roadway connectivity and access in the vicinity of the station, the NW 2nd Avenue connector between NW 2nd Street and NW 4th Street is being contemplated. The NW 2nd Avenue connector was analyzed as future total conditions.

All study intersections are expected to operate at LOS D or better during A.M. and P.M. peak hours under existing, background, and future total conditions. Furthermore, the NW 2nd Avenue connector is expected to have the following benefits on the local area:

1. **Pedestrian and Bicycle Connectivity** – Currently no pedestrian or bicycle route/path/sidewalk connects NW 4th Street and NW 2nd Street between NW 5th Avenue and FEC Railway. The NW 2nd Avenue connector will provide a connection for both pedestrians and bicyclists.
2. **Enhanced Local Vehicular Circulation** – The NW 2nd Avenue connector will provide connectivity for east-west traffic to connect to NW 4th Street as an alternative to Broward Boulevard, an already congested roadway.
3. **Completion the Roadway Grid Network** – The NW 2nd Avenue connector will complete a missing segment of the area roadway grid.
4. **Improved Local Resident and Business Mobility** – The rail station will provide improved mobility for local residents and will help local businesses by providing additional exposure and visibility to potential customers.



APPENDIX A:
**Intersection Turning Movement Counts,
Roadway Segment Counts, Peak Season Factor
Category Report, and Signal Timing Data**

229 pages of support data available upon request.

3.1 Human Environment

For purposes of this document, the Human Environment will be defined as those concerns related to the human, built environment. These include transportation, land use, environmental justice, barriers to the elderly and handicapped, public health and safety, contaminated sites and hazardous materials, cultural resources, Section 4(f) and recreational resources, municipal service, energy resources and aesthetics.

3.1.1 Transportation

The potential for transportation impacts has been evaluated for both rail transportation networks, regional roadway transportation networks, and local roadway transportation networks. All tables that appear in this section along with further detail can be found in Appendix I – Transportation.

3.3.1.1 Rail Transportation

The proposed Project is approximately 70 miles long following an existing, privately-owned ROW between West Palm Beach and Miami. The existing freight train operations consist of 10 through-freight trains per day, in addition to 4 local freight trains, with each train approximately 8,800 feet in length within the Project Area. Passenger rail service currently does not exist within the FEC corridor; however, Tri-Rail operates in a separate corridor west of the FEC corridor. The Tri-Rail system operates between West Palm Beach and Miami but does not directly service the central business districts (CBDs) of Miami, West Palm Beach, and Fort Lauderdale. The characteristics of the proposed FEC passenger rail service are significantly different from the Tri-Rail in terms of speeds, travel times, frequency, number of stops and target patrons and service areas. The proposed FEC passenger service trains would travel at an average of 60 mph, has only three stations, and a maximum frequency of one train per hour per direction. The frequency and types of service for 2006 base year, the 2015 opening year and the 2035 build out year are shown in Table 3-3.1. As shown in Table 3-3.1, the operational characteristics, such as speed of the freight trains, are expected to improve which, in turn, would decrease the time needed for trains to clear a railroad crossing.

The **No-Build Alternative** would not significantly impact rail transportation within the Project Area. As defined above, the **No-Build Alternative** has been analyzed as a system that will maintain the existing infrastructure without the introduction of the proposed passenger train service. It includes freight trains only (freight local and through), including the expected growth in freight based on the understanding that the frequency and/or length of the trains would be adjusted to meet the market demand and expected growth into the future. The No-Build Alternative would not be expected to result in any delays or impacts related to construction of stations or other infrastructure required for the proposed Project.

The **Preferred Build Project Alternative** (which, as defined above, includes the **Preferred Build System Alternative** and the **Preferred Build Station Alternatives**) will be designed to have no impact on freight rail transportation system. The provision of a mostly two track new railroad (in place of the existing mostly single track railroad) is likely to enhance freight reliability and capacity, in addition to accommodating the proposed passenger service. Current freight rail operations on the FEC corridor would not be affected by the 16-19 additional daily passenger train round trips because additional capacity will be gained through the double tracking of the approximately 70-mile corridor. Track

construction, improvements and rehabilitation needed to implement the *Preferred Build System Alternative* would be performed according to best management practices to have minimal temporary impacts to existing freight operations during construction.

**Table 3-3.1
FEC Railroad Crossing Delay Estimates**

FEC RAILROAD CROSSING DELAY ESTIMATES-2006 BASE CONDITION

Service Type	Time to activate and close the gate (Sec)	Length (Feet)	Speed (mph)	Time to Clear (Sec)	Time to bring the gate back up (Sec)	Total time to activate and clear (Sec)	Crossings per Day	Delay per Day (Min)	Maximum crossings per hour	Max delay per Hour (Min)
PALM BEACH										
Freight	30	6750	28.5	161	15	206	27	92.7	2	6.9
BROWARD										
Freight	30	6750	22.6	204	15	249	27	112.1	2	8.3
MIAMI-DADE										
Freight	30	6750	29.5	156	15	201	27	90.5	2	6.7

Note: Freight service includes 4 local freight trains and 23 through freight trains

FEC RAILROAD CROSSING DELAY ESTIMATES-2015 OPENING YEAR CONDITION

Service Type	Time to activate and close the gate (Sec)	Length (Feet)	Speed (mph)	Time to Clear (Sec)	Time to bring the gate back up (Sec)	Total time to activate and clear (Sec)	Crossings per Day	Delay per Day (Min)	Maximum crossings per hour	Max delay per Hour (Min)
PALM BEACH										
Freight	30	8837	30.5	198	15	243	14	56.7	1	4.1
Passenger	30	600	60.1	7	15	52	12	10.4	1	0.9
Total								67.1		5.0
BROWARD										
Freight	30	8837	30.5	198	15	243	14	56.7	1	4.1
Passenger	30	600	60.1	7	15	52	12	10.4	1	0.9
Total								67.1		5.0
MIAMI-DADE										
Freight	30	8837	31.3	192	15	237	14	53.3	1	4.0
Passenger	30	600	60.1	7	15	52	12	10.4	1	0.9
Total								65.7		4.9

Note: Freight service includes 4 local freight trains and 10 through freight trains

FEC RAILROAD CROSSING DELAY ESTIMATES-2035 YEAR CONDITION

Service Type	Time to activate and close the gate (Sec)	Length (Feet)	Speed (mph)	Time to Clear (Sec)	Time to bring the gate back up (Sec)	Total time to activate and clear (Sec)	Crossings per Day	Delay per Day (Min)	Maximum crossings per hour	Max delay per Hour (Min)
PALM BEACH										
Freight	30	12795	39.5	221	15	266	22	97.5	1	4.4
Passenger	30	600	60.1	7	15	52	16	13.9	1	0.9
Total								111.4		5.3
BROWARD										
Freight	30	12795	38.5	227	15	272	22	99.7	1	4.5
Passenger	30	600	60.1	7	15	52	16	13.9	1	0.9
Total								113.6		5.4
MIAMI-DADE										
Freight	30	12795	33.2	263	15	308	22	112.9	1	5.1
Passenger	30	600	60.1	7	15	52	16	13.9	1	0.9
Total								126.8		6

Note: Freight service includes 4 local freight trains and 10 through freight trains

Notes:

1. FRA regulations require 20 seconds to activate and close the gate prior to the train entering the railroad crossing and 30 seconds to bring the gate back up. FDOT uses 30 seconds to activate and close the gate prior to the train entering the railroad crossing and 15 seconds to bring the gate back up. To account for the worst-case scenario, FDOT timings were used in this analysis.
2. Time taken for the train to clear the railroad crossing is calculated using the length of the train and speed of the train.
3. A maximum of two trains would cross per hour (Northbound and Southbound combined).
4. To account for freight growth from 2016 to 2035, a 3% per year growth was assumed. The length of the train was increased 3% per year to account for this growth. The number of trains was kept constant.

Restored double track and new crossover and track work would be done using planning and construction practices that would minimize impact on freight or passenger traffic during construction. AAF is aware of similar projects (such as The Union Pacific Railroad in northern California) where the upgrades and double tracking work was completed without any impact to passenger and freight services during construction. AAF intends to follow similar construction techniques to minimize such impacts.

The **Preferred Build System Alternative** would have a positive impact to passenger rail transportation in the FEC corridor by providing new service between West Palm Beach and Miami's CBD with far fewer stops than Tri-Rail (Tri-Rail has about 18 stations where as the proposed FEC service will have just 3 stations). The **Preferred Build Project Alternative** would not have any impact on the existing freight service because the proposed stations are anticipated to serve passengers only.

3.3.1.2 Regional Roadway Network

A regional roadway network consists of major roadways that serve regional traffic (across counties and states). Freeways, state highways, and county arterials are generally part of a regional transportation network. The primary north-south roadways that serve the vehicular travel between West Palm Beach and Miami are I-95 and Florida's Turnpike. Both the I-95 and Turnpike corridors are already congested and are projected to experience increased delays -- especially during peak hours of travel. US 1 also serves regional traffic along this Project Area and is also heavily congested.

The **No-Build Alternative** has the potential to contribute to future adverse impacts on the I-95 and Florida's Turnpike corridors. Over time, these already congested and physically constrained facilities would only continue to impede the traveling public's ability to move between West Palm Beach and Miami. Under the **No-Build Alternative**, the proposed passenger service would not be available to the residents and tourists of southeast Florida as a travel option.

The **Preferred Build Project Alternative** (which, as defined above, includes the **Preferred Build System Alternative** and the **Preferred Build Station Alternatives**) would have an overall, positive impact on the regional roadway network (especially I-95 and Florida's Turnpike corridors) by providing a new transportation alternative for residents and tourists in southeast Florida that would be easily accessible to residents and visitors to the Florida in the CBDs of West Palm Beach, Fort Lauderdale and Miami. It is anticipated that the traffic on I-95 and the Florida turnpike that parallel the FEC corridor would be reduced if the proposed **Preferred Build Project Alternative** were implemented.

3.3.1.3 Local Vehicular Transportation

Analysis and evaluation of impacts to local vehicular transportation was divided into two distinct scenarios: (1) potential impacts along the corridor at crossings resulting from the **Preferred Build System Alternative**, and (2) potential impacts specific to station locations resulting from the station alternatives considered under this EA, including the **Preferred Build Station Alternatives**. The following sections summarize those findings.

Potential Impacts at Crossings

The ***Preferred Build System Alternative*** is planned within an area of the FEC corridor that currently crosses 183 roadways at signalized/gated crossings traversing nearly 70 miles and three counties. No new crossings are proposed for construction/operation as part of the ***Preferred Build System Alternative***.

To assess the impact of the proposed passenger service on the existing crossings, first the delay estimates at a typical crossing were developed, and then two representative crossings were analyzed in detail for each affected county, for a total of six investigated crossings. These crossings were selected at major arterial roadways that have significant traffic volumes compared to other roadways with railroad crossings. Adjacent signalized intersections within 500 feet from the crossing were also included in the analysis to study the impact of the train crossing event on intersection traffic operations. It is expected that if the impact is minimal at a major arterial crossing (with higher traffic volumes) then the impact would be minimal at minor roadway crossings. Therefore these crossings represent worst-case scenario in terms of traffic delay and LOS.

The methodology and analysis of a typical crossing are based on the following assumptions and are described in detail below:

- Length of the train, speed, and clearance time requirements for closing and opening of the gates at the crossings are based on information from FEC, and in accordance with FRA and FDOT guidelines (See, e.g., 49 CFR 234). Details of train characteristics, frequency and clearance time are provided in Table 3-3.1, above.
- Two railroad crossing events (one passenger and one freight movement) are assumed to take place during the PM peak hour, one in each direction, resulting in two crossings per hour. This constitutes a worst case condition, since the traffic conditions on adjacent roadways would represent the highest delay/congestion during pm peak period.
- Based on the speed, length and clearance time, the proposed passenger train is anticipated to take approximately fifty two (52) seconds to clear the crossing. The freight trains take much longer (anywhere from 237 seconds to 308 depending on the County) to clear the crossing.

Table 3-3.1 also shows how much delay would be caused by freight and passenger trains at a typical crossing such as those being studied based on various parameters. The delay estimates provide comparison by type of service and other operational characteristics for year 2006 and future years 2015 and 2035. The year 2006 only has freight service while the opening year of 2015, and future build-out year of 2035 includes both freight and passenger service. It can be seen from these delay estimates that the delay caused by a passenger train crossing event (52 seconds) is much less than the delay from a freight train crossing event (266-308 seconds). This generalized analysis of a typical crossing is shown in Table 3-3.1.

Study Crossings

Based on the above discussed criteria and parameters, the following major arterials with FEC at-grade crossings were selected to be analyzed:

- **Palm Beach County**
 - Forest Hill Boulevard Crossing
 - Linton Boulevard Crossing
- **Broward County:**
 - Hillsboro Boulevard Crossing
 - Broward Boulevard Crossing
- **Miami-Dade County:**
 - US 1/Biscayne Boulevard Crossing
 - NW 20th Street Crossing

These crossings along with any adjacent intersections to these crossings were analyzed for the opening year of 2015 and the build out year of 2035.

Traffic Data

Traffic data used in this analysis was obtained from Palm Beach County, Broward County, Dade County and FDOT sources. Some counts used in the analysis were conducted by URS in 2010. The opening year (2015) and build out year (2035) traffic volumes were developed by using a 1% per year growth rate from existing counts. It should be noted that most of the Project Area is built out and has experienced either no growth or negative growth in the past 5 years. Therefore this 1% growth assumption represents worst-case future year traffic volumes.

Traffic Operational Analysis:

Capacity analyses for all the crossings and intersections in the Project Area were conducted in accordance with the methodology presented in the Highway Capacity Manual utilizing the Synchro/Simtraffic software, version 7. Level of Service qualitatively relates capacity to operational conditions. LOS ranges from "A" to "F", with "A" being the best operating condition and "F" being the worst. Generally, LOS "E" or better is considered acceptable for CBDs and developed urbanized areas. LOS for signalized intersections is measured by control or signal delay per vehicle. Table 3-3.2 provides the delay ranges for LOS "A" through "F".

**Table 3-3.2
 Level of Service (LOS) Criteria**

Level of Service	Delay (seconds/vehicle)
A	<10
B	10.1 to 20.0
C	20.1 to 35.0
D	35.1 to 55.0
E	55.1 to 80.0
F	> 80.0

Source: Highway Capacity Manual (HCM) 2000

For this analysis of the Project the selected six intersections and railroad crossings were analyzed for the p.m. peak hour conditions to represent the maximum traffic volumes during the day. The p.m. peak hour generally takes place between 4:00 p.m. and 6:00 p.m. The crossing operation includes a clearance phase prior to the arrival of the train to clear any queues present on the railway and adjacent approaches. Gates will then be closed and the train crossing event will run. During this phase, the traffic movements not affected by the crossings will continue to operate normally at the adjacent intersections. After the train event, the intersections revert back to normal phase operations for the rest of the peak hour.

The analysis involved following steps:

- The peak hour operations at the crossing were divided in to three cycles. The first cycle represents no train crossing event, second cycle represents freight train crossing event, and the third cycle represents passenger train crossing event. Delay was calculated for each of these cycles and the average delay was calculated as the weighted hourly average delay of the signal cycles with no train crossing, with freight train crossing, and with passenger train crossing. Under this analysis, a typical peak hour would have one freight train crossing, one passenger train crossing, and rest of the hour will have normal signal cycles where there will not be any delay caused by gate closure at the crossing. The no train crossing event delays are included in the average because the delays calculated represent average delay for the peak hour.
- Delays and levels of service were also calculated and reported for the affected cycle when railroad crossings are anticipated to take place. Queue lengths were obtained from 95th percentile queue lengths reported by the Synchro Software. The 95th percentile queue represents the queue length that is not expected to be reached 95% of the time. A similar procedure was applied for estimating queue lengths on the approaches to the rail crossing when the train is present.
- Levels of service (LOS) for the roadways and intersections in the influence area of the crossing was calculated using the weighted average of the delay for all signal cycles during the peak hour with and without the train crossing events. For illustration purposes, the LOS is also presented for the affected cycles when the railroad crossings take place.
- All traffic signals are assumed to have pre-emption capabilities and standard signal coordination in place allowing traffic to clear out and/or hold vehicles until the train clears. The signal operation at adjacent intersections would be coordinated in such a way that they would not be providing green time to movements that approach the crossings. This coordination and preemption would prevent the vehicles from being trapped between the crossing location and the intersection.

Palm Beach County

In Palm Beach County, the at-grade crossings at Forest Hill Blvd. and Linton Blvd. were analyzed for opening year (2015) and the build out year (2035). Results of the analysis are summarized in Table 3-3.3. This table shows detail comparison of delay, LOS, and queuing under normal signal cycle, freight train crossing cycle and passenger train crossing cycle.

Forest Hill Blvd.:

This crossing was analyzed along with the adjacent signalized intersection at Georgia Avenue. As seen in Table 3-3.3, the delay increase between normal signal operation and the weighted average delay including the freight train, and passenger train crossing events for the build out year of 2035 is minimal (3.4 sec/veh) and the intersection would continue to operate at acceptable LOS (LOS E or better) during the peak hour. Also the delay during the passenger train crossing cycle is much less than the delay during the freight train crossing cycle. The analysis results indicate that the impact on the arterial in terms of delay and queuing is limited to the signal cycles immediately following a train crossing event. Such delay and queuing impacts would dissipate as the signal operation returns to normal cycle and the weighted average impact during the peak hour is minimal. Therefore, the ***Preferred Build System Alternative*** is not expected to significantly impact the traffic operations at this crossing. The delay impact was higher in the build out year (2035) compared to the opening year (2015) as the traffic volumes and freight activity grow from 2015 to 2035.

Linton Blvd.:

This crossing is located very close (about 50 feet) to the intersection of Dixie Highway and the crossing. Therefore the crossing and the intersection were analyzed as a single signal operation. As seen in Table 3-3.3, the delay increase between normal signal operation and the weighted average delay including the freight train, and passenger train crossing events for year 2035 is minimal (52.4 sec/veh to 67.4 sec/veh) and the intersection would continue to operate at acceptable LOS (LOS E or better) during the peak hour. Therefore, the ***Preferred Build System Alternative*** is not expected to significantly impact the traffic operations at this crossing. The delay impact was higher in the build out year (2035) compared to the opening year (2015) as the traffic volumes and freight activity grow from 2015 to 2035.

Table 3-3.3
Mainline Railroad Crossing
PM Peak Hour Delay and LOS
Palm Beach County

Forest Hill Blvd Crossing, Opening Year 2015 Conditions

Approach/Movement	AADT	Lanes	Normal Signal Cycle				Freight Train Crossing Cycle				Passenger Train Crossing Cycle				Weighted Average		
			Delay	LOS	Queue	Cycles/Hour	Delay	LOS	Queue	Cycles/Hour	Delay	LOS	Queue	Cycles/Hour	Delay	Queue	LOS
Forest Hill Blvd @ Georgia Ave																	
Overall Intersection			11.8	B		54	187.9	F		1	36.6	D		1	15.4		B
EB Approach			8.8	B	150	54	240.4	F	1225	1	33.6	C	275	1	13.4	175	B
WB Approach			10.4	B	175	54	157.6	F		1	35.4	D		1	13.5		B
Forest Hill Blvd @ FEC RR Crossing	18,800	4															
EB Approach			0.0	A	0	54	106.7	F		1	10.0	B		1	2.3		A
WB Approach			0.0	A	0	54	288.5	F	1200	1	32.8	C	275	1	4.8	25	A

Forest Hill Blvd Crossing, Build Out Year 2035 Conditions

Approach/Movement	AADT	Lanes	Normal Signal Cycle				Freight Train Crossing Cycle				Passenger Train Crossing Cycle				Weighted Average		
			Delay	LOS	Queue	Cycles/Hour	Delay	LOS	Queue	Cycles/Hour	Delay	LOS	Queue	Cycles/Hour	Delay	Queue	LOS
Forest Hill Blvd @ Georgia Ave																	
Overall Intersection			13.0	B		53	224.8	F		1	45.8	D		1	17.4		B
EB Approach			10.4	B	225	53	379.4	F	1700	1	47.7	D	375	1	17.8	250	B
WB Approach			11.7	B	225	53	89.4	F		1	39.0	D		1	13.6		B
Forest Hill Blvd @ FEC RR Crossing	22,500	4															
EB Approach			0.0	A	0	53	224.6	F		1	11.9	B		1	4.3		A
WB Approach			0.0	A	0	53	380.2	F	1700	1	46.4	D	375	1	7.8	50	A

Linton Blvd Crossing, Opening Year 2015 Conditions

Approach/Movement	AADT	Lanes	Normal Signal Cycle				Freight Train Crossing Cycle				Passenger Train Crossing Cycle				Weighted Average		
			Delay	LOS	Queue	Cycles/Hour	Delay	LOS	Queue	Cycles/Hour	Delay	LOS	Queue	Cycles/Hour	Delay	Queue	LOS
Linton Blvd @ Dixie Hwy/FEC RR	30,000	6															
Overall Intersection			37.4	D		33	365.0	F		1	108.1	F		1	48.6		D
EB Approach			28.0	C	275	33	323.0	F	1000	1	81.3	F	400	1	38.0	300	D
WB Approach			41.6	D	350	33	486.9	F	1700	1	80.1	F	475	1	55.4	400	E

Linton Blvd Crossing, Build Out Year 2035 Conditions

Approach/Movement	AADT	Lanes	Normal Signal Cycle				Freight Train Crossing Cycle				Passenger Train Crossing Cycle				Weighted Average		
			Delay	LOS	Queue	Cycles/Hour	Delay	LOS	Queue	Cycles/Hour	Delay	LOS	Queue	Cycles/Hour	Delay	Queue	LOS
Linton Blvd @ Dixie Hwy/FEC RR	35,900	6															
Overall Intersection			52.4	D		33	475.5	F		1	153.8	F		1	67.4		E
EB Approach			39.6	D	400	33	349.3	F	1300	1	120.8	F	500	1	50.8	425	D
WB Approach			56.9	E	525	33	557.6	F	2175	1	119.3	F	600	1	73.0	575	E

Notes:

- 1 Delay measured in sec/veh
- 2 LOS Level of Service during the PM Peak Hour
- 3 Queue lengths shown are in feet rounded to nearest 25 feet.
- 4 To obtain 2015 and 2035 volumes, existing volumes were grown at 1% per year growth rate

Both the crossings analyzed in Palm Beach County are expected to operate at LOS E or better in the year 2035 under the preferred build alternative. There would be no significant impact to traffic operations at these locations as a result of the **Preferred Build System Alternative**.

Broward County

In Broward County, the at-grade crossings at Hillsboro Blvd. and Broward Blvd. were analyzed for the opening year of 2015 and the build out year of 2035. Results of the analysis are summarized in Table 3-3.4. This table shows detail comparison of delay, LOS, and queuing under normal signal cycle, freight train crossing cycle and passenger train crossing cycle.

**Table 3-3.4
 Mainline Railroad Crossing
 PM Peak Hour Delay and LOS
 Broward County**

Hillsboro Blvd Crossing, Opening Year 2015 Conditions																	
Approach/Movement	AADT	Lanes	Normal Signal Cycle				Freight Train Crossing Cycle				Passenger Train Crossing Cycle				Weighted Average		
			Delay	LOS	Queue	Cycles/Hour	Delay	LOS	Queue	Cycles/Hour	Delay	LOS	Queue	Cycles/Hour	Delay	Queue	LOS
Hillsboro Blvd @ FECRR	47,300	6															
Overall Intersection			0.0	A	0	53	399.7	F		1	26.4	C		1	5.0		A
EB Approach			0.0	A	0	53	233.7	F	1600	1	25.4	C	350	1	4.7	25	A
WB Approach			0.0	A	0	53	353.2	F	2150	1	30.9	C	475	1	3.0	57	A

Hillsboro Blvd Crossing, Build Out Year 2035 Conditions																	
Approach/Movement	AADT	Lanes	Normal Signal Cycle				Freight Train Crossing Cycle				Passenger Train Crossing Cycle				Weighted Average		
			Delay	LOS	Queue	Cycles/Hour	Delay	LOS	Queue	Cycles/Hour	Delay	LOS	Queue	Cycles/Hour	Delay	Queue	LOS
Hillsboro Blvd @ FECRR	56,100	6															
Overall Intersection			0.0	A	0	53	489.1	F		1	44.6	D		1	9.7		A
EB Approach			0.0	A	0	53	403.3	F	2325	1	28.8	C	490	1	7.9	90	A
WB Approach			0.0	A	0	53	554.8	F	3024	1	52.1	E	675	1	11.2	75	B

Broward Blvd Crossing, Opening Year 2015 Conditions																	
Approach/Movement	AADT	Lanes	Normal Signal Cycle				Freight Train Crossing Cycle				Passenger Train Crossing Cycle				Weighted Average		
			Delay	LOS	Queue	Cycles/Hour	Delay	LOS	Queue	Cycles/Hour	Delay	LOS	Queue	Cycles/Hour	Delay	Queue	LOS
Broward Blvd @ FECRR	59,500	6															
Overall Intersection			0.0	A	0	52	571.3	F		1	41.3	D		1	11.3		B
EB Approach			0.0	A	0	52	651.0	F	3475	1	52.7	D	925	1	13.0	75	B
WB Approach			0.0	A	0	52	474.4	F	2700	1	27.5	C	600	1	5.3	50	B

Broward Blvd Crossing, Build Out Year 2035 Conditions																	
Approach/Movement	AADT	Lanes	Normal Signal Cycle				Freight Train Crossing Cycle				Passenger Train Crossing Cycle				Weighted Average		
			Delay	LOS	Queue	Cycles/Hour	Delay	LOS	Queue	Cycles/Hour	Delay	LOS	Queue	Cycles/Hour	Delay	Queue	LOS
Broward Blvd @ FECRR	82,600	6															
Overall Intersection			0.0	A	0	52	841.0	F		1	49.7	F		1	17.3		B
EB Approach			0.0	A	0	52	943.7	F	4750	1	132.0	C	1225	1	19.9	100	B
WB Approach			0.0	A	0	52	716.0	F	3725	1	45.8	D	900	1	14.1	75	B

Notes:
 1. Delay measured in seconds
 2. LOS=Level of Service during the PM Peak hour
 3. Queue lengths shown are for the rounded to nearest 1/4 feet
 4. To obtain 2015 and 2035 volumes, existing volumes were grown at 1% per year growth rate

Hillsboro Blvd.:

This crossing was as a standalone intersection. As seen in Table 3-3.4, the year 2035 delay at the crossing for normal signal cycle (no train crossing event) is 0.0 sec/veh, and the weighted average delay including the freight train and passenger train crossing events is 9.7 sec/veh and the intersection would operate at acceptable LOS (LOS E or better) during the peak hour. Also the delay during the passenger train crossing cycle is much less than the delay during the freight train crossing cycle. Therefore, the **Preferred Build System Alternative** is not expected to significantly impact the traffic operations at this crossing. The delay impact was higher in the build out year (2035) compared to the opening year (2015) as the traffic volumes and freight activity grow from 2015 to 2035.

Broward Blvd.:

This crossing was as a standalone intersection. The results (shown in Table 3-3.4) were similar to Hillsboro Blvd and impact is expected to be minimal on the peak hour basis and the intersection would continue to operate at acceptable LOS (LOS E or better) during the peak hour.

Both the crossings analyzed in Broward County are expected to operate at LOS E or better in the build-out year of 2035 under the *Preferred Build System Alternative*. There would be no significant impact to traffic operations at these locations as a result of the *Preferred Build System Alternative*.

Miami-Dade County

At-grade crossings at US 1/Biscayne Blvd. and NW 20th St. were analyzed. In Miami-Dade County, the at-grade crossings at US 1/Biscayne Blvd. and NW 20th St. were analyzed for the opening year of 2015 and build out year of 2035. Results of the analysis are summarized in Table 3-3.5. This table shows detail comparison of delay, LOS, and queuing under normal signal cycle, freight train crossing cycle and passenger train crossing cycle.

US 1/Biscayne Blvd.:

This crossing was analyzed along with the adjacent signalized intersection at NE 6th Ave. As seen in Table 3-3.5, the delay increase between normal signal operation and the weighted average delay including the freight train, and passenger train crossing events for year 2035 is minimal (10 sec/veh) and the intersection would continue to operate at acceptable LOS (LOS E or better) during the peak hour. Also the delay during the passenger train crossing cycle is much less than the delay during the freight train crossing cycle. The analysis results indicate that the impact on the arterial in terms of delay and queuing is limited to the signal cycles immediately following a train crossing event. Such delay and queuing impacts would dissipate as the signal operation returns to normal cycle and the weighted average impact during the peak hour is minimal. Therefore, the *Preferred Build System Alternative* is not expected to significantly impact the traffic operations at this crossing. The delay impact was higher in the build out year (2035) compared to the opening year (2015) as the traffic volumes and freight activity grow from 2015 to 2035.

**Table 3-3.5
Mainline Railroad Crossing
PM Peak Hour Delay and LOS
Miami-Dade County**

US 1/USCayre Blvd Crossing, Opening Year 2015 Conditions

Approach/Movement	AADT	Lanes	Normal Signal Cycle				Freight Train Crossing Cycle				Passenger Train Crossing Cycle				Weighted Average		
			Delay	LOS	Queue	Cycles/Hour	Delay	LOS	Queue	Cycles/Hour	Delay	LOS	Queue	Cycles/Hour	Delay	Queue	LOS
US 1/USCayre Blvd @ NE 6th St																	
Overall Intersection			14.9	B		38	84.0	F		1	18.4	C		1	17.3		B
NB Approach			11.8	B	200	36	119.0	F	1125	1	11.3	C	373	1	25.0	225	B
SB Approach			18.2	B	125	38	84.1	F		1	15.7	C		1	20.0		B
US 1/USCayre Blvd @ FEC RR Crossing	18,100	6															
NB Approach			0.0	A	0	38	157.8	F		1	37.1	B		1	7.4		A
SB Approach			0.0	A	0	38	102.2	F	475	1	15.6	B	125	1	2.9	25	A

US 1/USCayre Blvd Crossing, Build Out Year 2035 Conditions

Approach/Movement	AADT	Lanes	Normal Signal Cycle				Freight Train Crossing Cycle				Passenger Train Crossing Cycle				Weighted Average		
			Delay	LOS	Queue	Cycles/Hour	Delay	LOS	Queue	Cycles/Hour	Delay	LOS	Queue	Cycles/Hour	Delay	Queue	LOS
US 1/USCayre Blvd @ NE 6th St																	
Overall Intersection			18.0	B		36	350.5	F		1	35.6	D		1	28.0		C
NB Approach			14.0	B	250	35	502.8	F	1850	1	27.9	C	350	1	29.2	300	C
SB Approach			20.3	C	175	36	315.4	F		1	33.8	D		1	20.2		C
US 1/USCayre Blvd @ FEC RR Crossing	21,700	6															
NB Approach			0.0	A	0	35	608.0	F		1	40.6	D		1	22.9		C
SB Approach			0.0	A	0	35	176.4	F	650	1	16.1	B	350	1	3.3	25	A

NW 20th St Crossing, Opening Year 2015 Conditions

Approach/Movement	AADT	Lanes	Normal Signal Cycle				Freight Train Crossing Cycle				Passenger Train Crossing Cycle				Weighted Average		
			Delay	LOS	Queue	Cycles/Hour	Delay	LOS	Queue	Cycles/Hour	Delay	LOS	Queue	Cycles/Hour	Delay	Queue	LOS
NW 20th St @ Miami Ave																	
Overall Intersection			8.0	A		35	46.9	D		1	20.7	C		1	10.3		B
NB Approach			8.6	A	175	35	112.8	F	775	1	16.3	B	200	1	13.1	150	B
SB Approach			8.6	A	75	35	11.9	B		1	1.6	A		1	6.9		A
NW 20th St @ FEC RR Crossing	6,500	4															
NB Approach			0.0	A	0	35	76.6	F		1	17.1	B		1	2.6		A
SB Approach			0.0	A	0	35	188.7	F	300	1	14.7	B	75	1	3.3	25	A

NW 20th St Crossing, Build Out Year 2035 Conditions

Approach/Movement	AADT	Lanes	Normal Signal Cycle				Freight Train Crossing Cycle				Passenger Train Crossing Cycle				Weighted Average		
			Delay	LOS	Queue	Cycles/Hour	Delay	LOS	Queue	Cycles/Hour	Delay	LOS	Queue	Cycles/Hour	Delay	Queue	LOS
NW 20th St @ Miami Ave																	
Overall Intersection			10.6	B		35	189.3	F		1	22.4	C		1	18.0		D
NB Approach			11.8	B	200	35	449.7	F	1500	1	13.1	B	250	1	23.7	225	C
SB Approach			10.1	B	100	35	202.0	F		1	1.7	A		1	20.5		C
NW 20th St @ FEC RR Crossing	3,300	4															
NB Approach			0.0	A	0	35	324.5	F		1	13.2	B		1	7.6		A
SB Approach			0.0	A	0	35	155.6	F	400	1	15.0	B	100	1	4.6	25	A

Notes:
 1. Delay measured in sec/veh;
 2. LOS based on Service during the PM Peak Hour;
 3. Queue lengths shown are in feet rounded to nearest 25 feet;
 4. For each 2015 and 2035 volume, all 100 to measure growth in 1% per year growth rate.

NW 20th St.:

This crossing was analyzed along with the adjacent signalized intersection at Miami Ave. As seen in Table 3-3.5, the delay increase between normal signal operation and the weighted average delay including the freight train, and passenger train crossing events for year 2035 is minimal (5.4 sec/veh) and the intersection would continue to operate at acceptable LOS (LOS E or better) during the peak hour. Therefore, the **Preferred Build System Alternative** is not expected to significantly impact the traffic operations at this crossing. The delay impact was higher in the build out year (2035) compared to the opening year (2015) as the traffic volumes and freight activity grow from 2015 to 2035.

There would be no significant impact to traffic operations at these locations as a result of the **Preferred Build System Alternative**.

Summary

Based on the analysis of the opening year of 2015 and the build out year of 2035 with and without the train service traffic operations at the six crossings at major arterial roadways in the Project Area, the following conclusions were reached:

- The passenger train is expected to clear the crossing in 52 seconds and have one such crossing event in the peak hour. The analysis indicates that the additional delay at the crossing caused by the introduction of passenger rail service on the adjacent roadway network is minimal.
- Since the analysis was conducted for the peak hour, any event taking place during non-peak hours would have less impact on traffic operations.
- The traffic operations and LOS at adjacent intersections are anticipated to continue to operate at similar LOS with the introduction of the passenger rail service compared to LOS with already existing freight service. Therefore the additional impact from the passenger rail service is minimal. During a train crossing event, traffic movements not affected by the train will be operated normally to minimize the impact on delay and queues.
- It should be noted that some of the crossings have intersections within close proximity of the crossing and queues will back up to and over the FEC railway at these intersection. These queues must be cleared before the rail crossing event under the pre-emption signal cycle operation. Proper signage and traffic controls to alert drivers about the railroad crossings will be in place in accordance to local City, County and State standards.

The **No-Build Alternative** (which includes freight service only) would not have a significant impact on local vehicular transportation at crossings in the tri-county Project Area.

The **Preferred Build System Alternative** (which has been analyzed to include impacts resulting from existing freight service, as well as projected freight growth and the proposed passenger service) would not have a significant impact on traffic operations at railroad crossings in the tri-county Project Area because the **Preferred Build System Alternative** would not lower the LOS on roadways proximate to existing crossings from an acceptable LOS to a failing LOS. The impact on delay, queuing, and LOS as result of the **Preferred Build System Alternative** is limited to signal cycles immediately following a train crossing event and are minimal on a peak hour basis. The passenger train is proposed clear a typical crossing in 52 seconds. With only one such crossing event during peak hour the impact on traffic operations on adjacent roadways is expected to be minor. Signal and circuit upgrades performed as part of the track construction, improvement and rehabilitation would occur within the FEC ROW, and would not substantially impact traffic on intersecting roadways.

Potential Impacts at Stations

Based on the results of the *All Aboard Florida Ridership Study* (Louis Berger, July 2012) and trip generation resulting from the proposed development plans at the three station locations included within the **Preferred Build Station Alternatives**, a Traffic Impact Analysis was performed. The land uses, trip generation and traffic impact from the stations are described in the following sections.

Proposed Land Uses

Following land uses are being proposed at the stations:

- **West Palm Beach Station:**
 - 10,000 square foot retail within the station
- **Fort Lauderdale Station:**
 - 10,000 square foot retail within the station
- **Miami Station:**
 - 60,000 square foot station depot
 - 30,000 square foot retail within the station
 - 75,000 square foot transit-oriented retail
 - 300,000 square foot office
 - 200-room hotel
 - 400-residential units
 - 1,050 parking spaces, approximately

Station Access

Station access points for each of the stations are as follows:

- West Palm Beach North-Access to Quadrille St and 6th St
- West Palm Beach Central-Access to Evernia St
- Fort Lauderdale North-Access to Brickell Ave
- Fort Lauderdale South-Access to SE 2nd St
- Miami Central Elevated-Access to NW 1st Ave
- Miami South At-grade-Access to NW 1st Ave/NE 1st St

Exhibits showing the access and conceptual plans for the stations are provided in Appendix I-Transportation.

Daily Boarding and Ridership

Daily boarding forecast for the year 2030 for the proposed stations are based on *All Aboard Florida (AAF) Ridership and Revenue Forecasts*. Year 2030 daily boarding volumes by station access mode are presented in Table 3-3.6.

Table 3-3.6
2030 Daily boardings at AAF stations
Station Access, Mode Split and Volumes

Station	Daily Boardings	Private Auto Park and Ride	Private Auto Drop-Off	Total Private Auto	Taxi	Transit/Shuttle	Walk	Bike	Total
West Palm Beach		22%	13%	35%	2%	24%	37%	2%	100%
Fort Lauderdale		18%	9%	27%	2%	37%	32%	2%	100%
Miami		16%	6%	22%	4%	38%	34%	2%	100%
West Palm Beach	1,998	440	260	700	40	480	739	40	1,998
Fort Lauderdale	1,827	329	164	493	37	676	585	37	1,827
Miami	1,868	299	112	411	75	710	635	37	1,868
Total	5,693	1,068	536	1,604	151	1,865	1,959	114	5,693

1. Source: Daily Boardings from AAF Ridership and Revenue Forecast

2. Station Access Modal Split adapted from Transit Cooperative Research Report 153 - Guidelines for Providing Access to Public Transportation Stations, 2012.

Trip Generation

Trip generation estimates at each station consists of trips generated by the proposed land uses at each station and the trips associated with the forecasted boarding and ridership data. Trips for retail, office, and hotel land uses were estimated using the *Institute of Transportation Engineers (ITE) Trip Generation, 8th Edition*. Summary of the trip generation for each of the stations is presented in Table 3-3.7. A detailed Trip Generation Memorandum was also prepared.

Trip Distribution

Traffic from the proposed train stations was manually distributed to surrounding roadways based on surrounding land uses, roadway network and existing traffic characteristics. All roadways within half-mile radius from proposed stations were studied. At the proposed railroad stations where at-grade crossings are proposed to be closed, the vehicular traffic is re-routed to the adjacent streets. For example, in the proposed Miami At-grade Station, the at-grade crossing at NW 3rd Street, between NW 2nd Avenue and NW 1st Avenue is proposed to be closed. The traffic from NW 3rd Street where the at-grade crossing is proposed to be closed is rerouted to NW 2nd Avenue south to NE/NW 1st Street and north to NE 5th Street continuing eastward to NW 1st Avenue where it connects with 3rd Street.

Table 3-3.7
Trip Generation Summary for Proposed Stations (NET new trips)

Description	Daily			AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total	In	Out	Total
WEST PALM BEACH STATION									
Retail Trips	182	182	364	24	16	40	16	17	33
Ridership/Boarding Trips	771	771	1,542	231	231	463	231	231	463
TOTAL	953	953	1,906	255	255	503	247	248	496
FORT LAUDERDALE STATION									
Retail Trips	182	182	364	24	16	40	16	17	33
Ridership/Boarding Trips	575	575	1,150	173	173	345	173	173	345
TOTAL	757	757	1,514	197	189	385	189	190	378
MIAMI STATION									
Office/Retail/Hotel/ Residential Trips	4,591	4,591	9,182	612	263	875	364	557	921
Ridership/Boarding Trips	533	533	1,066	160	160	320	160	160	320
TOTAL	5,124	5,124	10,248	772	423	1,195	524	717	1,241

1. See the attached trip generation sheets for detailed trip generation, internal capture, and pass-by calculations.
2. Daily Boardings information is obtained from AAF Ridership and Revenue Forecast
3. Station Access Modal Split adapted from Transit Cooperative Research Report 153 - Guidelines for Providing Access to Public Transportation Stations, 2012.
4. Peak hour boardings are assumed to be 30% of the daily boardings based on the information from TRB's Commuter & Light Rail Transit Corridors, March 1996.

Traffic Analysis

Roadway segments were analyzed for the opening year of 2015 and the build out year of 2035. Future background traffic volumes were obtained from the 2035 Southeast Florida Regional Planning Model (SERPM). Year 2015 background volumes were developed by interpolating existing and 2035 volumes. Once the background traffic was developed, the project trips based on distribution were added to background trips to obtain total future volume on each link. Reasonableness checks were completed to make sure the future volumes were higher than existing volumes for all roadway segments. In cases where the model has predicted negative growth rate, the future volumes were adjusted to grow at 1% per year growth rate. Total daily volumes were compared to roadway capacities based on number lanes and Florida Department of Transportation *Generalized Service Volumes* applicable for urbanized areas. Level of service for each of the segments was determined by comparing the total daily volume on the segment to daily capacity from FDOT generalized tables. Worksheets showing the analysis results for each of the stations are attached to this memorandum.

All the segments that were within half mile radius from the stations were studied for impact. Given the CBD nature of the study areas surrounding the stations and presence of transit services, LOS E is considered acceptable LOS. To evaluate the impact of the station on each of the study area roadway segments, the percentage of the total capacity consumed by the project traffic was calculated. The segments along which project traffic consumes 5% or more of the capacity were identified as being impacted. Out of these segments that are identified as being impacted by the project traffic, the

segments on which the project traffic causes the LOS to degrade from acceptable LOS (LOS E or better) to LOS F would be considered as significantly impacted. For such segments further detailed analysis would be required to determine if any improvement are needed. For the segment on which the project traffic consumes less than 5% of the capacity the project related impact is considered not significant and no further analysis or improvements are needed. These guidelines are consistent with those used by FDOT and counties in Florida for the traffic analysis related to Development of Regional Impacts (DRIs) and Traffic Impact Studies (TIS) to evaluated the impact of developments on regional roadway network.

West Palm Beach-North

The proposed **West Palm Beach-North** station would not have a significant impact on the local roadway network in the opening year of 2015 or in the future build-out year of 2035. There are no segments within the analysis area on which the project traffic would consume more than 5% of the capacity. On average the West Palm Beach-North station would create vehicular volumes that would occupy 0.62% of the 2035 capacity of the local roadway network. Therefore, this alternative has no significant impact on the surrounding roadways. Detailed analysis is provided in Table 3-3.8.

West Palm Beach-Central

The proposed **West Palm Beach-Central** station, which is the ***Preferred Build Station Alternative*** for this city, would not have a significant impact on the local roadway network in the opening year of 2015 or in future build-out year of 2035. There are no segments within the analysis area on which the project traffic would consume more than 5% of the capacity. On average the West Palm Beach-North station would create vehicular volumes that would occupy 0.56% of the 2035 capacity of the local roadway network. Therefore, this ***Preferred Build Station Alternative*** has no significant impact on the surrounding roadways. Detailed analysis is provided in Table 3-3.9 and Figure 3-3.1.

Fort Lauderdale (North and South)

The proposed **Fort Lauderdale-North** (the ***Preferred Build Station Alternative*** for this city) and **Fort Lauderdale-South** station locations are geographically proximate and share the same development plan. As such, results of this analysis is discussed together.

Neither of the proposed Fort Lauderdale stations would have a significant impact on the local roadway network in the opening year of 2015 or in future build-out year of 2035. There are no segments within the analysis area on which the project traffic would consume more than 5% of the capacity. On average the West Palm Beach-North station would create vehicular volumes that would occupy 0.51% of the 2035 capacity of the local roadway network. Therefore, neither project alternative considered for the City of Fort Lauderdale, including the ***Preferred Build Station Alternative***, would have significant impact on the surrounding roadways. Detailed analysis is provided in Table 3-3.10 and Figure 3-3.2.

Miami-South At-grade

The project traffic from the proposed **Miami-South at-grade** station consumes more than 5% of the capacity on 16 of the 74 roadway segments analyzed by the year 2035. These segments are considered impacted by the project traffic. On average the Miami-South at-grade station would create vehicular

volumes that would occupy 3.50% of the 2035 capacity of the local roadway network. However the project traffic does not cause the LOS on any of these links to degrade from actable LOS (LOS E or better) to failing LOS (LOS F). Therefore, the Miami-South At-grade station alternative has no significant impact on the surrounding roadways. Detailed analysis is provided in Table 3-3.11.

Miami-Central Elevated

The project traffic from the proposed **Miami-Central Elevated** station (which is the **Preferred Build Station Alternative** for this city) consumes more than 5% of the capacity on 15 of the 74 roadway segments analyzed by the year 2035. These segments are considered impacted by the project traffic. On average, the Miami-South at-grade station would create vehicular volumes that would occupy 3.70% of the 2035 capacity of the local roadway network. However, the project traffic does not cause the LOS on any of these links to degrade from actable LOS (LOS E or better) to failing LOS (LOS F). Therefore, the this **Preferred Build Station Alternative** has no significant impact on the surrounding roadways. Detailed analysis is provided in Table 3-3.12 and Figure 3-3.3.

Based on the analysis, the project traffic generated by the proposed stations is minor compared to existing traffic and roadway capacities in the study area. Therefore, none of the station alternatives considered under this EA, including the **Preferred Build Station Alternatives**, would have any significant impact on adjacent roadways except for one segment near the Miami station. Summary of the results is provided below:

- West Palm Beach Stations-No significant impact
- Fort Lauderdale Stations-No significant impact
- Miami Stations-Significant impact on several segments but no adverse effect on any segments and therefore no mitigation is required.
- The roadways segments that provide direct access to the proposed station may require access management traffic analysis during the design phases.

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Table 3-3.8
West Palm Beach North Alternative - Existing and Future LOS

Roadway	Existing		2015 Operating		2035 Buildout		Significant Impacts?
	Lanes	Capacity	LOS	ADT	LOS	ADT	
Quadrille Blvd	4	36700	B	14300	B	26300	NO
Cleechobee Blvd	4	36700	B	11000	B	21000	NO
Fern St	4	36700	B	11800	B	18100	NO
Banyan Blvd	4	36700	B	13500	B	26300	NO
Quadrille Blvd / 1st St	4	36700	B	10200	B	15500	NO
Tamarind Ave	2	16500	B	2900	B	3500	NO
Quadrille Blvd	2	16500	B	3500	B	4100	NO
Fragler Dr	2	16500	B	286	B	3785	NO
Quadrille Blvd	2	16500	B	2500	B	381	NO
Fragler Dr	2	16500	B	1700	B	1491	NO
Quadrille Blvd	2	16500	B	20800	B	27500	NO
Fragler Dr	2	16500	B	7000	B	9200	NO
Dixie Hwy	4	36700	B	16400	B	31000	NO
Quadrille Blvd	4	36700	B	6300	B	11400	NO
Evans St	2	16500	B	9200	B	10200	NO
Banyan Blvd / 1st St	2	16500	B	10200	B	11800	NO
Quadrille Blvd	2	16500	B	21800	B	21900	NO
Palm Beach Lakes Blvd	2	16500	B	4200	B	4400	NO
Quadrille Blvd / 1st St	2	16500	B	15500	B	15500	NO
Banyan Blvd / 1st St	2	16500	B	22100	B	22100	NO
Quadrille Blvd	2	16500	B	114	B	114	NO
Quadrille Blvd	4	36700	B	15500	B	15500	NO
Banyan Blvd / 1st St	4	36700	B	22100	B	22100	NO
Quadrille Blvd	4	36700	B	22100	B	22100	NO

Notes:
1. Existing ADT's are obtained from FDOT's West Palm Beach Expressway. Some counts are from 2010 and 2011.
2. Future background ADT is obtained from 2015 background Florida Inland Planning Model (2010).
3. Project traffic was manually distributed to surrounding roadways combining future background traffic, build and roadway capacity.
4. Other than future background volume was lower than the existing count, the future background volume was manually adjusted with a growth rate of 3% per year.
5. One day per background volume was reduced by 10% by adding existing and future volume.
6. Project traffic for operating year was assumed to be same as build out year at most at this time if it was not expected to be built by operating year.
7. Existing background ADT's are based on Average Daily Volume for each road.
8. Project impact with percentage of roadway capacity is only assumed by project type.
9. Impact was assumed to be significant if it is more than 5%.
10. Capacity and LOS are based on daily volume.
11. For 2015, number of lanes are assumed same as existing. For 2035 number of lanes are based on this cost as well as SRPM model.

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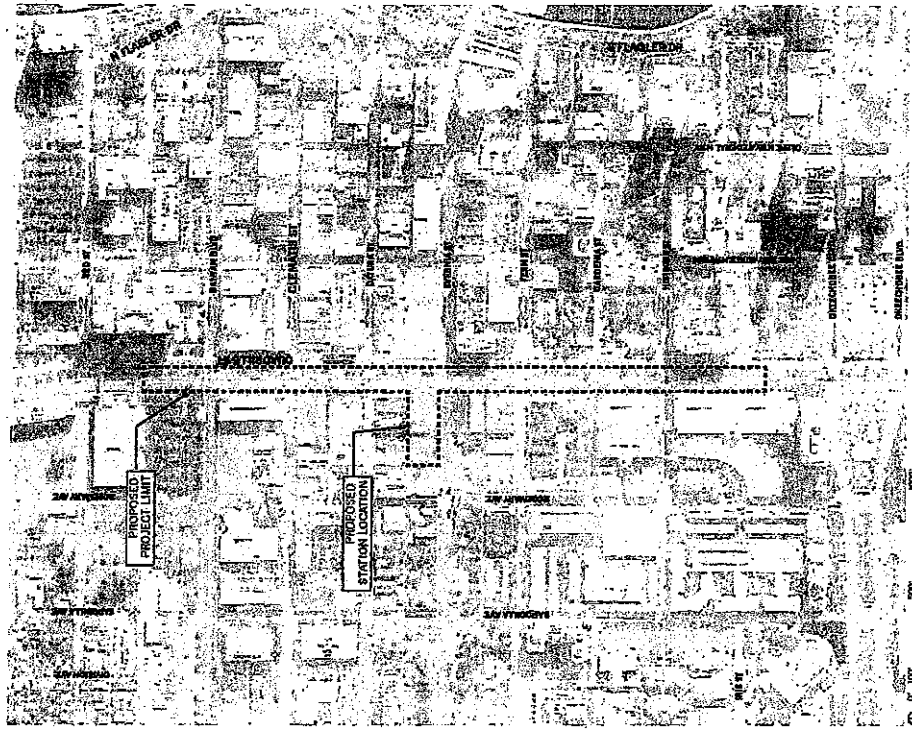
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Table 3-3.9
West Palm Beach Central Alternative - Existing and Future LOS

Roadway	From		To		Existing				2015 Operating				2035 Buildout				Project Impacts	Significant Impacts
	Lanes	Capacity	ADT	LOS	Background	Project	Total	LOS	Capacity	LOS without Project	Project %	Project	Total	LOS with Project				
Quadrille Blvd	4	36700	14291	B	14200	191	14291	B	26300	4	36700	B	10%	191	26491	B	0.52%	NO
Okeechobee Blvd	4	36700	9600	B	11300	361	11661	B	21000	4	36700	B	20%	361	21361	B	1.04%	NO
Fern St	4	36700	10900	B	11800	191	11991	B	38100	4	36700	B	20%	191	38291	B	0.52%	NO
Benway Blvd / 1st St	4	36700	11600	B	13300	291	13591	B	29500	4	36700	B	7%	291	29791	B	0.52%	NO
Quadrille Blvd	4	36700	2900	B	3000	191	10291	B	15300	4	36700	B	7%	133	15633	B	0.36%	NO
Transfined Ave	2	36500	2800	B	2800	191	3091	B	3500	2	16500	B	10%	191	3621	B	1.16%	NO
Quadrille Blvd	2	36500	3400	B	3500	286	3786	B	4100	2	16500	B	15%	286	4386	B	1.73%	NO
Fern St	2	16500	2000	B	2500	361	2861	B	6000	2	16500	B	20%	361	6361	B	2.31%	NO
Quadrille Blvd	2	16500	1500	B	1700	191	1891	B	2900	2	16500	B	20%	191	3391	B	1.16%	NO
Transfined Ave	6	73800	40000	B	46900	191	47091	B	96500	6	73800	F	10%	191	96691	F	0.26%	NO
Okeechobee Blvd	6	55300	19600	B	20800	95	20895	B	27300	6	55300	B	5%	95	27395	B	0.17%	NO
Palm Beach Lakes Blvd	4	36700	22900	B	23200	191	23391	B	25100	4	36700	B	10%	191	25291	B	0.54%	NO
Transfined Ave	4	36700	6700	B	7000	57	7057	B	9200	4	36700	B	3%	57	9257	B	0.16%	NO
Okeechobee Blvd	4	36700	14800	B	16400	191	16591	B	27100	4	36700	B	7%	191	27291	B	0.54%	NO
Benway Blvd	2	36500	8100	B	6300	191	6491	B	7100	2	36500	B	30%	191	7291	B	1.16%	NO
Okeechobee Blvd	2	22020	7500	B	9700	114	9814	B	20300	2	22020	D	6%	114	20414	F	0.52%	NO
Benway Blvd / 1st St	4	36700	8500	B	10200	57	10257	B	18700	4	36700	B	3%	57	18757	B	0.16%	NO
Quadrille Blvd	4	36700	21000	B	21800	114	21914	B	27000	4	36700	B	6%	114	27114	B	0.36%	NO
Okeechobee Blvd	2	22020	15700	C	16300	113	16413	C	20700	2	22020	D	7%	113	20813	F	0.67%	NO
Benway Blvd / 1st St	2	22020	4200	B	5900	76	5976	B	6900	2	22020	D	6%	76	6976	C	0.36%	NO
Quadrille Blvd	2	36500	3000	B	4100	114	4214	B	13900	2	16500	C	6%	114	14014	C	0.69%	NO
Okeechobee Blvd	4	36700	19000	B	19300	95	19395	B	28200	4	36700	B	5%	95	28295	B	0.26%	NO
Benway Blvd / 1st St	4	36700	23500	B	24100	95	24195	B	26400	4	36700	B	5%	95	26495	B	0.26%	NO
Quadrille Blvd	4	36700	21500	B	22100	114	22214	B	26400	4	36700	B	6%	114	26514	B	0.36%	NO

Notes:
 1. Existing ADTs are obtained from 2007 West Palm Beach County Census. Some counts are from 2010 and 2011.
 2. Future background ADT is obtained from 2015 Southwestern Florida Regional Planning Board (SRP/RP).
 3. Project traffic year normally distributed as surrounding roadway considering future background traffic, in of use, and roadway connectivity.
 4. Where the future background volume is lower than the existing county data future background volume was normally adjusted with a growth rate of 1% per year.
 5. Operating year background volume was obtained by interpolating existing and future volumes.
 6. Project traffic for opening year was assumed to be same as fully open year as most of the local users are expected to build by opening year.
 7. Capacity is based on 2007's Generalized Annual Average Daily Volume for urban street cross.
 8. Project impact is the percentage of roadway capacity consumed by project type.
 9. Impact was assumed to be significant if it is more than 5%.
 10. Capacity and LOS are based on daily volume.
 11. For 2015, number of lanes are assumed same as existing. For 2035, number of lanes is based on the current health SRP/RP model.

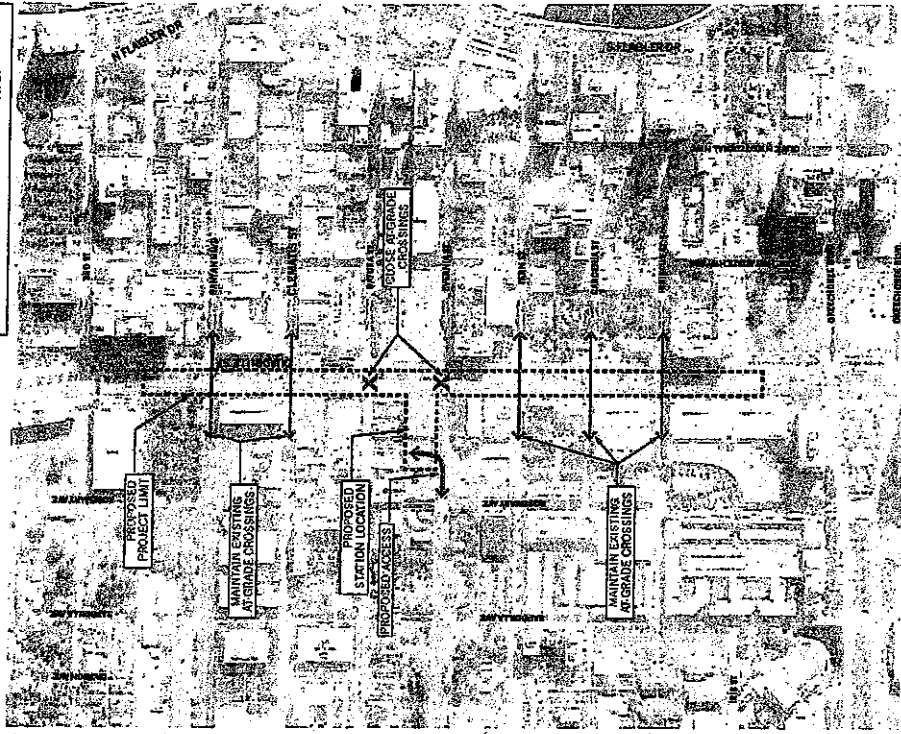
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September 7, 2012

WEST PALM BEACH - CENTRAL
EXISTING VEHICULAR CIRCULATION PATTERN

Figure 3.3-1
West Palm Beach - Central



September 7, 2012

WEST PALM BEACH - CENTRAL
PROPOSED CHANGES TO VEHICULAR CIRCULATION

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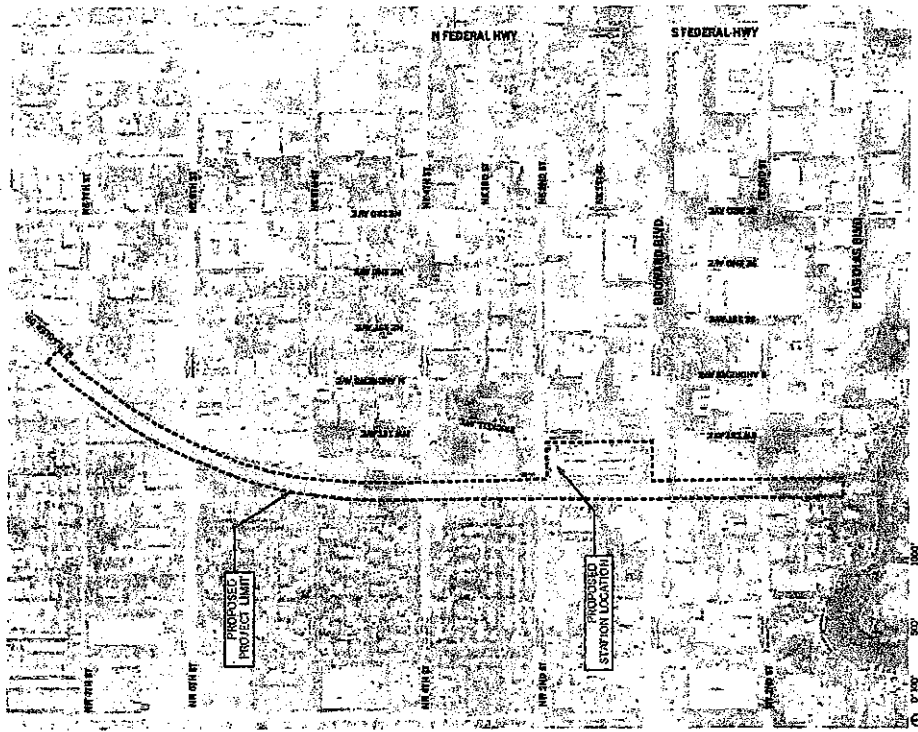
Table 3-3.10
 Fort Lauderdale Alternatives - Existing and Future LOS

Roadway	From	To	Existing			2015 Opening			2035 Buildout			LOS with Project	Project Impact %	Significant Impacts?						
			Lanes	Capacity	AUT	LOS	Background	Project	Total	LOS	Without				Projects	Project	Total			
Broward Blvd	NW 9th Ave	Avenue of the Arts	6	55300	37000	F	58700	151	58851	F	70100	6	53000	F	10%	151	70251	F	0.27%	NO
	Avenue of the Arts	S Andrews Ave	6	55300	52000	C	52000	454	52454	C	62100	6	53000	F	30%	454	52854	F	0.82%	NO
	S Andrews Ave	NE 3rd Ave	6	55300	33500	B	34500	530	35030	B	41200	6	53000	B	35%	530	41730	B	0.96%	NO
	NE 3rd Ave	S Federal Hwy	6	55300	37000	B	38100	303	38403	B	45500	6	55000	B	20%	303	45803	B	0.55%	NO
NW 9th St	NW 9th Ave	Avenue of the Arts	4	36700	16700	B	17900	76	17976	B	23900	4	36700	C	5%	76	24176	C	0.21%	NO
	Avenue of the Arts	S Andrews Ave	4	36700	12400	B	15200	121	15321	B	33900	4	36700	C	8%	121	34121	C	0.33%	NO
	S Andrews Ave	NE 3rd Ave	2	16500	4700	B	6400	76	6476	B	17800	2	16500	F	5%	76	17376	F	0.46%	NO
	NE 3rd Ave	S Federal Hwy	2	16500	4700	B	5700	76	5776	B	12200	2	16500	C	5%	76	12276	C	0.46%	NO
SW 2nd St	S Andrews Ave	S Federal Hwy	2	16500	7100	B	7600	106	7706	B	11100	2	16800	C	7%	106	11206	C	0.64%	NO
	S Andrews Ave	NE 3rd Ave	4	36700	9700	B	9800	227	10027	B	10600	4	36700	B	15%	227	10827	B	0.62%	NO
SE 7th St	NE 3rd Ave	S Federal Hwy	4	36700	34600	B	35600	76	35676	B	22000	4	36700	B	5%	76	22076	B	0.21%	NO
	S Andrews Ave	NE 3rd Ave	2	16500	3600	B	4500	121	4621	B	10900	2	16500	C	8%	121	10721	C	0.73%	NO
	NE 3rd Ave	S Federal Hwy	2	16500	3600	B	4800	76	4876	B	10900	2	16500	C	5%	76	10976	C	0.46%	NO
	S Andrews Ave	SE 7th St	4	36700	20400	B	21500	580	22080	B	28800	4	36700	B	35%	580	28830	B	1.44%	NO
NE 3rd Ave	Broward Blvd	NW 6th St	4	36700	20400	B	21000	303	21303	B	24800	4	36700	B	20%	303	25103	B	0.83%	NO
	SE 7th St	Broward Blvd	4	36700	23000	B	25000	76	25076	B	38600	4	36700	F	5%	76	38676	F	0.21%	NO
Avenue of the Arts	Broward Blvd	NW 6th St	4	36700	23000	B	23400	227	23627	B	26000	4	36700	B	15%	227	26227	B	0.62%	NO
	Broward Blvd	NW 6th St	4	36700	14800	B	18300	151	18451	B	41600	4	36700	F	10%	151	41751	F	0.41%	NO
NW 9th Ave	Broward Blvd	NW 6th St	4	36700	26600	B	29600	151	29751	B	36400	4	36700	F	10%	151	36551	F	0.43%	NO
	Broward Blvd	NW 6th St	2	36700	3400	B	4700	76	4776	B	13200	2	36700	B	5%	76	13276	B	0.21%	NO
S Federal Hwy	E. Las Olas Blvd	Broward Blvd	6	55300	42500	B	43900	106	44006	B	53600	6	55000	C	7%	106	53706	D	0.19%	NO
	Broward Blvd	NW 6th St	6	55300	41500	B	42000	151	42151	B	51100	6	55000	C	10%	151	51251	C	0.27%	NO

Notes:

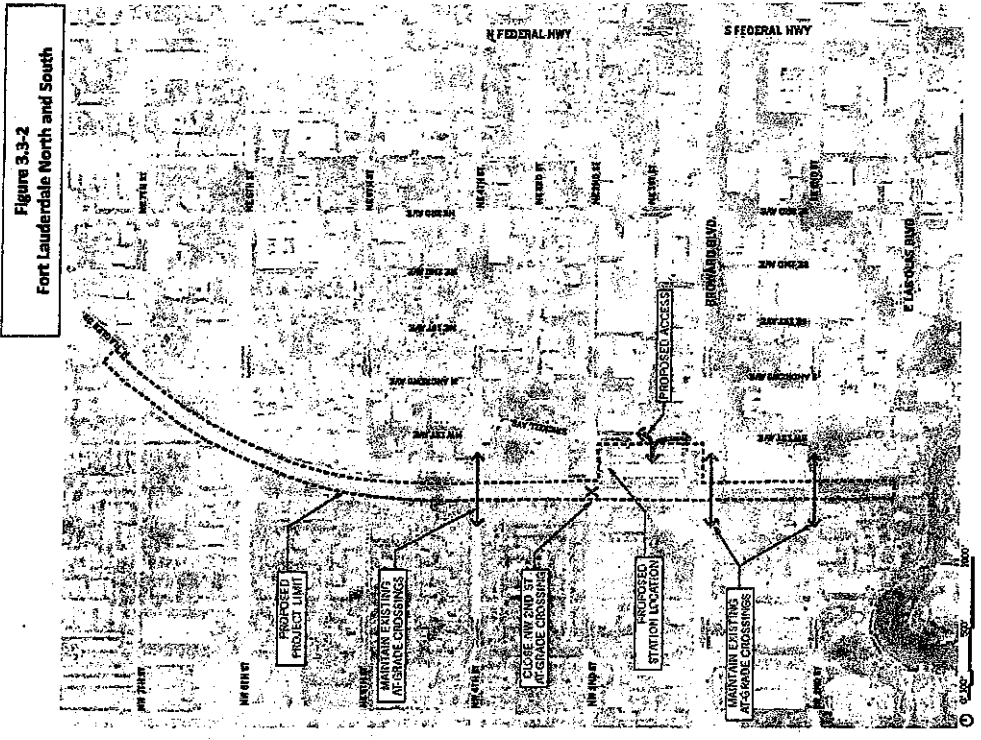
- Existing LOS are obtained from RDOT and Inland County sources. Lane counts are from 2010 and 2011.
- Future background AUT is obtained from 2035 Southeast Florida Regional Planning Model (SERPM).
- Project traffic was manually distributed to surrounding corridors considering future background traffic, land uses, and roadway connectivity.
- Where the future background volume was lower than the existing count, the future background volume was manually adjusted with a growth rate of 5% per year.
- Opening year background volume was obtained by interpolating existing and future volumes.
- Project traffic for opening year was processed to be same as build out year as most of the land uses are expected to built by opening year.
- Capacity is based on RDOT Generalized Annual Average Daily Volumes for urbanized areas.
- Project impact is the percentage of roadway capacity consumed by project trips.
- Impact was assumed to be significant if it is more than 5%.
- Capacities and LOS are based on daily volumes.
- For 2035, number of lanes are assumed same as existing. For 2015 number of lanes are based on the last feasible SERPM model.

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September 7, 2012

FT. LAUDERDALE - NORTH
 EXISTING VEHICULAR CIRCULATION PATTERN



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FT. LAUDERDALE - NORTH
 PROPOSED CHANGES TO VEHICULAR CIRCULATION

Figure 3.3-2
 Fort Lauderdale, North and South

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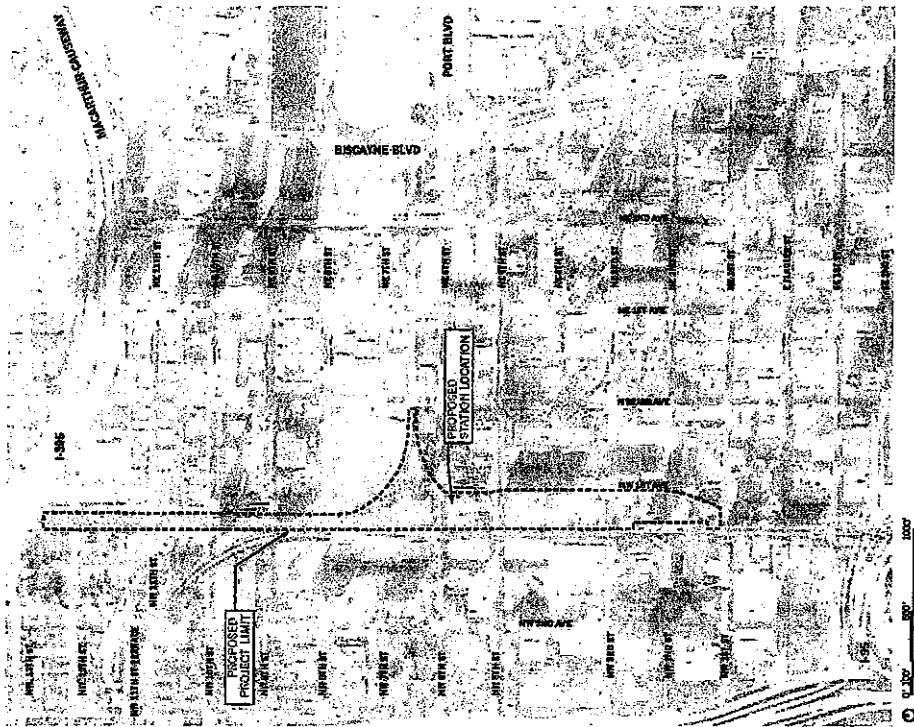
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Table 3-3.12
 Miami Elevated - Existing and Future LOS

Segment	Station	Direction	Daily Passenger Capacity		Daily Passenger Capacity				Daily Passenger Capacity		Daily Passenger Capacity		Daily Passenger Capacity		Daily Passenger Capacity		Daily Passenger Capacity			
			2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	2075	2080	2085	2090	
D/M	Miami Beach	Northbound	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	
			18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000
			18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000
			18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000
D/M	Miami Beach	Southbound	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000
			18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000
			18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000
			18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000
D/M	Miami Beach	Eastbound	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000
			18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000
			18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000
			18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000
D/M	Miami Beach	Westbound	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000
			18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000
			18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000
			18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000

Environmental Assessment for the All Aboard Florida Passenger Rail Project
 - West Palm Beach to Miami, Florida

October 31, 2012



MIAMI - CENTRAL ELEVATED
 EXISTING VEHICULAR CIRCULATION PATTERN

September 7, 2012

Figure 3.3-3
 Miami Elevated



MIAMI - CENTRAL ELEVATED
 PROPOSED CHANGES TO VEHICULAR CIRCULATION

September 7, 2012

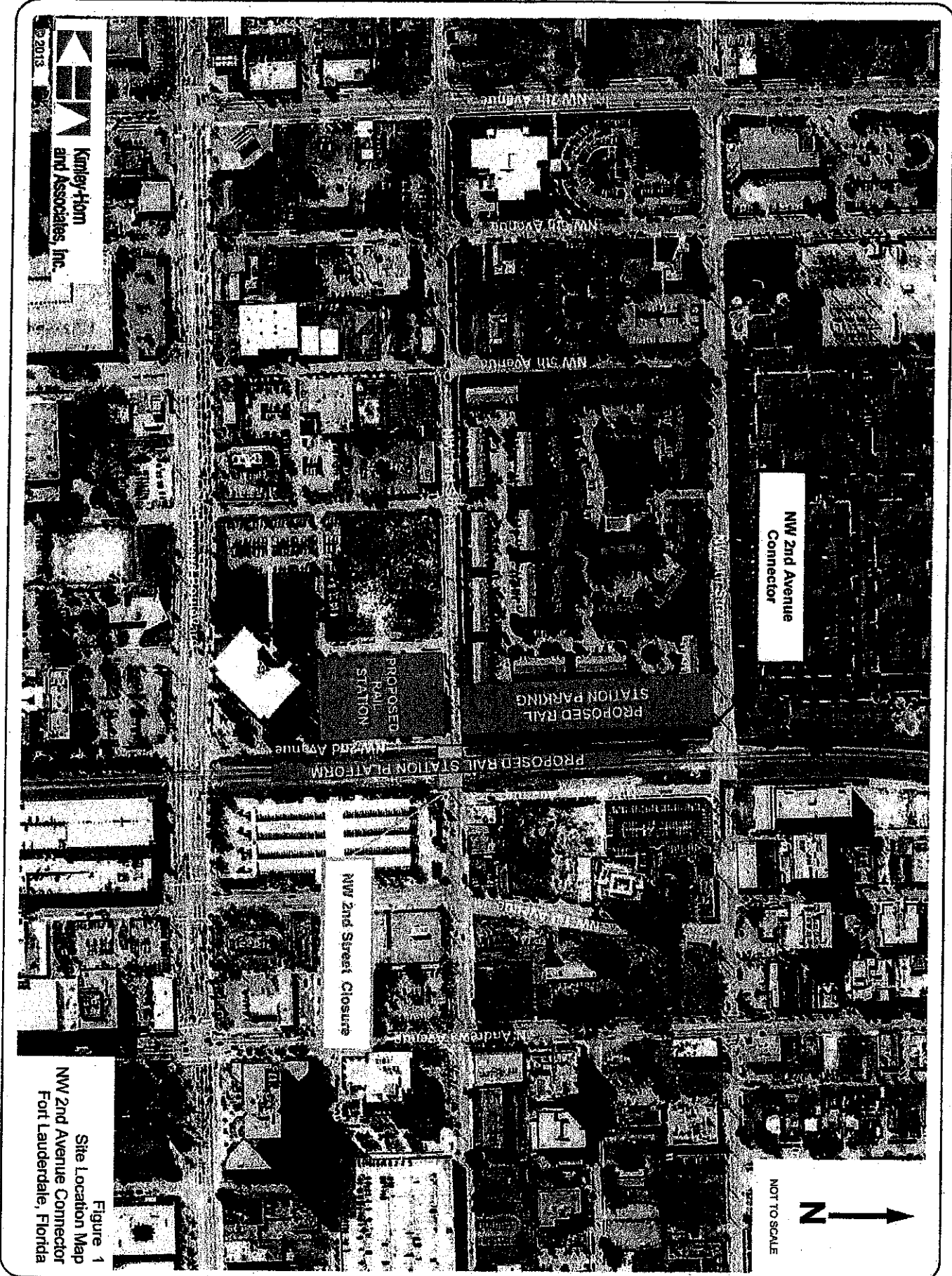


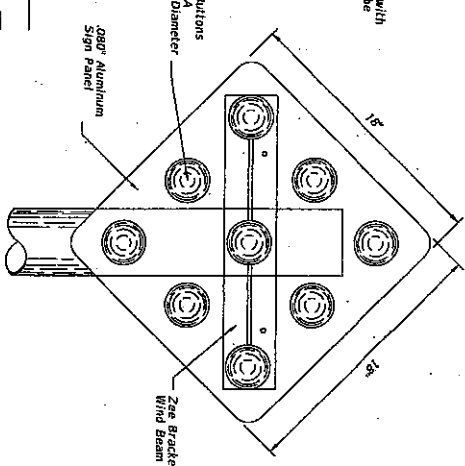
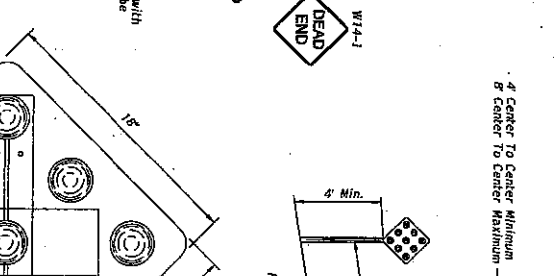
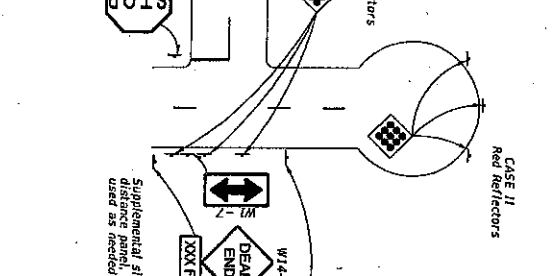
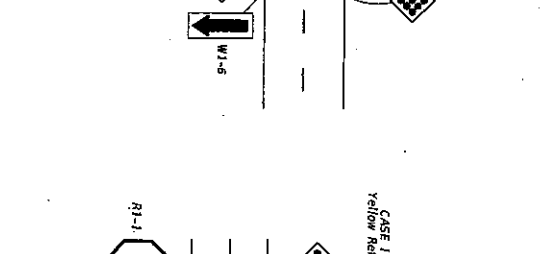
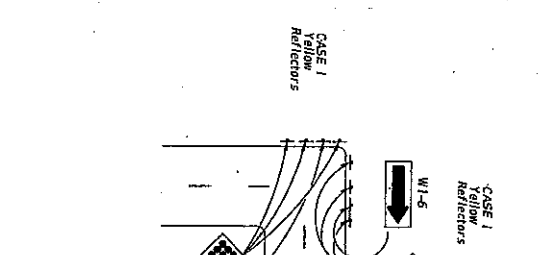
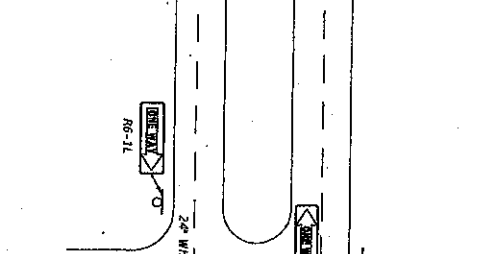
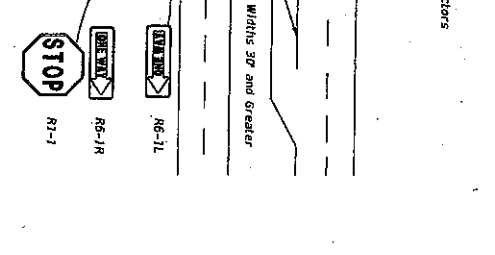
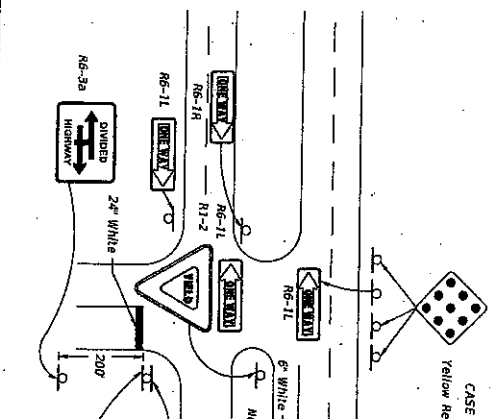
Figure 1
Site Location Map
NW 2nd Avenue Connector
Fort Lauderdale, Florida

© 2013
Krmley-Holm
and Associates, Inc.

NOT TO SCALE
N

12/30/2011 11:48:46 AM rd5507h C:\p\projects\standards\roadway\17300-p\17349-01.dgn

- CASE I** Type 1 Object Markers shall consist of nine yellow reflectors mounted on a yellow reflective background or consist of a retroreflective panel of the same size.
- CASE II** End of Road Markers shall consist of nine red reflectors mounted on a red reflective background or consist of a retroreflective panel of the same size.
- NOTES:**
1. This index applicable to residential and minor streets only. Major streets to be evaluated on a case by case basis.
 2. $\frac{1}{4}$ "-Intersection-Two-Way arrows and reflectors are optional. The need should be based on a review of each location.
 3. For additional details on aluminum round post, sign panel material and bolts, nuts and washers see Index Nos. 11800.
 4. **Case I Installation** - The arrow panels and object markers shall be spaced approximately 20' but not less than 15' from the edge of the travel lane.
 5. Dead end sign shall be posted a sufficient advance distance to permit the vehicle operator to avoid the dead end by turning off, if possible, at the nearest intersecting street.
 6. For pavement marking see Index No. 17346
 7. No guardrail is required unless special field conditions require its use.



Object markers shall be installed on 2" x 4" Aluminum Round Post. Head Bolt with Nut and Lockwasher or 1/4" x 8 Stainless Steel Hex Head Bolt with Flat Washer under Head and Lockwasher under Nut. Post foundation shall be installed in accordance with Index No. 11800.

LAST REVISION	DESCRIPTION	INDEX NO.	SHEET NO.
01/01/12		17349	1



FDOT DESIGN STANDARDS
FY 2012/2013

TRAFFIC CONTROLS FOR STREET TERMINATIONS

U.S. DOT CROSSING INVENTORY FORM

EXHIBIT "D"

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION (FRA)

OMB No. 2130-0017

Public reporting burden for this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for this information collection is 2130-0017. All responses to this collection of information are voluntary. Send comments regarding this burden estimate or any other aspect of this collection, including suggestions for reducing this burden to: Information Collection Officer, Federal Railroad Administration, 1200 New Jersey Ave., SE, Third Floor West, Washington, D.C. 20590.

A. Initiating Agency <input type="checkbox"/> Railroad <input type="checkbox"/> State		B. Crossing Number (max. 7 char.)		C. Reason for Update <input type="checkbox"/> Changes in Existing Data <input type="checkbox"/> New Crossing <input type="checkbox"/> Closed Crossing or Abandoned		D. Effective Date (MM/DD/YYYY)	
Part I: Location and Classification Information							
1. Railroad Oper. Co. (code (max. 4 char.) or name)				2. State (2 char.)		3. County (max 20 char.)	
4. Railroad Division or Region (max. 14 char.)			5. Railroad Subdivision or District (max. 14 char.)		6. Branch or Line Name (max. 15 char.)		7. RR Milepost (max. 7 char.) (nnnn.n)
8. RR I.D. No. (max. 10 char.)		9. Nearest RR Timetable Station (max. 15 char.) (optional)		10. Parent RR (max. 4 char.) (if applicable)		11. Crossing Owner (RR or Company name) (if applicable)	
12. City (max. 16 char.) (check one) <input type="checkbox"/> In <input type="checkbox"/> Near				13. Street or Road Name (max. 17 char.)		STATE SUPPLIED INFORMATION	
14. Highway Type & No. (max. 7 char.)				15. ENS Sign Installed (1-800) <input type="checkbox"/> Yes <input type="checkbox"/> No		21. HSR Corridor ID (2 char.)	
17. Crossing Type (choose one only) <input type="checkbox"/> Public <input type="checkbox"/> Private <input type="checkbox"/> Pedestrian				18. Crossing Position <input type="checkbox"/> At Grade <input type="checkbox"/> RR Under <input type="checkbox"/> RR Over		22. County Map Ref. No. (max. 10 char.)	
19. Type of Passenger Service <input type="checkbox"/> AMTRAK <input type="checkbox"/> AMTRAK & Other <input type="checkbox"/> Other <input type="checkbox"/> None				20. Average Passenger Train Count Per Day		23. Latitude (max. 10 char., nn.nnnnnn)	
26. Is There an Adjacent Crossing With a Separate Number? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Provide Number _____ (7 characters)				24 hr <input type="checkbox"/> 24 hr <input type="checkbox"/> Unknown <input type="checkbox"/>		24. Longitude (max. 11 char., nnn.nnnnnn)	
27. PRIVATE CROSSING INFORMATION							
27.A. Category (check one) <input type="checkbox"/> Recreational <input type="checkbox"/> Farm <input type="checkbox"/> Residential <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial			27.B. Public Access <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown		27.C. Signs/Signals <input type="checkbox"/> None <input type="checkbox"/> Signs Specify (max. 15 char.) _____ <input type="checkbox"/> Signals Specify (max. 15 char.) _____		
28.A. Railroad Use (max. 20 char.)				29.A. State Use (max. 20 char.)			
28.B. Railroad Use (max. 20 char.)				29.B. State Use (max. 20 char.)			
28.C. Railroad Use (max. 20 char.)				29.C. State Use (max. 20 char.)			
28.D. Railroad Use (max. 20 char.)				29.D. State Use (max. 20 char.)			
30. Narrative (max. 100 char.)							
31. Emergency Contact (Telephone No.)			32. Railroad Contact (Telephone No.)			33. State Contact (Telephone No.)	
MUST COMPLETE REMAINDER OF FORM FOR PUBLIC VEHICLE CROSSINGS AT GRADE							
Part II: Railroad Information							
1. Number of Daily Train Movements							
1.A. Total Trains		1.B. Total Switching Trains		1.C. Total Daylight Thru Trains (6 AM to 6 PM)		1.D. Check if Less Than One Movement Per Day <input type="checkbox"/>	
2. Speed of Train at Crossing		2.A. Maximum Time Table Speed (mph) _____		2.B. Typical Speed Range Over Crossing (mph) from _____ to _____			
3. Type and Number of Tracks Main _____ Other _____ If Other, Specify (max. 10 char.) _____							
4. Does Another RR Operate a Separate Track at Crossing? <input type="checkbox"/> Yes If Yes, Specify RR (max. 16 char.) <input type="checkbox"/> No				5. Does Another RR Operate Over Your Track at Crossing? <input type="checkbox"/> Yes If Yes, Specify RR (max. 16 char.) <input type="checkbox"/> No			

U.S. DOT CROSSING INVENTORY FORM

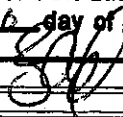
DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION (FRA)

OMB No. 2130-0017

B. Crossing Number (max. 7 char.)		PAGE 2		D. Effective Date (MM/DD/YYYY)	
Part III: Traffic Control Device Information					
1. No Signs or Signals <input type="checkbox"/> Check if Correct	2. Type of Warning Device at Crossing - Signs (specify number of each)				
	2.A. Crossbucks	2.B. Highway Stop Signs (R1-1)	2.C. RR Advance Warning Signs (W10-1) <input type="checkbox"/> Yes <input type="checkbox"/> No	2.D. Hump Crossing Sign (W10-5) <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	
2.E. Pavement Markings <input type="checkbox"/> Stoplines <input type="checkbox"/> RR Xing Symbols <input type="checkbox"/> None			2.F. Other Signs (specify MUTCD type) Number _____ Specify Type (max. 10 char.) _____ Number _____ Specify Type (max. 10 char.) _____		
3. Type of Warning Device at Crossing - Train Activated Devices (specify number of each)					
3.A. Gates	3.B. Four-quadrant (or full barrier) Gates <input type="checkbox"/> Yes <input type="checkbox"/> No	3.C. Cantilevered (or Bridged) Flashing Lights Over Traffic Lane (number) _____ Not Over Traffic Lane (number) _____	3.D. Mast Mounted Flashing Lights (number)	3.E. Number of Flashing Light Pairs	
3.F. Other Flashing Lights Number _____ Specify Type (max. 9 char.) _____			3.G. Highway Traffic Signals (number)	3.H. Wigwags (number)	3.J. Bells (number)
3.K. Other Train Activated Warning Devices: (specify) (max. 9 char.) _____					
4. Specify Special Warning Device NOT Train Activated (max. 20 char.)			5. Channelization Devices With Gates <input type="checkbox"/> All Approaches <input type="checkbox"/> One Approach <input type="checkbox"/> None		
6. Train Detection <input type="checkbox"/> Constant Warning Time <input type="checkbox"/> DC/AFO <input type="checkbox"/> Motion Detectors <input type="checkbox"/> Other <input type="checkbox"/> None		7. Signalling for Train Operation: Is Track Equipped with Train Signals? <input type="checkbox"/> Yes <input type="checkbox"/> No		8. Traffic Light Interconnection/Preemption <input type="checkbox"/> Not Interconnected <input type="checkbox"/> N/A <input type="checkbox"/> Simultaneous Preemption <input type="checkbox"/> Advance Preemption	
9. Reserved For Future Use	10. Reserved For Future Use	11. Reserved For Future Use	12. Reserved For Future Use		
Part IV: Physical Characteristics					
1. Type of Development <input type="checkbox"/> Open Space <input type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Institutional				2. Smallest Crossing Angle (Degrees) <input type="checkbox"/> 0 - 29 <input type="checkbox"/> 30 - 59 <input type="checkbox"/> 60 - 90	
3. Number of Traffic Lanes Crossing Railroad		4. Are Truck Pullout Lanes Present? <input type="checkbox"/> Yes <input type="checkbox"/> No		5. Is Highway Paved? <input type="checkbox"/> Yes <input type="checkbox"/> No	
6. Crossing Surface (on main line) <input type="checkbox"/> 1. Timber <input type="checkbox"/> 2. Asphalt <input type="checkbox"/> 3. Asphalt and Flange <input type="checkbox"/> 4. Concrete <input type="checkbox"/> Concrete and Rubber <input type="checkbox"/> 6. Rubber <input type="checkbox"/> 7. Metal <input type="checkbox"/> 8. Unconsolidated <input type="checkbox"/> 9. Other (Specify) _____					
7. Does Track Run Down a Street? <input type="checkbox"/> Yes <input type="checkbox"/> No		8. Nearby Intersecting Highway? <input type="checkbox"/> Less than 75 feet <input type="checkbox"/> 75 to 200 feet <input type="checkbox"/> 200 to 500 feet <input type="checkbox"/> N/A Is it Signalized? <input type="checkbox"/> Yes <input type="checkbox"/> No			
9. Is Crossing Illuminated? (street lights within approx. 50 feet from nearest rail) <input type="checkbox"/> Yes <input type="checkbox"/> No		10. Is Commercial Power Available? <input type="checkbox"/> Yes <input type="checkbox"/> No		11. Space Reserved For Future Use	
Part V: Highway Information					
1. Highway System <input type="checkbox"/> Interstate <input type="checkbox"/> Federal Aid, Not NHS <input type="checkbox"/> Nat. Hwy System (NHS) <input type="checkbox"/> Non Federal Aid		2. Is Crossing on State Highway System? <input type="checkbox"/> Yes <input type="checkbox"/> No	3. Functional Classification of Road at Crossing	4. Posted Highway Speed	
5. Annual Average Daily Traffic (AADT) Year _____ AADT _____		6. Estimate Percent Trucks	7. Average Number of School Buses Over Crossing per School Day		

CERTIFICATION

I certify this to be a true and correct copy of the record of the City of Fort Lauderdale, Florida.

WITNESSETH my hand and official seal of the City of Fort Lauderdale, Florida, this the 16 day of JULY 2014
 ASST City Clerk

RESOLUTION NO. 14-113

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF FORT LAUDERDALE, FLORIDA, AUTHORIZING EXECUTION OF A STIPULATION WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION AND FLORIDA EAST COAST, LLC PERMITTING, SUBJECT TO CERTAIN TERMS AND CONDITIONS, THE CLOSURE OF THE NW 2ND STREET RAILROAD CROSSING AND DELEGATING TO THE CITY MANAGER THE AUTHORITY TO EXECUTE THE STIPULATION; REPEAL OF ANY AND ALL RESOLUTIONS IN CONFLICT HEREWITH; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, as part of the All Aboard Florida rail project it has been deemed necessary that the N.W. 2nd Street railroad crossing be permanently closed; and

WHEREAS, a Stipulation permitting the permanent closing of the N.W. 2nd Street railroad crossing has been tendered to the City by the Florida Department of Transportation and the Florida East Coast, LLC, the effect of which is to agree to a permanent closing of the railroad crossing and avoidance of a separated administrative hearing thereon under Chapter 120, Florida Statutes;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF FORT LAUDERDALE, FLORIDA:

SECTION 1. That each WHEREAS clause set forth above is true and correct and incorporated herein by this reference.


SECTION 2. That the City Commission hereby authorizes execution of the Stipulation Of Parties for the Closure of NW 2nd Street Railroad-Highway Grade Closing, Crossing Number 272554D, City of Fort Lauderdale, a copy of which is attached hereto as Exhibit "A".

SECTION 3. That the City Commission hereby delegates authority to the City Manager to execution the Stipulation identified in Section 2 hereof.

SECTION 4. That any and all Resolutions in conflict herewith are hereby repealed.


SECTION 5. That this Resolution shall be in full force and effect immediately upon and after its final passage.

ADOPTED this the 1st day of July, 2014.



Mayor
JOHN P. "JACK" SEILER

ATTEST:



City Clerk
JONDA K. JOSEPH

L:\COMM 2014\Resolutions\July 1\14-113.docx

**STIPULATION OF PARTIES FOR THE CLOSURE OF
NW 2ND STREET RAILROAD-HIGHWAY GRADE CROSSING,
CROSSING NUMBER 272554 D,
CITY OF FORT LAUDERDALE, FLORIDA**

The City of Fort Lauderdale, Florida (CITY), Florida East Coast LLC (RAILROAD), and Florida Department of Transportation (DEPARTMENT) agree to the following conditions:

1. The RAILROAD has filed an application with the DEPARTMENT for a permit to close a public railroad-highway grade crossing, pursuant to Section 335.141(1), Florida Statutes (F.S.) and Rule 14-57.012, Florida Administrative Code (F.A.C.), attached as EXHIBIT "A."
2. The public railroad-highway grade crossing, Crossing Number 272554 D, at Railroad Milepost 340.91, is located at NW 2nd Street, Fort Lauderdale, Florida, as shown on the map, attached as EXHIBIT "B." NW 2nd Street is a two-lane road, classified as a major collector.
3. The RAILROAD will notify the CITY a minimum of 72 hours prior to starting any work related to the closing of the subject crossing.
4. The RAILROAD, at its expense, will remove all evidence of the crossing and restore the RAILROAD right-of-way. The RAILROAD is responsible for removing the concrete paneled crossing surface, all crossing signs and signals, roadway pavement, and all crossing debris inside the RAILROAD's right-of-way.
5. Prior to the start of the subject crossing's closure, the RAILROAD, at its expense, will erect, on each side of the crossing, permanent closure signs and object markers as identified in the DEPARTMENT's Standard Index 17349 and shown in EXHIBIT "C".
6. The CITY, at the RAILROAD's expense, will remove any rail crossing advance warning signs and pavement markings pertaining to the subject crossing.
7. All work by the RAILROAD, DEPARTMENT, or CITY will be in compliance with the current Manual of Uniform Traffic Control Devices, incorporated by reference in Rule 14-15.010,

EXHIBIT "A"

F.A.C., the American Association of State Highway and Transportation Officials Policy, and the current Manual of Uniform Minimum Standards for Design, Construction, and Maintenance for Streets and Highways, incorporated by reference in Rule 14-15.002, F.A.C.

8. All work by the RAILROAD or CITY, within the railroad-highway grade crossing area, will be in accordance with all applicable railroad requirements, such as flagging, insurance, etc.

9. The RAILROAD will provide the DEPARTMENT's District Four Rail Coordinator with the scheduled date of work, the project completion date, and a completed U.S. DOT Crossing Inventory form identifying the updated crossing status as closed, as attached in EXHIBIT "D".

10. This Stipulation of Parties has been executed by all parties having an interest in this matter. The RAILROAD and CITY waive the right to request an administrative hearing, provided by Chapter 120, F.S., relating to the closure of the NW 2nd Street railroad-highway grade crossing by execution of this Stipulation of Parties.

11. The terms of this Stipulation of Parties may not be changed, waived, discharged or terminated orally, but only by an instrument or instruments in writing, signed by RAILROAD, CITY, and DEPARTMENT.

12. Any failure of any party to insist upon the strict performance of any terms or provisions of this Stipulation of Parties shall in no way constitute a waiver of future violations of the same or any other term or provision of this Stipulation.

13. This Stipulation of Parties is governed by, and shall be interpreted and construed in accordance with, the laws of the State of Florida.

14. The DEPARTMENT authorizes the closure of the NW 2nd Street railroad-highway grade crossing as evidenced by the execution of this Stipulation of Parties, provided all conditions of the Stipulation are met, the removal of the crossing surface and signs are completed within eighteen (18) months of the execution, and the completed closure project is inspected and approved by the DEPARTMENT.

(THIS CONCLUDES THE BODY OF THIS STIPULATION OF PARTIES)

FLORIDA EAST COAST LLC – RAILROAD

By: _____
(Authorized Signature)

Title: _____

Printed Name: _____

Attest: _____

Date: _____

CITY OF FORT LAUDERDALE – CITY

By: _____
(Authorized Signature)

Printed Name: _____

Title: _____

Attest: _____
(Authorized Official)

Date: _____

**STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION**

By: _____
State Freight & Logistics Administrator

Date: _____

**DEPARTMENT OF TRANSPORTATION
LEGAL REVIEW**

By: _____
Attorney, FDOT

Date: _____

