APRIL 2018

MARTIN COUNTY TRANSIT OPERATIONS CENTER FEASIBILITY STUDY

PROJECT NO: RFQ2015-2825

PREPARED FOR:
Martin Metropolitan Planning Organization

MARTIN MPO | MARLIN

PREPARED BY:
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1700 NW 66th Avenue, Suite 106
Plantation, FL 33313

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MARTIN MPO

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EXECUTIVE SUMMARY

This feasibility study was sponsored by the Martin Metropolitan Planning Organization (MPO) in a cooperative effort with Martin County Public Transit (MCPT). The purpose of this study is to provide planning services for a conceptual operations plan for a full-service transit operations facility/customer service center and to identify potential sites for development of that facility for MCPT. The project team coordinated closely with MCPT and other Martin County staff to identify long range staffing and operations needs and determine appropriate parcel size. Eligible sites were vetted based on ownership, efficient operations performance criteria, access needs, community impacts and following Federal Transit Administration (FTA) Guidelines and Regulations. Project deliverables include documenting agency needs and spatial requirements, a conceptual illustration of facility operations and a list/ map of the viable locations for the County to consider in the future planning for a MCPT facility.

This Transit Facility Feasibility Study involved a collaboration of stakeholder agencies including the MPO, MCPT, Martin County Public Works, Martin County Growth Management Department, Martin County Information Technology Services Department, and the Florida Department of Transportation (FDOT) District 4.

Best Practices Review

MCPT plans to have a fleet of 20-22 buses by 2024/2025 and long range plans are for a fleet of 30 fixed route vehicles including the FTA required 20% spare vehicles. A best practices review was undertaken reviewing comparable facilities from transit agencies across the United States. The National Transit Database (NTD) was queried to find transit systems with 30 directly operated (not contracted) fixed-route vehicles available in maximum service. Five facilities were selected and the average lot size is 6.4 acres. Based on information from the peer review and after discussion with the Stakeholder Advisory Team (SAT), it was agreed that the approximate size of a facility in Martin County would average approximately 7.0 acres.

Employment data reported to the NTD includes agencies' full-time and part-time employment numbers (including vehicle operators). The peer average for total number of employees (118) was used to represent future total employment to be housed at the proposed Martin County Transit Operations Center.

To estimate the number of parking spaces needed for staff/visitor parking, a parking supply ratio was calculated for each peer agency by dividing the number of parking spaces at the peer agencies' maintenance and operations facility (which were inventoried via aerial photography) by each agencies' total employment. The average parking supply ratio was applied to the future total employment estimate for the Martin County Transit facility.

Therefore, the conceptual drawing of a transit facility and administrative building will include 84 parking spaces for Martin County transit staff customers. Finally, with Martin County anticipating 30 standard-size buses, eleven paratransit buses, four driver transport vehicles, and two utility vehicles, the vehicle storage lot will provide 48 storage spaces for the Martin County Transit fleet.

Regulations and Guidelines

It is fully anticipated that MCPT will be seeking federal funding for the development and implementation of a transit operations center. A summary of the most significant guidelines related to project siting is provided in this report including Capital Investment Grant Guidelines, Americans with Disabilities Act (ADA) requirements and National Environmental Policy Act (NEPA) requirements.

FTA specifically indicates that funding is available for facilities that support transit operations, such as maintenance garages and administrative buildings under the Bus Program.

The program guidance indicates that the basis for new maintenance and administrative facilities or major expansions or renovations of existing facilities should be documented in a feasibility study. Activities would include the development of site evaluation criteria, identification

and evaluation of alternative sites based upon site evaluation and design requirements. These criteria are documented in this feasibility study as a first step in project development by the MPO. The next step would be for Martin County to utilize this information for final site selection and preliminary building design, environmental documentation, and the development of a staging and financing plan.

If Martin County chooses to move forward, this document includes information related to Title VI and ADA requirements and a NEPA checklist that will be extremely helpful in guiding Martin County through the FTA funding and approval process.

Projected Trip Generation

The project trip generation was developed in two layers – first the trip generation for employees and customers accessing and egressing the site was projected, and then bus traffic accessing and egressing the site was projected and the two calculations were summed. Finally, a comparison of the estimates were made to similar projects. The results indicate that a reasonable assessment of daily traffic has been developed. For the administration, operations/dispatch, and customer service center functions of the project, Land Use code 710, General Office, of the Trip Generation Manual was used to determine the total daily trips and AM peak hour and PM peak-hour trips generated by the project. The anticipated employment level is 118 employees, and 41 of the 118 are anticipated to be drivers, due to the fleet size consisting of 30 conventional transit buses and 11 paratransit vehicles.

Since the office portion of the facility will also support a customer service center, it was determined through collaboration with MCPT that on average, ten additional customers per day would stop in for assistance during the hours (approximately 8am-5pm, or 9 hours) added to the current 12-13 customers per week in their customer service center. Ten customers per day would be a notable increase, but to be conservative, this value was utilized to account for future growth in customer service.

The fleet size is anticipated to consist of 41 buses (30 conventional transit buses with a capacity of approximately 45 passengers, and 11 paratransit vehicles). Assume that 80% are in operation on any one day, while 20% are not being utilized (to be used as a substitute if a bus happens to have mechanical issues during its routes or undergoing maintenance). Assume that 75% of the buses that are being utilized leave the facility before the AM peak hour, and 25% leave the facility during the AM peak hour. Assume that 75% of the buses being utilized return to the facility after the PM peak hour, and 25% arrive at the facility during the PM peak hour. Comparing the factored Napa Valley Transit Agency transit facility to the proposed Martin County transit facility:

			Daily			AM Peak			PM Peak		
Land Use	Intensity	Units	In	Out	Total	In	Out	Total	In	Out	Total
MCPT	Total	Trips	242	242	484	53	18	71	20	48	68

The comparison shows that the results derived for the Martin County Transit Operations Facility can be considered reasonable. These results do not represent a significant traffic generator and should be used in the future to assess site access and driveway needs. A large majority of employee and bus traffic from a transit operations center occurs over a 15 plus hour day. Drivers arrive very early in the morning and most buses will exit the site before the AM peak period. Administrative employees and customers will reflect normal office type traffic through the morning and afternoon. There will be a driver shift change that occurs through the mid-day and then the buses arrive after the PM peak throughout the evening and drivers depart shortly after.

Facility Concepts

The team developed a set of guidelines to serve as a framework for planning and conceptualizing the transit operations service center. The guidelines reflect the following:

- Sizing of the overall center and its components
- Desirable site location characteristics
- Design considerations and parameters
- Trip Generation – daily, peak traffic periods and peak period of operations
- Access and circulation requirements (including multimodal access and parking needs)

Sizing the facility relied on guidance from the Federal Transit Administration (FTA) and the American Public Transportation Association (APTA), peer data, and assumptions about the area required for landscaping, setbacks, and drainage.

Based on the verified needs, the team developed two illustrative, high-level concept drawings for the center and developed overall spatial needs for the entire center in acres. These drawings illustrate building envelopes, parking and circulation, and potential connections to surrounding land uses and the surrounding transportation system.

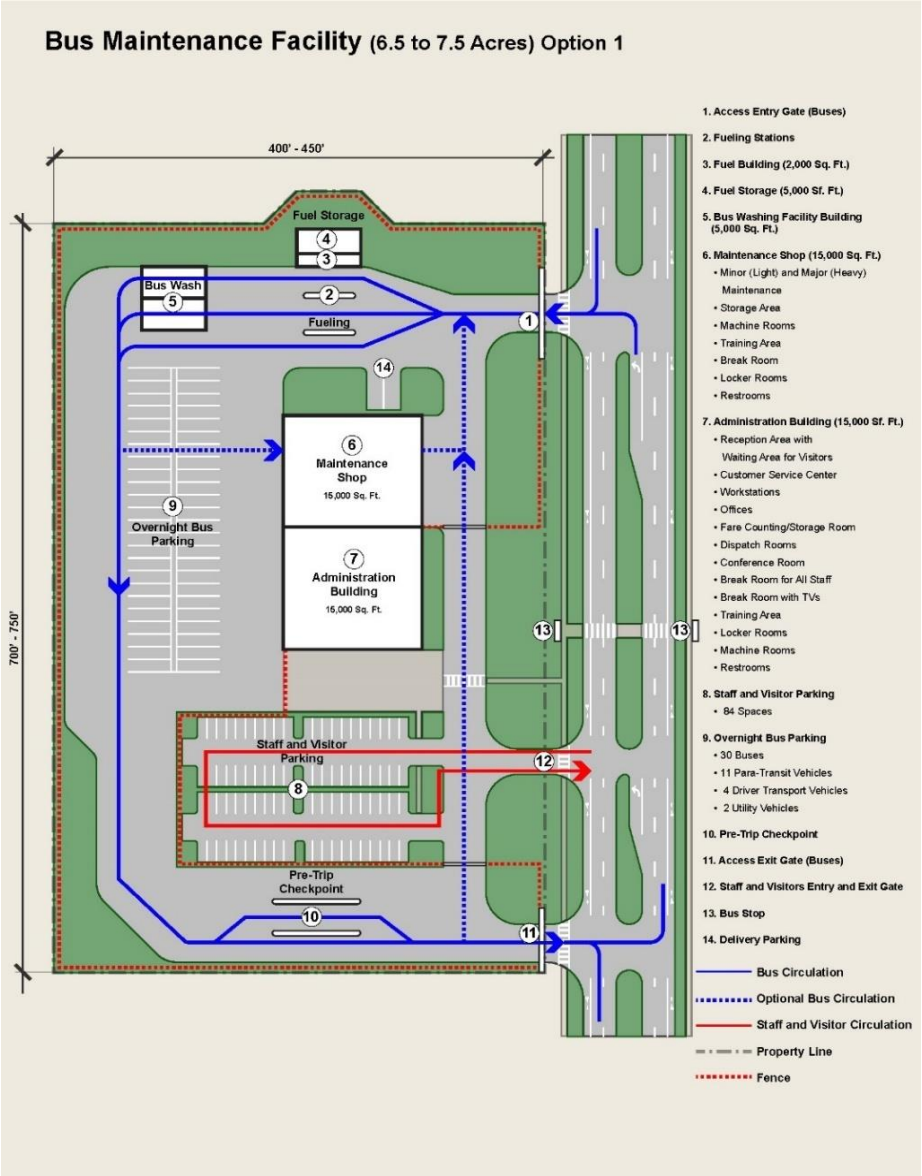
Through discussion with the SAT and close coordination with MCPT, it was agreed that the ideal size of a facility in Martin County to accommodate the expanded fleet and expanded functionality would average approximately 6.5 to 7.5 acres. However, in case an ideal site of that size could not be located, it was agreed that the site analysis would seek properties of a minimum of five (5) acres. In addition, it was determined there would be no maximum acreage when performing the site analysis because there was the possibility of finding a particularly large parcel that would have the potential of being divided.

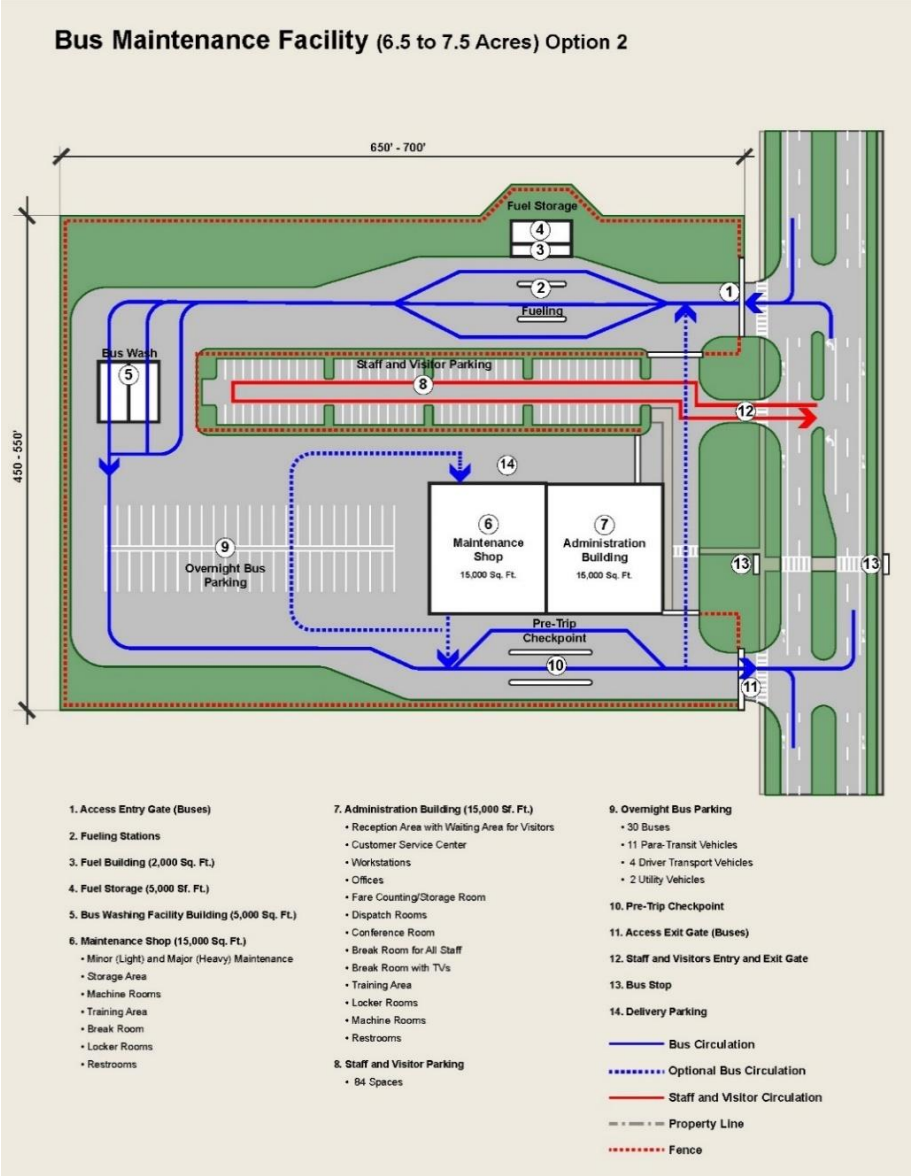
Using this information 2 concepts of operations were developed based on potential portrait and landscape shaped parcels.

SITE ELEMENTS	UNITS	NOTES	SIZE
Administration and Operations Building		**Subtotal**	**15,000 Sqft**
		Includes customer service and reservations center, 2 dispatch offices, training/conference rooms, staff offices and workstations, contractor office, break rooms, locker rooms, fare counting/storage, common spaces	
Maintenance Building		**Subtotal**	**14,832 Sqft**
repair bays (pits/lifts)	5 bays	2 minor, 3 major, 20'x80' feet each (1,600 sf each) per FTA	8,000 Sqft
interior cleaning bays	2 bays	20'x50' each (1,000 sqft each)	2,000 Sqft
support space for stockroom, restrooms, offices - minor maintenance	41 buses	12 sqft/bus avg per FTA	492 Sqft
support space for stockroom, restrooms, offices - major maintenance	41 buses	20 sqft/bus avg per FTA	820 Sqft
stockroom (with dock)	41 buses	25 sqft/bus per FTA plus 240 sqft for dock	1,265 Sqft
shop areas	41 buses	20 sqft/bus from FTA	820 Sqft
other activities, major maintenance	41 buses	35 sqft/bus from FTA	1,435 Sqft
Exterior Facilities		**Subtotal**	**79,897 Sqft**
Exterior bus wash	1 wash	2,800 sqft from transit systems of similar size	2,800 Sqft
Pre-trip service bays	2 bays	20'x50' each (1,000 sqft each)	2,000 Sqft
Fueling bays	2 bays	20'x50' each (1,000 sqft each)	2,000 Sqft
Fuel storage	47 vehicles	2,000 sqft per transit systems of similar size	2,000 Sqft
Bus vehicle parking spaces	41 vehicles	12'x42' each space + 55' aisle per FTA	47,724 Sqft
Support vehicle parking spaces	6 vehicles	8.5'x17.5' spaces at 90 degrees in two rows with 26' aisle per ITE	1,556 Sqft
Employee/visitor parking spaces	83 spaces	0.7 spa/employee; 8.5'x17.5' spaces at 90 degrees in two rows with 26' aisle from ITE	21,518 Sqft
Bus stop	1 pad	10'x30' pad (300 sf)	300 Sqft
Subtotal Sqft			**109,729** Sqft
Circulation areas		additional 20% assumed	21,946 Sqft
Stormwater management		0.5 acre assumed	21,780 Sqft
TOTAL SQFT			**153,455** Sqft
TOTAL AC			**3.5 Acre**
LAND DEVELOPMENT CODE MULTIPLIER		**2.0**	**7.0 Acre**

NOTES
1 - All numbers in this spreadsheet are subject to change based on site plan, size and shape of property.
2 - The 80-foot repair bays allow for circulation and staging adjacent to the vehicle. This space could be reduced. Minimum length is 45' based on one 40-foot bus.
3 - Fuel storage square footage is flexible depending on fuel type and site plan.
4 - Fueling bays, interior cleaning bays, and pre-trip service bays could be combined based on final operations plan.
5 - Peer review data was used to derive the employee/visitor parking supply ratio.

Concepts of Operations (Portrait and Landscape)





Site Analysis

A comprehensive review of land uses and property information was performed in order to identify the most suitable properties for a future transit operations facility/customer service center. The goal of this exercise is to reveal suitable geographic locations for the facility when considering surrounding land use, existing utilities, traffic impacts, and connectivity to transit. In addition, another important factor to consider in the screening process is to find locations that would increase eligibility for federal funding to construct the facility. To become eligible, the site would have to be selected by utilizing a set of performance criteria based on:

- Environmental, cultural, or historical concerns
- Local land development codes and zoning regulations
- Access needs/restrictions – transit, Americans with Disabilities Act requirements, signalization, medians and curb cuts
- Projected future traffic
- Upstream and downstream signalized intersection congestion
- Compatibility with adjacent land uses
- Transit operations and impacts to dead head time and transit costs per hour
- Most recent/available real estate/property appraiser information
- Other considerations identified by stakeholders

The site analysis component of this study involved a comprehensive review of available parcels within Martin County. Martin County GIS data was obtained from Martin County's Information Technology Services, MCPT, Treasure Coast Regional Planning Council (TCRPC), local municipalities, FDOT and other stakeholders to develop a system of data layers that was used to support the site selection process.

The results of the analysis showed 28 sites that are viable for potential development. The top 10 sites are in the table below. Key factors in developing the most viable site locations were: sites that are publicly owned, possess appropriate land use designations, and are adjacent to non-residential uses. The table below and map on the following page presents the most likely sites to meet community preferences. Note the top 4 are the publicly owned sites. Note that Site 52 is the smallest of the publicly owned sites and may be difficult to provide enough space and drainage for the full facility. It was brought up by the SAT that development of that site could be combined with Site 53 which is across Ruhnke Street.

NUM	Address	Available Acreage	Ownership	Future Land Use	Adjacent Future Land Use
53	951 SE Ruhnke St	16.02	Martin Co.	General Institutional	General Institutional
45	2616 SE Dixie Hwy	10.51	Martin Co.	General Institutional	General Institutional
55	5250 SE Willoughby Blvd	15.40	Martin Co.	Recreational	Agricultural
52	900 SE Ruhnke St	5.15	Martin Co.	General Institutional	General Institutional
46	1699 SE Darling St	7.76	Private	General Institutional	Agricultural
47	1845 SE Salerno Rd	7.77	Private	General Institutional	Commercial/Residential
40	2204 SE Indian St	9.67	Private	Commercial	Industrial
37	3261 SE Railroad Ave	6.78	Private	Commercial	Industrial
41	2194 SE Indian St	6.64	Private	Commercial	Industrial
42	3546 SE Commerce Ave	7.10	Private	Commercial	Industrial

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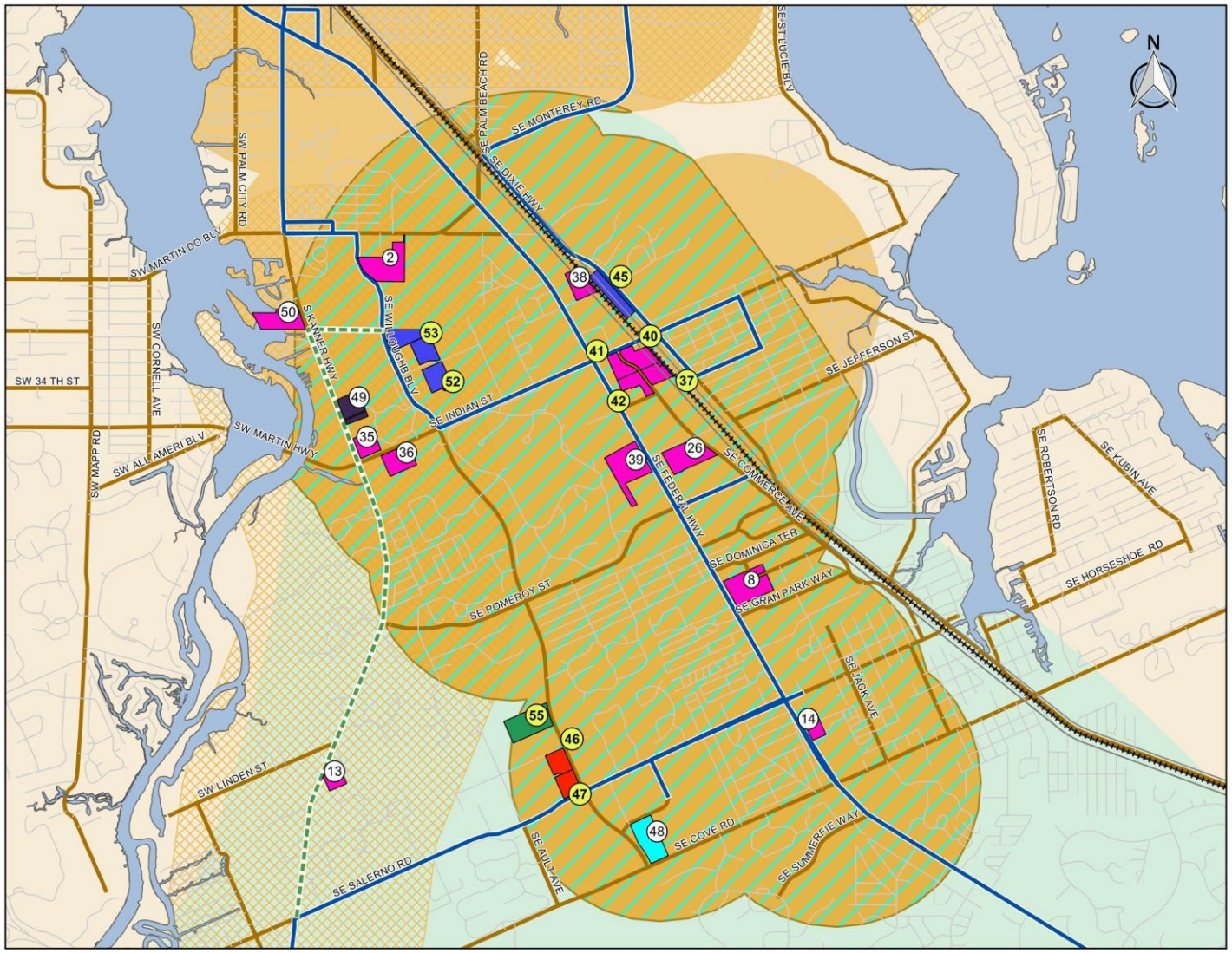
Transit Operations Facility Feasibility Study

Potential Sites

Legend

- (#) Site Index Number
- (#) Top 10 Site Index Number
- ADA ParaTransit 3/4 Mile Buffer
- 30min Rule Boundary
- 30min Rule + ADA Area
- ADA 3/4 Buffer Planned Bus Routes
- Commercial
- Commercial/Residential
- Public/General Institutional
- Private/General Institutional
- Industrial
- Information N/A
- Planned Bus Route (Long Range)
- Planned Bus Route (Short Term 2025)
- Existing Bus Routes
- Major Roads
- Minor Roads
- Railroad
- Urban Service Area



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STUDY PURPOSE

This feasibility study was sponsored by the Martin Metropolitan Planning Organization (MPO) in a cooperative effort with Martin County Public Transit (MCPT). The purpose of this study is to provide planning services for a conceptual operations plan for a full-service transit operations facility/customer service center and to identify potential sites for development of that facility for MCPT. The project team coordinated closely with MCPT and other County staff to identify long range staffing and operations needs in order to identify needs and subsequently parcel size. Eligible sites were vetted based on ownership, efficient operations performance criteria, access needs, community impacts and following Federal Transit Administration (FTA) Guidelines and Regulations. Project deliverables include documenting agency needs and spatial requirements, a conceptual illustration of facility operations and a list/map of the viable locations for the County to consider in the future planning for a MCPT facility.

BACKGROUND

MCPT is managed by the Martin County Public Works Department and currently utilizes an on-road and support services contractor to operate and maintain fixed route (including regional "MARTY" services) and paratransit services for the County. Plans for a County owned facility have been discussed for a number of years.

Most recently, the Florida Department of Transportation (FDOT), in coordination with MCPT, undertook the development of a Martin County Transit Business Plan. On May 9, 2017 the plan was presented to the Martin County Board of County Commissioners and they approved the addition of one Transit Project Manager position, directed staff to continue planning efforts for a Transit Building, and considered future investment levels outlined in the Transit Business Plan. The study included a Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis, and the top recommendation to best maximize efficiency and increase effectiveness of MCPT's operation was to initiate a plan for a wholly owned maintenance and operations/dispatch facility.

This Feasibility study represents an initial effort sponsored by the MPO to assist MCPT in identifying viable properties for the transit operations center. The effort is organized into 5 tasks including:

Task 1.0 Coordination with Stakeholder Agencies
Task 2.0 Best Practices Review
Task 3.0 Development of Spatial Parameters
Task 4.0 Site Analysis
Task 5.0 Documentation

COORDINATION

This Transit Operations Facility Feasibility Study involved a collaboration of departments and agencies including the Martin MPO, Martin County Public Works, MCPT, Martin County Growth Management Department, Martin County Information Technology Services Department, and FDOT District 4.

PROJECT CONCEPTS PRESENTED AT THE MPO TAC

As the study progressed, status updates were regularly shared with the Stakeholder Advisory Team (SAT) and the MPO Technical Advisory Committee (TAC), Citizen's Advisory Committee (CAC), Bicycle and Pedestrian Advisory Committee (BPAC), and the Martin MPO Policy Board. Staff from all departments and advisory committees provided valuable insights and information that assisted in guiding the direction of the study.

BEST PRACTICES REVIEW

Prior to engaging in a site analysis of potential properties, a best practices review was undertaken reviewing comparable facilities from transit agencies across the United States. Martin County Transit anticipates long term growth to use a fleet size of 30, 40' fixed route vehicles and 11 paratransit vehicles.

As of December 1, 2017, MCPT is operating at maximum service with eight (8) vehicles. The addition of a Jensen Beach service (2 buses), Palm City service (2 buses), I-95 service (2 buses), South Stuart service (2 buses) and an additional bus in Indiantown (1 bus) will require 17 vehicles operating in maximum service at around by 2024/2025. Including the FTA required spare ratio of 20% the fleet size will be 20 to 22 vehicles at that time.

An initial set of peers was identified using data from the National Transit Database (NTD). Specifically, the NTD was queried to find transit systems with approximately 30 directly operated (not contracted) fixed-route vehicles available in maximum service.

This set of transit systems was narrowed down to those that operate out of a facility of the kind that MCPT is planning. Pasadena Transit, the transit agency in Pasadena, CA, was added to the set. Pasadena Transit is not included in the NTD because it does not rely on federal funding; however, it is in the process of building a new operations and maintenance facility to accommodate its fleet of 30 full-sized vehicles and 15 paratransit vehicles and was deemed to be relevant on that basis. Table 1 provides a summary of the peer agencies and Figure 1 provides a brief summary of each facility's operations, a bird's eye perspective of the facility footprint, and a snapshot of relative transit operation figures to compare.

SAMPLE MAINTENANCE FACILITY FOR FIXED ROUTE AND PARATRANSIT COURTESY OF HUITT - ZOLLERS

Of the five facilities reviewed, the average lot size is 6.4 acres. Four out of the five facilities occupy over five acres. Pasadena, CA however, operates a facility considerably smaller, operating on a parcel of 1.6 acres. After inquiring with a local Pasadena transit agency official, it was expressed that logistics are quite difficult to operate in such a tight space and the facility is already operating at maximum capacity. This site was also unique in that parcel is under a lease agreement while the other four facilities operate on publicly owned land. The agency expressed that it is now in the process of purchasing a property of larger size to relocate operations. Table 1 provides the detailed analysis of

size needs for the proposed facility based on the peer review and FTA requirements.

Employment data reported to the NTD includes agencies' full-time and part-time employment numbers (including vehicle operators). The peer average for total number of employees (118) was used to represent future total employment to be housed at the new Martin County Transit facility.

To estimate the number of parking spaces needed for staff/visitor parking, a parking supply ratio was calculated for each peer agency by dividing the number of parking spaces at the peer agencies' maintenance and operations facility (which were inventoried via aerial photography) by each agencies' total employment. The average parking supply ratio was applied to the future total employment estimate for the Martin County Transit facility.

Therefore, the conceptual drawing of a transit facility and administrative building will include 84 parking spaces for Martin County transit staff customers. Finally, with Martin County anticipating 30 standard-size buses, eleven paratransit buses, four driver transport vehicles, and two utility vehicles, the vehicle storage lot will provide 48 storage spaces for the Martin County Transit fleet.

SAMPLE TRANSIT OPERATIONS CENTER ACTIVITY
COURTESY OF INSIDE METRO

Table 1: Average of Peer Review Facilities

PARAMETERS	PASADENA, CA	TOPEKA, KS	SCRANTON, PA	PT HURON, MI	SANTA FE, NM	AVERAGE
Vehicles available for max service (2015 NTD, fixed-route bus)	30	30	30	36	30	**31.2**
Vehicles available for max service (2015 NTD, paratransit bus)	15	13	32	59	33	**30.4**
Acreage (approx.)	1.6	6.7	5.6	11.3	6.9	**6.4**
Total employees (2015 NTD, full- plus part-time)		95.5	128.5	126.9	119.5	**117.6**
Employee and visitor parking spaces (approx.)		42	67	134	91	**83.5**
Employee and visitor parking spaces/total employees		0.4	0.5	1.1	0.8	**0.7**

NOTES

1 - Pasadena vehicle numbers are from the agency, not the NTD. Pasadena Transit does not appear to report to the NTD.

2 - Pasadena acreage is for the existing leased facility. The agency is building a new facility. The agency's project manager acknowledges that the existing and proposed sites are both constrained.

3 - Acreages include setbacks, easements, and driveways.

4 - The Port Huron fleet includes 6 buses designated for Commuter Bus service.

Figure 1: Summary of Peer Review Facilities

	AGENCY DESCRIPTION	TRANSIT FACILITY AERIAL	FACILITY FIGURES	
Pasadena, CA	Pasadena Transit is a city-owned local bus service. Pasadena Transit consists of 8 routes in the City of Pasadena. All routes connect with the Metro Gold Line. City Officials did express that the current transit facility is constrained. Pasadena is in the process of building a city-owned facility as the current site is leased.		SITE SIZE TOTAL EMPLOYEES FLEET SIZE PARKING SPACES	1.6 Acres N/A 30 Bus/15 Paratransit N/A
Topeka, KS	The Topeka Metropolitan Transit Authority provides bus service within the Topeka city limits and works with other organizations to meet mass transit needs. The Metro provides fixed route service and paratransit service Monday through Saturday during daytime hours. The Metro currently operates twelve fixed routes and two daily specials.		SITE SIZE TOTAL EMPLOYEES FLEET SIZE PARKING SPACES	6.7 Acres 95.5 30 Bus/13 Paratransit 42
Scranton, PA	The County of Lackawanna Transit System (COLTS) is the operator of public transport for the City of Scranton urban area and its surrounding area of Lackawanna County. Most routes depart from the Lackawanna Transit Center on Lackawanna Avenue near the Mall at Steamtown in downtown Scranton.		SITE SIZE TOTAL EMPLOYEES FLEET SIZE PARKING SPACES	5.6 ACRES 128.5 30 Bus/32 Paratransit 67
Pt. Huron, MI	Pasadena Transit is a city-owned local bus service. Pasadena Transit consists of 8 routes in the City of Pasadena. All routes connect with the Metro Gold Line. City Officials did express that the current transit facility is constrained. Pasadena is in the process of building a city-owned facility as the current site is leased.		SITE SIZE TOTAL EMPLOYEES FLEET SIZE PARKING SPACES	11.3 Acres 126.9 36 Bus/59 Paratransit 134
Santa Fe, NM	Santa Fe Trails is the local transit agency in Santa, Fe, New Mexico. Santa Fe Trails operates ten bus routes which serve most areas of the city. Nearly all of the routes originate at either the Downtown Transit Center or the Santa Fe Place Transit Center.		SITE SIZE TOTAL EMPLOYEES FLEET SIZE PARKING SPACES	6.9 Acres 119.5 30 Bus/33 Paratransit 91

REGULATORY GUIDELINES

United States Department of Transportation (USDOT) and FTA Regulations

It is fully anticipated that MCPT will be seeking federal funding for the development and implementation of a transit operations center. A summary of the most significant guidelines is provided in this section

FTA C 9300.1B CAPITAL INVESTMENT PROGRAM GUIDANCE AND APPLICATION INSTRUCTIONS provides guidance on the administration of the Capital Investment Program under Title 49 U.S.C. 5309 with specific guidance on the development of transit operations and maintenance facilities.

The Capital Investment Program provides funds to invest in capital equipment and facilities to allow for efficient and improved public transportation services. For bus and bus related facilities, the program provides for extraordinary capital needs that require resources in excess of funds supplied by formula funding or to advance important special emphasis initiatives. For all program-funded projects, FTA expects recipient agencies to maintain sufficient funding resources to ensure the recapitalization and operation of the overall transit system.

Projects eligible for funding under the Capital Investment Program include those defined in Section 5309. Section 5309 authorizes grants for buses and bus facilities, fixed guideway modernization, New Starts and Small Starts, and the development of corridors to support new fixed guideway capital projects.

The major purchases under the Bus and Bus-related Facilities category are buses and other rolling stock, ferry boats, ancillary equipment, and the construction of bus facilities (i.e., maintenance facilities, garages, storage areas, waiting facilities and terminals, transit malls and centers, and transfer facilities and intermodal facilities).

This section contains information concerning program requirements specific to the construction or acquisition of facilities funded through the Bus Program.

FTA generally assists in building two kinds of facilities under the Bus Program:

(1) Facilities that support transit operations, such as maintenance garages and administrative buildings; and

(2) Facilities that provide passenger amenities and extend into the built environment such as bus terminals, stations, shelters, and park-and-ride lots as well as intermodal facilities that include both transit and intercity bus services.

The program guidance specifically indicates that the basis for new maintenance and administrative facilities or major expansions or renovations of existing facilities should be documented in a feasibility study. Activities would include an evaluation of the condition and adequacy of the existing facility (which doesn't exist) and the development of site evaluation criteria, identification and evaluation of alternative sites based upon site evaluation and design requirements. These criteria are documented in this feasibility study. Final site selection and preliminary concept building design, environmental documentation, and the development of a staging and financing plan will need to be performed by the County utilizing the information provided in this report.

FTA's general policy is to provide assistance for facilities that are adequate for the grant recipient's present needs and that will meet, in a realistic way, its needs of the future. Thus, for a grant recipient currently operating 20 vehicles, a request for a bus maintenance garage that will accommodate 20 vehicles and have space for a 10 to 25 percent vehicle increase would be considered an acceptable grant request. For the same transit agency, a grant request for a garage accommodating 40 vehicles would not be acceptable, unless the grant recipient could demonstrate its need, willingness, and ability to expand its fleet to 40 vehicles in a relatively short time. In either case, however, the purchase of enough land for the future expansion of the fleet and

supporting facilities may be justifiable. MCPT 20240/2025 plans for expansion place them in a good position related to this policy.

When applying for a grant to build a facility, a grant recipient must be able to fully describe the project and estimate the cost of the facility. Prior planning for the project may include a feasibility study/needs assessment for possible site locations. The first request for funds would be for engineering and design, which would include costs for development of an environmental document, and real estate appraisals. Once FTA has reviewed and approved the environmental documentation, funds may be requested for land acquisition and construction.

TITLE VI REQUIREMENTS AND GUIDELINES FOR FEDERAL TRANSIT ADMINISTRATION RECIPIENTS

When investing FTA funding it is critical to follow Title VI program objectives. FTA recipients must:

- Ensure that the level and quality of public transportation service is provided in a nondiscriminatory manner;
- Promote full and fair participation in public transportation decision-making without regard to race, color, or national origin;
- Ensure meaningful access to transit-related programs and activities by persons with limited English proficiency.

Transit providers that operate 50 or more fixed route vehicles in peak service and are located in urbanized areas (UZA) of 200,000 or more people, or that otherwise meet the threshold defined in Chapter IV, must conduct a Title VI equity analysis whenever they plan a fare change and/or a major service change. MCPT does not meet the fleet criteria however they do meet the population criteria. Typical use of an equity analysis relates to changes in fare or service. The development does not occur frequently and it is highly recommended that MCPT contact FTA on requirements prior to initiating the next phase of site development.

Under these requirements the FTA recipient shall include a copy of the Title VI equity analysis conducted during the planning stage with regard to the location of a facility such as a vehicle storage facility, maintenance facility, operation center, etc.

The Title VI equity analysis will document with regard to where a project is located or sited to ensure the location is selected without regard to race, color, or national origin. Recipients shall engage in outreach to persons potentially impacted by the siting of facilities. The Title VI equity analysis must compare the equity impacts of various siting alternatives, and the analysis must occur before the selection of the preferred site.

When evaluating locations of facilities, recipients should give attention to other facilities with similar impacts in the area to determine if any cumulative adverse impacts might result. Analysis should be done at the Census tract or block group where appropriate to ensure that proper perspective is given to localized impacts.

If the recipient determines that the location of the project will result in a disparate impact on the basis of race, color, or national origin, the recipient may only locate the project in that location through extensive documentation justifying the need for that specific site. The recipient must show how both tests are met; it is important to understand that in order to make this showing, the recipient must consider and analyze alternatives to determine whether those alternatives would have less of a disparate impact on the basis of race, color, or national origin, and then implement the least discriminatory alternative.

TITLE VI REQUIREMENTS AND GUIDELINES FOR FEDERAL TRANSIT ADMINISTRATION RECIPIENTS – also includes very specific guidelines for Americans with Disabilities Act (ADA) requirements. The requirements relating to operating complementary paratransit to fixed route service is very important and was raised at the SAT meetings. There is a desire by MCPT to have the Transit Operations Center be accessible to fixed route transit and if there is not a current stop at the site, MCPT will be required to provide

complementary paratransit for 3/4 mile around that stop. It was determined that the site analysis should have a preference for locations that are within the current and planned complementary paratransit service boundary.

Note that FTA considers the 3/4-mile requirement as a straight-line distance ("as the crow flies" for bus service). In addition to meeting the requirement to provide service within 3/4 mile of each side of each fixed route and a 3/4-mile radius of the ends of each fixed route, this requirement obligates transit agencies to also provide service throughout a "core service area." This refers to the portion of agencies' service areas where many bus routes intersect and/or overlap so that their respective 3/4-mile corridors cover virtually all destinations. For smaller agencies, the core service areas are usually downtown districts served by multiple bus routes.

ADA guidelines and regulations also have requirements for the provision of service. Transit systems must keep vehicle lifts and ramps in operative condition. Drivers are required to contact dispatch immediately when lifts and ramps are deemed inoperable and shall dispatch a spare vehicle to complete the day's service.

When a vehicle is operating on a fixed route with an inoperative lift or ramp and the headway to the next accessible vehicle on the route exceeds 30 minutes, the entity shall promptly provide alternative transportation to individuals with disabilities who are unable to use the vehicle because the lift does not work. MCPT currently has 2 routes that have headways exceeding 30 mins including Route 2 to Indiantown and 20X to the Gardens Mall in Palm Beach County.

MCPT has included specific language in its contract with its transit provider to address this issue. *"The Contractor shall provide all services addressed herein to all Riders without regard to location or without regard to or consideration of race, age, religion, color, gender, sexual orientation, national origin, marital status, physical or mental ability, political affiliation, or any other factor which cannot be lawfully used as a basis for service delivery. Contractor must provide alternative service within 30 minutes if a lift or ramp failure occurs where the headway is greater than 30 minutes and the passenger cannot be served".* It was decided at the SAT meeting that the siting analysis should understand that deployment of a vehicle must get to the farthest location on Route 2 and 20X.

NATIONAL ENVIRONMENTAL POLICY ACT Checklist - The purpose of this "checklist" is to offer a potential grantee seeking Federal funds for any phase of work for a transit facility guidance for researching and understanding the myriad of Federal requirements for developing a facility. The checklist is not meant to over-simplify a complicated *real estate, environmental review, public involvement and oversight process* but to offer insights to potential grantees on the areas and issues the grantee will encounter due to Federal rules and regulations adopted over many years. The purpose of the regulations are to protect the public, ensure environmental impacts are considered, involve the public in the process and make good and informed investment decisions while minimizing conflict. The following guidance will be important for the locals to consider as they move forward.

National Pollutant Discharge Elimination System Regulations (NPDES) are also important to consider in site selection. Early in the process Martin County staff raised an issue that the Team should be concerned with the NPDES process as it can have an impact on the size of site. The NPDES permitting program regulates discharges from pesticide applications consistent with Section 402 of the Clean Water Act (CWA). Point source discharges of biological pesticides and chemical pesticides that leave a residue into waters of the U.S. are required to comply with NPDES requirements. This report performs a preliminary review of the NPDES system for the top 10 sites identified for potential development of a transit facility site.

TRIP GENERATION FORECAST

The number of vehicle trips that will originate from or are destined to a development is called trip generation and is dependent upon the type and size of the development. The total daily and peak hour trip generation potential for proposed developments are usually determined based on trip generation equations and rates provided in the Institute of Transportation Engineer's (ITE) Informational Report, *Trip Generation Manual*. In the case of a transit operations facility, the *Trip Generation Manual* does not have published trip generation data for such a facility.

The proposed Martin County Transit Operations Facility will support overnight bus parking, administration, operations/dispatch, customer service center, maintenance facilities and a bus stop located on a bus route. The project trip generation was developed in two layers – first the trip generation for employees and customers accessing and egressing the site was projected, and then bus traffic accessing egressing the site was projected and the two calculations were summed. Finally, a comparison of the estimates were made to similar projects. The results indicate that a reasonable assessment of daily traffic has been developed.

General Office for Administration, Operations/Dispatch, Customer Service Center

For the administration, operations/dispatch, and customer service center functions of the project, Land Use code 710, General Office, of the Trip Generation Manual was used to determine the total daily trips and AM peak hour and PM peak-hour trips generated by the project. The anticipated employment level is 118 employees, and at least 82 (minimum of 2 drivers per day per bus) of the 118 are anticipated to be drivers, due to the fleet size consisting of 30 conventional transit buses and 11 paratransit vehicles.

			Daily			AM Peak			PM Peak		
Land Use	Intensity	Units	In	Out	Total	In	Out	Total	In	Out	Total
General Office	118	Employees	196	196	392	50	7	57	9	45	54

Customers

Since the office portion of the facility will also support a customer service center, it was assumed that on average, ten customers per day would stop in for assistance during the hours (approximately 8am-5pm, or 9 hours) that the office would be open. MCPT Manager, explained that currently they serve 12-13 customers per week in their customer service center. Ten customers per day would be a notable increase, but to be conservative, this value was utilized to account for future growth in customer service. Thus, the projected trip for customers was estimated at 13 per day with 3 in and 3 out during the AM and PM peak hour as follows:

			Daily			AM Peak			PM Peak		
Land Use	Intensity	Units	In	Out	Total	In	Out	Total	In	Out	Total
Customers	13	Customer	13	13	26	3	3	6	3	3	6

Bus Operations

Daily bus operations include buses exiting the site in the morning and entering the site in the evening. Driver shifts would be handled utilizing service vehicles to transport drivers back and forth to stops for each route. It is preferable that the potential site be located near one or more routes to reduce these trips where drivers could transfer using the bus system.

The fleet size is anticipated to consist of 41 buses (30 conventional transit buses with a capacity of approximately 45 passengers, and 11 paratransit vehicles). Assuming that: 80% are in operation on any one day, while 20% are not being utilized (to be used as a substitute if a bus happens to have mechanical issues during its routes, or undergoing maintenance); that 75% of the buses that are being utilized leave the facility before the AM peak hour, and 25% leave the facility during the AM peak hour; and that 75% of the buses being utilized return to the facility after the PM peak hour and 25% arrive at the facility during the PM peak hour – results in projected future average weekday bus activity as follows:

Land Use	Intensity	Units	Daily			AM Peak			PM Peak		
			In	Out	Total	In	Out	Total	In	Out	Total
Bus Traffic	33*	Buses	33	33	66	0	8	8	8	0	8

Total Fixed Route and Paratransit Buses = 41, however, 20% are spares, 33 buses in/out per day

Total Trip Generation for Project

Add the final General Office, Customers, and final Bus Traffic tables together, which results in an average weekday traffic projection for the MCPT Operations Center as follows:

Land Use	Intensity	Units	Daily			AM Peak			PM Peak		
			In	Out	Total	In	Out	Total	In	Out	Total
MCPT	Total	Trips	242	242	484	53	18	71	20	48	68

Comparison to Other Similar Projects

The Project Team researched trip generation from Bus Transit Operations and Maintenance Facilities and found very limited information. The ITE Trip Generation Manual does not have information on such facilities and like this effort – we found that other transit agencies were creative in developing estimates of daily and peak period traffic. In Los Angeles, California, the Los Angeles County Metropolitan Transportation Authority (Metro) completed a study for a new bus maintenance and operations facility project in September 2009. The study was prepared by Terry A. Hayes Associates, LLC. In that study they recognized that the *Trip Generation Manual* does not have published trip generation data for such a facility. The consultant collected traffic data from another similar existing facility operated by Metro, and the data was factored down by a ratio of number of buses to be served by the facility and number of employees (the new facility would be smaller than the existing facility).

Their results indicated that for a facility serving 200 buses with 579 employees (with no customer service center included), their trip generation figures were as follows:

Land Use	Intensity	Units	Daily			AM Peak			PM Peak		
			In	Out	Total	In	Out	Total	In	Out	Total
LA Metro	Total	Trips	1,389	1,389	2,778	33	52	85	57	31	88

When prorated down to the size of the projected Martin County fleet the facility would result in these trip generation figures:

Land Use	Intensity	Units	Daily			AM Peak			PM Peak		
			In	Out	Total	In	Out	Total	In	Out	Total
LA Metro Transit	Factored	Trips	233	233	466	7	10	17	11	9	20

Note that the prorated figures for the AM peak and PM peak volumes appear to be very low.

In another study, completed September 2016, DKS Consultants provided a traffic impact study for a Napa Valley Transit Authority (NVTA) Bus Maintenance Facility proposed to be located in Napa Valley, California. Again, this facility would be similar to the proposed Martin County facility.

Comparing the prorated NVTA Transit facility to the proposed Martin County Transit facility:

Land Use	Intensity	Units	Daily			AM Peak			PM Peak		
			In	Out	Total	In	Out	Total	In	Out	Total
NVTA Transit	Factored	Trips	260	260	520	24	38	62	14	35	49
MCPT	Total	Trips	242	242	484	53	18	71	20	48	68

The comparison shows that the results derived for the Martin County Transit Operations Facility can be considered reasonable. These results do not represent a significant traffic generator and should be used in the future to assess site access and driveway needs. A large majority of employee and bus traffic from a transit operations center occurs over a 15 plus hour day. Drivers arrive very early in the morning and most buses will exit the site before the AM peak period. Administrative employees and customers will reflect normal office type traffic through the morning and afternoon. There will be a driver shift change that occurs through the mid-day and then the buses arrive after the PM peak throughout the evening and drivers depart shortly after.

SPATIAL CONCEPTS

Based on the outcomes of Tasks 1 and 2, the team developed a set of guidelines to serve as a framework for planning and conceptualizing the transit operations facility / customer service center. The guidelines reflect the following:

- Sizing of the overall center and its components
- Desirable site location characteristics
- Design considerations and parameters
- Trip Generation – daily, peak traffic periods and peak period of operations
- Access and circulation requirements (including multimodal access and parking needs)
- Other considerations resulting from Task 2

The facility parameters provided by Martin County Transit are summarized in Table 2. Sizing the facility relied on guidance from the Federal Transit Administration (FTA) and the American Public Transportation Association (APTA), peer data, and assumptions about the area required for landscaping, setbacks, and drainage.

Based on the verified needs, the team developed two illustrative, high-level concept drawings for the center and developed overall spatial needs for the entire center in acres. These drawings illustrate building envelopes, parking and circulation, and potential connections to surrounding land uses and the surrounding transportation system.

Through discussion with the SAT and close coordination with MCPT, it was agreed that the ideal size of a facility in Martin County to accommodate the expanded fleet and expanded functionality would average approximately 6.5 to 7.5 acres. However, in case an ideal site of that size could not be located, it was agreed that the site analysis would seek properties of a minimum of five (5) acres. In addition, it was determined there would be no maximum acreage when performing the site analysis because there was the possibility of finding a particularly large parcel that would have the potential of being divided.

Table 2: Site Size Needs

SITE ELEMENTS	UNITS	NOTES	SIZE
Administration and Operations Building		**Subtotal**	**15,000 Sqft**
		Includes customer service and reservations center, 2 dispatch offices, training/conference rooms, staff offices and workstations, contractor office, break rooms, locker rooms, fare counting/storage, common spaces	
Maintenance Building		**Subtotal**	**14,832 Sqft**
repair bays (pits/lifts)	5 bays	2 minor, 3 major, 20'x80' feet each (1,600 sf each) per FTA	8,000 Sqft
interior cleaning bays	2 bays	20'x50' each (1,000 sqft each)	2,000 Sqft
support space for stockroom, restrooms, offices - minor maintenance	41 buses	12 sqft/bus avg per FTA	492 Sqft
support space for stockroom, restrooms, offices - major maintenance	41 buses	20 sqft/bus avg per FTA	820 Sqft
stockroom (with dock)	41 buses	25 sqft/bus per FTA plus 240 sqft for dock	1,265 Sqft
shop areas	41 buses	20 sqft/bus from FTA	820 Sqft
other activities, major maintenance	41 buses	35 sqft/bus from FTA	1,435 Sqft
Exterior Facilities		**Subtotal**	**79,897 Sqft**
Exterior bus wash	1 wash	2,800 sqft from transit systems of similar size	2,800 Sqft
Pre-trip service bays	2 bays	20'x50' each (1,000 sqft each)	2,000 Sqft
Fueling bays	2 bays	20'x50' each (1,000 sqft each)	2,000 Sqft
Fuel storage	47 vehicles	2,000 sqft per transit systems of similar size	2,000 Sqft
Bus vehicle parking spaces	41 vehicles	12'x42' each space + 55' aisle per FTA	47,724 Sqft
Support vehicle parking spaces	6 vehicles	8.5'x17.5' spaces at 90 degrees in two rows with 26' aisle per ITE	1,556 Sqft
Employee/visitor parking spaces	83 spaces	0.7 spa/employee; 8.5'x17.5' spaces at 90 degrees in two rows with 26' aisle from ITE	21,518 Sqft
Bus stop	1 pad	10'x30' pad (300 sf)	300 Sqft
Subtotal Sqft			**109,729** Sqft
Circulation areas		additional 20% assumed	21,946 Sqft
Stormwater management		0.5 acre assumed	21,780 Sqft
TOTAL SQFT			**153,455** Sqft
TOTAL AC			**3.5 Acre**
LAND DEVELOPMENT CODE MULTIPLIER		**2.0**	**7.0 Acre**

NOTES

1 - All numbers in this spreadsheet are subject to change based on site plan, size and shape of property.

2 - The 80-foot repair bays allow for circulation and staging adjacent to the vehicle. This space could be reduced. Minimum length is 45' based on one 40-foot bus.

3 - Fuel storage square footage is flexible depending on fuel type and site plan.

4 - Fueling bays, interior cleaning bays, and pre-trip service bays could be combined based on final operations plan.

5 - Peer review data was used to derive the employee/visitor parking supply ratio.

Figure 2: Concept Option 1

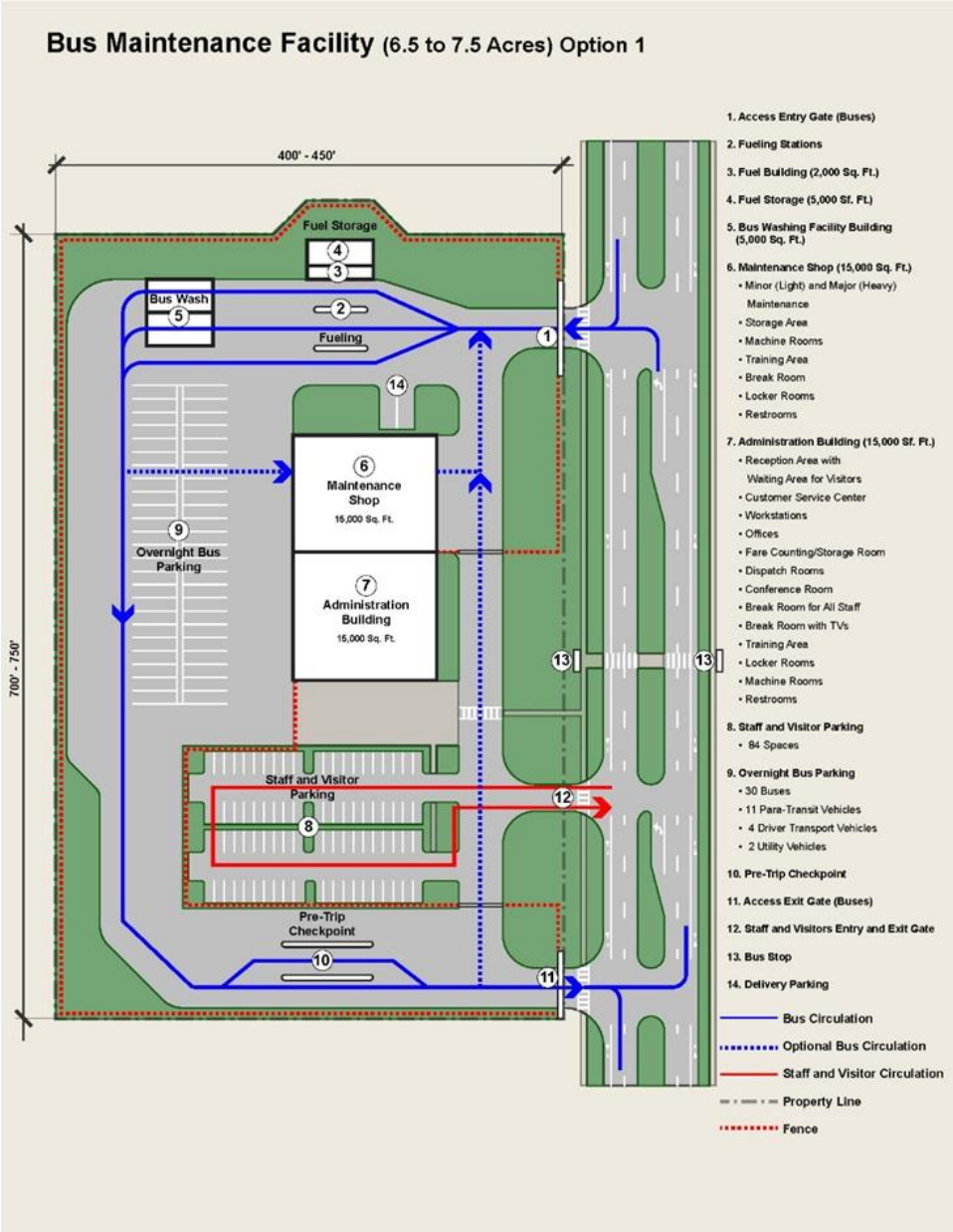
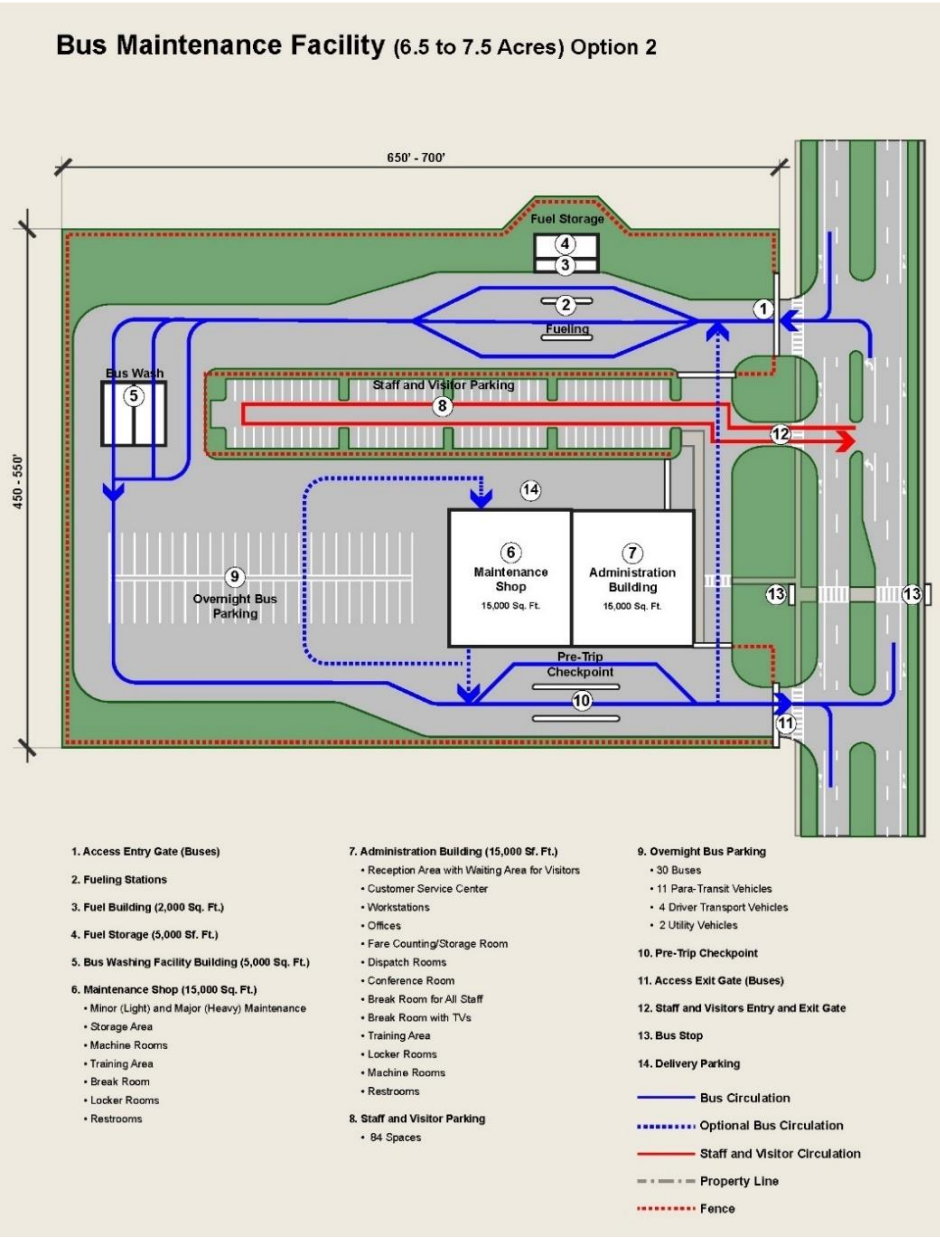


Figure 3: Concept Option 2



SITE ANALYSIS

A comprehensive review of land uses and property information was performed in order to identify viable properties for a future transit operations facility/customer service center. The goal of this exercise was to reveal suitable geographic locations for the facility when considering surrounding land use, existing utilities, traffic impacts, and connectivity to transit. In addition, another important factor to consider in the screening process was to find locations that would increase eligibility for federal funding to construct the facility. To become eligible, the site would have to selected by developing a set of performance criteria based on:

- Environmental, cultural or historical concerns
- Local land development codes and zoning regulations
- Access needs/restrictions – transit, Americans with Disabilities Act requirements, signalization, medians and curb cuts
- Projected future traffic
- Upstream and downstream signalized intersection congestion
- Compatibility with adjacent land uses
- Transit operations and impacts to dead head time and transit costs per hour
- Most recent/available real estate/property appraiser information
- Other considerations identified by stakeholders

The site analysis component of this study involved a comprehensive review of available parcels within Martin County. Martin County GIS data was obtained from the County's Information Technology Services Department, MCPT, Treasure Coast Regional Planning Council (TCRPC), local municipalities, FDOT and other stakeholders to develop a system of data layers that was used to support the site selection process.

As parcels were screened through an array of factors, the list of potential sites was continuously reviewed by Martin County staff, the Stakeholder Advisory Team (SAT), Technical Advisory Committee (TAC), Citizen's Advisory Committee (CAC), Bicycle and Pedestrian Advisory Committee (BPAC), and the Martin MPO Policy Board for further vetting and contextual insights.

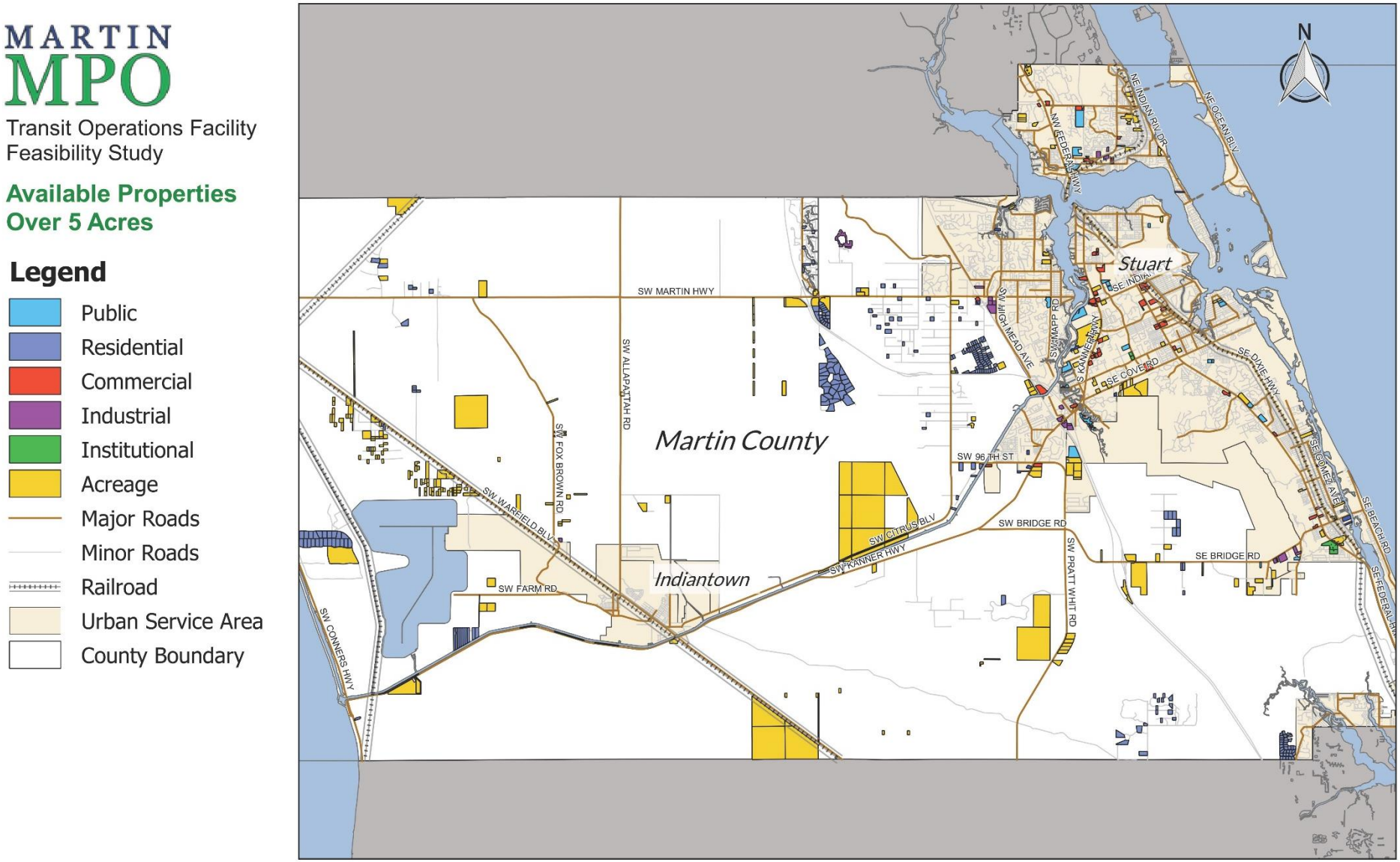
Screen 1

Martin County is located north of Palm Beach County and south of St. Lucie County. Lake Okeechobee serves as the western boundary, with the Atlantic Ocean flanking the east. Major roads within the County which provide regional connectivity include Martin Highway, Citrus Boulevard, Federal Highway, Dixie Highway, Kanner Highway, Salerno Road, and Indian Street. Another important transportation corridor to consider is the FEC rail line located to the east. While the rail line has served as a freight corridor for the past generation, the rail line is scheduled to provide high speed passenger service from Miami to Orlando within the next few years. During the time of this study, the West Palm Beach to Fort Lauderdale passenger line is already active. Considering the anticipated spike in rail activity, potential sites that avoid crossing the railroad would be ideal to avoid delays in service.

The site sizing analysis indicated that the probable parcel size of a transit operations facility would be approximately 6.5 to 7.5 acres. This analysis gathered parcel data for all properties within Martin County properties that were a minimum of five acres or above so as to not discard a site that could be feasible through a multi-story facility, structured parking, or other site layout technique. The preliminary list of properties totaled over 550 available parcels for consideration.

Figure 4 displays the results of the available properties. Clusters of sites can be found within or close to the City of Stuart to the east, and Indiantown to the west. The list of parcels included public and privately-owned land. While it was important to consider all potential sites, no matter the jurisdiction, the screening process eventually placed a higher weight of preference on publicly owned land versus privately owned land that would have to be purchased by Martin County. This was done because securing private property would require a willing seller or an extensive NEPA process.

Figure 4: Martin County Parcels 5+ Acres



Public ownership, appropriate land use designation and available acreage for the parcel were key to site selection. Adjacent land use was also important as close proximity of the site to residential uses may result in opposition to the project from the community. Considering the industrial nature of a transit operations center and its daily operations involving frequent bus activity, constructing a facility away from residential land uses was a secondary factor. The screening process lowered the ranking of available sites where the future land use was designated as residential.

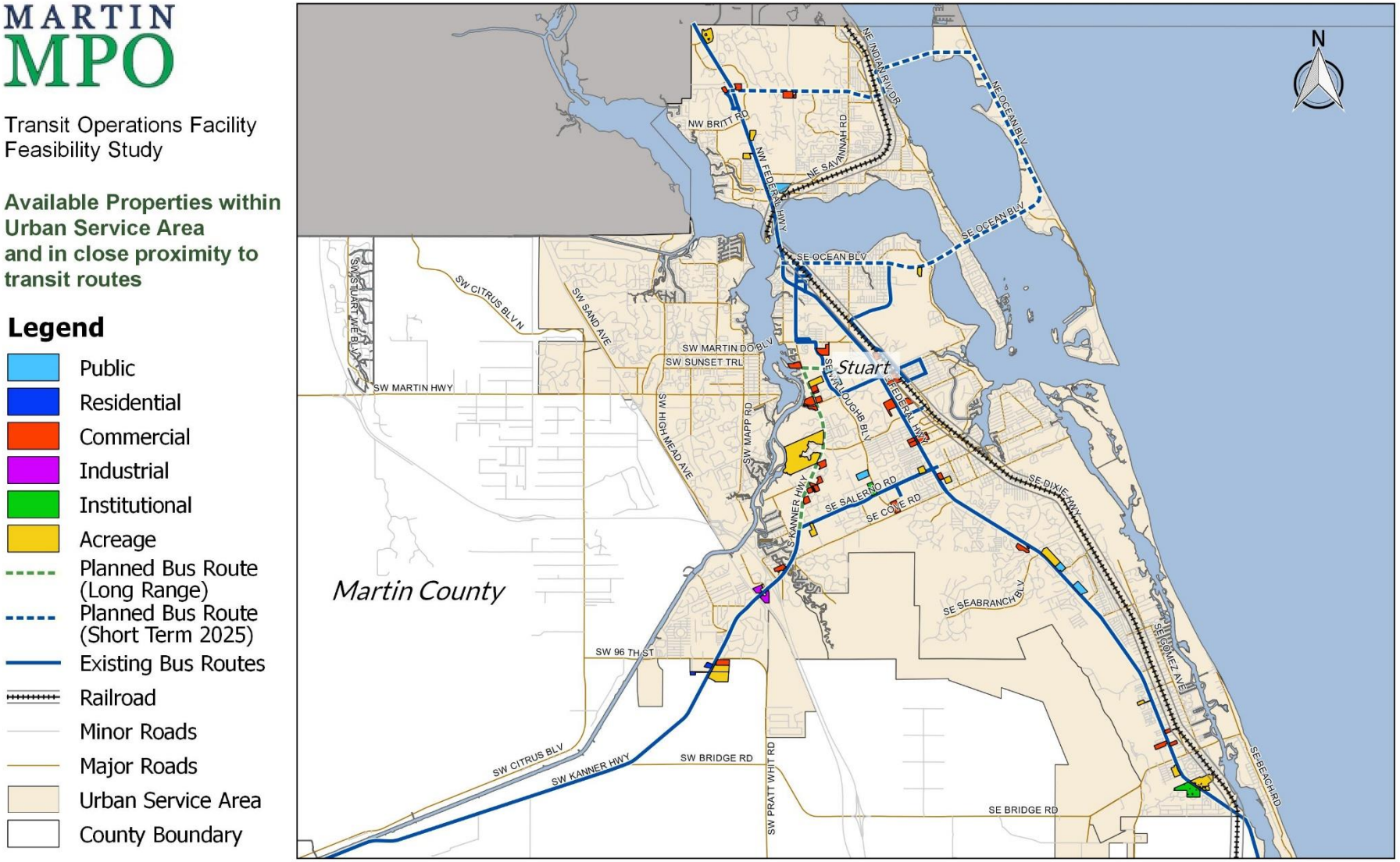
As advised by the SAT, the future facility should also be located somewhere within the Urban Service Area. The Urban Service Area is the area within Martin County that provides the necessary infrastructure and utilities for planned development. While connection to water and sewer are not guaranteed at this scale, the Urban Service Area served as a preliminary geographic area as to where the future facility would need to be constructed. The screening process removed all sites that were not within or adjacent to the Martin County Urban Service Area.

The next major factor in Screen 1 was to determine which of these properties was in close proximity to an existing or planned transit route. As informed by the SAT, Martin County currently has four existing bus routes and two planned routes. Because this facility serves as a daily starting and end point for all buses in Martin County, it would be ideal to provide the bus drivers with a facility that remains on or in close proximity to an existing or planned transit route. Figure 5 shows the Urban Service Area which encompasses the City of Stuart and surrounding area. The solid blue lines represent existing Marty transit routes which include: Route 1 (US 1 Corridor); Route 2 (Indiantown); Route 3 (Stuart); and Route 20X which services portions of Stuart, Hobe Sound and North Palm Beach. The dotted blue and green lines represent the two proposed future routes for Marty transit.

Figure 5 displays the results of the Screen 1 vetting. The Team reviewed all remaining sites to determine that the sites were in fact 5 acres or above, they were vacant or at least partially vacant, and in close proximity to an existing or planned transit route. The results of Screen 1 eliminated approximately 500 properties leaving just over 45 properties for the Screen 2 process. Clusters of potential parcels can be found on the south end of the Urban Service Area near Bridge Road, towards the north end of the Urban Service Area along Federal Highway, and numerous clusters in central Stuart along Kanner Highway, Salerno Road, and Federal Highway.

SAMPLE MAINTENANCE FACILITY FOR FIXED ROUTE AND PARATRANSIT COURTESY OF BRASFIELD & GORRIE

Figure 5: Screen 1 Final Properties



Screen 2

Screen 2 involved a more detailed level of analysis for the remaining parcels. The primary factors involved in Screen 2 included verification of water and sewer connections, identifying dominant adjacent land use and satisfying FTA and ADA requirements.

A GIS layer was obtained from Martin County which displayed properties that contained existing water and sewer connections throughout the Urban Service Area. Properties that contained neither connection were eliminated. Parcels that had one of the two, were not eliminated but identified as to which of the utility types was missing. Regarding dominant adjacent land use, similar to Screen 1 which eliminated parcels designated as residential, considering that this facility primarily carries an industrial use, it would be unwise to recommend a parcel that was adjacent to an existing or future residential land uses. The most desirable land uses ranked in order are General Institutional, Industrial, Commercial, and Open Space. Properties that were directly adjacent to a residential land use or environmental preserve were eliminated. Remaining parcels were ranked in the order of the most desired land use type.

Finally, as expressed in the Regulatory Guidelines section (page 5), in order to satisfy FTA funding and ADA requirements, the site needed to qualify under two spatial factors: 1. the site had to be in a location where if a bus were to break down and leave passengers stranded, a replacement bus would need to be able to get to the location of the broken-down bus and pick up the stranded passengers within 30 minutes or less; and 2., regarding paratransit door to door service, the location had to be within a 3/4 mile distance of an existing or planned bus stop.

Figures 6 and 7 and Table 3 displays the results of Screen 2. Notice the two clouds that serve as the areas that satisfy the 30-minute FTA rule and the 3/4-mile paratransit ADA rule. Once the Bus Routes were identified, a 3/4-mile buffer was established surrounding each route. Notice the orange cloud that hovers above in Figures 6 and 7. The crosshatched translucent orange cloud represents the 3/4-mile buffer for the 2 planned transit routes. Any parcels within the 3/4-mile clouds, satisfy the ADA Paratransit requirement. As for the FTA 30-minute Rule, the team utilized Google Maps drive-time estimates to establish a boundary in which a bus/paratransit vehicle could reach any part of Martin County within 30 minutes. The 30-minute Rule cloud can be seen in Figure 6 and Figure 7 in light-green hovering above the Martin County Urban Service Area.

Where the two clouds overlap narrowed down viable locations significantly. The light-brown cloud with green cross-hatches represents the overlap between the ADA Paratransit buffer and FTA 30-minute rule. The 28 parcels falling within the two clouds are the best options for the potential transit operations center. After vetting the parcels within the area and discussing with the SAT, the list of remaining parcels was narrowed down to 10 top qualifying sites for consideration.

Figure 6: Screen 2 Areawide Final Properties

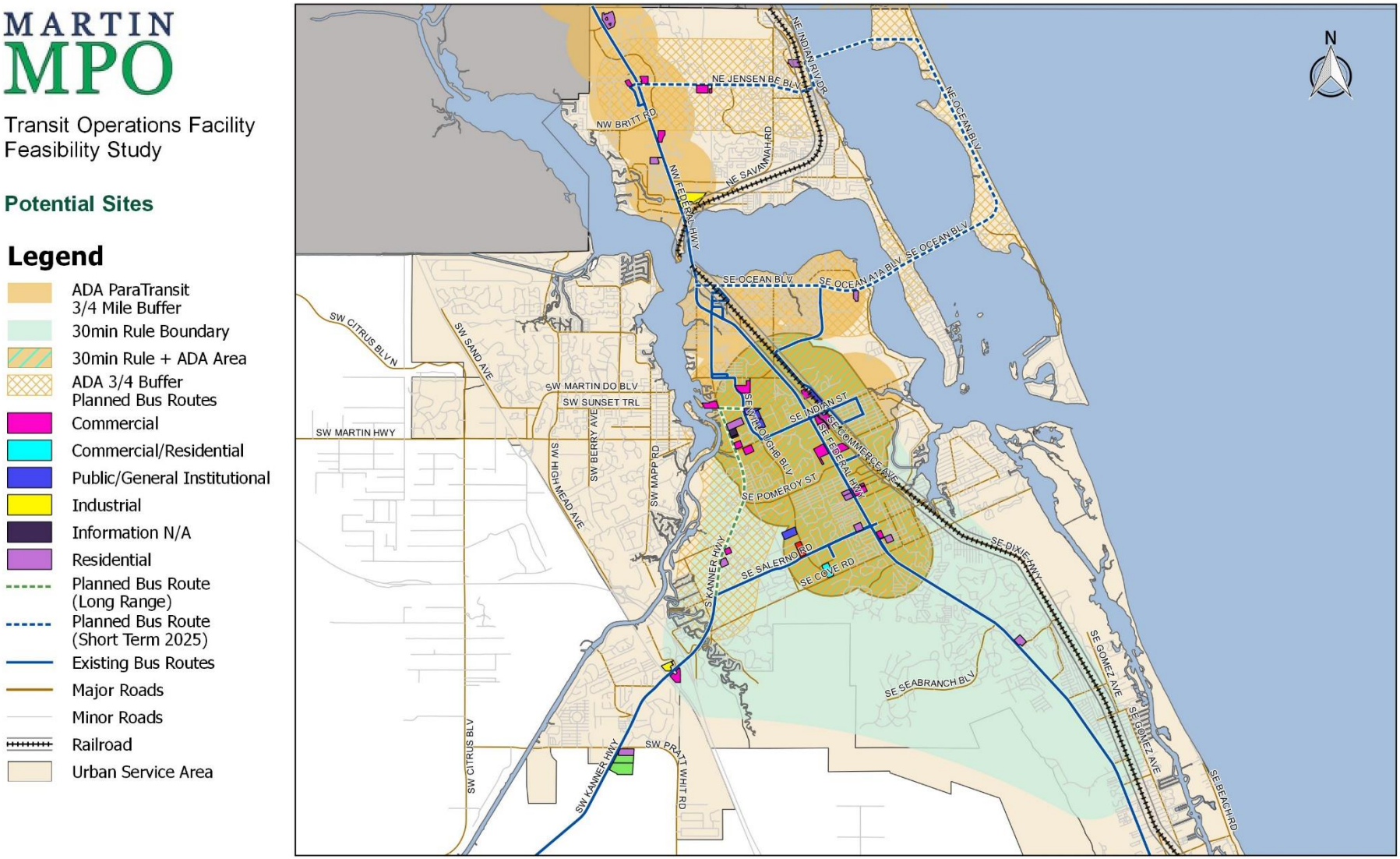


Figure 7: Screen 2 Zoomed-In Final Properties

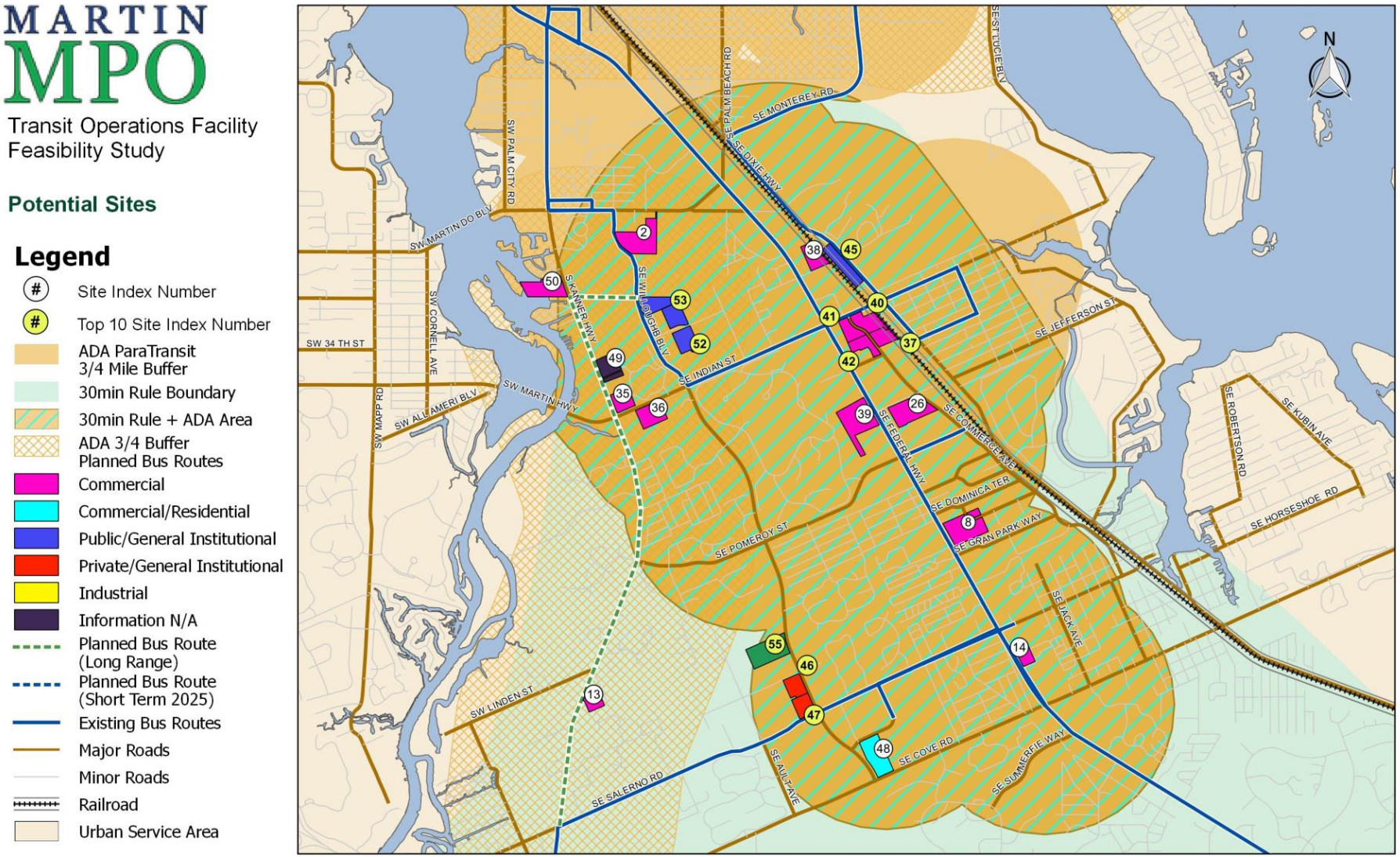


Table 3: Property Ranking

NUM	Address	Available Acreage	Ownership	5 Acres and above	Urban Service Area	Adjacent Transit Routes	Vacant	Future Land Use	Adjacent Future Land Use	Water Connection	Sewer Connection	30 Min. Rule	ADA 3/4 mile Rule	Direct Access
53	951 SE Ruhnke St	16.02	Martin Co.	Yes	Yes	No	Partial	General Institutional	General Institutional	Yes	Yes	Yes	Yes	Yes
45	2616 SE Dixie Hwy	10.51	Martin Co.	Yes	Yes	Yes	Partial	General Institutional	General Institutional	Yes	Yes	Yes	Yes	Yes
55	5250 SE Willoughby Blvd	15.40	Martin Co.	Yes	Yes	No	Partial	Recreational	Agricultural	Yes	Yes	Yes	Yes	Yes
52	900 SE Ruhnke St	5.15	Martin Co.	Yes	Yes	No	Partial	General Institutional	General Institutional	Yes	Yes	Yes	Yes	Yes
46	1699 SE Darling St	7.76	Private	Yes	Yes	Yes	Yes	General Institutional	Agricultural	Yes	Yes	Yes	Yes	Yes
47	1845 SE Salerno Rd	7.77	Private	Yes	Yea	Yes	Yes	General Institutional	Commercial/Residential	Yes	Yes	Yes	Yes	Yes
40	2204 SE Indian St	9.67	Private	Yes	Yes	Yes	Yes	Commercial	Industrial	Yes	Yes	Yes	Yes	Yes
37	3261 SE Railroad Ave	6.78	Private	Yes	Yes	Yes	Yes	Commercial	Industrial	Yes	Yes	Yes	Yes	Yes
41	2194 SE Indian St	6.64	Private	Yes	Yes	Yes	Yes	Commercial	Industrial	Yes	Yes	Yes	Yes	Yes
42	3546 SE Commerce Ave	7.10	Private	Yes	Yes	Yes	Yes	Commercial	Industrial	Yes	Yes	Yes	Yes	Yes
38	2805 SE Federal Hwy	8.75	Private	Yes	Yes	Yes	Partial	Commercial	Industrial	Yes	Yes	Yes	Yes	Yes
2	2601 SE Willoughby Blvd	20.07	Private	Yes	Yes	Yes	Yes	Commercial	Commercial	Yes	Yes	Yes	Yes	Yes
14	5567 SE Federal Hwy	6.21	Private	Yes	Yes	Yes	Yes	Commercial	Commercial	Yes	Yes	Yes	Yes	Yes
39	3694 SE Federal Hwy A	22.65	Private	Yes	Yes	Yes	Yes	Commercial	Commercial	Yes	Yes	Yes	Yes	Yes
26	3700 SE Commerce Ave	17.63	Private	Yes	Yes	Yes	Yes	Commercial	Commercial	Yes	Yes	Yes	Yes	Yes
35	3583 S Kanner Hwy	7.91	Private	Yes	Yes	Yes	Yes	Commercial	Commercial	Yes	Yes	Yes	Yes	Yes
8	4501 SE Federal Hwy	19.31	Private	Yes	Yes	Yes	Yes	Commercial	Commercial	Yes	Yes	Yes	Yes	Yes
36	150 SE Indian St	11.39	Private	Yes	Yes	Yes	Yes	Commercial	Residential	Yes	Yes	Yes	Yes	Yes
50	3020 S Kanner Hwy	14.86	Private	Yes	Yes	Yes	Yes	Commercial	Residential	Yes	Yes	Yes	Yes	Yes
48	2285 SE Cove Rd	16.26	Private	Yes	Yes	No	Yes	Commercial/Residential	Commercial	Yes	Yes	Yes	Yes	Yes
10	3529 SE Cobia Way	8.81	Private	Yes	Yes	Yes	Yes	Residential	Commercial	Yes	Yes	Yes	Yes	No
34	3320 SR-76	19.78	Private	Yes	Yes	Yes	Yes	Residential	Agricultural	Yes	Yes	Yes	Yes	Yes
12	4558 SE Federal Hwy	5.78	Private	Yes	Yes	Yes	Yes	Residential	Residential	Yes	Yes	Yes	Yes	Yes
23	4638 SE Federal Hwy	7.26	Private	Yes	Yes	Yes	Yes	Residential	Residential	Yes	Yes	Yes	Yes	Yes
49	3523 S Kanner Hwy	10.36	Private	Yes	Yes	Yes	Yes	Residential	Residential	Yes	Yes	Yes	Yes	Yes
51	2898 SE Salerno Rd	9.58	Private	Yes	Yes	Yes	Yes	Residential	Residential	Yes	Yes	Yes	Yes	Yes

PRELIMINARY ENVIRONMENTAL ASSESSMENT OF REMAINING SITES

Once the geographic area was selected with properties satisfying all or the majority of factors, the next step in the site analysis process was to review the remaining parcels based on environmental factors. An important factor to consider was whether or not any of the parcels fell into an EPA Superfund site, or if the site was a brownfield, or if it was a National Pollutant Discharge System (NPDES) site.

The following information is based on the environmental data collected from the U.S. EPA Envirofacts Data Warehouse, and the EnviroMapper interactive map. Envirofacts contains information from select EPA Environmental program office databases and provides access about environmental activities that may affect air, water, and land anywhere in the United States. For this assessment we have adopted the term Recognized Environmental Condition (REC) from the American Society for Testing and Materials (ASTM) E-1527-13 to determine if the recommended site or adjacent property(s) are identified to have any REC in connection with the recommended site. A REC is defined as the "presence or likely presence of any hazardous substance or petroleum products on the subject property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the site or into the ground, ground water, or surface water of the site".

Table 4 summarizes the findings on each recommended site. A map of each location is provided in Appendix A. The Figures in the Appendix shows the recommended site with a green icon, and contaminated sites with a blue or red icon. Each site has at leats 1 contamintaed site in proximty to is but there is no contamination on any of the selected sites.

Table 4: Preliminary Environmental Assessment

As Listed	Proposed Site Address	Recognized Environmental Conditions
53	951 SE Ruhnke St	Has 1 contaminated site approximately 0.610-mile north distance. However, site is not listed as having any recognized environmental condition.
45	2616 SE Dixie Hwy	Has 7 contaminated sites within 0.5-mile radius distance. However, site is not listed as having any recognized environmental condition.
55	5250 SE Willoughby Blvd	Has 1 contaminated site approximately 1.13-mile north distance. However, site is not listed as having any recognized environmental condition.
52	900 SE Ruhnke St	Has 1 contaminated site approximately 0.610-mile north distance. However, site is not listed as having any recognized environmental condition.
46	1699 SE Darling St	Has 1 contaminated site at approximately 0.5-mile distance. However, site is not listed as having any recognized environmental condition.
47	1845 SE Salerno Rd	The nearest contaminated site is located approximately 1.88-mile distance from the subject site. However, site is not listed as having any recognized environmental condition.
40	2204 SE Indian St	Has 7 contaminated sites within less than 0.5-mile radius distance. However, site is not listed as having any recognized environmental condition.
37	3261 SE Railroad Ave	Has 1 contaminated site approximately at 0.21-mile distance NE. However, site is not listed as having any recognized environmental condition.
41	2194 SE Indian St	Has 1 contaminated site approximately at 0.41-mile distance NE. However, site is not listed as having any recognized environmental condition.
42	3546 SE Commerce Ave	Has 1 contaminated site approximately at 0.43-mile distance NE. However, site is not listed as having any recognized environmental condition.

SUMMARY: RECOMMENDED SITES EXISTING CONDITIONS

The results of the analysis showed 28 sites on Table 3 that are viable for potential development. Key factors in developing the most viable site locations were: sites that are publicly owned, possess appropriate land use designations, and are adjacent to non-residential uses. Note the top 4 are the publicly owned sites and probably the best options for Martin County to move forward. Site 52 is the smallest of the publicly owned sites and may be difficult to provide enough space and drainage for the full facility. It was brought up by the SAT that development of that site could be combined with Site 53 which is across Ruhnke Street. The following pages provide a summary of existing conditions regarding each of the top ten ranking sites.

Site # 53

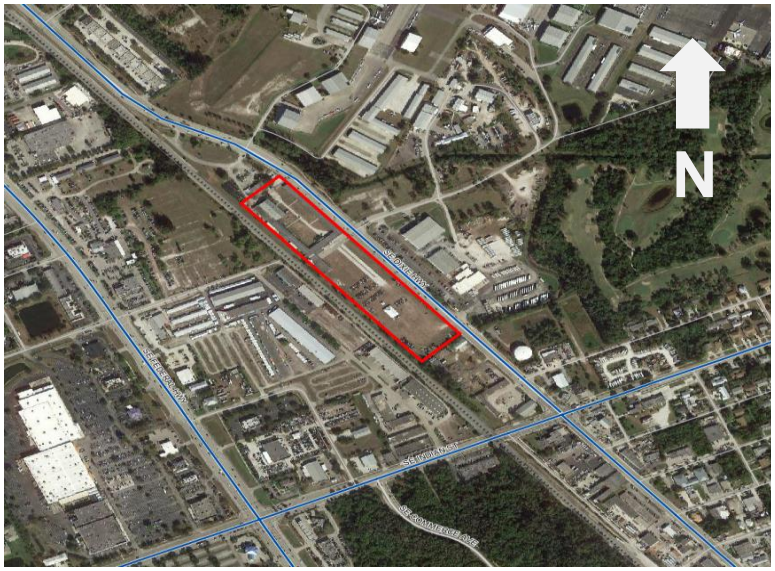
Aerial View

Street Views

Address:	951 SE Ruhnke St.
Available Acreage:	16.02
Future Land Use:	General Institutional
Adjacent Land Use North:	General Institutional
Adjacent Land Use South:	Public
Adjacent Land Use East:	Residential
Adjacent Land Use West:	General Institutional
Water:	Yes
Sewer:	Yes
Sidewalks on property:	Yes
Bike lanes:	No
Nearest Bus Stop:	.17 miles
Nearest Traffic Signal:	Willoughby Blvd. @ Ruhnke St.

Site # 45

Aerial View



Street Views

Address:	2616 SE Dixie Hwy.
Available Acreage:	10.51
Future Land Use:	General Institutional
Adjacent Land Use North:	General Institutional
Adjacent Land Use South:	General Institutional
Adjacent Land Use East:	General Institutional
Adjacent Land Use West:	Industrial
Water:	No
Sewer:	Yes
Sidewalks on property:	Yes
Bike lanes:	Yes
Nearest Bus Stop:	Old Dixie Hey @ Aviation Way
Nearest Traffic Signal:	Old Dixie Hey @ Aviation Way

Site # 55

Aerial View

Street Views

Address:	5250 Willoughby Blvd.
Available Acreage:	15.40
Future Land Use:	Recreational
Adjacent Land Use North:	Estate Density
Adjacent Land Use South:	Agricultural
Adjacent Land Use East:	Estate Density
Adjacent Land Use West:	Agricultural
Water:	Yes
Sewer:	Yes
Sidewalks on property:	Yes
Bike lanes:	No
Nearest Bus Stop:	1.5 miles; Salerno Village Square
Nearest Traffic Signal:	Willoughby Blvd. @ Pomeroy St.

Site # 52

Aerial View

Street Views

Address:	900 SE Ruhnke St.
Available Acreage:	5.15
Future Land Use:	General Institutional
Adjacent Land Use North:	General Institutional
Adjacent Land Use South:	Public
Adjacent Land Use East:	Private Institution
Adjacent Land Use West:	Public
Water:	Yes
Sewer:	Yes
Sidewalks on property:	Yes
Bike lanes:	No
Nearest Bus Stop:	.14 miles; Willoughby Blvd. @
Nearest Traffic Signal:	Willoughby Blvd. @ Ruhnke St.

Site # 46

Aerial View

Street Views

Address:	1699 SE Darling St
Available Acreage:	7.76
Future Land Use:	General Institutional
Adjacent Land Use North:	Agricultural
Adjacent Land Use South:	Agricultural
Adjacent Land Use East:	Agricultural
Adjacent Land Use West:	Agricultural
Water:	Yes
Sewer:	Yes
Sidewalks on property:	Yes
Bike lanes:	No
Nearest Bus Stop:	.36 Miles; Martin Hospital South
Nearest Traffic Signal:	Willoughby Blvd. @ Salerno Rd.

Site # 47

Aerial View

Street Views

Address:	1845 SE Salerno Rd.
Available Acreage:	7.77
Future Land Use:	General Institutional
Adjacent Land Use North:	Agricultural
Adjacent Land Use South:	Agricultural
Adjacent Land Use East:	Agricultural
Adjacent Land Use West:	Agricultural
Water:	Yes
Sewer:	Yes
Sidewalks on property:	Yes
Bike lanes:	Yes
Nearest Bus Stop:	.30 miles; Martin Hospital
Nearest Traffic Signal:	Willoughby Blvd. @ Salerno Rd.

Site # 40

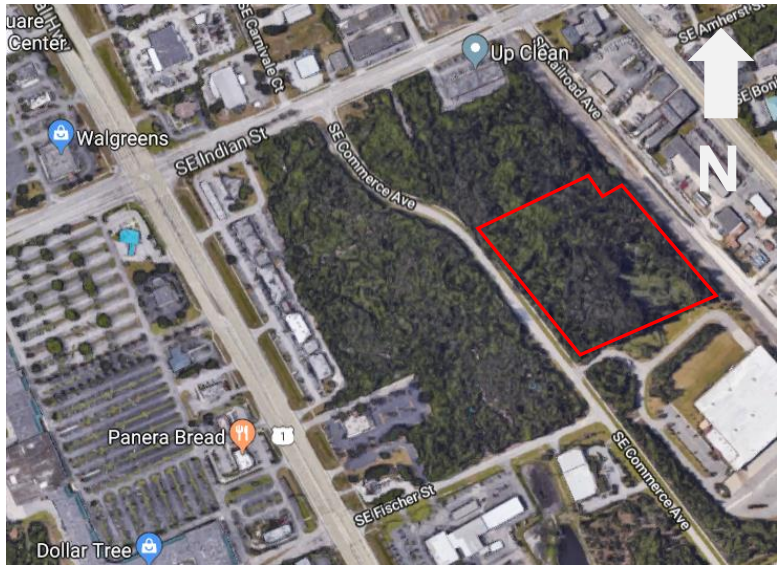
Aerial View

Street Views

Address:	2204 SE Indian St.
Available Acreage:	9.67
Future Land Use:	Commercial
Adjacent Land Use North:	Industrial
Adjacent Land Use South:	Commercial
Adjacent Land Use East:	Industrial
Adjacent Land Use West:	Commercial
Water:	Yes
Sewer:	Yes
Sidewalks on property:	Yes
Bike lanes:	No
Nearest Bus Stop:	.37 miles; US 1 @ Indian St.
Nearest Traffic Signal:	Old Dixie Hwy @ Indian St.

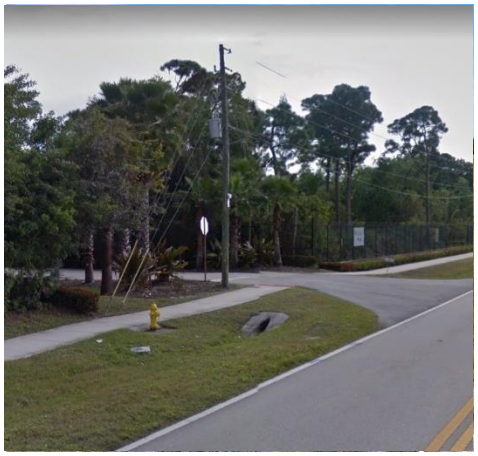
Site # 37

Aerial View



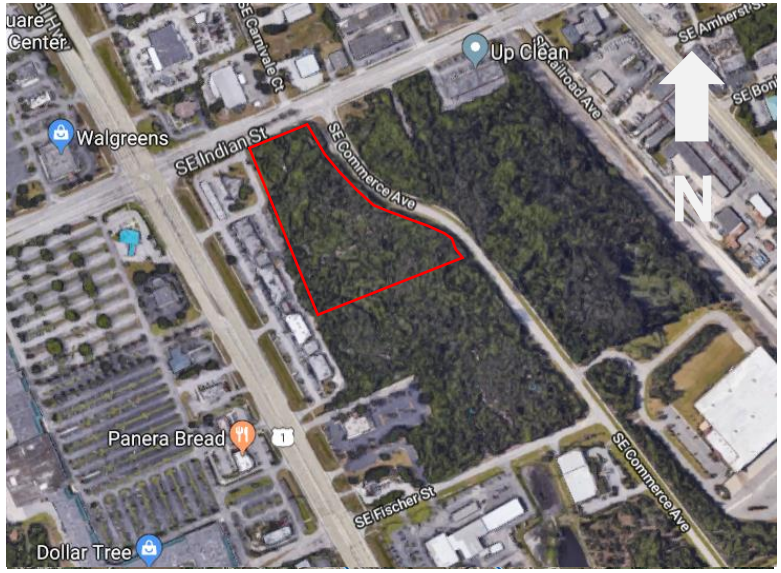
Street Views

Address:	3621 SE Railroad Ave.
Available Acreage:	6.78
Future Land Use:	Commercial
Adjacent Land Use North:	Commercial
Adjacent Land Use South:	Commercial
Adjacent Land Use East:	Industrial
Adjacent Land Use West:	Commercial
Water:	Yes
Sewer:	Yes
Sidewalks on property:	Yes
Bike lanes:	No
Nearest Bus Stop:	.31 miles; US 1 @ Indian St.
Nearest Traffic Signal:	.31 miles; US 1 @ Indian St.



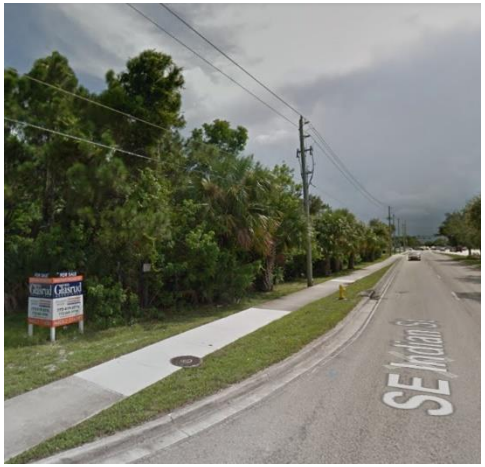
Site # 41

Aerial View



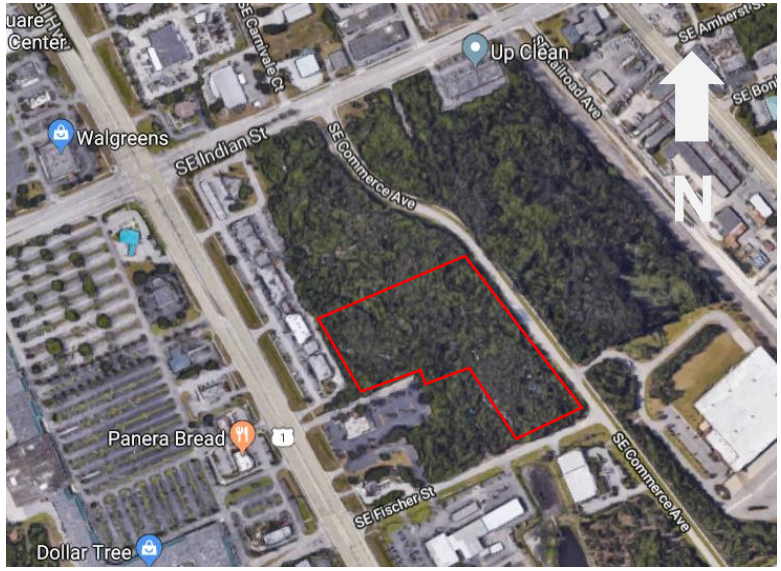
Street Views

Address:	2194 SE Indian St.
Available Acreage:	6.64
Future Land Use:	Commercial
Adjacent Land Use North:	Industrial
Adjacent Land Use South:	Commercial
Adjacent Land Use East:	Commercial
Adjacent Land Use West:	Industrial
Water:	Yes
Sewer:	Yes
Sidewalks on property:	Yes
Bike lanes:	No
Nearest Bus Stop:	.09 miles; US 1 @ Indian St.
Nearest Traffic Signal:	.09 miles; US 1 @ Indian St.



Site # 42

Aerial View



Street Views

Address:	3546 SE Commerce Ave
Available Acreage:	7.10
Future Land Use:	Commercial
Adjacent Land Use North:	Commercial
Adjacent Land Use South:	Commercial
Adjacent Land Use East:	Commercial
Adjacent Land Use West:	Industrial
Water:	Yes
Sewer:	Yes
Sidewalks on property:	No
Bike lanes:	No
Nearest Bus Stop:	.29 miles; US 1 @ Indian St.
Nearest Traffic Signal:	.29 miles; US 1 @ Indian St.

APPENDIX A

Preliminary Environmental Assessment

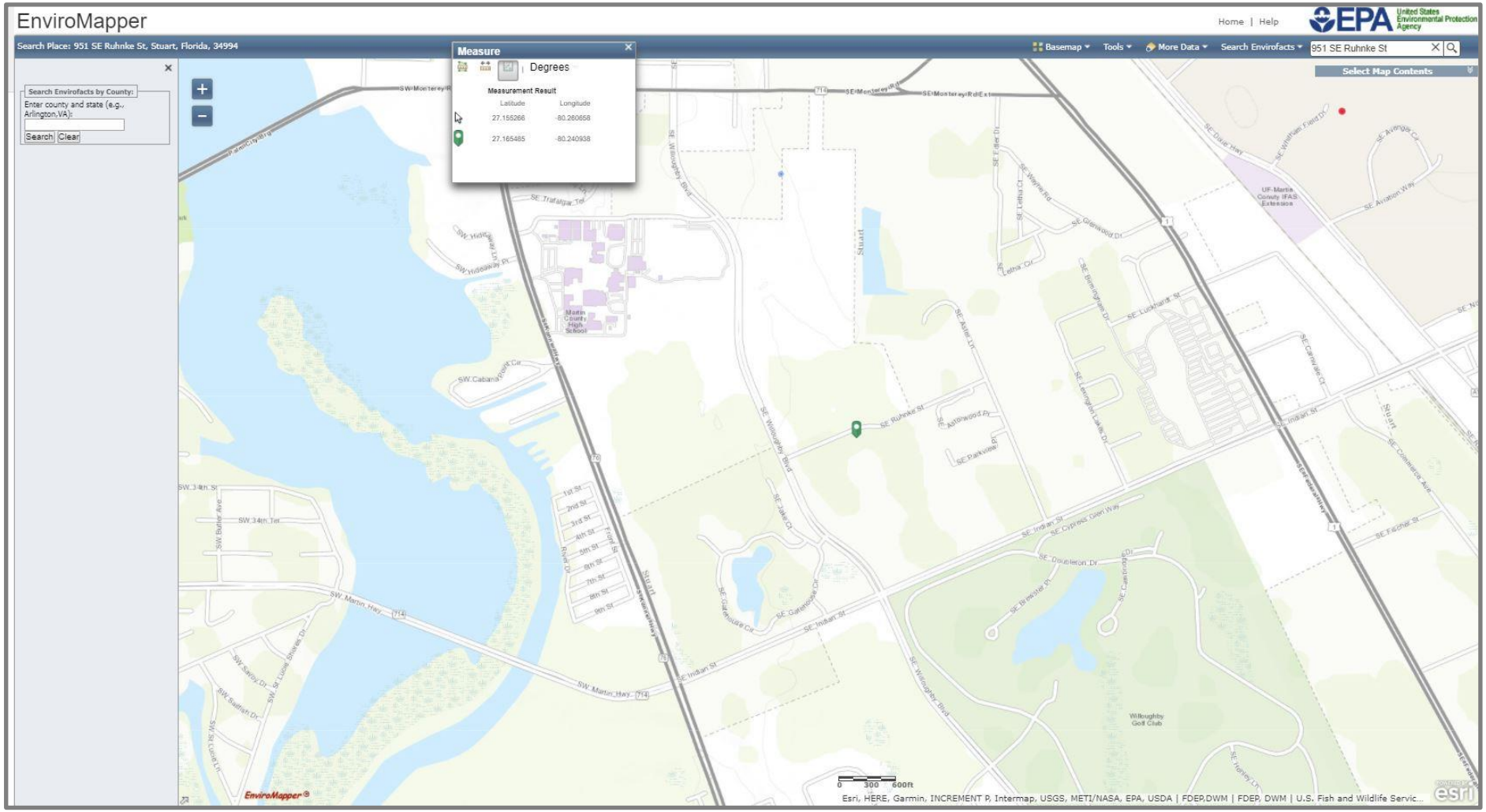
Environmental Data Collection

The following information is based on the environmental data collected from the U.S. EPA Envirofacts Data Warehouse, and the EnviroMapper interactive map. Envirofacts contains information from select EPA Environmental program office databases and provides access about environmental activities that may affect air, water, and land anywhere in the United States. For this assessment we have adopted the term Recognized Environmental Condition (REC) from the American Society for Testing and Materials (ASTM) E-1527-13 to determine if the recommended site or adjacent property(s) are identified to have any REC in connection with the recommended site. A REC is defined as the "presence or likely presence of any hazardous substance or petroleum products on the subject property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the site or into the ground, ground water, or surface water of the site".

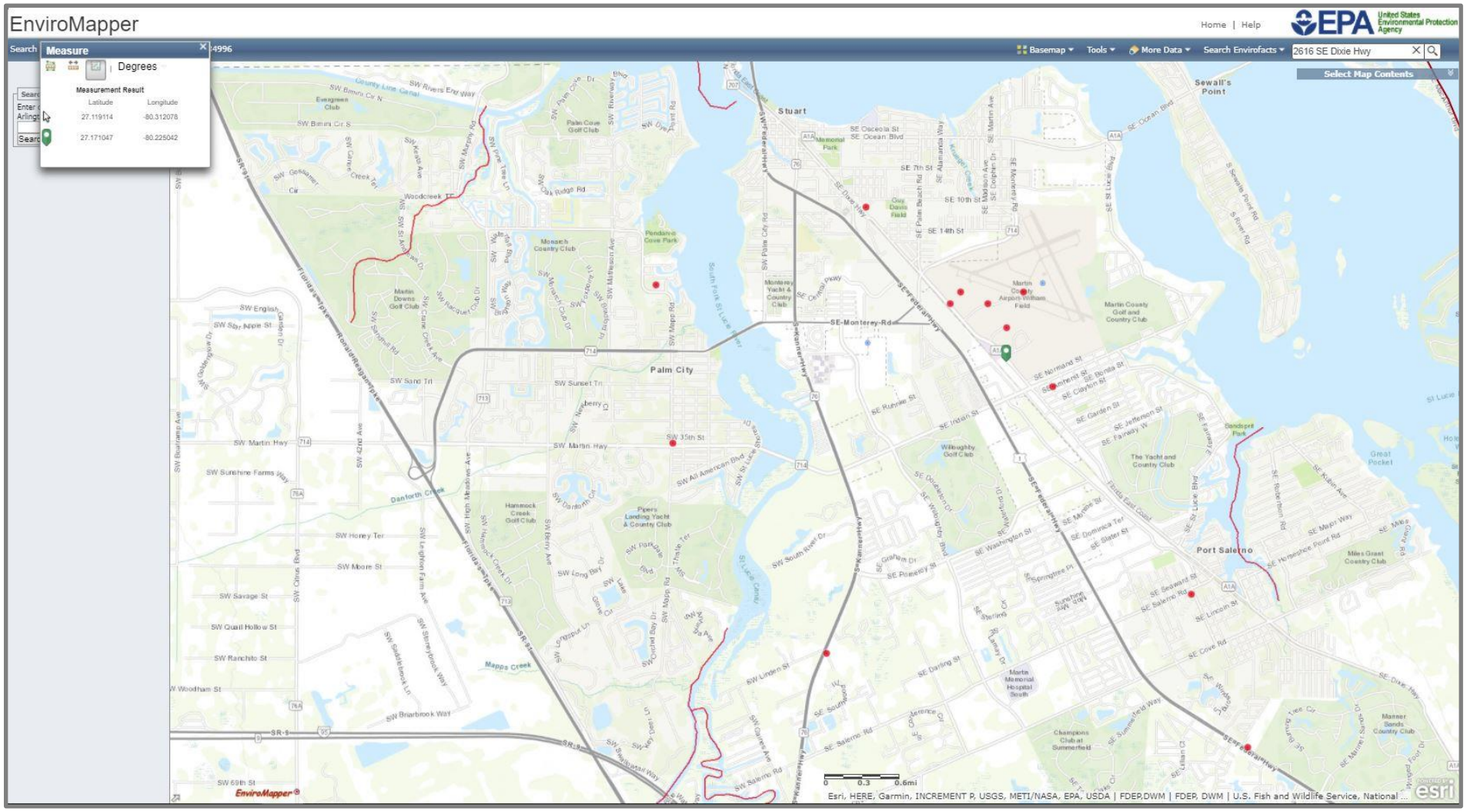
The Table to the right summarizes the findings on each recommended site. Each Figure shows the Recommended Site with a green icon, and Contaminated Sites with a blue or red icon. Nevertheless, none of the Recommended Sites presented on-site RECs.

As Listed	Proposed Site Address	Recognized Environmental Conditions
53	951 SE Ruhnke St	Has 1 contaminated site approximately 0.610-mile north distance. However, site is not listed as having any recognized environmental condition.
45	2616 SE Dixie Hwy	Has 7 contaminated sites within 0.5-mile radius distance. However, site is not listed as having any recognized environmental condition.
55	5250 SE Willoughby Blvd	Has 1 contaminated site approximately 1.13-mile north distance. However, site is not listed as having any recognized environmental condition.
52	900 SE Ruhnke St	Has 1 contaminated site approximately 0.610-mile north distance. However, site is not listed as having any recognized environmental condition.
46	1699 SE Darling St	Has 1 contaminated site at approximately 0.5-mile distance. However, site is not listed as having any recognized environmental condition.
47	1845 SE Salerno Rd	The nearest contaminated site is located approximately 1.88-mile distance from the subject site. However, site is not listed as having any recognized environmental condition.
40	2204 SE Indian St	Has 7 contaminated sites within less than 0.5-mile radius distance. However, site is not listed as having any recognized environmental condition.
37	3261 SE Railroad Ave	Has 1 contaminated site approximately at 0.21-mile distance NE. However, site is not listed as having any recognized environmental condition.
41	2194 SE Indian St	Has 1 contaminated site approximately at 0.41-mile distance NE. However, site is not listed as having any recognized environmental condition.
42	3546 SE Commerce Ave	Has 1 contaminated site approximately at 0.43-mile distance NE. However, site is not listed as having any recognized environmental condition.

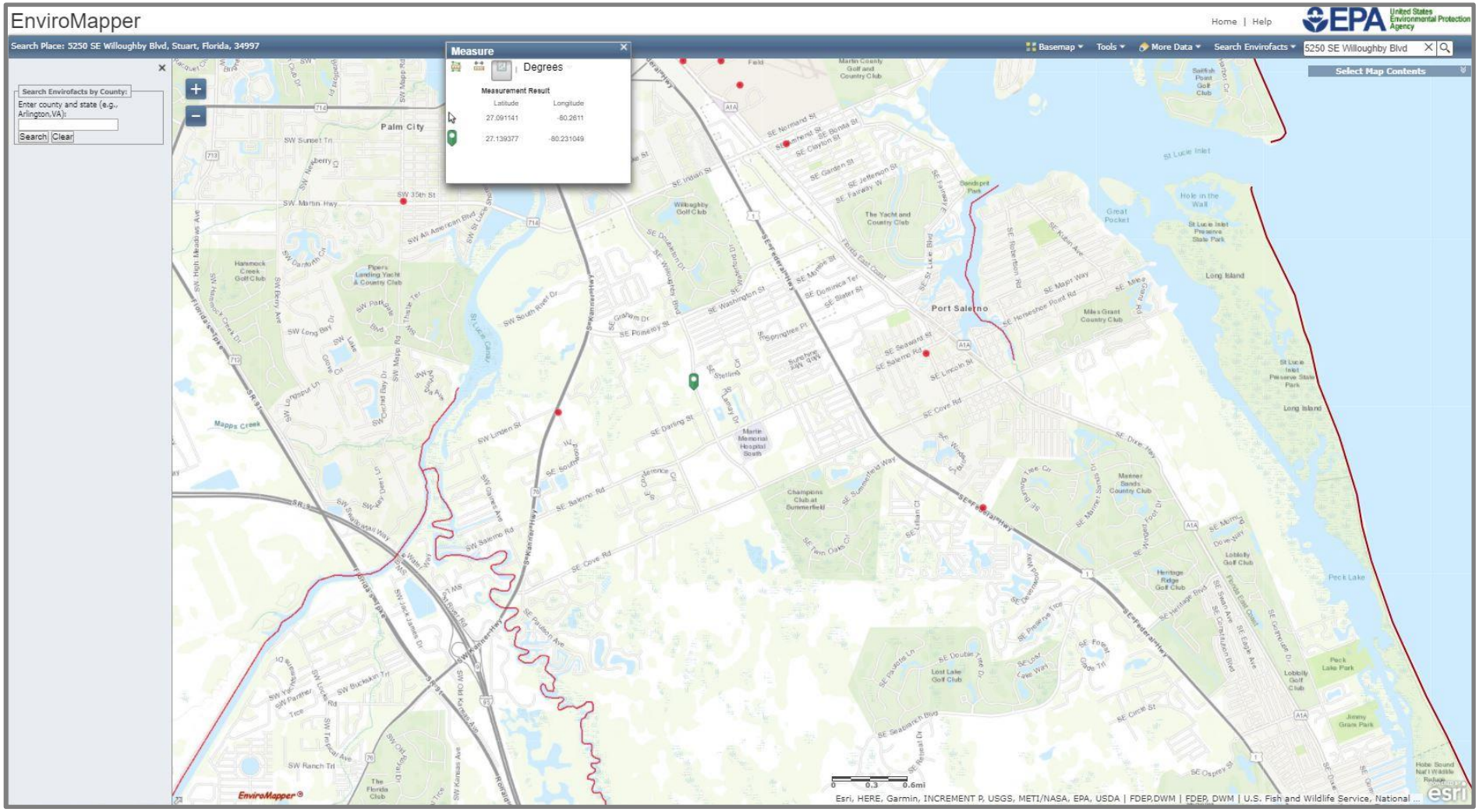
Site 53: 951 SE Ruhnke St.



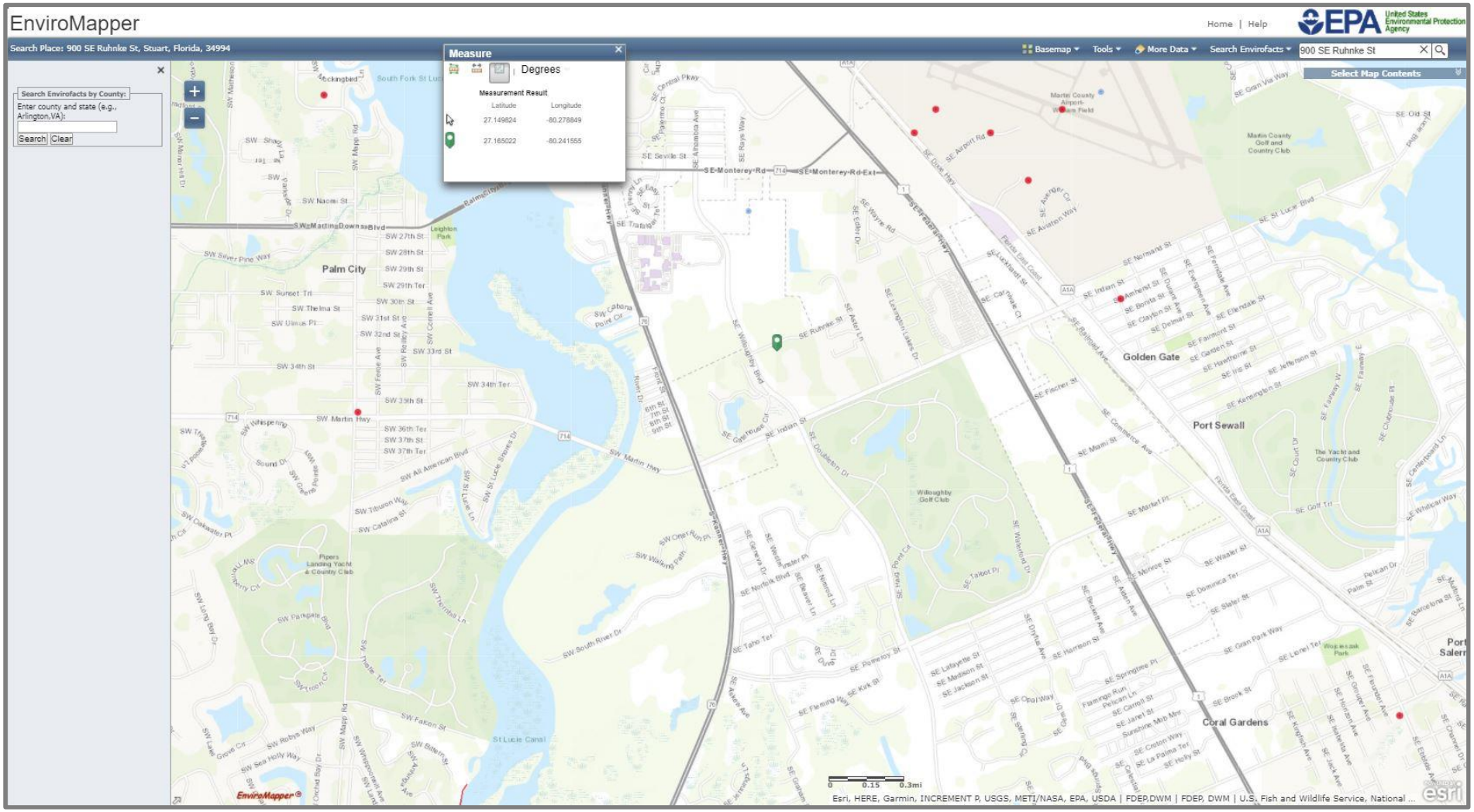
Site 45: 2616 SE Dixie Hwy



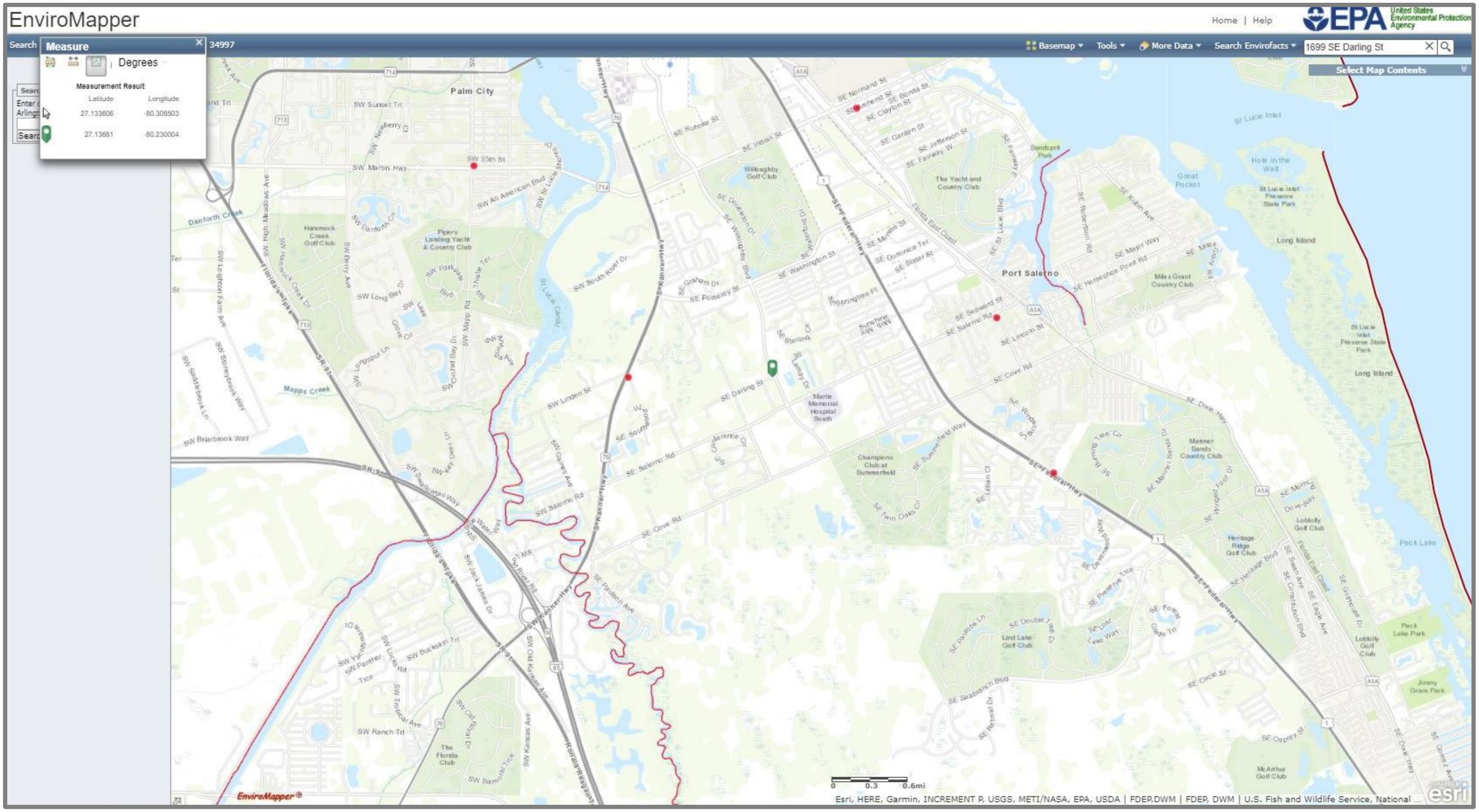
Site 55: 5250 SE Willoughby Blvd



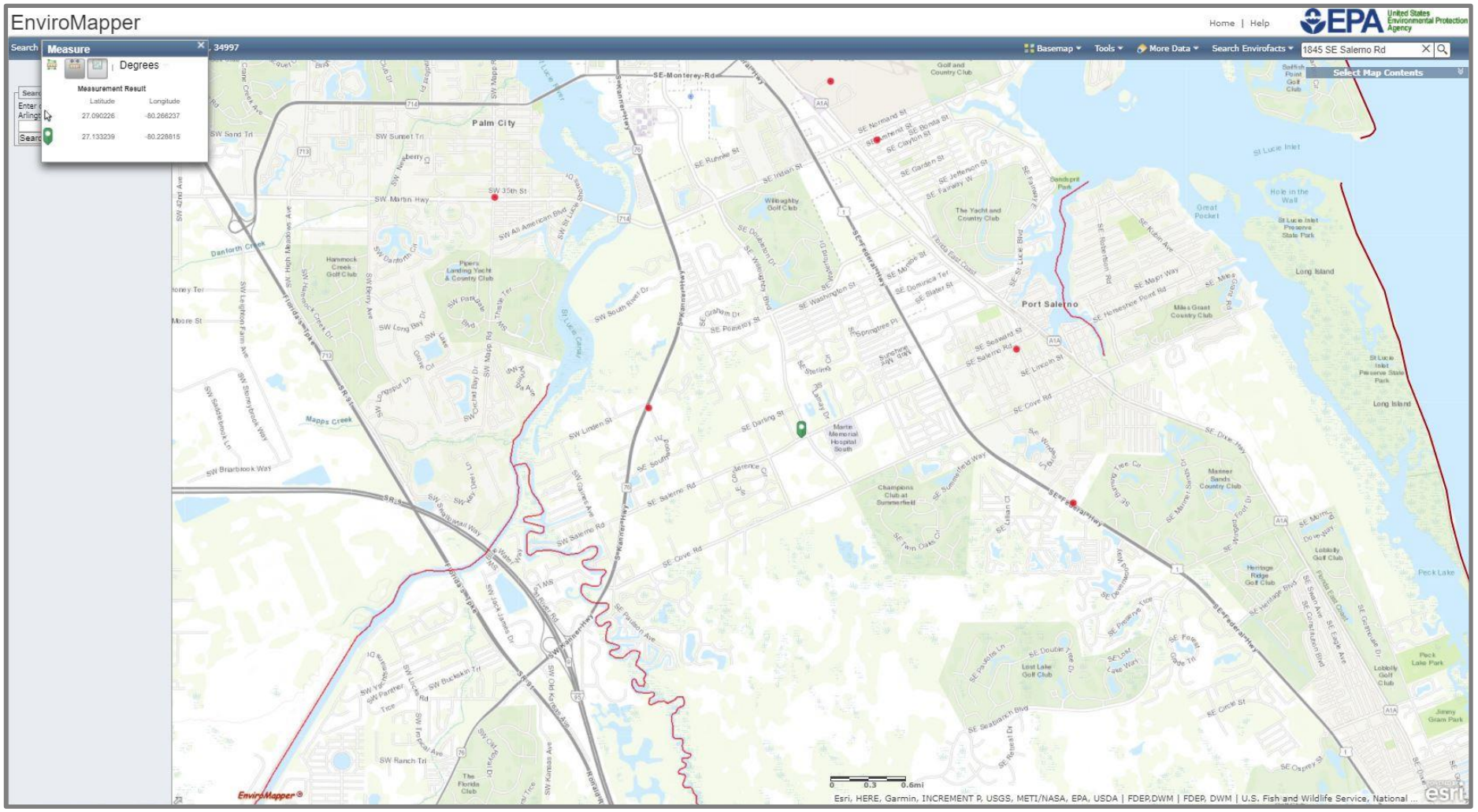
Site 52: 900 SE Ruhnke St.



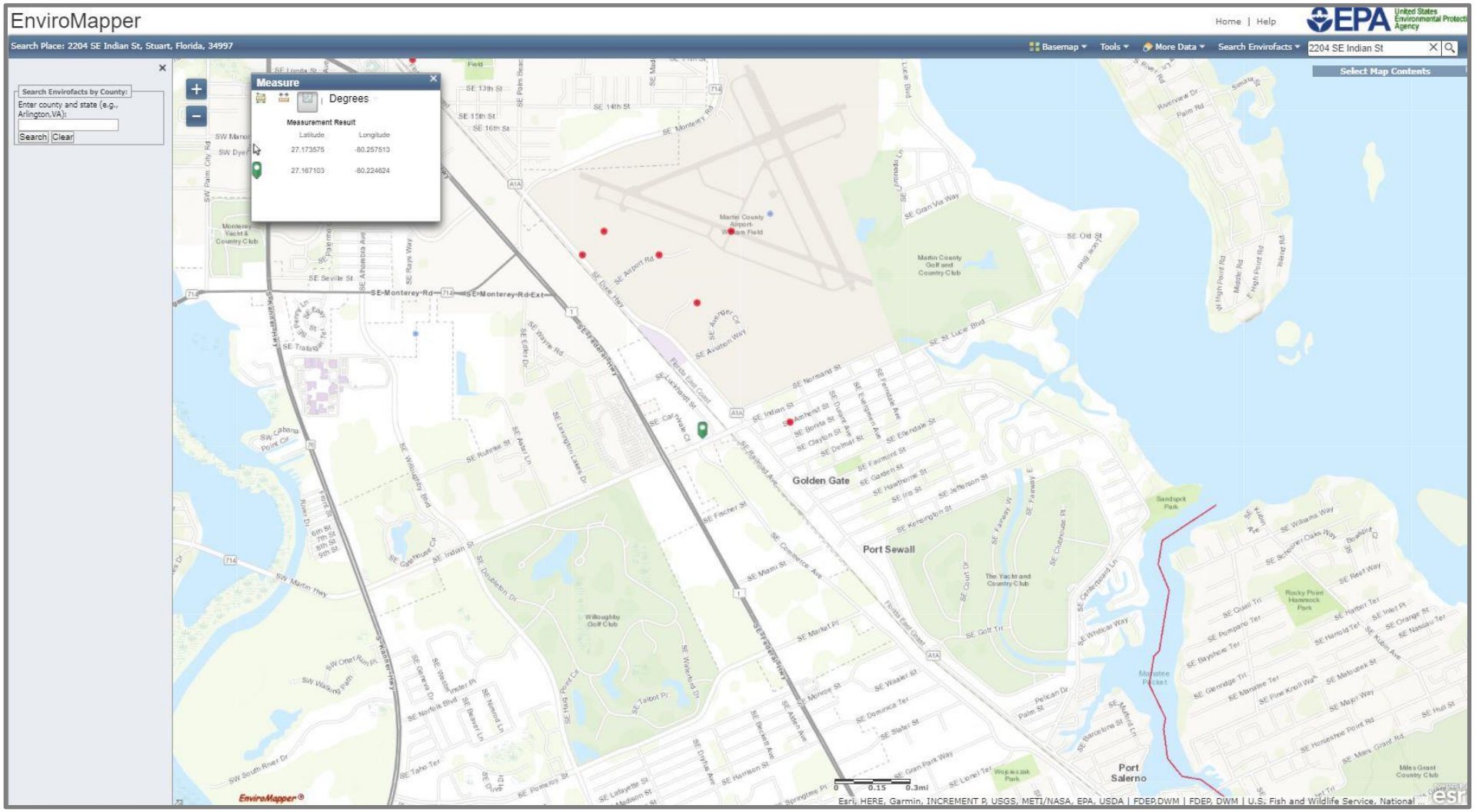
Site 46: 1699 Darling St.



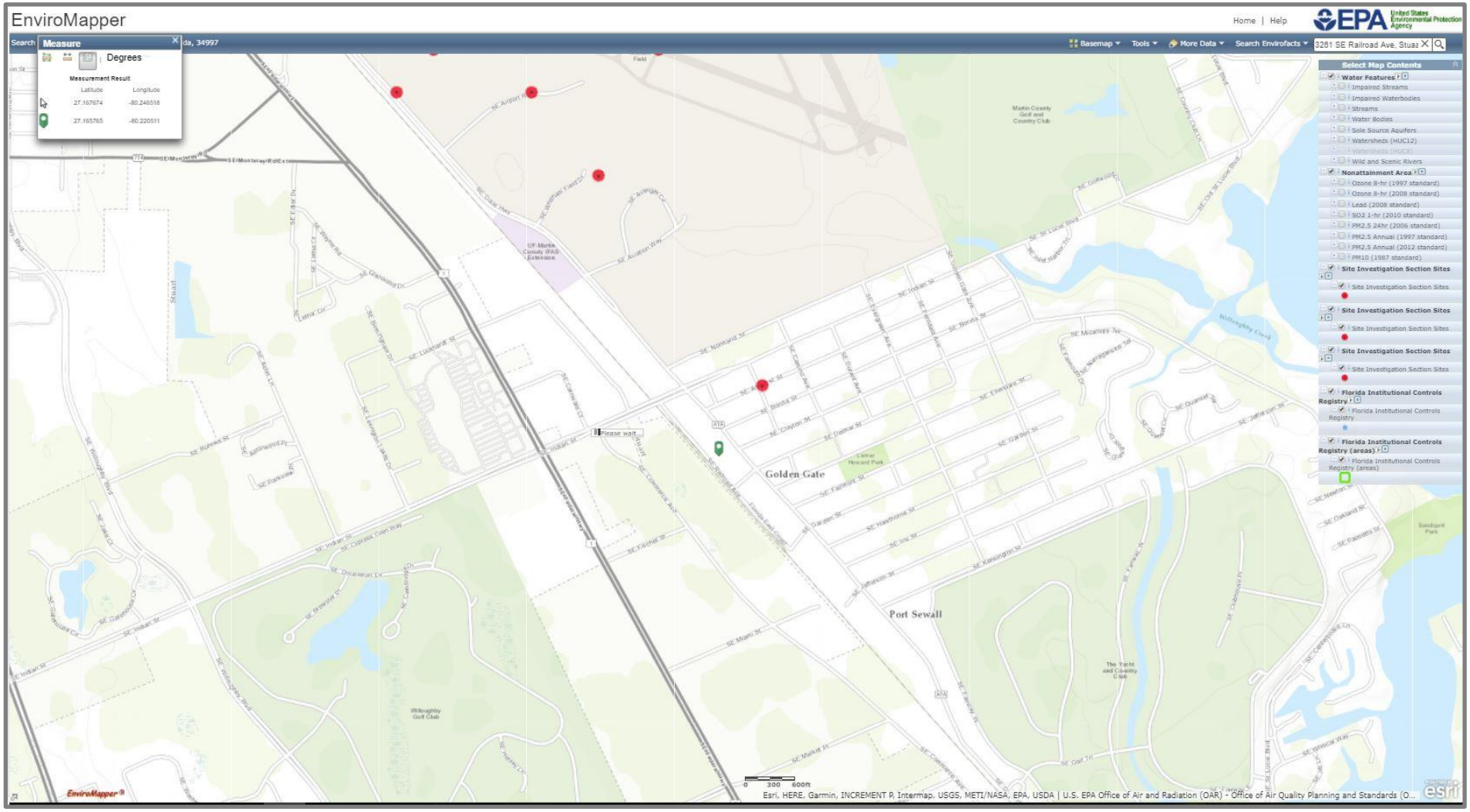
Site 47: 1845 SE Salerno Rd.



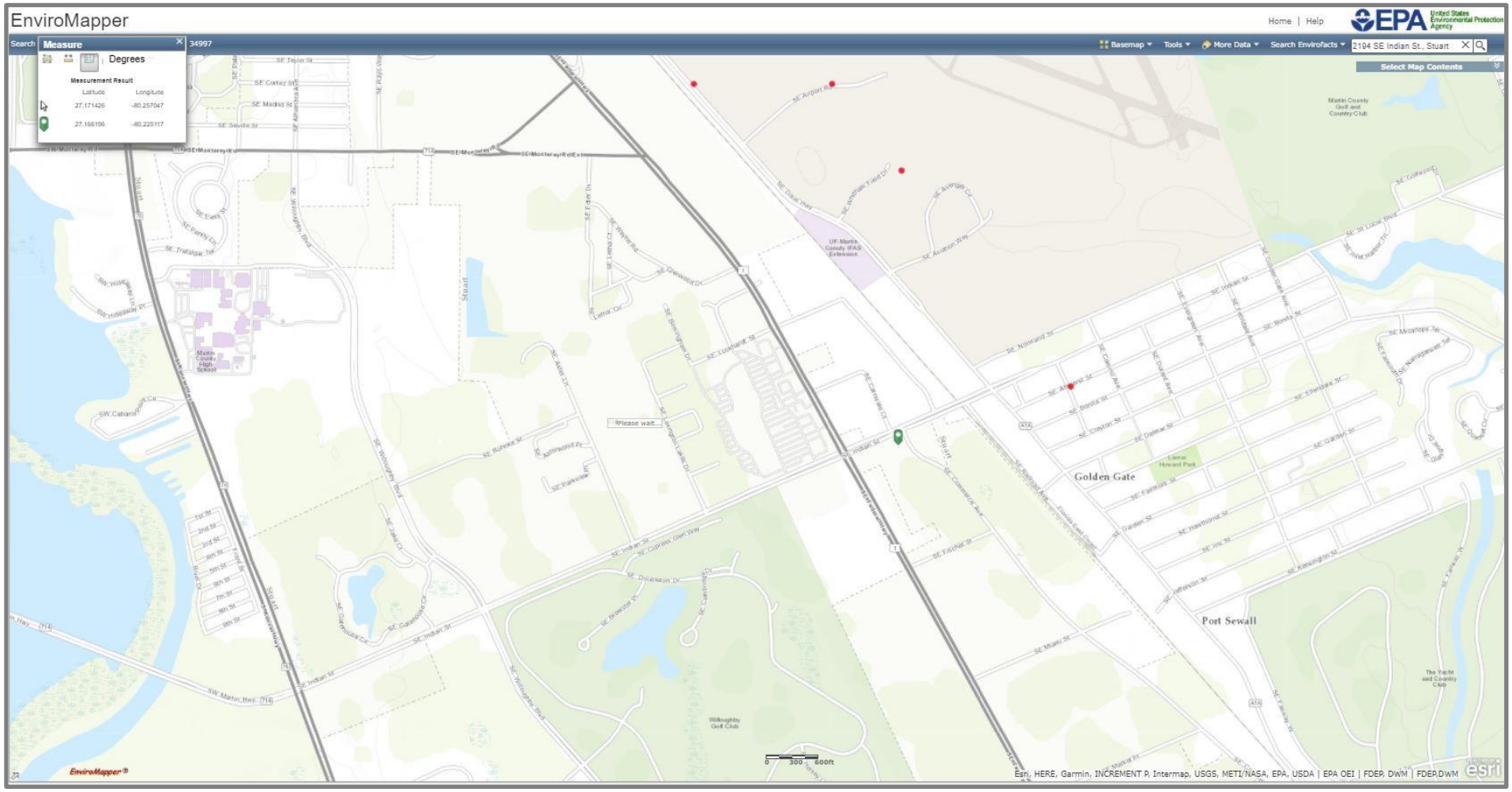
Site 40: 2204 SE Indian St.



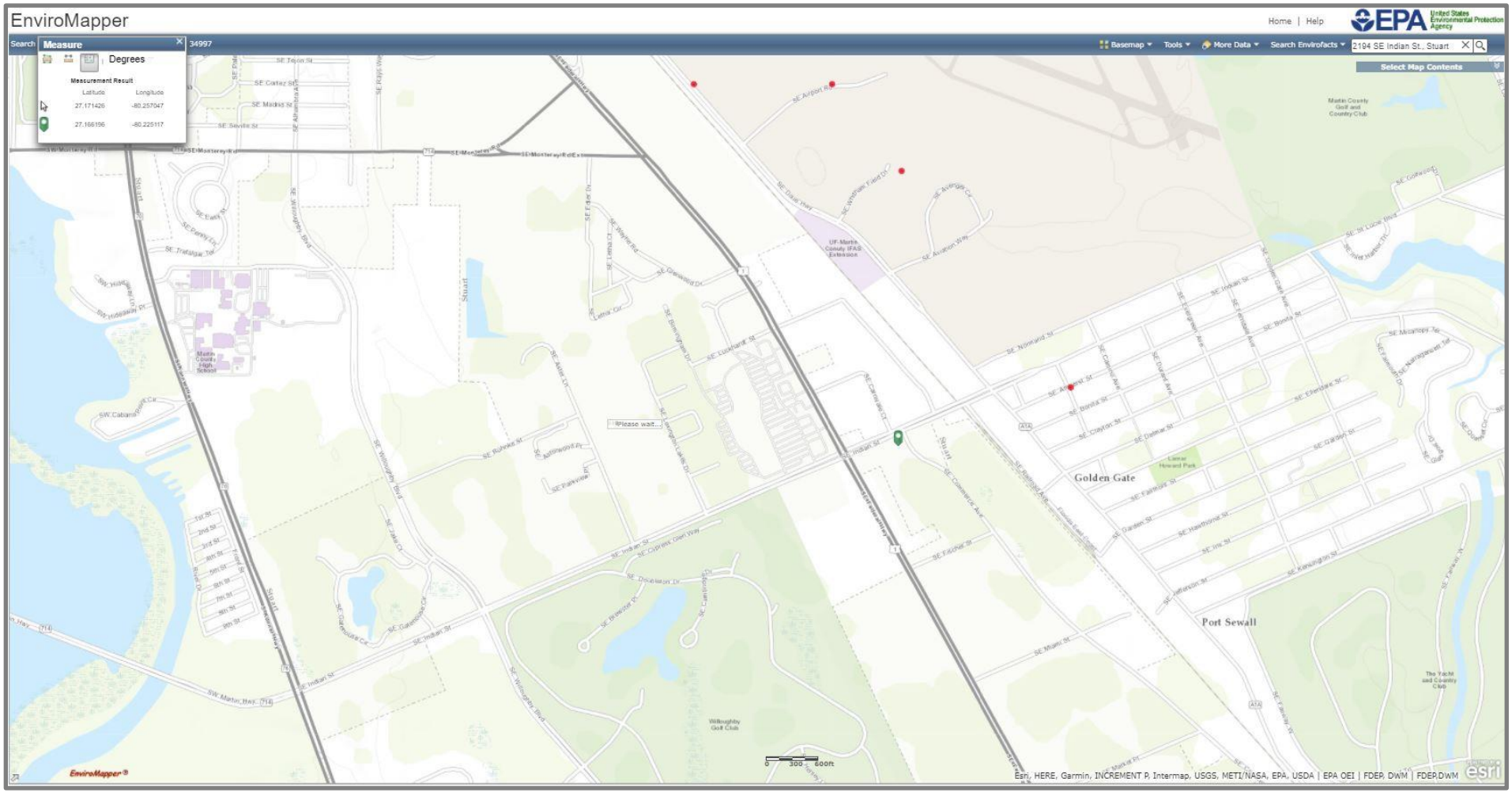
Site 37: 3261 SE Railroad Ave.



Site 41: 2194 SE Indian St.



Site 42: 3546 SE Commerce Ave



APPENDIX B

Capital Investment Program Chapter III- Buses and Bus Facilities

CHAPTER III

BUSES AND BUS FACILITIES

1. INTRODUCTION. The Bus and Bus-Related Facilities portion of the Capital Investment Program (Bus Program) provides capital assistance for new and replacement vehicles and related equipment and facilities. Funds are allocated on a discretionary basis each year and are primarily intended to support one-time or periodic capital needs left unmet by Federal formula funding or by local or State funding sources.

2. ALLOCATION OF FUNDS AND PERIOD OF AVAILABILITY. Funding is appropriated by Congress each fiscal year (FY). These annual appropriations may include funding designations for specific projects or purposes. It is important to note that these Congressional allocations are subject to change by subsequent appropriations or other acts of Congress. FTA may allocate any funds not allocated by Congress on a discretionary basis.

   Funds designated for specific Bus Program projects remain available for obligation for three fiscal years, which includes the fiscal year in which the amount is appropriated plus two additional years. For example, funds apportioned in FY 2008 are available until the end of FY 2010 (September 30, 2010). Bus Program funds not obligated in an FTA grant by the end of this period will generally be made available for other authorized bus projects.

   FTA is authorized to set aside 1 percent of the Capital Investment Program funds to contract for oversight of major capital projects and to conduct safety, procurement, management, and financial compliance reviews and audits. FTA sets aside the funds for these purposes before apportionment of the Bus Program funds.

3. ELIGIBLE RECIPIENTS. States and local governments, as well as subrecipients, such as public agencies, private companies engaged in public transportation and private non-profit organizations, are eligible to receive funds under the Bus Program.

4. ELIGIBLE PROJECTS. Examples of capital projects eligible under the Bus Program include:

   a. the acquisition of vehicles for fleet and service expansion, including clean fuel vehicles;

   b. rehabilitation of buses;

   c. maintenance and administrative facilities;

   d. transfer facilities, bus malls, transportation centers, intermodal terminals, and park-and-ride facilities;

e. intercity bus stations and terminals that are part of joint development projects in accordance with FTA guidance, published in the *Federal Register*, on the eligibility of joint development improvements under Federal transit law (72 FR 5788, Feb. 7, 2007);

f. acquisition of replacement vehicles and bus rebuild;

g. passenger amenities such as passenger shelters and bus stop signs;

h. accessory and miscellaneous equipment such as mobile radio units, supervisory vehicles, fareboxes, computers, and shop and garage equipment;

i. Intelligent Transportation Systems (ITS);

j. ferry vessels and facilities specifically listed in 49 U.S.C. 5309(m);

k. costs incurred in arranging financing for eligible projects under the bus category as a reimbursement (see Chapter II; Subsection 7.g. of this circular concerning alternative financing); and

l. fixed guideway bus projects, such as Bus Rapid Transit (BRT) projects. Fixed guideway bus projects do not have to be advanced through the New Starts or Small Starts processes if funded under the Bus Program instead of the New Starts or Small Starts Programs. However, if the project funded under the Bus Program is also being funded under the New Starts or Small Starts Programs, that project must meet all New Starts or Small Starts Program requirements. In this case, the funding from the Bus Program will be counted as part of the total project cost as "other" Federal funds. (See Chapter V, "New Starts/Small Starts Program," for additional information.)

NOTE: Planning activities are not eligible under the Bus Program. However, costs associated with environmental compliance as part of preliminary engineering (PE) or final design are eligible capital expenses.

5. ENVIRONMENTAL CONSIDERATIONS. FTA's environmental review process has two primary objectives: to fully disclose the probable environmental impacts resulting from a proposed project and to develop measures that will avoid, minimize, or mitigate adverse environmental effects. Before FTA may approve a Capital Investment Program grant, the environmental review process must be complete, and will involve compliance with a number of laws, regulations, and Executive Orders that usually takes place in the context of the National Environmental Policy Act (NEPA) process.

a. Projects That Do Not Have Environmental Impacts. Many projects and activities assisted with Bus Program funds do not involve significant environmental impacts. The joint Federal Highway Administration (FHWA)/FTA environmental impact regulations (23 CFR Part 771) use the term "categorical exclusion" (CE) to describe classes of projects that do not involve significant environmental impacts and, therefore, do not require preparation of either an environmental assessment (EA) or an

environmental impact statement (EIS). CEs fall into two categories: those that are listed specifically in the regulation (23 CFR 771.117(c)) and need no further analysis, and those that require additional documentation under 23 CFR 771.117(d) in order to assure their suitability for CE. Recipients should consult each list to determine whether a particular project may be categorically excluded from the need to prepare either an EA or an EIS.

b. Projects That May Have an Environmental Impact. Projects that involve construction have greater potential for on-site and off-site environmental impacts and are, therefore, subject to additional analysis. Experience has shown, however, that many construction projects can be built and operated without causing significant impacts if they are carefully sited in areas with compatible, non-residential land use where the primary access roads are adequate to handle the additional bus traffic. FTA may approve the designation of these construction projects as documented CEs if the recipient provides an administrative record demonstrating that the conditions stated above in this paragraph are met and that no significant adverse effects will result.

For any project not meeting the conditions for a CE, the recipient must, at a minimum, prepare an EA. In addition to documenting the impacts of the proposed project, an EA requires the grant recipient to consider alternatives as required by Section 102(2)(E) of NEPA (42 U.S.C. 4332(2)). An EA is also subject to public comment. Once the EA has been completed, and when warranted, FTA may issue a finding of no significant impact (FONSI) or a mitigated FONSI which concludes the NEPA process.

If, either as a result of an EA or because of certain project characteristics evident at the outset of project planning, significant environmental impacts are identified or known to exist, an EIS will be required. For example, the new construction or extension of a separate roadway for buses or high-occupancy vehicles (HOVs) not located within an existing highway right-of-way would typically require an EIS.

Federal regulations place limitations on project development while the environmental review process is being conducted. Please contact the appropriate FTA regional office for further information.

6. CLEAN AIR ACT (CAA). The principal CAA requirement with which FTA-funded projects must comply is the transportation conformity process. The conformity requirements are contained in an Environmental Protection Agency (EPA) regulation (40 CFR Part 93) and the requirements apply in areas that currently violate one or more of the National Ambient Air Quality Standards (NAAQS) (nonattainment areas) and also in areas that once violated the standards, but EPA has since redesignated to attainment status (so-called maintenance areas). The transportation conformity process applies not only to federally funded projects but also to long-range transportation plans and Transportation Improvement Programs (TIPs). Determining conformity for transportation plans and TIPs is the responsibility of the Metropolitan Planning Organization (MPO). Determining conformity for individual projects is the project sponsor's responsibility. Major transit

infrastructure projects, e.g., new fixed guideway projects and extensions, will be analyzed at both the regional and local scales.

The transportation conformity regulation reserves detailed air quality analysis for large projects which have the potential to create new violations or make existing violations worse. There is also a list of exempt highway and transit projects in the regulation that does not require any analysis. Many transit projects are exempt from the conformity requirements and can be processed expeditiously. Regardless of the type of project being considered, early consultation with the FTA Regional Office is essential in nonattainment and maintenance areas to establish what the requirements are and how best to satisfy them. The FTA Regional Office can also provide information on selected provisions of other laws that support clean air objectives—for example, FHWA's Congestion Mitigation and Air Quality (CMAQ) Improvement Program. Over the years, local transit agencies have benefited greatly from this program as a supplementary source of funding for transit. The CMAQ Program has its own eligibility requirements, available on FHWA's website at **http://www.fhwa.dot.gov/environment/cmaq06gm.htm**.

7. REQUIREMENTS RELATED TO VEHICLES AND EQUIPMENT. This section contains information concerning program requirements specific to the purchase, maintenance, and operation of vehicles and equipment funded through the Bus Program. Requirements common to all Capital Investment Program applications appear in Chapter VI, "Other Provisions," of this circular.

   a. Buses in Service. The following requirements apply to any vehicle acquired with FTA funding under the Bus Program.

      (1) Commercial Driver's License (CDL). All drivers of motor vehicles designed to transport 16 or more passengers (including the driver) or of motor vehicles which have a gross combination weight rating of 26,001 pounds or more must have a CDL. Mechanics that drive the vehicle must also have a CDL.

      (2) Charter Operations. Title 49 U.S.C. 5323(d) limits charter service provided by federally assisted public transportation operators. FTA regulations specify these limitations in 49 CFR Part 604—Charter Service, amended effective April 30, 2008 (73 FR 2326, Jan.14, 2008). Each grant recipient must enter into an agreement with FTA that the recipient will not engage in charter service unless permitted by FTA charter service regulations. FTA includes that agreement in its annual publication of Certifications and Assurances. Charter service is defined based on whether a third party requests the service or whether the transit agency initiates the service. If a third party requests service, FTA will utilize four characteristics of charter service to determine whether the proposed service meets the definition of charter. If a transit agency initiates the service, FTA will look at whether the transit agency also charges a premium fare or accepts a subsidy from a third party.

In addition, the charter rule established a new electronic database. Interested private operators must register at the FTA charter registration website (**http://www.fta.dot.gov/laws/leg_reg_179.html**) in order to receive notice from transit agencies regarding potential charter trips. Private operators may register by city, by zip code, or for the entire United States. When a transit agency receives a request for charter service that does not fit within one of the other exceptions outlined in the rule, and it is interested in performing the service, it must send notice to all private operators registered for that city or zip code. The notice sent by the transit agency must conform strictly to the requirements of the rule, as additional information will void the notice and may subject the transit agency to a complaint from registered charter providers. The rule also provides for more detailed complaint procedures in the hopes of avoiding frivolous complaint filings. Finally, the rule contains hearing procedures, appeal procedures, and several appendices to assist transit agencies with compliance.

(3) School Bus Operations. Title 49 U.S.C. 5323(f) prohibits the use of FTA funds for exclusive school bus transportation for school students and school personnel. The implementing regulation (49 CFR Part 605) does permit regular service to be modified to accommodate school students along with the general public (so called "tripper service"). For the purpose of FTA's school bus regulation, Headstart is a social service, not a school program. Rules for the Headstart Program limit the types of vehicles which may be used to transport children participating in a Headstart Program. FTA recipients may operate multi-functional vehicles that meet the safety requirements for school transportation, but may not provide exclusive school service.

b. Bus Fleets. FTA has established several policies that are meant to ensure that buses purchased or leased with Federal funds are maintained and remain in transit use for a minimum useful life and to ensure that the buses acquired are necessary for regularly scheduled transit revenue service (i.e., to meet peak service requirements with a reasonable allowance for spares).

(1) Useful Life Policy. Useful life of rolling stock begins on the date the vehicle is placed in revenue service and continues until it is removed from service. Minimum useful life for buses, vans, trolleys, and ferry boats is determined by years in service or accumulation of miles, whichever comes first, as follows:

(a) Large, heavy-duty transit buses including over the road buses (approximately 35'–40', and articulated buses): at least 12 years of service or an accumulation of at least 500,000 miles.

(b) Small size, heavy-duty transit buses (approximately 30'): at least ten years or an accumulation of at least 350,000 miles.

(c) Medium-size, medium-duty transit buses (approximately 25'–35'): at least seven years or an accumulation of at least 200,000 miles.

(d) Medium-size, light-duty transit buses (approximately 25'–35'): at least five years or an accumulation of at least 150,000 miles.

(e) Other light-duty vehicles used in transport of passengers (revenue service) such as regular and specialized vans, sedans, light-duty buses including all bus models exempt from testing in the current 49 CFR Part 665: at least four years or an accumulation of at least 100,000 miles.

(f) Trolleys: The term "trolley" is often applied to a wide variety of vehicles. Thus, the useful life depends on the type of "trolley." FTA classifies "trolleys" and the suggested useful life as described below. For disposition actions, FTA will use these minimum useful life standards:

1 A fixed guideway steel-wheeled "trolley" (streetcar or other light rail vehicle): at least 25 years.

2 A fixed guideway electric trolley-bus with rubber tires obtaining power from overhead catenary: at least 15 years.

3 Simulated trolleys, with rubber tires and internal combustion engine (often termed "trolley-replica buses"): please refer to bus useful life criteria above.

(g) Ferries: The useful life of a ferry depends on several factors, including the type and use of the ferry. Until a final policy for ferries is determined, FTA offers the following suggested minimum useful lives:

1 Passenger Ferries: 25 years.

2 Other Ferries (without refurbishment): 30 years.

3 Other Ferries (with refurbishment): 60 years.

Grant recipients should specify the expected useful life category in requests for bids when acquiring new vehicles.

FTA calculates the value of vehicles before the end of their minimum useful life on the basis of a formula using straight-line depreciation. Straight-line depreciation is a term most often used to indicate that personal property has declined in service potential. Removal of an FTA-funded vehicle from revenue service before the end of its minimum useful life, except for reasons of fire, collision, or natural disaster, leaves the recipient liable to FTA for the Federal share of the vehicle's remaining value. In the case of Project equipment or supplies lost or damaged by fire, casualty, or natural disaster, the fair market value shall be calculated on the basis of the condition of the equipment or supplies immediately before the fire, casualty, or natural disaster, irrespective of the extent

of insurance coverage. Consistent with this policy, the suggested vehicle useful life standards stated above in years refer to time in normal service, not time spent stockpiled or otherwise unavailable for regular transit duty.

(2) Spare Ratio Policies. Spare ratio is defined as the number of spare vehicles divided by the vehicles required for annual maximum service. Spare ratio is usually expressed as a percentage (100 vehicles required and 20 spare vehicles results in a 20 percent spare ratio).

Spare ratios will be taken into account during the review of grant applications proposing to replace, rebuild, or add vehicles. The basis for determining a reasonable spare ratio takes local circumstances into account, but generally, the number of spare vehicles in the active fleet for recipients operating 50 or more fixed-route revenue vehicles should not exceed 20 percent of the number of vehicles operated in maximum service.

For purposes of the spare ratio calculation, "vehicles operated in maximum service" is defined as the total number of revenue vehicles operated to meet the annual maximum service requirement. This is the revenue vehicle count during the peak season of the year, and on the week and day that maximum service is provided. It excludes atypical days and one-time special events. Scheduled standby vehicles are permitted to be included as "vehicles operated in maximum service."

For each grant application to replace, rebuild, or add vehicles, a grant recipient must address the subjects of current spare ratio, the spare ratio anticipated at the time the new vehicles are introduced into service, disposition of vehicles to be replaced, and the recipient's conformance with FTA's spare ratio guidelines. A recipient is required to notify FTA if the spare ratio computation on which the grant application is based is significantly altered before the grant award.

(3) Contingency Fleet. Vehicles may be placed in an inactive contingency fleet, or "stored," in preparation for emergencies. No vehicle may be placed in this inactive contingency fleet unless the vehicle has reached the end of its minimum useful life.

Vehicles held in a contingency fleet must be properly stored, maintained, and documented in a contingency plan, updated as necessary, to support the continuation of a contingency fleet. A contingency plan is not an application requirement, although FTA may request information about the contingency fleet when reviewing grant applications. Contingency plans are also subject to review during FTA's oversight reviews, including the triennial reviews required for recipients of the Urbanized Area Formula Program (49 U.S.C. 5307). Any rolling stock not supported by a contingency plan will be considered part of the active fleet. Since vehicles in the contingency fleet are not part of the active fleet, they do not count in the calculation of spare ratio.

c. Requirements Related to the Purchase of Vehicles. Grant recipients requesting funds for the purchase of vehicles must meet certain FTA requirements.

(1) Rolling Stock Status Report. Grant recipients seeking assistance to undertake fleet and service expansion should describe new markets they intend to serve. The application should address vehicle needs, fleet size, and spare ratio. Official property records (or a Rolling Stock Status Report), in which future needs (expansion and replacement) are discussed, must be available upon request by FTA. The source of some of this information may be documentation developed during the metropolitan and statewide transportation planning processes, in which case summary information and precise reference to the earlier material will be acceptable. Depending on the degree of expansion, the grant recipient may wish to make available a map indicating the fleet and service expansion locations.

In planning for service expansion, local criteria should be used in the identification of feasible opportunities for new or expanded routes. These criteria are often based on demographic measures and are used to identify geographic locations that are good candidates for new transit service. The recipient should take care to explore all areas within the region. Areas that are currently served by transit should also be considered since they may have potential for different types of service.

Candidate areas should then be subjected to a more detailed analysis. Established service design standards suggesting the type and level of service that should be provided (for example, a minimum of 60-minute headways for all routes, or a 12-hour service day) should be included in that analysis. A "Fleet Status" example that may assist the grant recipient in addressing expansion appears in Appendix C of this circular.

(2) Eligibility of Components for Funding. Normally, vehicle components such as spare parts are considered routine purchases and should be acquired using funding from the Urbanized (Section 5307) or Nonurbanized Area (Section 5311) Formula Programs. However, if the grant recipient can show that it would be cost-effective, a limited number of major "spare part" components may be purchased along with the vehicles under the Capital Investment Program. This policy generally applies only when vehicles are being procured for new transit systems, or for extensions and expansions of existing systems that result in a much larger fleet size. However, the policy may also be applied when acquiring replacement vehicles so long as the grant recipient can show that this approach is cost-effective.

(3) Pre-Award and Post-Delivery Review of Buses. Procurements for vehicles, other than sedans or unmodified vans, must be audited in accordance with 49 CFR Part 663, "Pre-Award and Post-Delivery Audits of Rolling Stock Purchases." Additional guidance is available in the manual, "Conducting Pre-Award and Post-Delivery Reviews for Bus Procurement" on FTA's website:

http://www.fta.dot.gov/laws/leg_reg_5423.html. The regulation requires any recipient or subrecipient that purchases rolling stock for use in revenue service with funds obligated after October 24, 1991, to conduct a pre-award and post-delivery review to assure compliance with its bid specifications, Buy America requirements, and Federal motor vehicle safety requirements, and to complete specific certifications. Purchase of more than 20 vehicles for use in areas under 200,000 in population (more than 10, for large urbanized areas with a population greater than 200,000), other than unmodified vans or sedans, requires in-plant inspection. In the case of consolidated procurements on behalf of multiple subrecipients, the in-plant inspection requirement is triggered only if any single subrecipient will receive more than 10 or more than 20 vehicles, depending on area size.

(4) Bus Testing. Any new model bus, as well as models with significant changes, must be tested at the FTA-sponsored test facility in Altoona, Pennsylvania, before Federal funds may be expended to purchase them. This bus testing requirement at 49 U.S.C. 5318(e) applies to buses and modified vans used in transit service, including new bus and van models using alternative fuels such as methanol, ethanol, and compressed natural gas (CNG).

FTA does not require a vehicle manufacturer to test its model before bidding. However, grant recipients acquiring any new bus model or any bus model with a major change in configuration or components must certify that the model will have been tested and the grant recipient will have received a copy of the test report prepared on the bus model before the final acceptance of the first vehicle.

FTA's Bus Testing regulation, at 49 CFR Part 665, defines a new model bus as one not used in public transportation service in the United States before October 1, 1988, or one used in such service but which, after September 30, 1988, is being produced with a major change in configuration or components. A major change in configuration is defined as a change which may have a significant impact on vehicle handling and stability or structural integrity. A significant impact is an effect that could result in an unsafe vehicle characteristic, such as a dangerous operating condition or failure of a structural element. A major change in components is defined as a change in one or more of the vehicle's major components such as the engine, transmission, suspension, axle, or steering.

Partial testing is allowed for vehicle models that previously have been fully tested but are being produced with significant changes. Only those tests that affect specific components or parts of the vehicle and that may produce significantly different data from previous tests must be performed.

Vehicles are tested for maintainability, reliability, safety, performance, structural integrity, fuel economy, and noise. FTA and the manufacturer together pay the bus testing fees.

Bus testing is not required for unmodified mass-produced vans. Unmodified mass-produced vans are vehicles manufactured as complete, fully assembled vehicles as provided by the original equipment manufacturer (OEM). This category includes vans with raised roofs or wheelchair lifts or ramps that are installed by the OEM or by someone other than the OEM, provided that the installation of these components is completed in strict conformance with the OEM modification guidelines. Reports on new model buses or buses with significant changes can be obtained from the Pennsylvania Transportation Institute Bus Testing and Research Center, Duncansville, PA 16635. The telephone number is: 814–695–3404, Fax: 814–695–4069.

(5) Buy America. With certain exceptions, FTA may not obligate funds for a public transportation project unless the steel, iron, and manufactured goods used in the project are produced in the United States (49 CFR Part 661). FTA's Buy America requirements at 49 CFR Part 661 differ from Federal Buy American regulations at 48 CFR Part 25. The former applies to third party contracts funded by FTA. The latter applies to direct Federal procurements. FTA strongly advises recipients to review these regulations, as well as FTA Circular 4220.1, "Third Party Contracting Guidance," before undertaking any procurement.

(6) Disadvantaged Business Enterprises (DBE's). Recipients shall ensure that each transit vehicle manufacturer (TVM), as a condition of being authorized to bid or propose on FTA-assisted transit vehicle procurements, certifies that it has complied with the requirements of 49 CFR Part 26, "Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs." The recipient is obligated to determine, by checking the TVM listing on FTA's website or by checking with FTA's Office of Civil Rights at the time of bid-opening that the manufacturer, which is the apparent contract recipient, is in fact in compliance with Part 26. For further guidance, contact FTA Regional Civil Rights Officers.

d. Replacing FTA-Funded Vehicles. FTA has established several policies to ensure that vehicles acquired with Federal funds are maintained and remain in transit use for a minimum useful life.

(1) Replacement at End of Minimum Useful life. A vehicle proposed to be replaced must have achieved at least the minimum useful life. For purposes of bus replacement grant applications, the age of the bus to be replaced is determined by the number of years of service or mileage at the time the proposed replacement bus will be introduced into service, or when the bus was taken out of service.

(2) Replacement Before the End of Minimum Useful life. Early replacement of a vehicle prior to the end of its minimum useful life requires FTA approval. If a vehicle is replaced before it has achieved its minimum useful life, the recipient has the option of returning to FTA an amount equal to the remaining Federal interest

in the vehicle or applying the "Like-Kind Exchange" policy (discussed below) and placing an amount equal to the remaining Federal interest in the vehicle into a newly purchased vehicle.

To determine the Federal interest in a federally funded vehicle during its minimum useful life, a straight-line depreciation formula is used. For example, a bus with a 12-year minimum useful life, or 500,000 miles, will decrease in value each year by one-twelfth of its original purchase price. Similarly, the Federal interest in the bus decreases each year by one-twelfth of the amount of the Federal grant that was awarded for its purchase. Alternatively, using straight-line depreciation based on mileage, the value decreases for each mile driven by 1/500,000 of the original purchase price, and the Federal interest in the bus decreases by 1/500,000 for each mile driven. The unamortized value of the remaining useful life per unit is the greater value obtained by calculating the straight-line depreciation based on either miles or years.

(3) Use of Like-Kind Exchange Policy. With prior FTA approval, a vehicle may be traded in or sold before the end of its minimum useful life, if a recipient so chooses. In lieu of returning the Federal share to FTA, a recipient may elect to use the trade-in value or the sales proceeds from the vehicle to acquire a replacement vehicle of like kind. "Like-Kind" means exchanging a bus for a bus or a rail vehicle for a rail vehicle, with similar useful lives. Under the like-kind exchange policy, proceeds from the vehicle sales are not returned to FTA; instead, all proceeds are re-invested in acquisition of the like-kind replacement vehicle. If sales proceeds are less than the amount of the Federal interest in the vehicle at the time it is being replaced, the recipient is responsible for providing the difference, along with the recipient's local share of the cost of the replacement vehicle. If sales proceeds are greater than the amount of the Federal interest of the vehicle traded in or sold, the investment of all proceeds in acquisition of the like-kind replacement vehicle results in reduction of the gross project cost.

See, "Example of Like-Kind Exchange Transaction for Transit Bus," in Appendix C of this circular for a sample calculation for the like-kind replacement of a heavy-duty bus, illustrating the sale of a bus at the bus's mid-life.

e. Rebuilding Policies. A recipient may choose to rebuild a vehicle rather than dispose of it. The vehicle to be rebuilt should be at the end of its minimum useful life, as previously described, and in need of major structural and/or mechanical rebuilding. The age of the bus is determined by its years or mileage in service at the time the rebuilding begins. The minimum extension of useful life for a bus is four years. Bus rebuilding work must be procured competitively from private sector sources, unless there are mitigating circumstances. In-house rebuilding must not interfere with normal maintenance activities.

With few exceptions, a vehicle rebuilt with FTA funds must be brought into compliance with the Americans with Disabilities Act (ADA) if that vehicle is not already in compliance. For additional information, see 49 CFR 37.75 for remanufacture of non-rail vehicles.

f. Requirements Related to Accessories and Miscellaneous Equipment. A grant application may include certain miscellaneous items separate from the costs of a bus procurement or facilities project. For example, a recipient may apply for mobile radios, bus stop signs or shelters, supervisory vehicles, fareboxes, computers, and shop and garage equipment. The application must explain the rationale or need for each request. FTA does not require a separate justification if, for example, a farebox or radio is included in the cost of a new bus, or shop equipment is included in the cost of a new maintenance facility.

8. REQUIREMENTS RELATED TO FACILITIES. This section contains information concerning program requirements specific to the construction or acquisition of facilities funded through the Bus Program. Requirements common to all Capital Investment Program applications appear in Chapter VI, "Other Provisions," of this circular.

a. General Philosophy. FTA generally assists in building two kinds of facilities under the Bus Program:

(1) facilities that support transit operations, such as maintenance garages and administrative buildings; and

(2) facilities that provide passenger amenities and extend into the built environment, such as bus terminals, stations, shelters, and park-and-ride lots as well as intermodal facilities that include both transit and intercity bus services.

b. Useful Life of Facilities. Determining the useful life of a facility must take into consideration factors such as type of construction, nature of the equipment used, historical usage patterns, and technological developments. As such, FTA establishes a range of 40–50 years for the minimum useful life of a bus terminal, station, or intermodal facility. Based on any of the methods identified in FTA Circular 5010, "Grants Management Requirements" section on "Useful Life of Project Property," a railroad or highway structure has a minimum useful life of 50 years, and most other buildings and facilities (concrete, steel, and frame construction) 40 years.

c. Mixed-Use Projects. Recipients often choose to pursue projects that have both transit and non-transit elements; or they may construct a transit facility and, at a later date, incorporate non-transit elements. FTA encourages full use of real property and facilities purchased and constructed with Federal funds. Joint Development is an eligible capital expense under 49 U.S.C. 5302(a)(1)(G). FTA's Joint Development policy describes additional opportunities to incorporate commercial, residential, industrial, or mixed-use elements into eligible projects. For further information, see FTA's website for the *Federal Register* notice, 72 FR 5788, February 7, 2007, adopting

Final Agency Guidance on the Eligibility of Joint Development Improvements Under Federal Transit Law. FTA's approach to reviewing projects containing both transit and non-transit elements is reflected in the following examples:

(1) A project designed to improve pedestrian access in the immediate vicinity of and connecting to a transit bus station may be eligible for Capital Investment Program funding. The grant recipient should explain how the project benefits public transportation.

(2) A recipient may lease portions of an FTA-funded facility to other entities in accordance with FTA's joint development guidance (72 FR 5788, Feb. 7, 2007). For example, a recipient may lease part of a bus facility's lobby for use as a small concession stand. It is important to note that certain revenue that a recipient derives from leasing may be considered by FTA to be "program income" according to the standard established in 49 CFR 18.25, and, therefore, may in turn be used for capital or operating expenses.

(3) A recipient may use FTA funds to construct, renovate, or improve an intercity bus or rail station or terminal provided the terminal meets the eligibility criteria of 49 U.S.C. 5302(a)(1)(G).

d. Facility Size. FTA's general policy is to provide assistance for facilities that are adequate for the grant recipient's present needs and that will meet, in a realistic way, its needs of the future. Thus, for a grant recipient currently operating 20 vehicles, a request for a bus maintenance garage that will accommodate 20 vehicles and have space for a 10 to 25 percent vehicle increase would be considered an acceptable grant request. For the same transit agency, a grant request for a garage accommodating 40 vehicles would not be acceptable, unless the grant recipient could demonstrate its need, willingness, and ability to expand its fleet to 40 vehicles in a relatively short time. In either case, however, the purchase of enough land for the future expansion of the fleet and supporting facilities may be justifiable.

e. Project Staging. When applying for a grant to build a facility, a grant recipient must be able to fully describe the project and estimate the cost of the facility. Prior planning for the project may include a feasibility study/needs assessment for the project that provides preliminary cost estimates, funding sources, and possible site locations. The first request for funds would be for engineering and design, which would include costs for development of an environmental document, and real estate appraisals. Once FTA has reviewed and approved the environmental documentation, funds may be requested for land acquisition and construction.

f. Planning Justifications. There must be a planning basis for every project or for every group of projects. Accordingly, FTA requires recipients to include the planning justification in the Transportation Electronic Award and Management (TEAM) system grant application. Planning activities are eligible under the Section 5307 Urbanized Area Formula Program. Feasibility studies at varying levels of detail should be

undertaken in support of projects to acquire, install, or construct major transit facilities. In the grant application, a grant recipient may choose to reference and summarize pertinent parts of documents in which results of project studies were reported (for example, transportation plans, unified planning work programs (UPWPs), and management systems). FTA may request copies of studies or summaries of study results upon reviewing a grant application. The paragraphs that follow provide additional guidance for various kinds of facilities projects:

(1) Passenger Shelters. A program for bus shelters should be developed for the existing and proposed network based on the operator's shelter criteria, and, in the case of significant increases, should be described in the grant application. A map indicating the transit network and shelter location should be developed and available upon request.

(2) Transfer Facility or Transportation Center. The basis for a new transfer facility or transportation center should be documented in a planning study. Elements would include a determination of transit demand and other uses, an evaluation of existing transfer facilities or sites to satisfy existing and future transit needs, an evaluation and selection of sites if a new facility is warranted, preliminary concept design and cost estimate of the transit transfer facility, development of a staging and financing plan, and environmental documentation for the new facility.

(3) Park-and-Ride Facilities. The basis for a new park-and-ride lot should be documented in a feasibility study. Generally, activities would include an evaluation of demand and service needs, evaluation of sites to satisfy existing and future transit needs, preliminary concept design of the park-and-ride lots, development of a staging and financing plan, and environmental documentation for the new facility.

(4) Maintenance and Administrative Facilities. The basis for new maintenance and administrative facilities or major expansions or renovations of existing facilities should be documented in a feasibility study. Activities would include an evaluation of the condition and adequacy of the existing facility, development of site evaluation criteria, identification and evaluation of alternative sites based upon site evaluation and design requirements, final site selection and preliminary concept building design, environmental documentation, and the development of a staging and financing plan.

9. CLEAN FUELS GRANT PROGRAM. Section 3010 of SAFETEA–LU amended 49 U.S.C. 5308, commonly referred to as the Clean Fuels Grant Program, from a formula-based to a discretionary grant program.

The purpose of the program is two-fold. First, the program was developed to assist nonattainment and maintenance areas in achieving or maintaining the National Ambient Air Quality Standards (NAAQSs) for ozone and carbon monoxide (CO). Second, the

program supports emerging clean fuel and advanced propulsion technologies for transit buses and markets for those technologies.

Additionally, buses purchased through the Section 5309 Bus Program may be clean fuel vehicles.

Congress may allocate funds appropriated for Section 5308 to specific projects. If discretionary funds are available, FTA will issue a Notice of Funding Availability and solicit applications. FTA has issued a final rule for the program at 49 CFR Part 624.

a. Funds Availability. Funds are available to an eligible project for the year of apportionment plus two years after the fiscal year for which the amount is made available or appropriated. Any amount that remains unobligated at the end of the three-year period will be added to the amount made available in the following fiscal year.

b. Eligible Recipients. Designated recipients, for urbanized areas with a population of 200,000 or more; and States, for urbanized areas with a population of less than 200,000, in nonattainment or maintenance areas, are eligible to apply for Clean Fuels funds.

   An eligible recipient operates in an area that is either a nonattainment area or a maintenance area for ozone or carbon monoxide.

c. Eligible Projects. An eligible project means a project in a nonattainment or maintenance area and includes:

   (1) purchasing or leasing clean fuel buses and constructing new or improving existing public transportation facilities to accommodate clean fuel buses;

   (2) constructing or leasing clean fuel buses or electrical recharging facilities and related equipment for such buses;

   (3) constructing new or improved existing public transportation facilities to accommodate clean fuel buses; and

   (4) at the discretion of the Secretary, may include projects located in nonattainment or maintenance areas relating to clean fuel, bio-diesel, hybrid electric, or zero emissions technology buses that exhibit equivalent or superior emissions reductions to existing clean fuel or hybrid electric technologies.

      The vehicles must be powered by clean natural gas (CNG), liquefied natural gas (LNG), biodiesel fuels, batteries, alcohol-based fuels, hybrid electric, fuel cell, or clean diesel, to the extent allowed under 49 U.S.C. 5308.

      Although purchase of clean diesel buses is an eligible project, funding is limited to not more than 25 percent of the amount made available each fiscal year for the Clean Fuels Grant Program.

d. Federal Share. The Federal share of eligible project expenses for the base vehicle is 80 percent. The Federal share is 90 percent for the cost of vehicle-related equipment or facilities attributable to compliance with the Clean Air Act, 42 U.S.C. 7401 *et seq*.

(1) The Federal share for eligible projects undertaken for the purpose of complying with or maintaining compliance with the CAA is limited to 90 percent of the net incremental cost of the project or activity. For example, a recipient constructing a new maintenance facility may want to include a fueling station for CNG buses. The maintenance facility is not eligible for the 90 percent Federal share, but the cost of adding the station is eligible. Recipients should provide documentation with the grant application supporting these requests.

For administrative simplicity, FTA allows recipients to compute the Federal share at 83 percent for eligible vehicle purchases. The 83 percent is a blended figure representing 80 percent of the vehicle and 90 percent of the vehicle-related equipment to be acquired in compliance with the Clean Air Act. The 83 percent Federal share does not apply to facilities, for which the costs are more variable. The eligibility of facility-related cost elements at the 90 percent share will be reviewed on a case-by-case basis as part of the grant application process.

(2) The Federal share for capital costs not attributable to compliance with the CAA is 80 percent.

APPENDIX C

FTA Transit Facilities Checklist

Transit Facilities "Checklist", Guidance and Circulars: If Using Federal Funds for Any Phase of Work FTA, Region IV

Preface

The purpose of this "checklist" is to offer a potential grantee seeking Federal funds for any phase of work for a transit facility a "*point of departure*" for researching and understanding the ***myriad Federal requirements for developing a facility***. The checklist is not meant to over-simplify a complicated *real estate, environmental review, public involvement and oversight process* but to offer insights to potential grantees on the areas and issues the grantee will encounter due to Federal rules and regulations adopted over many years. The purpose of these regulations is in part to protect the public, ensure environmental impacts are considered, involve the public in the process and make good and informed investment decisions while minimizing conflict. (NOTE: please also see SAFETEA-LU, Section 6002 for additional information).

Long Range Transportation Plan (LRTP), Metropolitan and State Transportation Improvement Plans (MTIP and STIP)

If the transit facility project is within an urbanized area, please make sure the project is included in the Metropolitan Planning Organization's (MPO) Long Range Transportation Plan (LRTP) as well as the Metropolitan and State Transportation Improvement Program (MTIP and STIP). Please note that the MTIP and STIP are ***fiscally constrained*** program documents and inclusion of a project in the MTIP may be a matter of negotiation and *funding priority vis-à-vis many other possible projects*. Second, please make sure to have the MPO (if applicable) place the project and appropriate phases within the MTIP; and make sure the state has placed the appropriate phase of the facility in the STIP:

- For example, if using FTA funds for Preliminary Engineering, site selection, land acquisition, site improvements and/or construction please include the phase of work and funding amount (approximate) in the MTIP and STIP
- NOTE: FTA looks to *STIP documentation* as part of the application process
- STIP program pages and approval dates are required as part of the TEAM grant application and must be entered in TEAM (not the MTIP documentation)
- Finally, if within an air quality non-attainment or maintenance area please note Clean Air Act compliance provisions under FTA Circular C 9300.1 a 10-01-98. The MPO's LRTP will need to be in compliance with the Statewide Implementation Plan (SIP) and relevant motor vehicle emissions budgets (approved by EPA).

Project Feasibility

Identify ***the demand for and the feasibility of a Transit Facility*** to support your funding request and site selection process. Consider the level of due diligence needed to determine feasibility as well as the necessary environmental reviews:

- Consider and/or complete a *detailed scope of work and/or a study* to determine potential sites and the feasibility of such sites for the intended use.

- If you procure consultant services for a study and/or for environmental reviews and documentation, make sure you ***advertise, take competitive proposals in a fair and open procurement and document the "how/why"*** of selection. For example, is the consultant experienced in such studies/scopes/environmental reviews and is the experience well documented, are the items of work and schedules reasonable? Is the consultant flexible and open to public involvement and outreach? Is the budget for the work reasonable? Will additional services likely be needed and are hourly rates well documented? NOTE: Additional services may be likely as a result of Federal reviews or public input and should be anticipated in the study/documentation budget. If an EA or an EIS is being sought, can the consultant document the number and types of NEPA projects completed and the satisfactory award of Records of Decision (ROD) from FTA?

- Determine the proposed uses and develop a site plan and building facility layout to determine if parking, access and circulation are adequate given setbacks within local ordinances.

- Evaluate ***access, floodplain, drainage, sewer and retention issues, topography and grading issues, facility linkages and economic factors such as likely fair market value (FMV) and eventual public ownership***. Determine the site's suitability for construction of a transit facility and the approximate costs of constructing the desired improvements. Determine the impact of adding impermeable surfaces (asphalt, etc.) and the levels of run-off/retention when considering the site's suitability. Identify local comprehensive plan, land use and ***zoning (commercial/industrial*** vs. residential zoning for example); and note if the site is zoned for the proposed use? For example, will the site need to be re-zoned and has the re-zoning been completed prior to NEPA documentation?

- Please document any ***public involvement*** in the process of site selection. Make sure there is a level of public involvement consistent with the Participation Plan of the cognizant MPO which can be documented. Public involvement meetings during the course of your study should be considered and you may also want to advertise and hold meetings at the MPO level to get public input and document comments. For example, is the public generally supportive of the facility use and proposed location or is there considerable opposition?

Construction Management Handbook

Please see the web link below for the ***construction management handbook***:

http://www.fta.dot.gov/documents/Construct_Proj_Mangmnt_CD.pdf

Environmental Documentation

- FTA *planning dollars from 5303 and 5307 programs* may be used to fund the provision of NEPA documentation (NOTE: if done, please include reference in the Unified Planning Work Program (UPWP) of the relevant MPO as applicable).

- In order to apply for capital dollars under either the 5307 or 5309 programs, NEPA documentation (also see Categorical Exclusion as indicated in 23 C.F.R. 771.117, below) needs to have been submitted for review by FTA **prior to making a grant application in TEAM** for a capital expenditure.

- The purposes of developing the environmental document include: 1) to protect the natural and social environment; 2) to lead a lay reader through the National Environmental and Policy Act (NEPA) process so that the lay reader can reasonably be expected to understand the logic of this evolutionary process which may have led to the recommended alternative/solution; and 3) to protect the federal and local agency using public funds.

- In addition, the primary reason for NEPA and all its various documents is to arrive at ***"good decisions by the parties"*** involved. By making an attempt at obtaining the necessary input from the interested and affected parties, we can make better public funding decisions. *Taking "shortcuts", dismissing possible alternatives without examination and making "simplistic or wrongful assumptions" might result in a flawed environmental document*, which can result in legal delays and other consequences.

- In anticipating and ultimately completing the environmental review and the relevant document, please determine the *type, scope and scale* of the facility and its level of *potential adverse risk* and develop a scope of work for the needed level of environmental review. Please consider ***the class of action*** (emphasizing level of potential adverse impact, degree of certainty with respect to that potential adverse impact, assessment of local accord or discord with the action which together make up the potential risk).

- If procuring consultant services for the environmental documentation, please prepare a detailed scope of work which thoroughly anticipates the myriad issues, alternatives, public comments and re-writes which may be undertaken in the NEPA process and the possibility of additional services.

- A brief synopsis of each of the three types of environmental reviews or "classes of action" are provided as follows:

    - **Categorical Exclusion (23 C.F.R. 771.117)**: Categorical Exclusions (CE's) are granted for actions that do not individually or cumulatively involve significant social, economic or environmental impacts. The

projects listed in 23 C.F.R. 771.117 involve little or no construction and involve minimal or no effects off-site. The regulation gives a list of the types of projects that are categorically excluded. Once FTA has determined that a CE applies, it may act on the application for financial assistance.

- **Environmental Assessment (23 C.F.R. 771.119)**: FTA may require an applicant for financial assistance to prepare an Environmental Assessment (EA) when the significance of the environmental impact is not clearly established. An EA can result in either a Finding of No Significant Impact (23 C.F.R. 771.121) (FONSI) requiring no further environmental evaluation, or identification of potentially significant impacts requiring the applicant to conduct an Environmental Impact Statement (EIS).
- **Environmental Impact Statement (23 C.F.R. 771.123 et. seq**.): Depending on the nature of the proposed project, FTA may immediately require applicants to develop an Environmental Impact Statement (EIS), or request an EIS based on the outcome of an EA. In either case, the EIS requires that a substantial technical analysis and public review process be conducted to evaluate project alternatives, identify potential social, economic and environmental impacts of the project and designate methods to avoid or mitigate these impacts. **Successful completion of an EIS results in FTA signing a Record of Decision (ROD).** Once FTA has signed a ROD, the applicant can proceed with the project and its various phases of work having completed NEPA and FTA may act on the application for Federal assistance.

- Please note that neither the physical magnitude nor the cost of the project alone are indicators of what the class of action should be--it is the **degree of adverse impact and environmental risk** that point to the class of action. The size and/or the cost of the project do not by themselves determine the class of action.

- Consider the **alternatives and their relative environmental impacts**. For example, transfer and storage facilities and bus and maintenance facilities may be considered ***Categorical Exclusions*** by FTA as follows:

  - ***Categorical exclusions (CE's)*** are often granted by FTA with written documentation provided by the grantee to FTA for actions that do not individually or cumulatively involve significant social, economic or environmental impacts; and for projects listed in 23 C.F.R. 771.117, including:

    - new bus storage and maintenance facilities,
    - rehab or reconstruction of bus storage and maintenance facilities,
    - bus transfer facilities and rail storage facilities, and
    - "Hardship" (to the seller) land acquisition, among others.

- See the ***Categorical Exclusion (CE checklist)*** at the **end of this document** to consider if your documentation for a proposed CE submittal is adequate.

- NOTE: The presence of "unknown impacts" from development and construction of a transit facility for example, may result in the requirement that the grantee produce a **documented CE** report or study with written documentation beyond that provided by the checklist to be reviewed as to sufficiency by FTA. This is especially true in the case of a land or property assembly where a phase one or two environmental *site* assessment (as differentiated from a NEPA Environmental Assessment) may be required to determine the likelihood of the presence of any contamination. As a general rule, FTA does not provide grants to remove contamination. The presence of contamination should be thoroughly researched in the process of completing the documented CE report.

- Review the appropriate environmental requirements in various circulars on the FTA web site. For example, please see FTA Circular C 9300.1 A 10-01-98 from the FTA Capital Projects circular:

> b. Projects That May Have an Environmental Impact. A second group of bus category projects involve more construction and greater potential for off-site impacts. Examples are new construction or expansion of bus terminals and transfer facilities, bus storage and maintenance garages, office facilities, and transit centers with park-and-ride facilities. For these projects, the grant applicant must prepare environmental documentation with appropriate technical analysis to support a categorical exclusion, if appropriate, or a finding of no impact (FONSI), depending on the scope and magnitude of the probable environmental impacts.
>
> Experience has shown that many construction projects can be built and operated without causing impacts if they are carefully sited in areas with compatible, non-residential land use where the primary access roads are adequate to handle the additional bus traffic. FTA may approve the designation of these construction projects as categorical exclusions if the grant applicant provides documentation which clearly demonstrates that the conditions stated above are met and that no adverse effects will result. Grant applicants should refer to the list of categorical exclusions requiring FTA approval contained in the joint FHWA/FTA environmental regulations.
>
> For any project not meeting the conditions for a categorical exclusion, the grant applicant must prepare an Environmental Assessment (EA) which documents the impacts of the proposed project and considers alternatives to the proposed site or design. An EA is subject to public comment.
>
> If environmental impacts are identified for a bus category project, an Environmental Impact Statement (EIS) will be required. For example, the new construction or extension of a separate roadway for buses or high-occupancy vehicles which is not located within an existing highway right-of-way normally requires an EIS.
>
> Federal regulations place limitations on project development while the NEPA process is being conducted. Grant applicants should refer to Chapter VI; paragraph 7 in which the limitations are discussed.
>
> c. Clean Air Act Compliance. In nonattainment and maintenance areas, federally assisted transportation projects must comply with the conformity requirements of the Clean Air Act Amendments of 1990. In order to receive

Federal funding, transportation plans, programs, and projects must be found to conform to applicable state implementation plans (SIPs) for air quality. The proposed bus improvement must be included in a current long-range plan and transportation improvement program (TIP), which have been determined to conform to the SIP.

In general, any project expected to have a quantifiable effect on region-wide, transportation-related emissions in an air quality non-attainment area must be included in the regional emissions analysis required for the area's transportation plan and TIP. In addition, some large bus projects (e.g., new inter-modal terminals) must be analyzed for their potential localized impact on air quality. This is normally accomplished as part of the environmental analysis undertaken to comply with the National Environmental Policy Act (NEPA). The FTA Regional Office can provide guidance on how to analyze the localized air quality impacts of various bus projects.

Many bus category projects are exempted from the conformity requirements because they are presumed to have a negligible effect on regional and localized air quality. The grant applicant should refer to the Environmental Protection Agency (EPA) regulations governing the conformity process, for a complete list of exempt projects. There may be cases in which a normally exempt transit project will require an air quality analysis and a conformity determination; hence, the grant applicant should review the proposed project with the FTA Regional Office to decide whether an exemption is appropriate. FTA's exemption determination is usually made in consultation with the agencies responsible for the area's air quality attainment plan.

- When the **environmental impacts are uncertain**, than an Environmental Assessment (EA) may be required. When this is the case, the EA is prepared with relevant documentation to determine the impacts. If there are no, few or minor impacts, than a *Finding of No Significant Impact (FONSI)* will be prepared by the grantee and reviewed by FTA for possible FTA signature

- During the preparation of environmental documentation, if it is determined that **significant environmental impacts** will result, than an Environmental Impact Statement (EIS) must be considered (40 C.F.R. 1508.9).

- The presence of one or more conditions may require **special studies** and the documentation of archaeological, cultural, ecological, historical, parks and water impacts and may further indicate the need for an EIS. The preparation of an EIS or such special studies is beyond the scope of this checklist. (NOTE: Please see the **National Historic Preservation Act, Section 106 and the Federal Transit Act, Section 4 (f)** for additional information with regard to properties eligible for or on the National Register (in some cases properties 50 years old or older may need to be surveyed for historical significance and projects which impact parkland may need special studies).

- Obtain the review of FTA Region IV of the applicable environmental documentation (CE, FONSI Class III or ROD Class I documentation review) **prior to submitting an application for funds to FTA in TEAM.**

- When the environmental reviews are complete, consider **"pinning" the environmental documentation to a pending application in TEAM** using the "gem clip" feature in TEAM (to attach a scanned document).

- **NOTE: A NEPA document is a Federal document, and while the local sponsor (grantee) may recommend an alternative as the preferred alternative, the Federal sponsor is the ultimate decision maker of the alternative's appropriateness for Federal funding.**

Intermodal Transportation Facility: Level Boarding & Freight Issues

Level-boarding compatibility issues must be examined in facilities where AMTRAK and commuter rail trains may be using the same platform or facility. AMTRAK and other trains may have different platform and doorway heights and various "low floor" measures of doorways (17.5, 22 or 48 inches on older trains) may create level boarding challenges. Grantees should make contact with the Civil Rights Officer in Region IV if there is a question with regard to level boarding. The ***Disability Law Coordinating Council*** has written guidance on these level boarding and platform issues on the FTA web site:

http://www.fta.dot.gov/civilrights/ada/civil_rights_3890.html

In addition, *if an intermodal facility is proposed along an existing rail freight line* or a *proposed high speed rail corridor* (Atlanta to Richmond) than reviews by the Federal Railway Administration (FRA) are required to ensure that freight and passenger rail routes (and potential conflicts) are reviewed. In addition, transit facilities built within a curve may result in a "gap" in excess of that allowed or which can be bridged between the platform and the doorway of the train. Prospective stations have been moved due to this "gap" issue. Care should be taken to consider this station location in light of platform/doorway gaps, level boarding and freight queues. Finally, if an existing heavy rail line is being extended coordination with FTA in regard to level boarding compatibility is critical. Older systems may find fleet replacement and level boarding challenges. *The FRA contact is Dick Cogswell at 202.493.6388.*

PM 2.5 Particulate Matter—Non-Attainment Areas
Possible Conformity Determination

If the proposed transit facility is located within a non-attainment area for particulate matter (PM-2.5), the applicant may need to address ***a project conformity determination for PM-2.5 from diesel exhaust.*** According to 40 C.F.R. 93.123(b)(1)(iv), FTA and EPA may become involved via "interagency coordination" with the applicant. For example, projects of air quality concern with a "significant increase" in diesel buses at transit transfer facilities could result in a "CO hot-spot". The PM-2.5 non-attainment areas (in or partially in Region IV) include the following areas:

- Atlanta, Birmingham, Chattanooga, Cincinnati-Hamilton, Greensboro, Winston-Salem, High Point, Hickory, Huntington-Ashland, Knoxville, Louisville, Macon or Rome, GA.

Safety and Security Management Plans (SSMP)

For ***major capital projects***, the requirements for a Safety and Security Management Plan (SSMP) are outlined in FTA Circular 5800.1 - Safety and Security Management Guidance. Please review the ***Safety and Security Management Plan Circular 5800.1*** on the FTA web site regarding the new requirements in SAFETEA-LU for new ***major capital projects*** undertaken after August 1, 2007.

Real Estate

- Consider the following ***real estate property acquisition and relocation*** guidance from the following FTA web sites and links:

  - 49 C.F.R Part 24, see below for Uniform Relocation Act and Real Estate requirements for the Federal Government

    http://www.fta.dot.gov/planning/planning_environment_5937.html

- Please review section 1.3.3.4 - Real Estate Contracts of the FTA, Best Practices Procurement Manual (BPPM) that deals with the acquisition of Real Property (grantees are urged to obtain and review the BPPM):

  http://www.fta.dot.gov/funding/thirdpartyprocurement/bppm/grants_financing_6102.html

  Requirements related to the acquisition, use and disposal of real property may be found in the following regulations (see also FTA web site, and type in Circular name or number in the "Search" box:

  a. FTA Circular 5010.1D, Grant Management Guidelines, Chapter IV-2 Real Property. This Circular defines the requirements of the Federal Transit Laws that are codified at 49 U.S.C. Chapter 53.
  b. 49 CFR §18.31 Real Property, and 49 CFR Part 24, Subpart B Real Property Acquisition.
  c. FTA Master Agreement (MA (12) Section 19.

  The acquisition of real property, either by purchase or lease, is not subject to the requirements of FTA Circular 4220.1E. Real property is defined in 49 CFR Section 18.3 as "land, including land improvements, structures and appurtenances thereto, excluding movable machinery and equipment." The acquisition of easements and rights of way are considered real estate acquisitions and the requirements discussed herein pertain to these types of acquisitions.

  Real property acquisition, use and disposal is covered by FTA Circular 5010.1D, Chapter IV-2; 49 CFR Part 18.31; 49 CFR Part 24 Subpart B; and by the FTA Master Agreement, Section 19.1. It is important that the grantee be familiar with the requirements established by FTA in

Circular 5010.1D, Chapter IV-2. This circular establishes procedures to be followed by grantees in the following areas:

- The conduct of Hazardous Waste Site Assessments before acquiring real property.
- The conduct of an independent appraisal by a certified appraiser.
- The requirement for a review appraisal of the initial appraisal.
- FTA review and concurrence requirements related to grantee's offer to buy property.
- Incidental use of acquired real property as a means to supplement transit revenues.
- Disposition of excess real property by sale, transfer to other programs.
  Requirement to prepare excess property utilization plan for real property no longer used for its original purpose.

- Appraisals and review appraisals ("hard copy") completed by an appraiser will be required and must be completed **prior to preparing an application for funds in TEAM** if property/parcel acquisitions with a value of $ 500,000 * (as of November 1, 2008) or greater are to be acquired for the facility, as follows:

  - Have **"hard-copy" appraisals and a summary cover letter** from the applicant/grantee) sent to FTA Region IV for FTA headquarters (HQ) review (if acquisition cost > $ 500,000 per property/parcel)
  - FTA HQ will provide a review memo for sufficiency of documentation to Region IV and FTA Region IV will notify applicant/grantee of results
  - Value determination is not the FTA's responsibility and approval does not constitute FTA's agreeing with the value, but only sufficiency
  - FTA Region IV will **not be able to process a grant request** in TEAM for land acquisition unless the **'hard-copy" appraisals have first been reviewed** and approved by HQ
  - Appraisals should be dated within six months of the proposed purchase and/or updated accordingly.

- Other real estate issues should be addressed in the **Project Detail narrative in TEAM when the application is entered in TEAM**, as follows:

  - Is the facility ***zoned for transit facility use***? Who will own the facility?
  - Will there be non-transit related retail or other tenants in the facility?
  - If yes, will they pay rent and will be the disposition of rents?
  - Will parking be provided, and if so, will it be adequate for bus and automobile circulation?
  - **NOTE: the facility must be ADA accessible with curbs, ramps and other ADA improvements** and the application should indicate such.

Purchase of Real Estate & "Earmark Funds"

Because of the Uniform Act, appraisal and NEPA requirements, the purchase of property with earmark funds by a grantee that has not completed the numerous Federal actions described herein is ***discouraged***. Grantees who try to purchase property with earmarks without completing the Uniform Act, appraisal and NEPA documents are going to find there may be challenges completing the above requirements in proper sequence and may be risking a lapsing earmark (or the possible future use of Federal funds).

Early Acquisition of Real Estate is "At-Risk"

Grantees should understand that ***"early acquisition" of property is "at risk***" to the grantee and a failure to complete the Uniform Act and appraisal requirements may jeopardize the use of Federal funds on the project. Grantees are strongly urged to respect the appraisal and Uniform Act requirements if there is a chance that Federal funds will be sought for the project.

Use of Land as an In-Kind Match for Federal Funds

- See Circulars/Rules as follows:

  Common Grant Rule at 49 CFR 18.24 "Matching or Cost Sharing." (2) FTA's administration of this authority is in FTA C5010.1D, "Grant Management Guidelines," Chapter IV,-2,3 management of "Real Property, Equipment & Supplies."

  Also see 42 U.S.C. 61, Section 4627 http://www4.law.cornell.edu/uscode/42/4627.html

Uniform Relocation Assistance and Real Property Acquisition Act

- See also the following on relocation assistance procedures:

  The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, may be viewed at: http://www.fhwa.dot.gov/realestate/act.htm

  The implementing regulations (government-wide) are found in 49 CFR Part 24 http://a257.g.akamaitech.net/7/257/2422/01jan20051800/edocket.access.gpo.gov/2005/05-6.htm

Davis-Bacon Wage Rate Determination & Buy America Provisions

Grantees should be aware of the Dept. of Labor wage determination and certification process under the Davis-Bacon Act. Applications in TEAM are routinely sent to the DOL for labor certifications prior to approval. Project facility budgets may need to anticipate Davis-Bacon wage rates and labor reviews. Grantees should also be made aware of ***Buy America*** provisions when purchasing materials and equipment.

The CE Information "Checklist" is attached on the next page.

* NOTE: Circulars are in process of being updated and will change from time to time.

Date _____

Grant Applicant _____

INFORMATION REQUIRED FOR PROBABLE CATEGORICAL EXCLUSION (SECTION 771.117(d))

_____ A. DETAILED PROJECT DESCRIPTION:

_____ B. LOCATION (INCLUDING ADDRESS):

Attach a site map or diagram, which identifies the land uses and resources on the site and the adjacent or nearby land uses and resources. This is used to determine the probability of impact on sensitive receptors (such as schools, hospitals, residences) and on protected resources.

_____ C. METROPOLITAN PLANNING & AIR QUALITY CONFORMITY:

Is the proposed project "included" in the current adopted MPO plan, either explicitly or in a grouping of projects or activities? What is the conformity status of that plan? Is the proposed project, or are appropriate phases of the project included in the TIP? What is the conformity status of the TIP?

_____ D. ZONING:

Description of zoning, if applicable, and consistency with proposed use.

_____ E. TRAFFIC IMPACTS:

Describe potential traffic impacts; including whether the existing roadways have adequate capacity to handle increased bus and other vehicular traffic.

_____ F. CO HOT SPOTS:

If there are serious traffic impacts at any affected intersection, and if the area is non-attainment for CO, demonstrate that CO hot spots will not result.

_____ G. HISTORIC RESOURCES:

Describe any cultural, historic, or archaeological resource that is located in the immediate vicinity of the proposed project and the impact of the project on the resource.

_____ H. NOISE:

Compare the distance between the center of the proposed project and the nearest noise receptor to the screening distance for this type of project in FTA's guidelines. If the screening distance is not achieved, attach a "General Noise Assessment" with conclusions.

_____ I. VIBRATION:

If the proposed project involves new or relocated steel tracks, compare the distance between the center of the proposed project and the nearest vibration receptor to the screening distance for this type of project in FTA's guidelines. If the screening distance is not achieved, attach a "General Vibration Assessment" with conclusions.

_____ J. ACQUISITIONS & RELOCATIONS REQUIRED:

Describe land acquisitions and displacements of residences and businesses.

_____ K. HAZARDOUS MATERIALS:

If real property is to be acquired, has a Phase I site assessment for contaminated soil and groundwater been performed? If a Phase II site assessment is recommended, has it been performed? What steps will be taken to ensure that the community in which the project is located is protected from contamination during construction and operation of the project? State the results of consultation with the cognizant State agency regarding the proposed remediation?

_____ L. COMMUNITY DISRUPTION & ENVIRONMENTAL JUSTICE:

Provide a socio-economic profile of the affected community. Describe the impacts of the proposed project on the community. Identify any community resources that would be affected and the nature of the effect.

_____ M. USE OF PUBLIC PARKLAND AND RECREATION AREAS:

Indicate parks and recreational areas on the site map. If the activities and purposes of these resources will be affected by the proposed project, state how.

_____ N. IMPACTS ON WETLANDS:

Show potential wetlands on the site map. Describe the project's impact on on-site and adjacent wetlands.

_____ O. FLOODPLAIN IMPACTS:

Is the proposed project located within the 100-year floodplain? If so, address possible flooding of the proposed project site and flooding induced by proposed project due to its taking of floodplain capacity.

_____ P. IMPACTS ON WATER QUALITY, NAVIGABLE WATERWAYS, & COASTAL ZONES:

If any of these are implicated, provide detailed analysis.

_____ Q. IMPACTS ON ECOLOGICALLY-SENSITIVE AREAS AND ENDANGERED SPECIES:

Describe any natural areas (woodlands, prairies, wetlands, rivers, lakes, streams, designated wildlife or waterfowl refuges, and geological formations) on or near the proposed project area. If present, state the results of consultation with the state department of natural resources on the impacts to these natural areas and on threatened and endangered fauna and flora that may be affected.

_____ R. IMPACTS ON SAFETY AND SECURITY:

Describe the measures that would need to be taken to provide for the safe and secure operation of the project after its construction.

_____ S. IMPACTS CAUSED BY CONSTRUCTION:

Describe the construction plan and identify impacts due to construction noise, utility disruption, debris and spoil disposal, air and water quality, safety and security, and disruptions of traffic and access to property.

The action described above meets the criteria for a NEPA categorical exclusion (CE) in accordance

with 23 CFR Part 771.117 _____.

_____
Applicant's Environmental Reviewer **Date**

_____
FTA Grant Representative