

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
TECHNICAL REPORT COVERSHEET

**SOCIOCULTURAL EFFECTS EVALUATION
TECHNICAL MEMORANDUM**

Florida Department of Transportation
District 6

**Ludlam Trail Corridor
Project Development & Environment (PD&E) Study**

From SW 80th Street to 400 feet North of NW 7th Street
Miami-Dade County, Florida

Financial Management Number: 444236-1-22-01
ETDM Number: 14369

June 2021

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated December 14, 2016 and executed by FHWA and FDOT.

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List of Acronyms

ACHP	Advisory Council on Historic Preservation
ACS	American Community Survey
ADA	Americans with Disabilities Act
APE	area of potential effect
BCC	Board of County Commissioners
BEBR	Bureau of Economic and Business Research
CDMP	Comprehensive Development Master Plan
CEQ	Council on Environmental Quality
CRAS	Cultural Resource Assessment Survey
CSER	Contamination Screening Evaluation Report
DOA	Determination of Applicability
EO	Executive Order
ETDM	Efficient Transportation Decision Making
EZ	Enterprise Zone
FDEP	Florida Department of Environmental Protection
FDHR	Florida Division of Historical Resources
FDOT	Florida Department of Transportation
FEC	Florida East Coast
FECI	Florida East Coast Industries
FECR	Florida East Coast Railroad
FGDL	Florida Geographic Data Library
FHWA	Federal Highway Administration
FOLT	Friends of Ludlam Trail
F.S.	Florida Statutes
FY	Fiscal Year
GLO	General Land Office
LAP	Local Agency Program
LEP	Limited English Proficiency
LRTP	Long Range Transportation Plan
MDPROS	Miami-Dade County Parks, Recreation and Open Spaces
NHPA	National Historic Preservation Act
MPO	Metropolitan Planning Organization
NEPA	National Environmental Policy Act
NRHP	National Register of Historic Places
OGT	Office of Greenways and Trails
PAB	Planning Advisory Board
PD&E	Project Development and Environment
PIP	Public Involvement Plan
RRFB	Rectangular Rapid Flashing Beacon
RCI	Roadway Characteristics Inventory
ROW	right-of-way
RV	Recreational Vehicle
SCE	Sociocultural Effects
SHH	State Historic Highways
SHPO	State Historic Preservation Officer
STIP	State Transportation Improvement Program

SUN	Shared-Use Nonmotorized
SWEPT	StateWide Environmental Project Tracker
TIP	Transportation Improvement Program
TPO	Transportation Planning Organization
USDA	United States Department of Agriculture

EXECUTIVE SUMMARY

Miami-Dade County Parks, Recreation, and Open Spaces (MDPROS) in coordination with the Florida Department of Transportation (FDOT), is conducting a Project Development and Environment (PD&E) Study, in accordance with the National Environmental Policy Act (NEPA), to assess the proposed development of a 5.6-mile multi-use trail within a former railroad corridor, in Miami-Dade County, Florida.

This project has been developed in compliance with Title VI of the Civil Rights Act of 1964 and other related federal and state nondiscrimination authorities. Neither MDPROS nor the FDOT will deny the benefits of, exclude from participation in, or subject to discrimination anyone on the basis of race, color, national origin, age, sex, disability, or family status.

This Technical Memorandum identifies and addresses the project's potential effects on communities and community resources. The Sociocultural Effects (SCE) evaluation process is collaborative, involving government agencies, the public, and other stakeholders to work to ensure the community values and concerns receive consideration during project development and no population groups are disproportionately affected. Information gathered through the SCE evaluation process is carried forward and used as a basis for decision making throughout the project delivery process.

The project study area was assessed to evaluate the potential effects on communities and quality of life. The assessment included social, economic, land use changes, mobility, aesthetics effects, and relocations, including potential issues associated with Environmental Justice, Civil Rights, and other nondiscrimination laws. Project benefits and effects on communities were assessed with special consideration for minority, low-income, and other potentially underrepresented populations. **Table ES-1** provides a summary of the potential community impacts and degrees of effect.

Table ES - 1: Project Effects Overview Summary

Issue	Impact	Degree of Effect
Social	Temporary disruptions during construction Long-term quality of life improvements Enhanced mobility options Enhanced non-motorized transportation accommodations No neighborhood division or social isolation Enhance community cohesion Reduced congestion Improving opportunities for physical activity	Enhanced
Economic	Temporary disruptions during construction Stimulates the economic vitality of the area Property values will increase within walkable area Nodes of responsible development will generate additional property and sales tax revenue	Enhanced
Land Use Changes	Consistent with the existing and future land use vision for the project area	Minimal
Mobility	Temporary disruption to traffic patterns Provides non-motorized transportation options for transportation disadvantaged, equity Improved mobility, connectivity, and accessibility Safe crossings at intersections Regionally significant trail	Enhanced
Aesthetic Effects	Noise and vibration concerns during construction Loss of some existing vegetation Enhanced landscaping and hardscape Replacement of an abandoned railroad corridor with an active, well-maintained, and aesthetically pleasing trail	Enhanced
Relocation Potential	No relocations	None

1.0 INTRODUCTION

This Sociocultural Effects (SCE) Evaluation Technical Memorandum provides information in support of the Ludlam Trail Corridor Project Development and Environment (PD&E) Study. The Miami-Dade County Parks, Recreation and Open Spaces (MDPROS) Department, in coordination with the Florida Department of Transportation (FDOT), is conducting a PD&E Study for the Ludlam Trail Corridor, which stretches from SW 80th Street to 400 feet north of NW 7th Street, between 69th and 70th Avenue, in Miami-Dade County.

1.1 Project Description

MDPROS is proposing to develop a 5.6-mile multi-use trail within the former Florida East Coast Railroad (FECR) railroad corridor (i.e., the Ludlam Trail Corridor, or proposed project). As a priority paved land trail from the Florida Greenways and Trails System (FGTS) Priority Network and Shared-Use Nonmotorized (SUN) Trail Network, the proposed publicly accessible transportation corridor will serve bicyclists, pedestrians, and users of other types of non-motorized vehicles. In addition, the proposed project is anticipated to provide a safe, dedicated, and direct means of non-motorized transportation to and from areas of residences, work, schools, parks, and shopping centers.

The proposed project limits extend along a segment of the former FECR rail corridor from SW 80th Street to 400 feet north of NW 7th Street, between 69th and 70th Avenue (**Figure 1-1**). The project primarily occurs within the former FECR right-of-way (ROW) with the exception of proposed improvements at road and street crossings. The ROW for the proposed Ludlam Trail Corridor is approximately 100 feet wide for most of its length, although it narrows to between 75 and 80 feet in some areas and down to 18 feet in sections designated for mixed-use development. The project study area traverses sections of the City of Miami, and unincorporated Miami-Dade County, and is immediately adjacent to the City of West Miami and the City of South Miami. The Ludlam Trail Corridor project location is shown in **Figure 1-1**.

1.2 Project Background

In December 2018, MDPROS acquired the land formerly used as a railroad corridor from FECR. Approximately one (1) mile of the northernmost section of the corridor has an Interim Trail Use designation by the Surface Transportation Board (STB) and, although the rails have been removed, the corridor could be re-activated for railroad use in the future. The remaining approximate five (5)-mile portion of the corridor has been fully abandoned from railroad use since 2006. The County will develop the Ludlam Trail Corridor for public use, as a shared-use trail for non-motorized use. Miami-Dade County intends to utilize a variety of funding sources (e.g., federal, state, local) for the project through a Local Agency Program (LAP) agreement.

Consistent with the *Miami-Dade County Comprehensive Development Master Plan (2018)* and zoning approvals, FECR has retained parcels for mixed-use development of the proposed Ludlam Trail Corridor. The locations of the development nodes include the north/south sides of SW 40th Street/Bird Road, SW 24th Street/Coral Way, and from SW 8th Street/Tamiami Trail/Calle Ocho to SW 12th Street. Miami-Dade County acquired an 18-foot wide perpetual easement through the proposed development nodes for continuity of the Ludlam Trail.

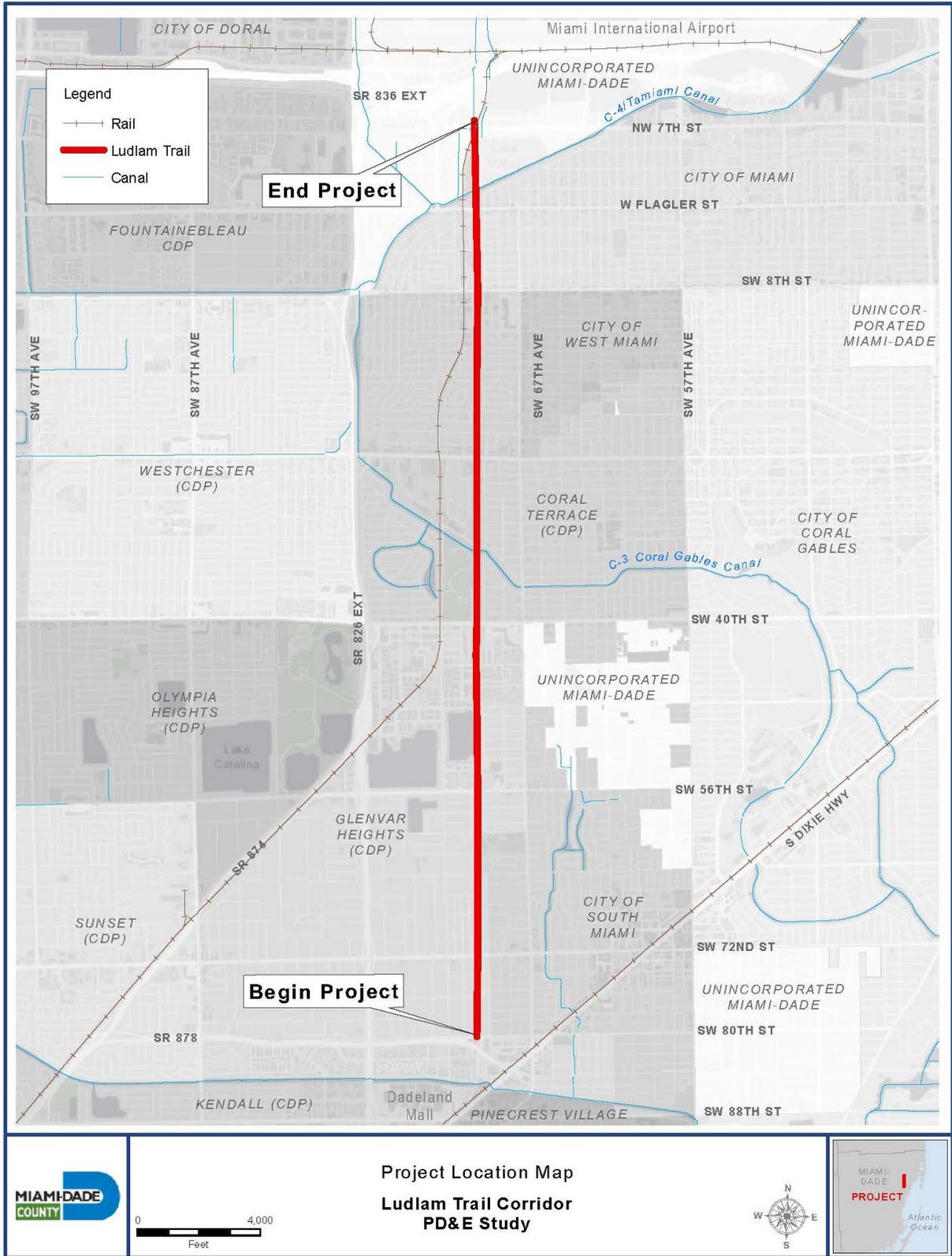


Figure 1 - 1: Project Location Map

1.3 Project Purpose and Need

The purpose of the proposed Ludlam Trail Corridor Project is to encourage the use of alternate modes of transportation and enhance overall connectivity and accessibility to schools, parks, transit stations, and bus stops for as many as 30,500 residents present within two miles of the proposed project corridor. The proposed project will provide a safe, dedicated, and direct means of non-motorized transportation to and from areas of residences, work, schools, parks, and shopping centers, and will serve bicyclists, pedestrians, and other non-motorized vehicle users. The need for the proposed project is based on the criteria identified below.

1.3.1 Primary Criteria

Area Wide Network/System Linkage

The proposed project supports the vision of the *Miami-Dade County Parks and Open Space System Master Plan*, a primary element of which is to “provide an interconnected trail system which offers transportation alternatives and reduces traffic congestion.” The Master Plan provides a 50-year unifying vision for a livable and sustainable Miami-Dade County, which involves the development of a seamless system of greenways, trails, and water trails. The Ludlam Trail will be a vital component of this network as it will link open spaces and civic institutions to neighborhoods, while offering a reliable transportation alternative. From a regional perspective, the proposed project will connect to the Metrorail Dadeland North Station to the south; the proposed Strategic Miami Area Rapid Transit (SMART) Plan Corridor #2 (East-West Corridor) near NW 7th Street to the north; and to other planned trails including The Underline/East Coast Greenway, South Dade Trail, Snapper Creek Trail, East/West Trail, and Merrick Trail.

1.3.2 Secondary Criteria

Social and Economic Demand

According to the *Miami-Dade County Trail Benefits Study: Ludlam Trail Case Study* (2011), development of the Ludlam Trail Corridor will improve public mobility for walking and biking to schools, parks, and transit stations, resulting in a reduction of daily vehicle trips in the project vicinity. By providing additional non-motorized transportation options, fewer vehicles will likely travel on the surrounding roadway network, which will help to reduce traffic congestion on major arterials in the area. Furthermore, the proposed project will enhance mobility and strengthen connections to neighboring communities, providing increased opportunities for economic development.

2.0 PROJECT ALTERNATIVES

The project study area, which extends 5.6 miles in length and has an average width of 100 feet, is of sufficient size to identify potential direct and indirect effects of the Preferred Alternative that may occur within or adjacent to the proposed project corridor.

2.1 Preferred Alternative

Based on preliminary engineering designs, the Ludlam Trail will consist of a 12-foot-wide bike path and an 8-foot-wide pedestrian path with an adjacent 2-foot wide soft natural surface path, separated in areas by a grassed buffer up to 14 feet wide. Generally, the paths will run along the center of the trail ROW. The Ludlam Trail will provide access to activity centers (i.e., schools, parks, and transit centers) via a multi-use path that can accommodate bicyclists and pedestrians. Connections to neighborhoods and parking facilities will be also be provided via a multi-use path. Additionally, way-finding signage that indicates points of interest, interpretive information, or other signage, as appropriate, may be installed along the trail corridor.

There will be two potential configurations for the Ludlam Trail (see **Figures 2-1 and 2-2** for Proposed Typical Cross Sections):

- **Scenario 1 / Buffered Separation:** The trail consists of a 12-foot wide bike trail and an 8-foot wide pedestrian trail separated by a landscape buffer that varies in width from 4 to 14 feet, with a 2-foot wide soft natural surface path adjacent to the pedestrian trail.
- **Scenario 2 / No Separation:** The trail consists of a 12-foot-wide bike trail and an 8-foot-wide pedestrian trail with an adjacent 2-foot wide soft natural surface path. The bike and pedestrian trails are separated by an 18-inch pavement stripe.

2.1.1 Roadway Crossings

The Ludlam Trail will cross several major roadways, closely aligned to the center point of the Trail ROW. All crossings will be compliant with the Americans with Disabilities Act (ADA). Additionally, information signs that indicate points of interest may be installed as appropriate. There will be two (2) options for roadway crossings along the Ludlam Trail:

- **At-Grade Crossings:** At these crossings, the trail will be divided by a raised median into bicycle and pedestrian paths. The crossing will include ADA tactile warning strips and curb cuts, a lean bar, and an area to turn around between the curbed median and the roadway. Each crossing will have signage for both the trail users and street traffic, a mid-crossing refuge island, High Emphasis Crosswalk for pedestrians and Green Bicycle Crossing, cut-off pedestrian safety lighting at all crossings, potentially a High-Intensity Activated CrossWalk also known as a HAWK signal or a Pedestrian Hybrid Beacon also known as Rectangular Rapid Flashing Beacon (RRFB), and a push button actuator for the crossing.
- **Above-Grade Crossings:** These crossings will include an elevated (above-grade or grade separated) crossing that will carry the Ludlam Trail across the existing roadway. This type of above-grade crossing is proposed at four (4) locations: SW 40th Street/Bird Road, SW

24th Street/Coral Way, SW 8th Street/Tamiami Trail/Calle Ocho, and West Flagler Street. The above-grade crossing at West Flagler Street will also have elevators and stairs.

During the Ludlam Trail PD&E Study, site specific conditions, such as volume of vehicle traffic, signal proximity, and driveway access points were considered to determine the specific type of roadway crossing most appropriate for each roadway crossing location. During the final design phase, intersection sight distance will be determined for selecting the appropriate control at a mid-block path-roadway intersection and approvals for sign placement will be obtained as necessary prior to construction.

2.1.2 Bridges

The proposed project corridor crosses two (2) canals – the Coral Gables/C-3 Canal and the Tamiami/C-4 Canal. Each of these canals are managed by the South Florida Water Management District (SFWMD). The existing bridge across the C-3 Canal is located approximately 0.5 mile north of SW 40th Street, in the northeast corner of A.D. “Doug” Barnes Park. The existing bridge across the C-4 Canal is located approximately 0.1 mile north of West Flagler Street adjacent to Robert King High Park. The existing bridges spanning each canal were originally part of the FEC rail line. As part of the proposed Ludlam Trail project, the structurally deficient bridges will be removed and replaced. The existing bridges currently consist of in-water pilings that will be removed as part of this project. It is anticipated that the new replacement bridges will each be single span without any structural elements (e.g., pilings, columns, foundations, etc.) placed in the canal. Details regarding the removal and replacement of each of the bridges will be determined in the final design phase of this project.

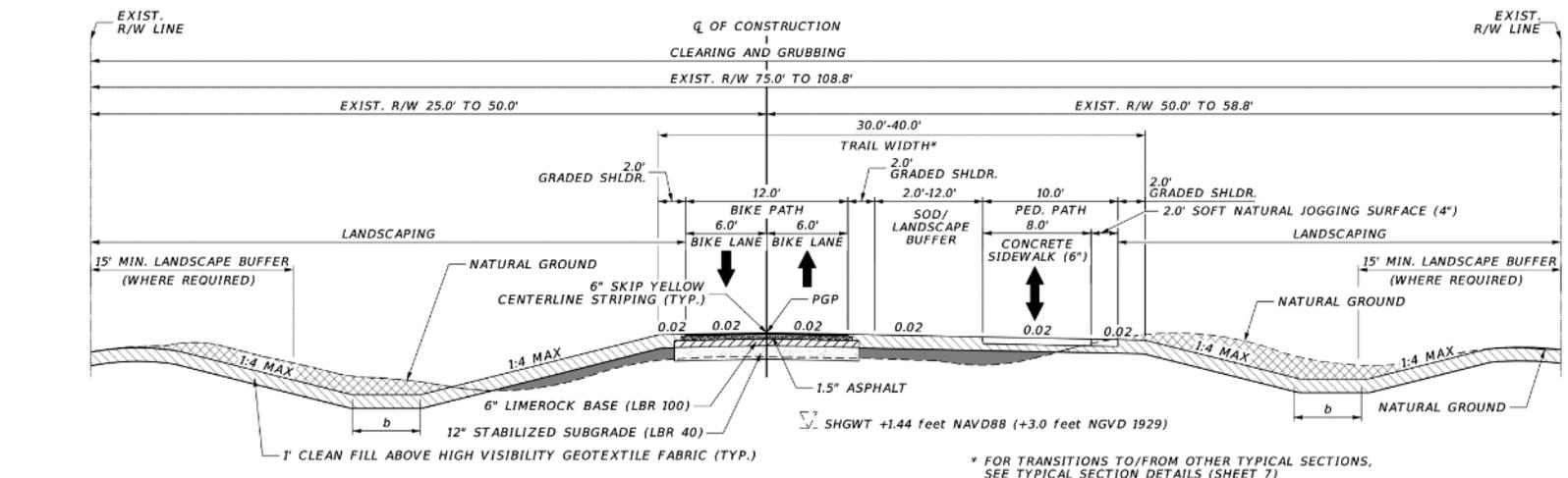
2.1.3 Development Nodes

The Ludlam Trail corridor includes nodes of private development at three (3) major roadway crossings: SW 40th Street/Bird Road, SW 24th Street/Coral Way, and SW 8th Street/Tamiami Trail/Calle Ocho to SW 12th Street. The development nodes will be sensitive to and compatible with the adjacent areas (e.g., a neighborhood mixed-use development fronting the trail corridor, which will serve the specific needs of trail users, such as bike/skate shops, outdoor cafes, flexible office space, and multi-family residential areas). The development node areas include an 18 ft wide perpetual easement for the Ludlam Trail to ensure connectivity of the trail through the length of the project corridor.

2.1.4 Trail Improvements

Tree plantings and other forms of landscaping will surround the proposed Ludlam Trail, providing users with shade, improving aesthetics, and providing a buffer to adjacent single-family residences. It is anticipated that pedestrian rest areas will be located throughout the trail corridor and may offer trail amenities (e.g., wayfinding signs, information signs, shaded benches or outdoor seating areas, trash receptacles, drinking fountains or spigots, bike racks and bike repair stations, security lighting). Proposed trailheads may also contain aesthetic features (e.g., decorative display fountains, opportunities for public artwork displays). Details regarding these trail improvements will be developed during the final design phase of this project.

LUDLAM TRAIL BICYCLE AND PEDESTRIAN PATH (BUFFERED SEPARATION)



* FOR TRANSITIONS TO/FROM OTHER TYPICAL SECTIONS, SEE TYPICAL SECTION DETAILS (SHEET 7)

TYPICAL SECTION 1

TRAIL DESIGN SPEED	
18 MPH	FOR LONGITUDINAL GRADES ≤ 4%
30 MPH	FOR DOWNHILL LONGITUDINAL GRADES > 4%

EARTHWORK LEGEND	
	CUT
	RELOCATED FILL
	CLEAN FILL

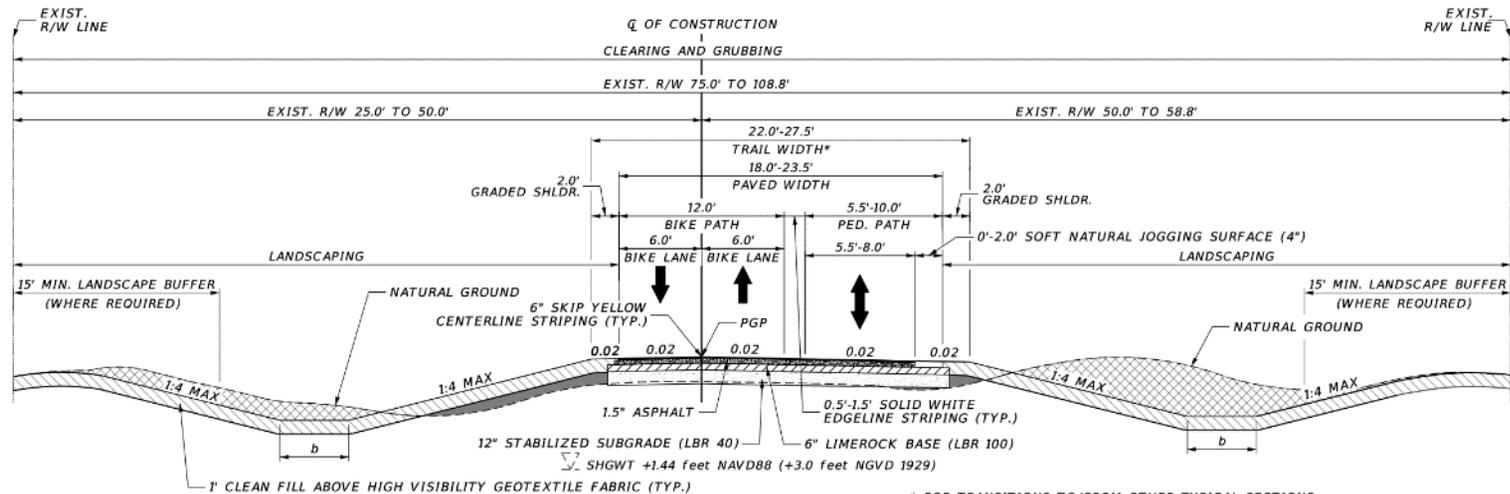
DRAINAGE LEGEND	
b:	Swale Bottom Width
Swale depth and width is to be determined in design.	

- NOTES:**
- ESTIMATED SEASONAL HIGH GROUNDWATER TABLE (SHGWT) EACH YEAR IS IN THE AUGUST-SEPTEMBER PERIOD AT THE END OF THE WET SEASON DURING A YEAR OF AVERAGE (NORMAL) RAINFALL. (PER PRELIMINARY REPORT OF SUBSURFACE EXPLORATION AND GEOTECHNICAL ENGINEERING EVALUATIONS, OCTOBER 2018, PREPARED BY: GEOSOL, INC.)
 - SHGWT BASED ON NORTH AMERICAN VERTICAL DATUM (NAVD) 1988.
 - PGP: PROFILE GRADE POINT
 - APPLICABLE DRAINAGE IS TO BE EVALUATED/DETERMINED DURING DESIGN.
 - APPLICABLE LIGHTING INCLUDING LOW-LEVEL BOLLARD LIGHTING IS TO BE EVALUATED/DETERMINED DURING DESIGN.
 - ANY EXISTING CHAIN LINK FENCE, ASPHALT PADS OR OTHER ITEMS/ENCROACHMENTS WITHIN THE TRAIL RIGHT OF WILL BE REMOVED AT THE TIME OF CLEARING AND GRUBBING

REVISIONS DATE DESCRIPTION <div style="border: 1px solid black; padding: 2px; display: inline-block;">DRAFT</div>	 110 EAST BROWARD BOULEVARD, SUITE 700 FORT LAUDERDALE, FL 33301	 MIAMI-DADE COUNTY	LUDLAM TRAIL CORRIDOR PD&E STUDY Miami-Dade County Parks, Recreation, and Open Spaces (MDPROS) Hickman Building 275 NW 2nd Street Miami, FL 33128 305-755-7800	LUDLAM TRAIL TYPICAL SECTIONS	SHEET NO. 2
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Figure 2 - 1: Proposed Typical Cross Section for the Ludlam Trail Shared Use and Pedestrian Path (Buffered Separation)

LUDLAM TRAIL BICYCLE AND PEDESTRIAN PATH (NO SEPARATION)



TYPICAL SECTION 2

* FOR TRANSITIONS TO/FROM OTHER TYPICAL SECTIONS, SEE TYPICAL SECTION DETAILS (SHEET 7)

TRAIL DESIGN SPEED	
18 MPH	FOR LONGITUDINAL GRADES ≤ 4%
30 MPH	FOR DOWNHILL LONGITUDINAL GRADES > 4%

EARTHWORK LEGEND	
	CUT
	RELOCATED FILL
	CLEAN FILL

DRAINAGE LEGEND	
b:	Swale Bottom Width
Swale depth and width is to be determined in design.	

- NOTES:**
1. ESTIMATED SEASONAL HIGH GROUNDWATER TABLE (SHGWT) EACH YEAR IS IN THE AUGUST-SEPTEMBER PERIOD AT THE END OF THE WET SEASON DURING A YEAR OF AVERAGE (NORMAL) RAINFALL. (PER PRELIMINARY REPORT OF SUBSURFACE EXPLORATION AND GEOTECHNICAL ENGINEERING EVALUATIONS, OCTOBER 2018, PREPARED BY: GEOSOL, INC.)
 2. SHGWT BASED ON NORTH AMERICAN VERTICAL DATUM (NAVD) 1988.
 3. PGP: PROFILE GRADE POINT
 4. APPLICABLE DRAINAGE IS TO BE EVALUATED/DETERMINED DURING DESIGN.
 5. APPLICABLE LIGHTING INCLUDING LOW-LEVEL BOLLARD LIGHTING IS TO BE EVALUATED/DETERMINED DURING DESIGN.
 6. ANY EXISTING CHAIN LINK FENCE, ASPHALT PADS OR OTHER ITEMS/ENCROACHMENTS WITHIN THE TRAIL RIGHT OF WILL BE REMOVED AT THE TIME OF CLEARING AND GRUBBING

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Figure 2 - 2: Proposed Typical Cross Section for the Ludlam Trail Shared Use and Pedestrian Path (No Separation)

3.0 COMMUNITY CHARACTERISTICS

This SCE evaluation process assesses social, economic, land use changes, mobility, aesthetics effects, and relocations, including potential issues associated with Environmental Justice, Civil Rights, and other nondiscrimination laws. Project benefits and effects on communities are assessed in the SCE evaluation with special consideration for minority, low-income, and other potentially underrepresented populations. The SCE evaluation is a process used to evaluate and address the effects of a transportation action on a community and its quality of life.

The data used for the community information and sociocultural effects evaluation are downloaded from the Florida Geographic Data Library (FGDL) and other sources as listed in this document. This report was prepared in accordance with the FDOT PD&E Manual, Part 2, Chapter 4, Sociocultural Effects Evaluation dated July 1, 2020.

3.1 SCE Evaluation Study Area

The project is located in Miami-Dade County along the former FECR railroad corridor for a total project length of 5.6 miles. The SCE Study Area extends east and west 0.25 mile from the centerline of the Ludlam Trail Corridor. The SCE Study Area is located primarily within unincorporated Miami-Dade County, traverses sections of the City of Miami, is immediately adjacent to the City of West Miami, and near the City of South Miami. Land use surrounding the corridor is identified predominantly as residential, with pockets of commercial and industrial uses located at or near major arterial roadway crossings. **Figure 3-1** depicts the SCE evaluation Study Area.

3.2 Community Features

Community features are public and private locations, facilities, or organizations that are important to local residents and communities. Many community features are located in the vicinity of the Ludlam Trail Corridor. These community focal points include schools, religious facilities, community centers, parks, government buildings, and healthcare facilities.

3.2.1 Schools

There are nine (9) public and private schools, listed below, located within the SCE Study Area, ranging from daycare learning to post-graduate education facilities. **Figure 3-2** depicts the locations of the schools within the SCE Study Area.

- A&A Children's Academy #2 6725 SW 21st Street, Miami, FL 33155
- Carousel Learning Academy 2 7100 SW 16th Street, Miami, FL 33155
- Coral Terrace Elementary School 6801 SW 24th Street, Miami, FL 33155
- Lincoln-Marti Community Agency 67 1328 SW 67th Avenue, Miami, FL 33144
- Palmetto Christian School 6790 S.W 56th Street, Miami, FL 33155
- South Miami K-8 Center 6800 SW 60th Street, Miami, FL 33143
- South Miami Middle School 6750 SW 60th Street, Miami, FL 33143
- South Miami Senior High School 6856 SW 53rd Street, Miami, FL 33155
- University Christian Children's Center 6750 Sunset Drive, South Miami, FL 33143

After project completion, access to schools in the SCE Study Area will benefit from reduced congestion, more efficient direct non-motorized access to/from school, and improved public safety in the form of enhanced at-grade crossings and new above-grade crossings.

3.2.2 Religious Facilities

There are eleven (11) religious facilities located within the SCE Study Area, as listed below. **Figure 3-3** identifies the locations of the religious facilities within SCE Study Area.

- Coral Villa Baptist Church 3201 SW 67th Avenue, Miami, FL 33155
- Fellowship Church 6767 Sunset Drive, South Miami, FL 33143
- Francis Burns United Methodist Church 6830 Bird Road, Miami, FL 33155
- Friends of the Orphans Florida 7175 SW 47th Street # 207, Miami, FL 33155
- Iglesia Cristiana Camino Nuevo 6790 SW 12th Street # 33, Miami, FL 33144
- Iglesia Evangelica Los Pinos Nuevos 2407 Southwest 69th Avenue, Miami, FL 33155
- Jehovah's Witnesses 1480 SW 69th Avenue, Miami, FL 33144
- Saint Thomas the Apostle Catholic Church 7377 Southwest 64th Street, Miami, FL 33143
- South Miami Lutheran Church 7190 Sunset Drive, Miami, FL 33143
- St Luke Methodist Episcopal Church 355 Northwest 72nd Avenue, Miami, FL 33126
- Templo Biblico de Miami 7120 Southwest 30th Road, Miami, FL 33155

Religious facilities can play an important role in community cohesion. There are many non-religious functions that take place in church buildings such as youth groups, community meeting places, charity events, adult education, and food banks to support the people in the community. The project will serve to enhance multi-modal access to the eleven religious facilities located within the SCE Study Area whereby improving community cohesion and enhancing the community's quality of life.

3.2.3 Community Centers, Parks, and Cemeteries

Three (3) community centers and four (4) parks are located within the SCE Study Area and are listed below and shown on **Figure 3-4**. There are no cemeteries located within the SCE Study Area. Section 4(f) Exception/Exemption Forms were completed for A.D. "Doug" Barnes Park and Robert King High Park, and a Section 4(f) No Use Form was completed for Palmer Park. Each form is included in the FDOT District 6 project file. Due to the distance from the project corridor, Flagami Park was previously determined to not be potentially impacted by the proposed project and therefore a Section 4(f) assessment was not included for that park in this SCE.

Community Centers

- Armando Badia Senior Center 25 Tamiami Boulevard, Miami, FL 33144
- Inner Look Empowerment Center 4754 SW 72nd Avenue, Miami, FL 33155
- Lions Club - Miami Nicaraguan 711 NW 72nd Avenue, Miami, FL 33126

Parks

- A.D. "Doug" Barnes Park 3401 SW 72nd Avenue, Miami, FL 33155
- Flagami Park SW 3rd Street & 71st Avenue, Miami, FL 33144
- Palmer Park 6100 SW 67th Avenue, Miami, FL 33143
- Robert King High Park 7025 W Flagler Street, Miami, FL 33126

Community centers and parks are part of the community input findings that help to paint a picture of the community values. Improving opportunities for physical activity and a healthy lifestyle are goals that have been established by the local neighborhoods and the county. The proposed project is expected to enhance community cohesion and the social environment by providing non-motorized transportation accommodations for improved mobility and accessibility in the study area.

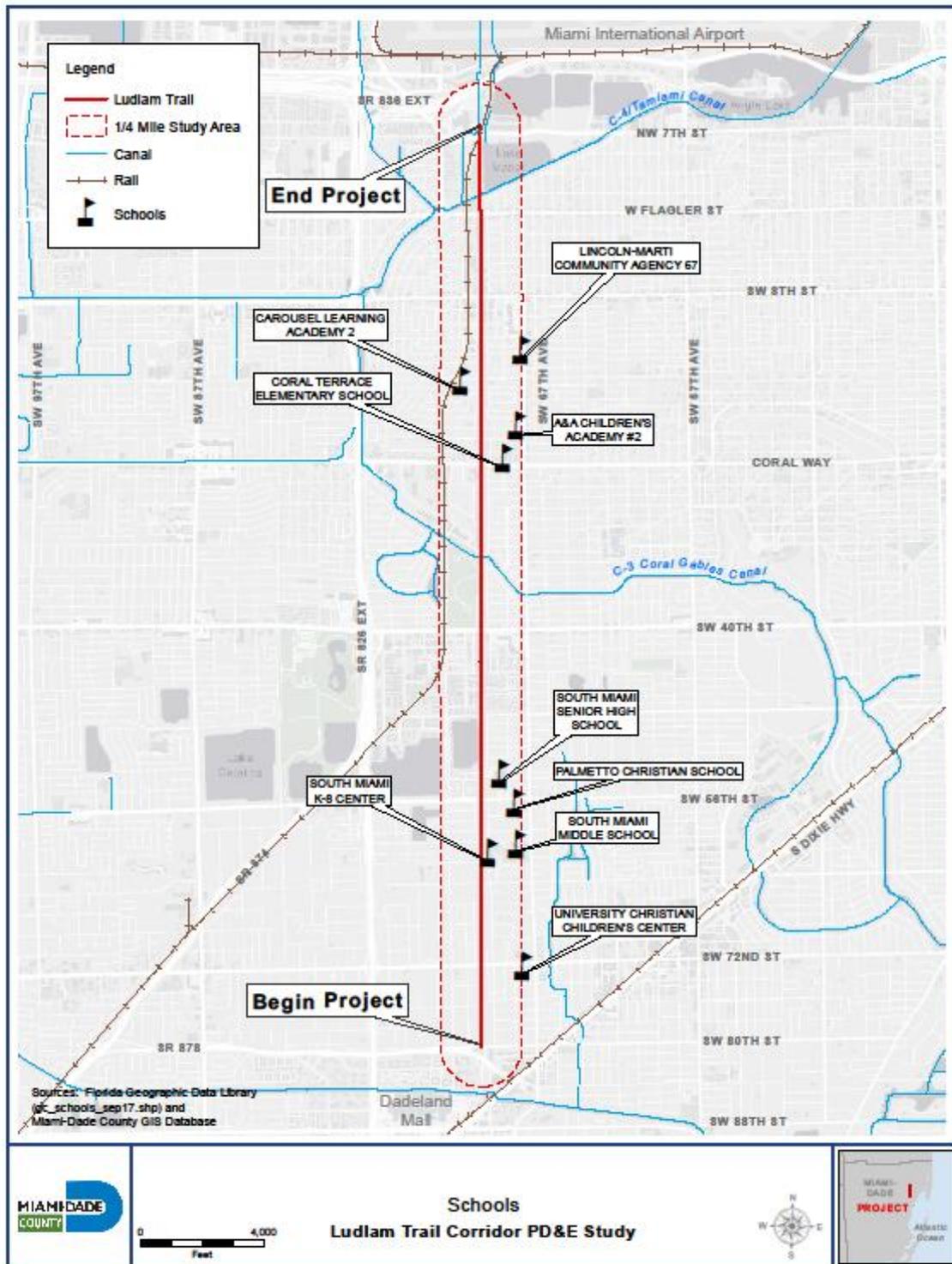


Figure 3 - 2: Schools

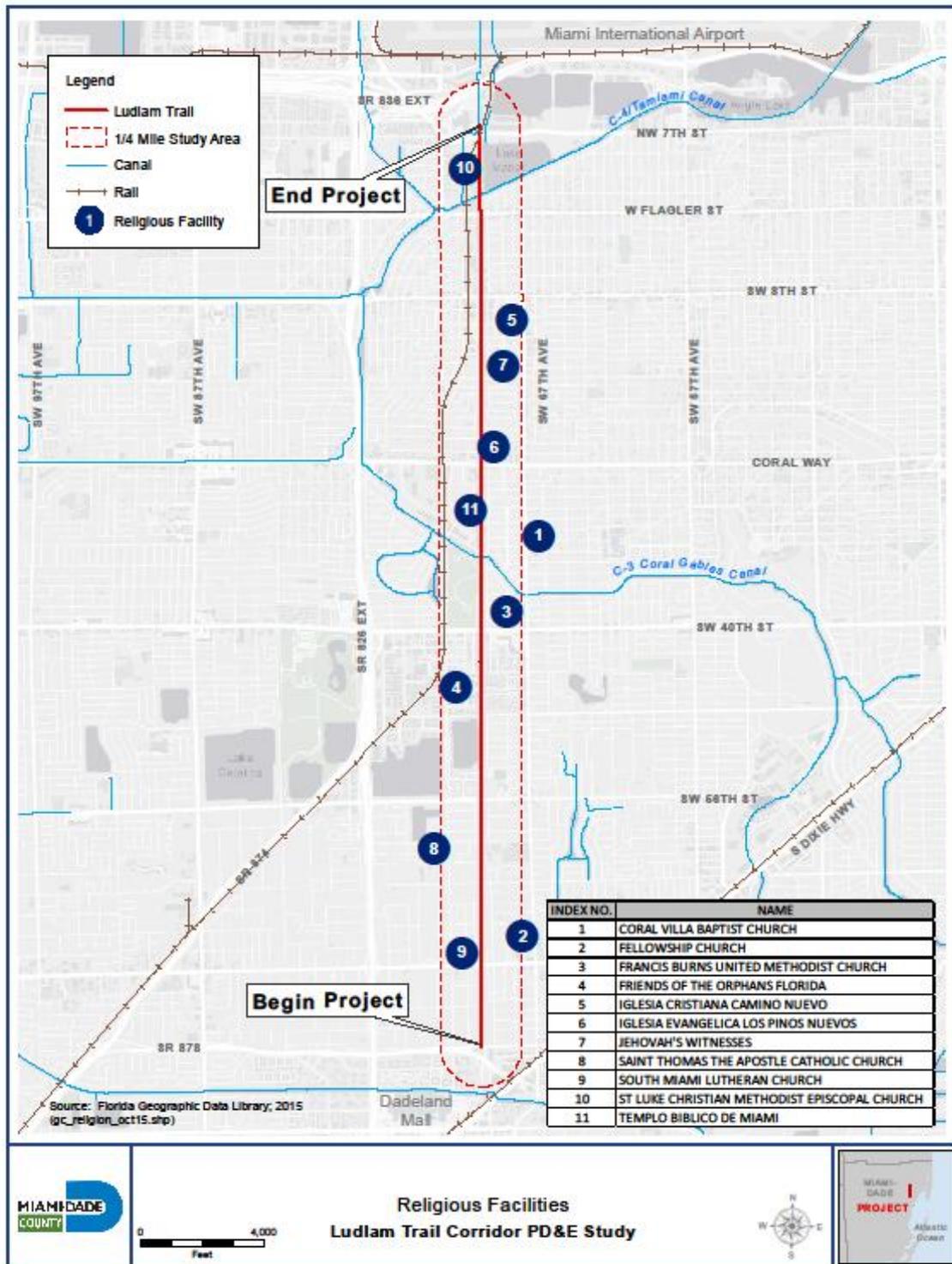


Figure 3 - 3: Religious Facilities

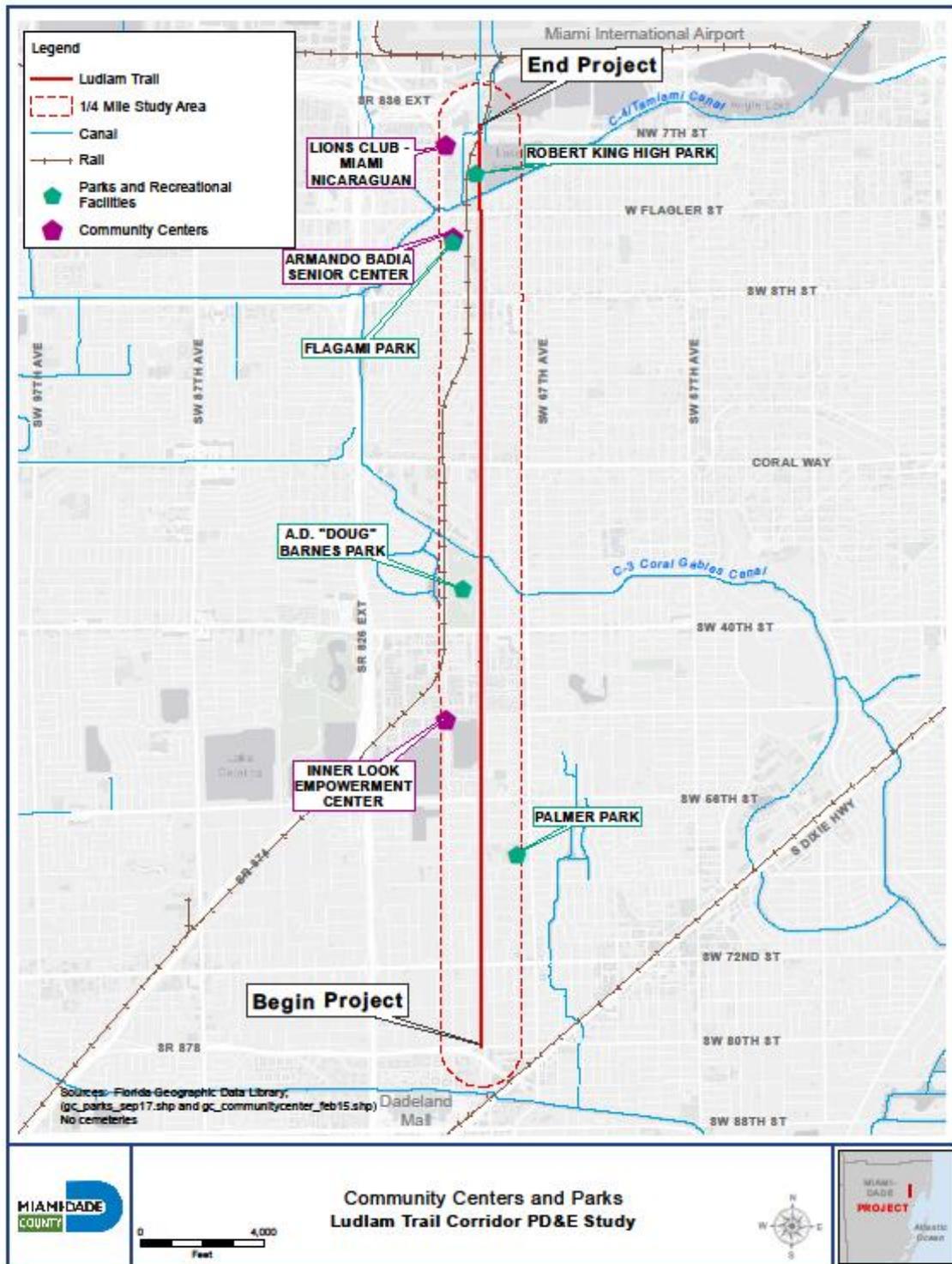


Figure 3 - 4: Community Centers and Parks

Three (3) of the parks listed above (A.D. “Doug” Barnes Park, Robert King High Park, and Palmer Park) are publicly owned and located adjacent or in close proximity to the Ludlam Trail Corridor. Each park has been determined to be a significant resource within the meaning of Section 4(f). A description of each of the Section 4(f) resources is provided below:

A.D. “Doug” Barnes Park is owned and maintained by Miami-Dade County and is located adjacent and to the west side of the proposed Ludlam Trail Corridor Project. A.D. “Doug” Barnes Park supports a range of activities, including walking/ jogging, biking, fitness zones, fishing pier, camping, basketball, picnic shelter/pavilion, playground, swimming pools (year-round), splash playground, visitor, and nature center and pine rockland nature preserve.



A.D. “Doug” Barnes Park Playground

Robert King High Park is owned and maintained by the City of Miami and is located adjacent and to the west side of the proposed Ludlam Trail Corridor Project. Robert King High Park supports a range of activities, including walking/jogging, biking, basketball, baseball, soccer, tennis, picnicking, computer lab, and playground with shelter area. In addition, park programs include after school care, summer camp, winter camp, spring break camp, youth football, youth basketball, and tennis lessons.



Robert King High Park Covered Basketball Courts

Palmer Park is owned and maintained by the City of South Miami and is located in the vicinity and to the east of the proposed Ludlam Trail Corridor Project. Palmer Park is not

located adjacent to the proposed Ludlam Trail and is separated by the South Miami K-8 Center (school).



Palmer Park Youth Baseball

It has been determined that the Ludlam Trail Corridor Project will have no adverse effect or use of Palmer Park. For both A.D. “Doug” Barnes Park and Robert King High Park, new access points will be provided, connecting to the proposed Ludlam Trail, thereby enhancing the recreational use of the trail and the parks. Section 4(f) No Use and Exception/Exemption forms were submitted to the FDOT Office of Environmental Management (FDOT OEM) through the StateWide Environmental Project Tracker (SWEPT) for review. In April 2021, FDOT OEM approved the no-use determination for Palmer Park, and the Exception/Exemption for use of A.D. “Doug” Barnes Park and Robert King High Park under the transportation enhancement category as described in FDOT’s PD&E Manual, Part 2, Chapter 7, Section 7.3.3 g., which states “The use of the Section

4(f) property is solely for the purposes of preserving or enhancing an activity, feature, or attribute that qualifies the property for Section 4(f) protection.”

3.2.4 Emergency Services and Government Facilities

There are no fire stations and no law enforcement facilities located within the SCE Study Area. There is one government building located within the SCE Study Area: United States Post Office – Ludlam. The property address is 6900 Bird Road, Miami, FL 33155. **Figure 3-5** shows the government building location within the SCE Study Area. No direct effects to the emergency services and government facilities present are anticipated.

3.2.5 Healthcare Facilities

There are 21 health care facilities located within the SCE Study Area, as listed below and shown on **Figure 3-6**. No direct effects to healthcare facilities are anticipated.

- Advanced Health Medical Center 7171 Coral Way, Suite 218, Miami, FL 33155
- Applemed Research Inc. 6850 Coral Way, Suite 409, Miami, FL 33155
- Argo Medical 6785 SW 40th Street, Miami, FL 33155
- Central Magnetic Imaging 4860 SW 72nd Avenue, Miami, FL 33155
- Coral Gables Nursing and Rehab Center 7060 SW 8th Street, Miami, FL 33144
- DA Health Care Associates Inc 7171 Coral Way, Suite 505, Miami, FL 33155
- DG Esthetic and Therapy Center Inc. 7171 Coral Way, Suite 102, Miami, FL 33155
- Digital Medical Diagnostic Inc. 41 Tamiami Canal Road, Miami, FL 33144
- Horizon Health Medical Center 31 Tamiami Canal Road, Miami, FL 33144
- InterAmerican Medical Center Group LLC 7101 W Flagler Street, Miami, FL 33144
- JC Medical Clinic Corp. 7171 Coral Way 305, Miami, FL 33155
- JRL Rehabilitation Center Inc. 6726 W Flagler Street, Miami, FL 33144
- Juan Alberto Prieto MD PA 6741 SW 24th St, Suite 50/51, Miami, FL 33155
- Leda Medical Center Inc. 7105 SW 8th Street, Suite 206, Miami, FL 33144
- Lin Dan Medical Center 6741 Coral Way, Suite 11-12, Miami, FL 33155
- Merch Medical Center LLC 6714 W Flagler Street, Miami, FL 33144
- Mestre-Canals, Luis F., M.D. 6850 Coral Way, Suite 304, Miami, FL 33155
- Riverside Group Enterprise 6789 W Flagler Street, Miami, FL 33144
- Rodolfo Binker MD PA 6700 SW 21st Street, Miami, FL 33155
- Silverland Medical Center, LLC 704 SW 68th Avenue, Miami, FL 33144
- The Hope Rehabilitation Inc. 7171 SW 24th Street 205, Miami, FL 33155

3.2.6 Cultural Facilities and Civic Centers

There are no cultural facilities within the SCE Study Area. There are two civic center facilities within the SCE Study Area, as listed below and shown on **Figure 3-7**. No direct effects to cultural facilities or civic centers are anticipated.

- Cascades Lounge Radisson Mart Plaza Hotel 711 Northwest 72nd Avenue, Miami, FL 33126
- Miami Motivations 7225 SW 48th Street, Miami, FL 33126

3.2.7 Social Service Facilities

There are 14 social service facilities located within the SCE Study Area, as listed below and shown on **Figure 3-8**. No direct effects to social service facilities are anticipated.

- A+ Senior Home 41 SW 68th Avenue, Miami, FL 33144
- Cary & Nico Tu Casita Feliz Assisted Living, Inc. 6790 SW 16th Terrace, Miami, FL 33155
- Coral Terrace Assisted Living 6744 SW 22nd Street, Miami, FL 33155
- Diana Home Care 2 1725 SW 71st Court, Miami, FL 33155
- Good Family Home 6851 SW 79th Terrace, Miami, FL 33143
- M.P. Diversified Services 311 SW 71st Avenue, Miami, FL 33144
- Maggie's Retirement Home 4 7100-02 NW 1st Terrace, Miami, FL 33126
- My New Home Assisted Living 7151 SW 42nd Street, Miami, FL 33155
- Senior Haven Assisted Living, Inc. 6745 SW 32nd Terrace, Miami, FL 33155
- Victoria's Dedicated Retirement Home 6890 SW 39th Terrace, Miami, FL 33155
- Little People Pre-School and Daycare Inc. 7020 SW 13th Terrace, Miami, FL, 33144
- O'Farrill Learning Center 6741 Coral Way, Miami, FL, 33155
- South Miami Lutheran School 7190 Sunset Drive, Miami, FL, 33143
- Tiny Steps Daycare Learning Center 7121 West Flagler Street Miami, FL 33144

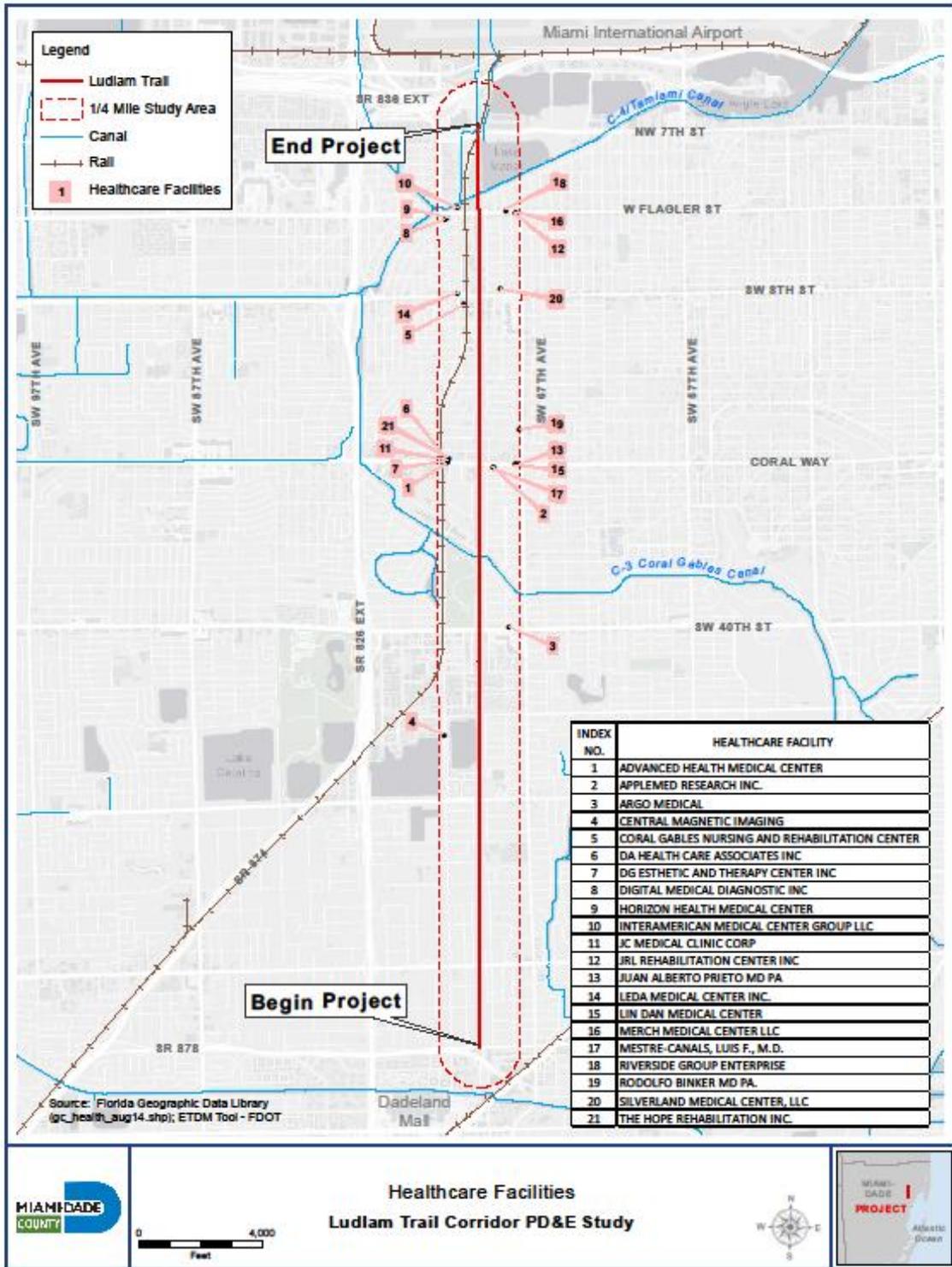


Figure 3 - 6: Healthcare Facilities

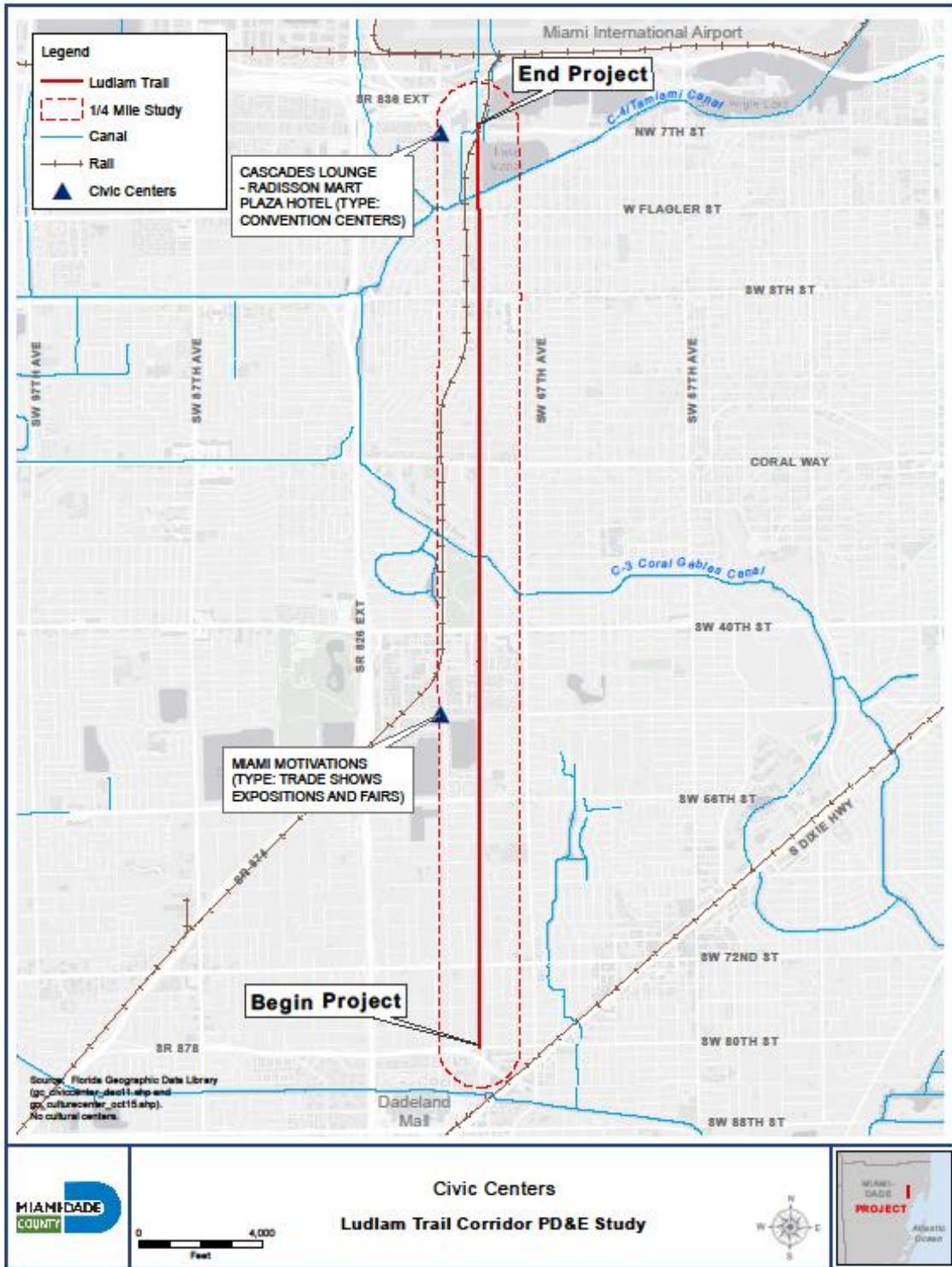


Figure 3 - 7: Civic Centers

3.2.8 Historic and Archaeological Resources

A Cultural Resource Assessment Survey (CRAS) was developed to support the Ludlam Trail Corridor PD&E Study. The objective of this survey was to identify cultural resources within the project area of potential effect (APE) and assess their eligibility for listing in the NRHP according to the criteria set forth in 36 CFR Section 60.4.

The CRAS complies with Section 106 of the National Historic Preservation Act (NHPA) of 1966 (Public Law 89-665, as amended), as implemented by 36 CFR 800 – Protection of Historic Properties (incorporating amendments effective August 5, 2004); Stipulation VII of the Programmatic Agreement among the Federal Highway Administration (FHWA), the Advisory Council on Historic Preservation (ACHP), FDHR, SHPO, and FDOT Regarding Implementation of the Federal-Aid Highway Program in Florida (Section 106 Programmatic Agreement, effective March 2016, amended June 7, 2017); Section 102 of the NEPA of 1969, as amended (42 USC 4321 et seq.), as implemented by the regulations of the Council on Environmental Quality (CEQ) (40 CFR Parts 1500–1508); the revised Chapter 267, Florida Statutes (F.S.); and the standards embodied in the FDHR’s Cultural Resource Management Standards and Operational Manual (February 2003), and Chapter 1A-46 (Archaeological and Historical Report Standards and Guidelines), Florida Administrative Code.

3.2.8.1 Area of Potential Effect

According to 36 CFR 800.16(d), the APE is the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if such properties exist. The APE is influenced by the scale and nature of the undertaking, as well as its geographical setting. The APE must include measures to identify and evaluate both archaeological and historical resources. Normally, archaeological and other below-ground resources will be affected by ground disturbing activities and changes in ownership status. Structural resources and other above ground sites are often impacted by those activities as well as alterations to setting, access and appearance. While there are historic parcels adjacent to the APE, the limited improvements occur primarily within the former FECR right-of-way (ROW) with the exception of proposed improvements at road and street crossings, and therefore were not included in the APE. Roadways will not be impacted at grade within the ROW and were not included as part of the APE. Based on the nature of the project, the project APE for both archaeological and historical resources consist of the footprint of the 5.6-mile segment of the former FEC railway ROW which is located within an approximately 100-foot wide corridor that narrows to between 75 or 80 feet in some areas.

3.2.8.2 Identified Resources and Conclusions

The 5.6-mile project corridor was previously divided into northern and southern segments, which were surveyed separately by Janus Research. The northern segment, extending 1.21 miles from SW 12th Street to approximately 400 feet north of NW 7th Street, was surveyed in 2016 as part of the CRAS and Effects Determination for the Florida East Coast Railway, LLC Abandonment Exemption in Miami-Dade County, Florida (Florida Master Site File [FMSF] Number [No.] 23080; Janus Research 2016). The archaeological survey for this segment was completed in 2019. The southern segment is approximately 4.4 miles long and extends from SW 80th Street to SW 12th Street. It was initially surveyed in 2018.

No archaeological resources were identified within the archaeological APE for the project during the pedestrian survey and shovel testing. The project APE for archaeological resources consists of the 5.6-mile segment of the abandoned FEC railway right-of-way (ROW). This ROW is located within an approximately 100-foot wide corridor that narrows to between 75 and 80 feet in some areas as well as to approximately 40 feet at roadway crossings. The analysis determined that the archaeological APE contains low archaeological site potential.

The 1.21-mile northern segment of the Little River Spur of the FEC Railway (8DA11416) that was extant during the 2016 survey was evaluated as National Register eligible along with the FEC Railroad Bridge at Tamiami Canal (8DA14821). The State Historic Preservation Officer (SHPO) concurred with the findings of this report on a letter dated August 4, 2016. The SHPO additionally determined in the same August 4, 2016 letter that the proposed project would have an adverse effect on these two resources. As a result, a Memorandum of Agreement (MOA) was developed and executed by the Surface Transportation Board, the SHPO, and FECR in October 2018. The MOA included mitigation stipulations that required the Historic American Engineering Record (HAER) documentation of the railroad and the bridge, and placement of State Historical Markers. The HAER documentation was completed and accepted by the National Park Service as complete and sufficient on April 19, 2019. The historic markers were installed on January 9, 2020, at the locations that were outlined in the application and approved by the State Historic Marker Committee. The railroad tracks of the Little River Spur of the FEC Railway (8DA11416) has since been removed and no historic materials remain. Based on removal of the railroad tracks, the FEC Railroad Bridge at Tamiami Canal (8DA14821) has been reevaluated and is no longer considered eligible as a contributing resource to the railroad due to the loss of associations and context.

Although the FEC Railroad Bridge at Tamiami Canal (8DA14821) will be removed as part of the project, this bridge is no longer considered eligible as a contributing resource. Therefore, this resource will not be adversely affected by the most recent action documented within the approved CRAS. However, as previously noted, this bridge was adversely affected as part of the 2016 railroad abandonment action. The mitigation for the adverse effect was memorialized in the 2018 MOA, and all mitigation measures have been completed and documented within the current CRAS report. The segment of the Seaboard Air Line (CSX) Railroad (8DA10753) within the 2016 APE was evaluated by the SHPO as National Register eligible. As no features associated with this resource would be affected by the proposed railroad abandonment, SHPO concurred that no adverse effect to the resource would result. The segment of the Tamiami Canal (8DA6453) within the 2016 APE was evaluated by the SHPO as National Register ineligible and non-contributing to the larger National Register eligible resource.

As a result of the 2018 survey, the remaining 4.4-mile southern segment of the Little River Spur of the FEC Railway (8DA11416) within the APE, as well as the FEC Railway Bridge at C-3 Canal (8DA15696), and the Coral Gables (C-3) Canal (8DA15697) were evaluated as National Register ineligible. As there are no significant historic properties identified as part of the latest 2018 survey, there will be no effect to historic properties.

A letter of concurrence from SHPO agreeing with the no effect findings outlined above was signed on August 27, 2020 and is included as part of the FDOT District Six project file in SWEPT.

4.0 POTENTIAL EFFECTS

4.1 Social Demographics

Demographic data describe a community's structure and are primarily collected by local, state, or federal agencies such as the U.S. Census Bureau and local government departments. Demographic data covers a range of topics about communities, including population size, gender, age composition, ethnic backgrounds, household characteristics, and geographic distribution. These data assist in designing public participation, outreach, and education strategies that reflect the age, education, and economic backgrounds of the community.

The SCE Study Area traverses four census designated places (South Miami, Glenvar Heights, Coral Terrace, and Miami), including several neighborhood communities. Other community features reported within the SCE Study Area include: five brownfields, three community centers, one Development of Regional Impact, one government building (United States Post Office), 21 health care facilities, 21 homeowner and condominium associations, one (1) Lasik medical facility, eleven (11) public and private schools, eleven (11) religious centers, one (1) mobile home and Recreational Vehicle (RV) park, seven (7) FDOT Roadway Characteristics Inventory (RCI) bridges, 51,389 linear feet of mainline railroad, four (4) local Florida parks/recreational facility boundaries, one (1) Office of Greenways and Trails (OGT) multi-use trail opportunity/hiking trail priority - which includes the same trail identified as part of the SUN Trail Network in Florida (Ludlam Trail Corridor [this project]), one (1) existing recreational trail (Bike Route 6), twelve (12) Florida Site File field survey project boundaries, two (2) Florida Site File historic standing bridges, 14 Florida Site File historic standing structures, and nine (9) Florida Site File resource groups.

Demographic data reported are from the U.S. Census Bureau's American Community Survey (ACS), 5-year estimate for years 2015-2019. The 2019 Census Block Group Data, which contains the most recent demographic profile, was used to complete the demographic comparison and analysis contained in this document. Block groups are defined by the United States Census Bureau as "statistical divisions of census tracts and are generally defined to contain between 600 and 3,000 people." Census blocks are statistical areas bounded by visible features, such as streets, roads, streams, and railroad tracks, and by nonvisible boundaries, such as selected property lines and city, township, school district, and county limits. The SCE Study Area intersects 36 Census Block Groups in Miami-Dade County, as shown on **Figure 4-1**. After grouping the census blocks intersecting the Ludlam Trail Corridor project area, the averages of specific demographic information were compared to the demographic information for Miami-Dade County and the State of Florida and are shown in **Tables 4-1** through **4-5**.

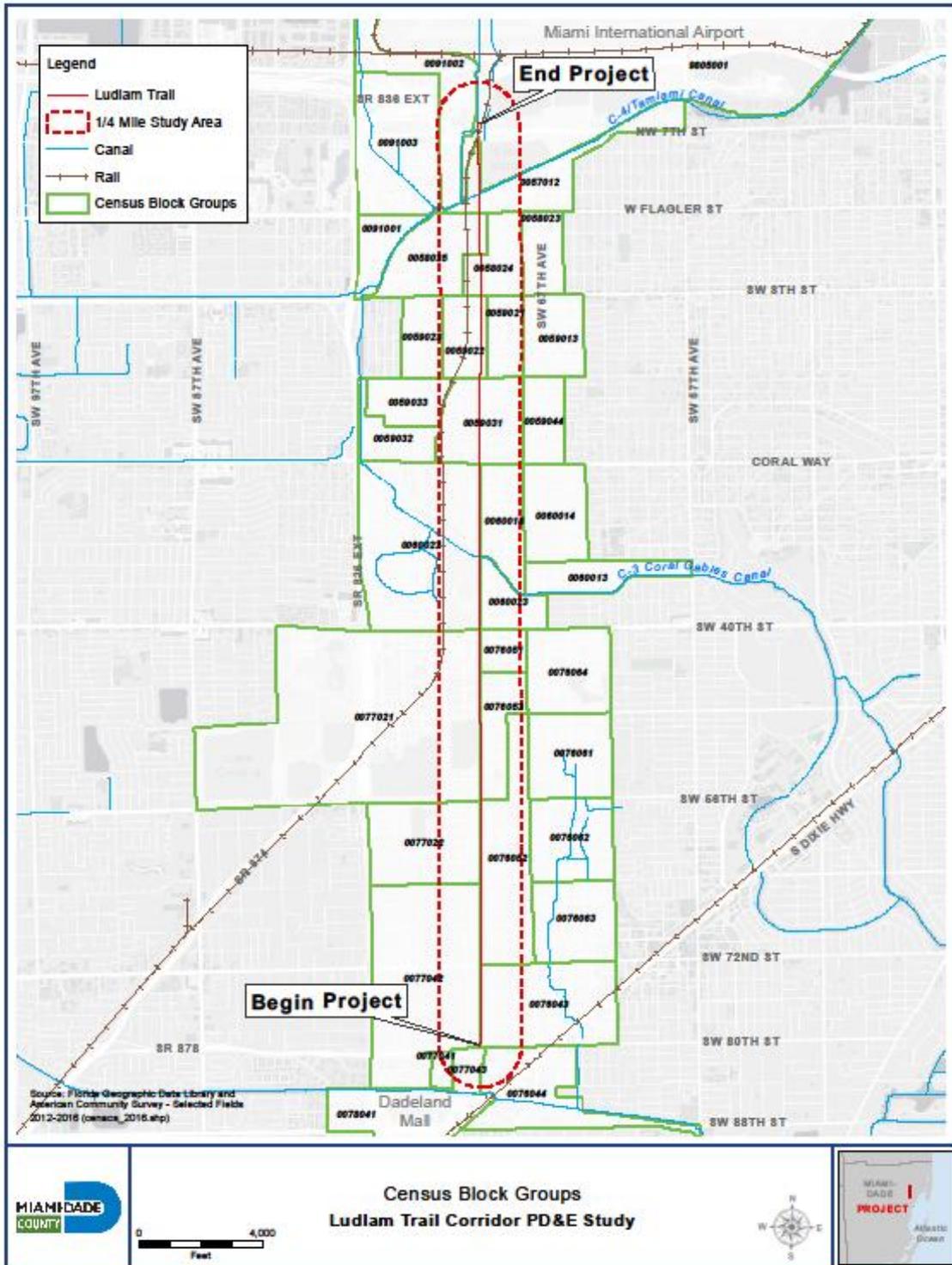


Figure 4 - 1: Census Block Groups

Table 4 - 1: Demographic Comparison: Population

Evaluation Criteria	Florida	Miami-Dade County	SCE Study Area
Total Population	20,901,636	2,699,428	60,584
Percentage of population that is White	75.1%	75.1%	90.2%
Percentage of population that is Black	16.1%	17.4%	3.9%
Percentage of population that is Asian	2.7%	1.6%	2.3%
Percentage of population that is Other ¹	6.1%	5.9%	3.5%
Percentage of population that is Hispanic	25.6%	68.5%	81.4%
Percentage of population that is considered "Minority"	46.1%	86.8%	87.9%
Median population age (number of years old)	42.0	39.9	42.4
Percentage of population that is above 65 years old	20.1%	16.0%	20.1%

¹Other Nationalities include American Indian or Alaska Native, Native Hawaiian or other Pacific Islander, or two or more races.

Table 4 - 2: Demographic Comparison: Density

Evaluation Criteria	Florida	Miami-Dade County	SCE Study Area
Total Square Miles (Land Area)	53,624.8	1,897.7	19.6
Population density (persons per sq mi)	144.2	1,315.5	3,087.4
Household density (houses per sq mi)	16.5	465.5	1,040.5
Percentage of housing units occupied	81.9%	86.3%	91.5%
Percentage of housing units vacant	18.1%	13.7%	8.5%
Average family size	3.27	3.65	3.6
Average household size	2.65	3.0	2.9
Occupied housing units with no vehicle	6.3%	10.3%	7.8%

Table 4 - 3: Demographic Comparison: Income

Evaluation Criteria	Florida	Miami-Dade County	SCE Study Area
Median Household Income (\$)	\$55,660	\$51,347	\$64,098
Median Family Income (\$)	\$67,414	\$57,871	\$76,792
Percentage of population below the poverty line ²	14.0%	17.1%	12.3%

²Census Bureau uses a set of money income thresholds that vary by family size and composition to determine who is in poverty. If a family's total income is less than the family's threshold, then that family and every individual in it is considered in poverty.

Table 4 - 4: Demographic Comparison: Language

Evaluation Criteria	Florida	Miami-Dade County	SCE Study Area
Percentage of the population 5 years and older that speaks only English	70.6%	25.1%	17.7%
Percentage of the population 5 years and older that speaks a language other than English	29.4%	74.9%	82.3%
Percentage of the population 5 years and older that speaks English less than “very well” (Limited English Proficient)	11.9%	34.7%	41.3%

Note: People with Limited English Proficiency (LEP) speak English “less than very well” or “not at all.” These people have a limited ability to read, write, speak, or understand English.

Table 4 - 5: Demographic Comparison: Education

Evaluation Criteria	Florida	Miami-Dade County	SCE Study Area
Percentage of the population that is over 25 years old and has less than a 9 th grade education	4.8%	9.8%	9.2%
Percentage of the population that is over 25 years old and has completed more than 9 th grade but does not have a high school diploma	7.0%	8.8%	6.9%
Percentage of the population that is over 25 years old and has a high school diploma or higher	88.2%	81.4%	84.0%
Percentage of the population that has a bachelor’s, master’s, doctorate, or professional degree	29.9%	29.8%	34.3%

As shown in the tables above, the SCE Study Area has a higher percentage of Whites and Hispanics and a lower percentage of Blacks compared to the whole of Miami-Dade County, as well as the State of Florida. However, the overall minority percentage is very similar to the overall County at approximately 87 percent. The SCE Study Area has a higher percentage of population that is above 65 years old, compared to the overall County, and identical percentage compared to the overall State. Similarly, the median age of the population within the SCE Study Area is higher than that present in Miami-Dade County more generally, and the very similar to the average present statewide. **Figure 4-2** shows the minority percentage for each block group within the SCE Study Area. As depicted in the figure, the higher minority population is generally located north of SW 40th Street/Bird Road.

The SCE Study Area has a much higher population density than Miami-Dade County, a characteristic which is consistent with an urban corridor. The median household income is higher for the SCE Study Area compared to the overall County, and more than Florida as a whole. The SCE Study Area has lower percentages of residents living below the poverty line compared to the overall County and State. **Figure 4-3** shows the percentage of the population below the poverty line for each census block group within the SCE Study Area.

The SCE Study Area has a slightly smaller percentage of households without a vehicle compared to Miami-Dade County, but a slightly higher percentage compared to the overall State. The SCE Study Area has some polarization in education attainment when compared to the State of Florida, with a high school graduation rate lower than that of the state, but a higher percentage of the population attaining a bachelor’s or higher college degree when making the same study area comparison.

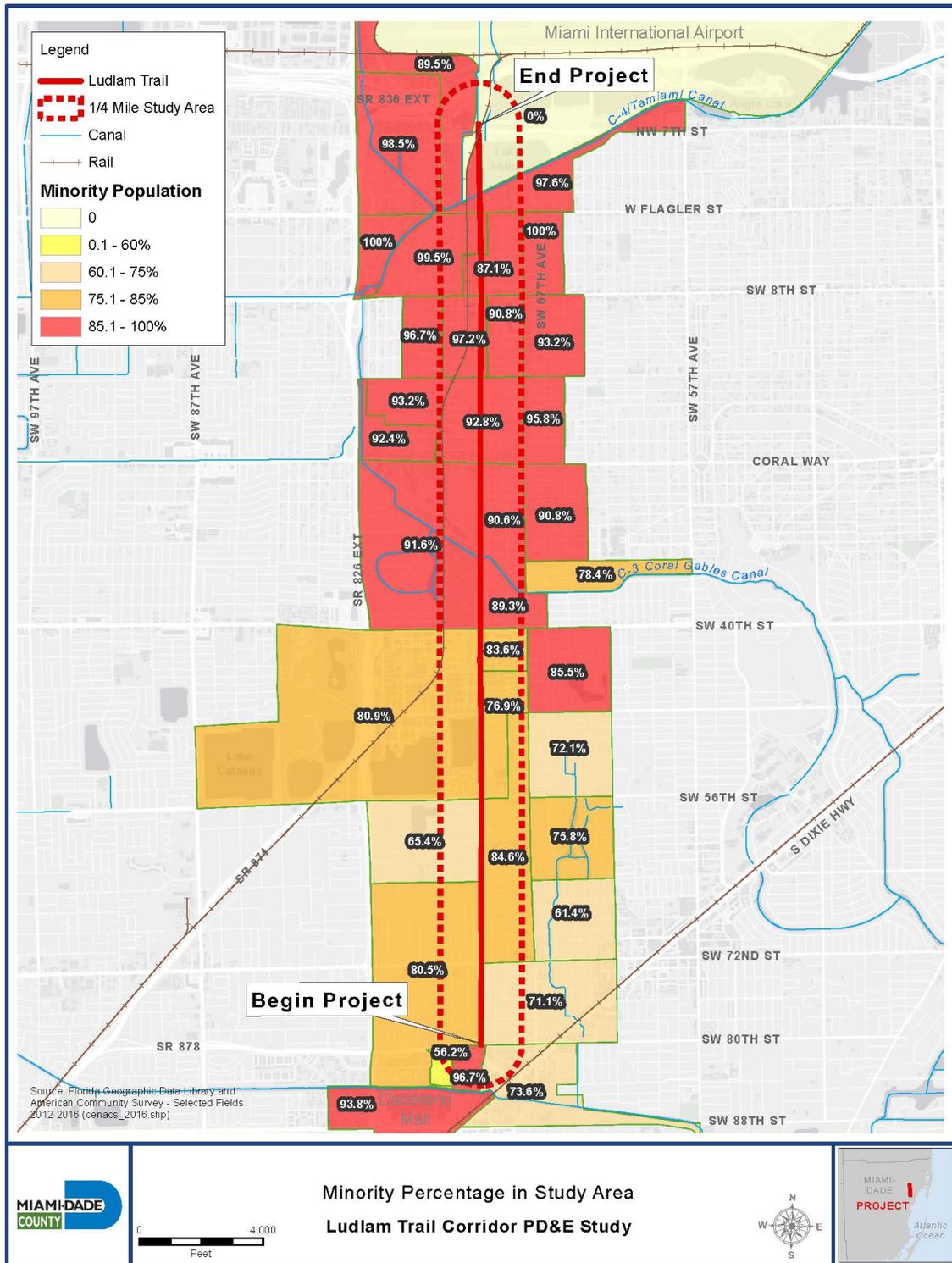


Figure 4 - 2: Minority Percentage in Study Area

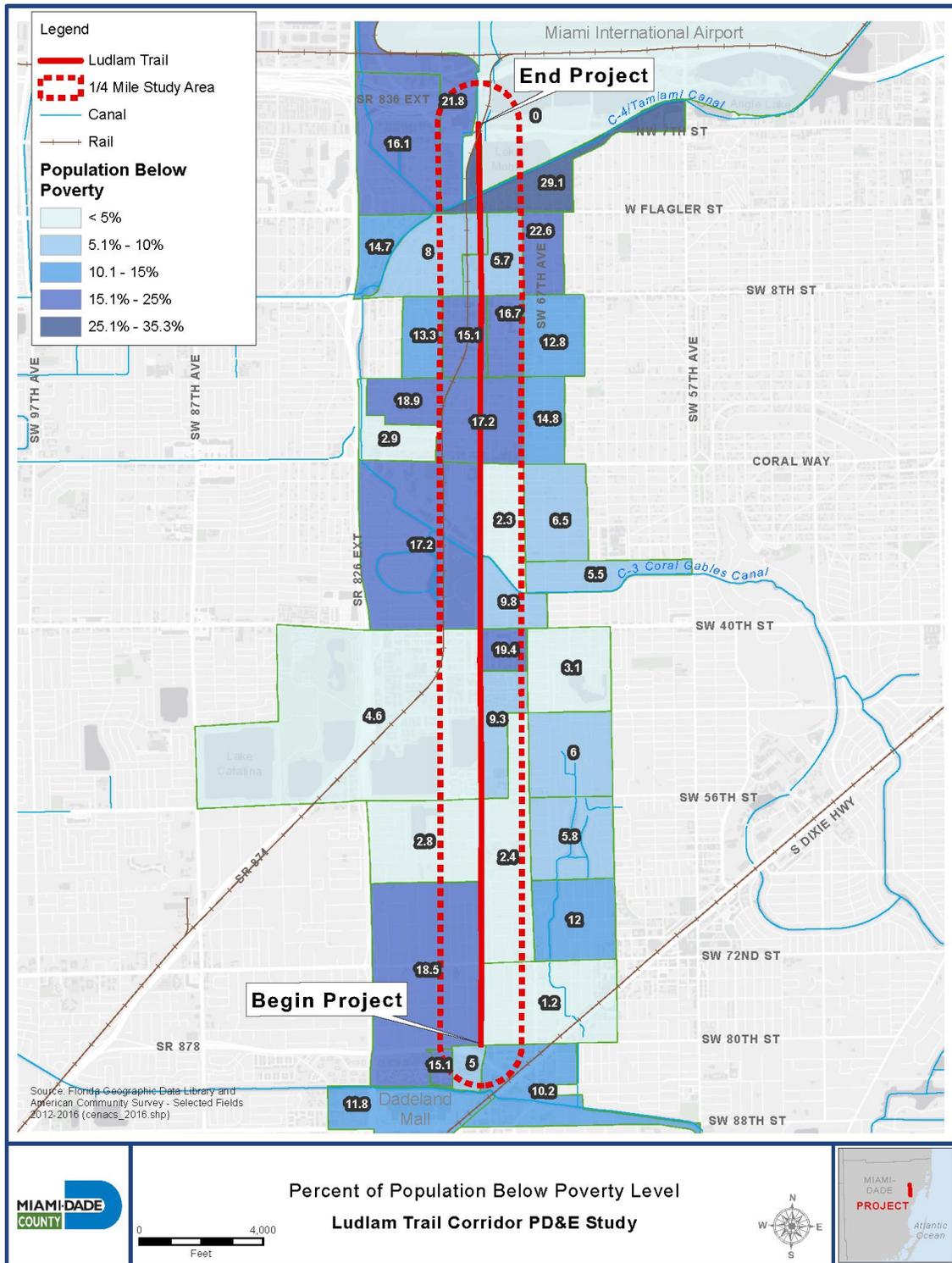


Figure 4 - 3: Percentage of Population Below Poverty Level

No changes to the population or demographic characteristics of the SCE Study Area are anticipated to result from the project as it is located within a former railroad corridor. In addition, the project is consistent with local growth management plans and adopted land use plans.

4.1.1 Community Cohesion

A community is made up of residents, businesses, and institutions within a defined geographic area. The people who comprise a community often share similar social, cultural, ethnic, economic, political, and/or religious characteristics. They may attend the same schools, churches, or social clubs, and often share similar values.

No neighborhood division or social isolation is expected to occur as a result of the proposed project. Overall, the proposed project is expected to enhance community cohesion and the social environment by providing non-motorized transportation accommodations; improving opportunities for social interaction, as well as physical activity and a healthy lifestyle; and providing potential amenities (e.g., pocket parks, benches, fountains, shade trees, and landscaped buffer areas) within the corridor to meet both the livability and mobility goals expressed by the County and surrounding communities. Minimal impact to social aspects is anticipated given that access to proximate residences, businesses, and recreational features could temporarily be affected and/or modified as a result of project construction.

4.1.2 Safety

The Ludlam Trail Corridor faces many challenges as the demand for open space intended for development increases throughout Miami-Dade County. Corridor encroachment and conflicting land uses are examples of conditions that arise; however, potential user safety is of the highest importance. With the corridor's north to south layout, trail traffic will travel both parallel and perpendicular to the flow of automobile traffic throughout south-central Miami-Dade County. This leads to a number of roadway crossings that involve safety concerns for both trail users and roadway drivers. During the engineering planning process, attention was paid to the type of roadway crossings, including arterial roadway crossings, collector street crossings, and local/neighborhood street crossings. This included whether the crossing will be between existing signalized intersections (mid-block crossing) or if the crossing is located near an existing signalized intersection.

Three (3) street crossings of arterial roadways with annual daily traffic counts of approximately 40,000 vehicles or more include the following:

- West Flagler Street
- SW 8th Street /Tamiami Trail
- SW 40th Street/Bird Road

The proposed project corridor also crosses three (3) collector/minor arterial roadways with annual daily traffic counts of approximately 10,000 to 40,000 vehicles. Collector/minor arterial roadway crossings include:

- SW 24th Street/Coral Way
- SW 56th Street/Miller Drive
- SW 72nd Street /Sunset Drive

Additional crossings include eight (8) local or neighborhood streets with annual daily traffic counts less than 10,000 vehicles. Local or neighborhood street crossings include:

- SW 4th Street
- SW 12th Street
- SW 16th Street
- SW 21st Street
- SW 22nd Street
- North Waterway Drive
- SW 60th Street
- SW 64th Street/Hardee Drive

There are four (4) above-grade structures proposed at the major intersections to accommodate safe crossings. This includes all three (3) of the arterial roadway crossings and SW 24th Street/Coral Way, classified as a minor arterial. These crossings will be designed consistent with the project vision, community framework, and components of the *Miami-Dade County Trail Design Guidelines and Standards: Ludlam Trail Case Study* such as materials, color, and lighting.

4.1.3 Community Goals/Quality of Life

The Ludlam Trail Corridor has been the subject of several regional and local transportation studies. These studies have identified the corridor as an opportunity for a regionally significant trail and have built a grassroots level of support throughout central Miami-Dade County.

Charrettes were conducted in 2015 for the Ludlam corridor located in Miami-Dade County Commission Districts 6 and 7. The Study Area for District 6 extends from the Blue Lagoon area at NW 7th Street to SW 40th Street/Bird Road. The Study Area for District 7 included the southern portion of the corridor from SW 40th Street/Bird Road to SW 80th Street. These two charrettes were open to the public and local residents shared their ideas for the future development of the corridor.

On April 21, 2015, the Board of County Commissioners adopted resolution R-350-15 directing that the results of the charrettes conducted for the corridor be reflected in a staff application to amend the Comprehensive Development Master Plan (CDMP) for the Ludlam Trail Corridor. Metropolitan Planning Organization (MPO) Resolution #29-16 supports funding applications to FDOT for the SUN Trail Program and listed the Ludlam Trail as the number one priority trail project. After years of public involvement and collaboration, the Board of County Commissioners formally adopted the Ludlam Trail Corridor District as part of the Miami-Dade Comprehensive Development Master Plan in 2017.

The Ludlam Trail project is contained in the MDPROS's Parks and Open Space System Master Plan, a 50-year unifying vision for a livable, sustainable Miami-Dade County. This vision creates a long-term guide to future park and trail development and stewardship. Most pertinent to this study is the component Great Parks, Greenways, Trails and Water Trails. This component seeks to provide an interconnected trail system that offers transportation alternatives and reduces traffic congestion, creates new recreation opportunities, increases property values, protects natural resources, and encourages tourism and business development.

Community leaders met with the MDPROS and have provided input into the project at public meetings and through extensive coordination with the MDPROS project team. Based on the input received through the project scoping and development process, the public involvement process, and a review of pertinent regional and local studies, documents, guidelines and governing codes and ordinances, the project is consistent with the community's vision. The Ludlam Trail Corridor Project will improve the quality of life of those living in the SCE Study Area, as well as visitors to the trail system.

4.1.4 Special Community Designations

There are no historic neighborhoods or historic business districts located within the SCE Study Area. The Miami-Dade County Enterprise Zone (EZ) occupies 6.55 percent (126.46 acres) of the 0.25-mile project buffer and four brownfields are also present (Central Miami Area, Coral Terrace, Glenvar Heights, and Miami EZ Expansion Area), as shown on **Figure 4-4**. An EZ is a specific geographic area targeted for economic revitalization. Enterprise Empowerment Zones encourage economic growth and investment in distressed areas by offering tax advantages and incentives to businesses located within the zone boundaries. The presence of the EZ in the project corridor is compatible with the proposed project.

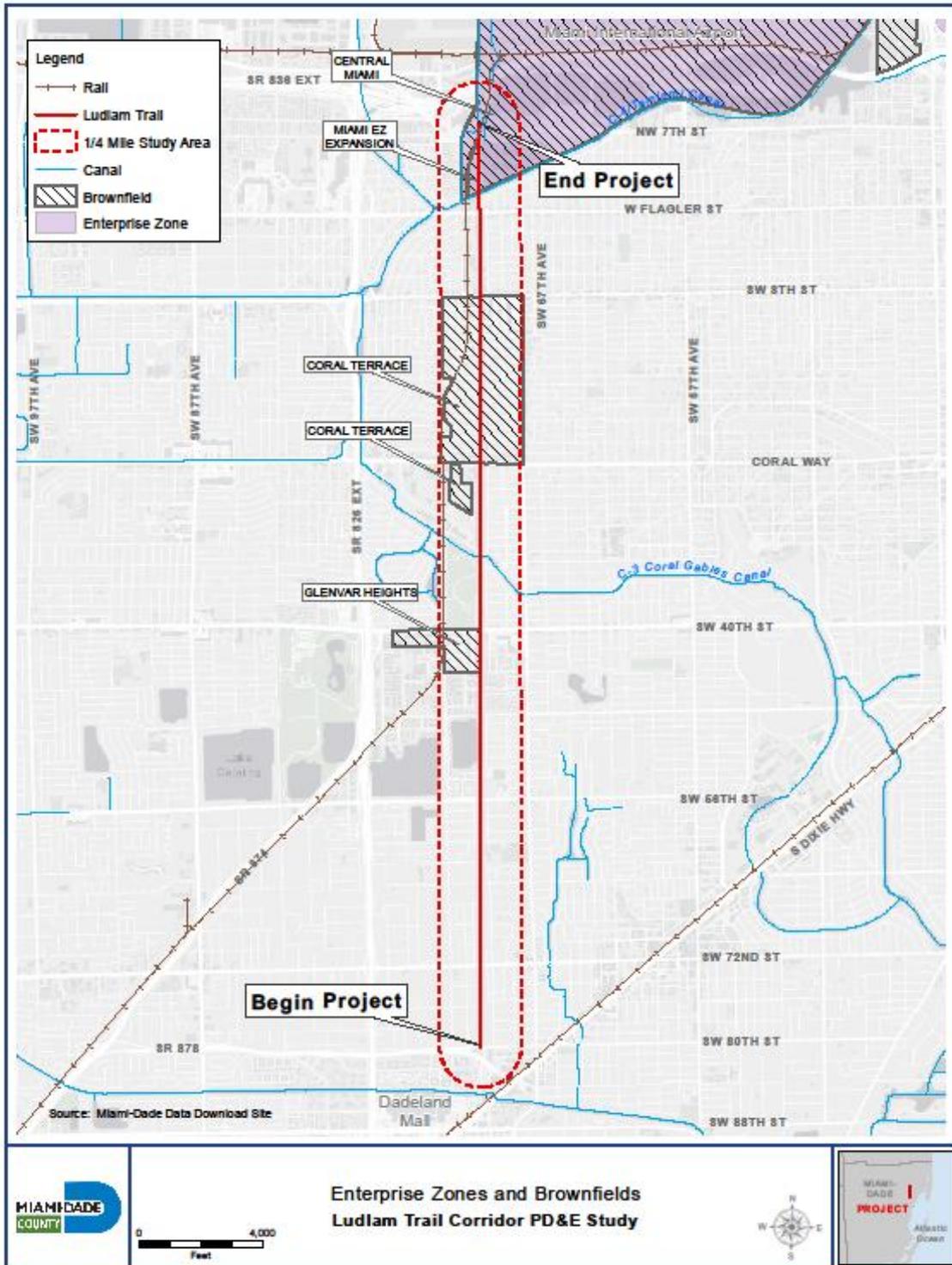


Figure 4 - 4: Enterprise Zones and Brownfields

4.2 Economic

4.2.1 Business and Employment

According to the University of Florida Bureau of Economic and Business Research (BEBR), the population of Miami-Dade County is expected to increase by over 30 percent from 2010 to 2040. Employment is expected to increase by 40 percent during the same time period. Consequently, long-term mobility options are needed that will not only serve current traffic volumes but will also accommodate the population and employment growth expected between 2018 and 2040.

The *Miami-Dade County Trail Benefits Study: Ludlam Trail Case Study* estimates the following economic benefits based on implementation of the project:

- Property Values – anticipated to increase within the Walkable Area (0.5 mile of a proposed public access point to the trail) at an annual pace of 0.32 percent to 0.73 percent faster than other properties in the County; total increase over a 25-year period of between \$121 million and \$282 million
- Property Taxes – anticipated to increased property values within the Walkable Area will generate additional tax revenue between \$98,000 and \$229,000 annually; total property tax revenue over a 25-year period of between \$2.47 million and \$5.74 million
- Retail Sales – between \$3.19 million and \$8 million annually
- Retail Sales Tax – between \$31,900 and \$80,000 generated annually for Miami-Dade County and between \$191,400 and \$480,000 annually for the State of Florida
- Retail Employment – anticipated to support between 27 and 68 new jobs within Miami-Dade County

The development of the trail will also provide more desirable alternatives for transportation disadvantaged populations. For these reasons, the proposed project is anticipated to enhance economic conditions for the surrounding communities and the County.

4.2.2 Tax Base

By definition, tax base is the sum of taxable activities, collective value of real estate, and assets subject to tax within a community. Many variables are reviewed when considering the effects on the tax base of a community. These variables include property values, the millage rate of a community that is funded by ad valorem revenue, the percentage of the total ad valorem revenue collected in the SCE Study Area, and the effect of the project on property values in the SCE Study Area.

The 2018 total millage rate for the three communities are as follows:

- Miami – 20.9454
- South Miami – 19.6361
- Unincorporated Miami-Dade County – 17.2644

The 2018 estimated real property assessment taxable values for the three communities and Miami-Dade County are shown below:

- Miami – \$53,071,000,000
- South Miami – \$1,902,000,000
- Miami-Dade County – \$288,859,000,000

The proposed project is not anticipated to affect the tax base of Miami-Dade County or any of the other municipalities within the SCE Study Area. Changes to business activities or relocations are not anticipated; therefore, there will not be any revenue loss from the property taxes. The anticipated effect to economics is enhanced due to the increase in mobility and the potential to attract new businesses in the nodes of responsible development and thereby support growth within the tax base.

4.2.3 Business Access

The proposed Ludlam Trail Corridor project will have no permanent adverse impact to existing business access. The Ludlam Trail will provide new multimodal access to the businesses included in the future mixed-use development areas to be constructed within the nodes at SW 40th Street/Bird Road, SW 24th Street/Coral Way, and SW 8th Street/Tamiami Trail. Temporary impacts may be possible during construction but will be minimized through adherence to the controls listed in the *FDOT Standard Specifications for Road and Bridge Construction*.

4.3 Land Use

4.3.1 Existing Land Use

The Ludlam Trail is proposed within the former FECR corridor. Land use surrounding the proposed project corridor is identified primarily as residential, with pockets of commercial and industrial uses located at or near major arterial roadway crossings. **Figure 4-5** shows the existing land use map for the SCE Study Area.

The Ludlam Trail Corridor District was adopted as part of the Miami-Dade Comprehensive Development Master Plan in 2017, establishing the trail as a district of county-wide significance to enhance regional mobility, provide opportunities for physical activity, and stimulate the economic vitality of the area. The CDMP amendment provides for the conversion of the former railroad corridor to a publicly accessible, pedestrian and bicycle trail with certain nodes of responsible private development that is sensitive to and compatible with the adjacent areas. Furthermore, the project supports the vision of the Parks Open Space System Master Plan, which is to “provide an interconnected trail system which offers transportation alternatives and reduces traffic congestion, creates new recreation opportunities, increases property values, protects natural resources, and encourages tourism and business development.” The project is consistent with the existing and future land use vision for the project area. Therefore, minimal changes to proximate land uses are anticipated as a result of the proposed project.

4.3.2 Plan Consistency

The future land use map, **Figure 4-6**, is almost identical to the existing land use map. As stated in Section 3.1.4, this project is consistent with the community’s vision and will improve the quality of life of those living in the SCE Study Area, as well as visitors to the trail. In 2004, Miami-Dade County voters approved the issuance of general obligation bonds to construct and improve neighborhood and regional parks and other recreational facilities; among the projects approved by the voters was the Ludlam Trail Corridor project. In addition, the proposed project is consistent with the community land use and development goals and objectives listed in the Miami-Dade County Comprehensive Development Master Plan. Relevant goal, objective and policy statements are highlighted below.

CDMP RECREATION AND OPEN SPACE ELEMENT

Goal: Develop, program, and maintain a comprehensive system of parks and recreational open spaces offering quality and diversity in recreational experiences while preserving and protecting valuable natural resources, unimpaired, for present and future generations.

Policy ROS-1A: Areawide park and recreation open spaces shall be provided to meet the diverse needs of all Miami-Dade residents and visitors. They shall continue to be established on the presence or development of regionally significant natural, historic, cultural, or tourism resources. Areawide park and recreation open spaces include Metropolitan Parks, Natural Area Preserves, Special Activity Areas, District Parks and Greenways. Areawide parks may include areas owned by other public agencies but managed by the County for passive public recreational purposes. The County shall be responsible for providing areawide park and recreation open spaces to all Miami-Dade County residents and visitors.

Policy ROS-3B: The County shall improve and promote non-motorized access to existing park and recreation open spaces by implementing the North Dade Greenway Master Plan and South Dade Greenway Network Master Plan, as well as improved sidewalks and trails, to improve connectivity between parks and residences, schools, activity centers and transportation nodes.

CDMP TRANSPORTATION ELEMENT

Goal: Develop and maintain an integrated multimodal transportation system in Miami-Dade County to move people and goods in a manner consistent with overall county land use and environmental protection goals.

Objective TE-2: In furtherance of pedestrianism as a mode of transportation encouraged in the planned urban area, by 2008 Miami-Dade County shall enhance its transportation plans, programs and development regulations as necessary to accommodate the safe and convenient movement of pedestrians and non-motorized vehicles, in addition to automobiles and other motorized vehicles.

Policies TE-2A: The County shall continue to promote and assist in the creation of a countywide system of interconnected bicycle ways, and promote the implementation of the Miami-Dade Bicycle Facilities Plan.

TE-2B: By 2008, the County shall develop a comprehensive countywide greenways network providing continuous corridors for travel by pedestrians and non-motorized vehicles incorporating elements of the adopted South Dade Greenway Network Master Plan and the North Dade Greenway Master Plan.

TE-2E: The County shall require accommodation of bicycle travel and pedestrian needs in plans for future arterial and collector road construction, widening or reconstruction projects where designed by the Bicycle Facilities Plan, wherever feasible.

The Ludlam Trail Corridor Project will achieve these goals and objectives by connecting transportation nodes and neighborhoods with city and county parks, schools, and activity centers such as Dadeland Mall and Bird Road Art District. Therefore, this project complies with and supports the local government comprehensive plan.

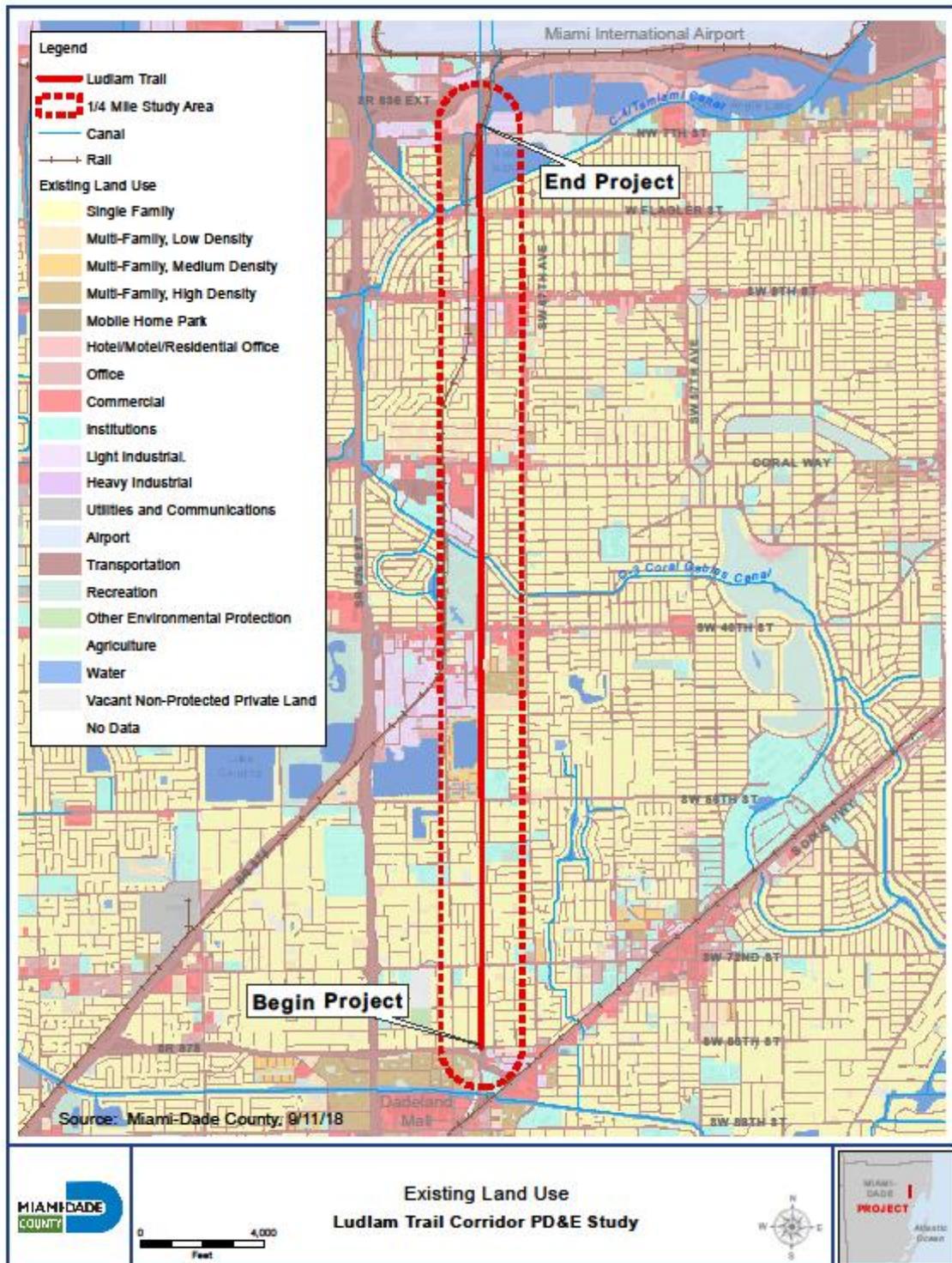


Figure 4 - 5: Existing Land Use

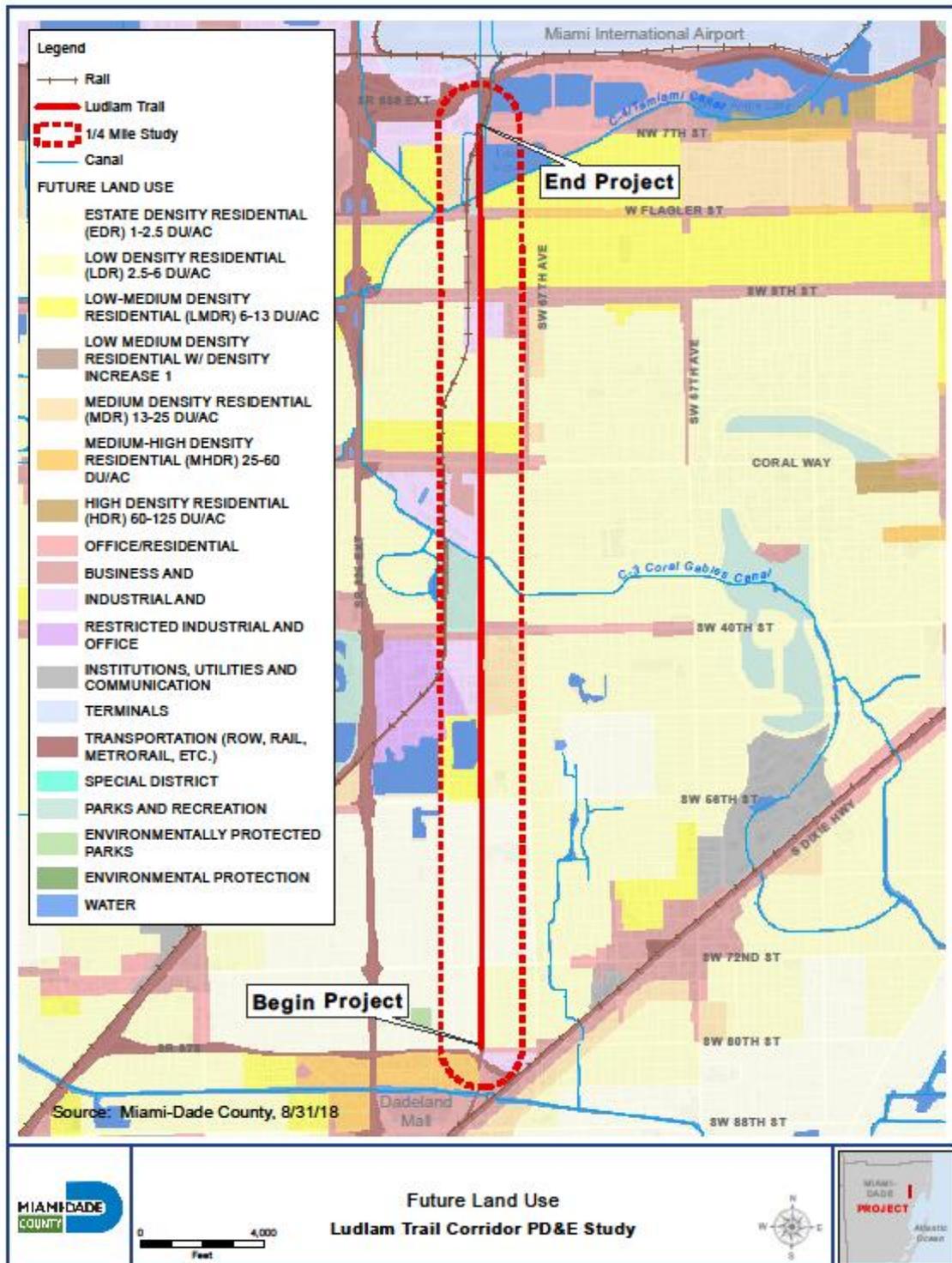


Figure 4 - 6: Future Land Use

4.3.3 Growth Trends and Issues (past and present)

Miami-Dade County experienced 10.2 percent increase in population from April 2010 to July 1, 2017, from 2,498,018 to 2,751,796. During that same period, the City of Miami population grew by 16.0 percent, and the City of South Miami grew by 5.2 percent. According to the Florida Bureau of Economic and Business Research (BEBR), the population of Miami-Dade County is expected to increase by over 30 percent from 2010 to 2040. Employment is expected to increase by 40 percent during the same time period. Consequently, growth in population and employment will increase the transportation demand on the system, which will contribute to increased congestion and delay for residents and visitors to South Florida. The proposed project is anticipated to enhance long-term mobility options within and adjacent to the SCE Study Area that will help to serve current traffic volumes, as well as population and employment growth estimated in the future.

4.3.4 Focal Points

The Ludlam Trail project is proposed within the former railroad corridor, which is approximately 100 feet wide and narrows to 75 or 80 feet in some locations. With the exception of proposed improvements at road and street crossings, no additional ROW outside of the railroad corridor is needed for this project. No community focal points will be adversely impacted by the proposed project.

4.4 Mobility

The Ludlam Trail Corridor extends for 5.6 miles south-north from SW 80th Street to 400 feet north of NW 7th Street in Miami-Dade County. The project is located within a Transportation Disadvantaged Service Provider Area (Miami-Dade Transit Authority), as well as within the vicinity of seven FDOT RCI bridges, one existing recreational trail (Bike Route 6), and one OGT multi-use trail opportunity/hiking trail priority - which includes the same trail identified as part of the SUN Trail Network in Florida (Ludlam Trail Corridor [this project]). There are also 35 bus routes that service the SCE Study Area.

Mobility is defined by the ability to move freely and easily. The proposed project will enhance access between neighborhoods and provide non-motorized transportation alternatives for travel to/from areas of residences, work, retail, schools, and parks. According to the *Miami-Dade County Trail Benefits Study: Ludlam Trail Case Study*, Section 3.2.1 Vehicle Trip Reduction Summary of Findings, development of the trail will improve mobility for walking and biking to schools, parks, transit stations, and running of miscellaneous errands, resulting in a reduction of daily vehicle trips within the Ludlam Trail Corridor Study Area. For these reasons, the project is anticipated to enhance mobility for all modes of transportation.

4.4.1 Accessibility

Visitors will be able to access the trail from the existing streets that cross through the trail corridor or from neighborhood footpaths. Existing footpaths that connect the corridor to neighborhood streets will be improved to provide ADA access to the trail. Additionally, new connections will be provided at A.D. "Doug" Barnes Park and Robert King High Park. All crossings and park access points will be ADA compliant. Measures to address privacy for existing residents and safety for all trail users and nearby residents will be implemented. The Ludlam Trail Corridor District zoning code requires a 15' wide vegetative buffer be planted within the corridor, in areas adjacent to single family or duplex residences in order to provide screening.

4.4.2 Connectivity

The Ludlam Trail Corridor is likely to become an important north-south connector in this area of the county. By providing walkers, joggers, and cyclists with a protected path that is fully separated from vehicular traffic, the trail will be a safe corridor of travel, bringing together existing park assets into a connected network of public spaces.

4.4.3 Traffic Patterns and Circulation

By providing non-motorized transportation options, fewer vehicles will travel on the surrounding roadway network, which will help reduce traffic congestion on major arterials in the area. The proposed Ludlam Trail Corridor improvements will not permanently modify traffic patterns throughout the surrounding area and will serve to reduce vehicle trips and enhance non-motorized travel through and access to the area and its businesses and communities.

Construction activities would likely have a temporary impact on the circulation of traffic in and near the project area. During construction, motorists and other people living and working in the surrounding area could experience temporary inconveniences associated with traffic delays, detours, and construction dust and noise. Construction impacts would be short-term and would occur only during the construction period. Maintenance of traffic and sequence of construction will be planned and scheduled so as to minimize traffic delays throughout the project.

4.4.4 Public Parking

No existing parking areas will be displaced by the proposed project. The concept plans developed during the PD&E Study include two parking areas, within the public right-of-way at SW 80th Street and SW 56th Street. Additionally, parking will be available at AD “Doug” Barnes Park and Robert King High Park.

4.5 Aesthetic Effects

Aesthetic issues during the transportation planning process incorporate how the community is affected visually by a project. Aesthetic issues are subjective and are best defined by the collective community vision of what constitutes a pleasing environment. It includes actual or perceived impacts to noise/vibration, viewsheds, including above-grade crossings and compatibility of the project with the surrounding area.

Land use surrounding the proposed project corridor is identified primarily as residential, with pockets of commercial and industrial uses located at or near major arterial roadway crossings. Community features associated with aesthetics reported within the SCE Study Area include: five (5) census designated places (South Miami, West Miami, Glenvar Heights, Coral Terrace, and Miami); five brownfields; 21 homeowner and condominium associations; 21 group care facilities; two (2) mobile home and RV park; five (5) local Florida parks/recreational facility boundaries, one (1) OGT multi-use trail opportunity/hiking trail priority - which includes the same trail identified as part of the SUN Trail Priority Trail Network in Florida (Ludlam Trail Corridor [this project]), and one (1) existing recreational trail (Bike Route 6), as well as historic features and numerous residential areas. Though temporary impacts to the local visual aesthetic may occur during construction, the trail is anticipated to improve the visual appeal of the area by replacing an

abandoned railroad corridor with an active, well-maintained, and aesthetically pleasing trail. In addition, amenities such as pocket parks, benches, fountains, shade trees, public art, and landscaped buffer areas are anticipated to be provided. As such, the proposed project improvements are anticipated to enhance the aesthetic character of the corridor and surrounding areas.

4.5.1 Noise/Vibration

The trail will prohibit motorized uses and is therefore not expected to impact existing use present along the proposed project corridor. The location of noise sensitive sites including proximate residential use and some outdoor recreation areas are present throughout the corridor. Temporary noise or vibration effects resulting from the construction activities will be minimized through adherence to the controls listed in the latest edition of the *FDOT Standard Specifications for Road and Bridge Construction*. In locations where the trail traverses areas that consist primarily of non-noise sensitive industrial and commercial land uses, there may be a possibility to repurpose some of the buildings for trail-facing restaurants and retail, including outdoor patios or terraces, as identified and consistent with the CDMP for Miami-Dade County.

4.5.2 Viewshed

The project will not affect vistas or viewsheds except at locations where above-grade structures are proposed. There are four (4) above-grade overpass bridge structures proposed at major intersections to accommodate safe trail crossings, including SW 40th Street/Bird Road, SW 24th Street/Coral Way, SW 8th Street/Tamiami Trail, and Flagler Street. These crossings will be designed consistent with the project vision, community framework, and components of the *Miami-Dade County Trail Design Guidelines and Standards: Ludlam Trail Case Study* design guidelines such as materials, color, and lighting. Overall, views will be enhanced as a former railroad corridor (industrial use) will be converted to a greenway trail which will include landscaping and public art.

4.5.3 Compatibility

As noted in Section 4.3, the proposed trail improvement is consistent with local planning documents and the community's transportation and land use visions for the corridor. The proposed trail replaces past freight rail activity with a mode supportive of the proximate residential, recreation and commercial use now present. Improved local access and mobility options will benefit an area with exceptionally high population and employment densities. The proposed trail is compatible with local land use patterns and will better connect the existing bicycle and pedestrian network.

The landscape within the former railroad, Ludlam Trail Corridor, has been completely altered from its historical condition, and virtually all native plants in the corridor have been displaced by exotic vegetation. The community structure that would have existed in natural communities such as pine rockland, tropical hardwood hammock, wet prairie, or forested wetland slough no longer exist. However, the potential for use of the site by some highly mobile and urban-adapted species of birds remains high. With a focus on providing tree canopy and native or select non-native plant species, many positive impacts may be realized by the community that were historically present in the corridor.

The vision, established by the *Miami-Dade County Trail Design Guidelines and Standards: Ludlam Trail Case Study* report, to be implemented in this project calls for landscape that ultimately represents a mature native upland of at least two historical communities, with native species of birds, butterflies, and

other invertebrates in the linear corridor and adjacent open spaces of parks and canopied residential areas. Ancillary benefits of this restoration are water quality improvement through upland overflow treatment of runoff, reducing heat island effects through shading, and air quality benefits of a stable, low maintenance native landscape.

No impacts to community resources are anticipated as a result of this project. The proposed trail will serve to enhance the existing character and aesthetics of the corridor while implementing a needed transportation improvement.

4.6 Relocation Potential

Land use surrounding the proposed project corridor is identified primarily as residential, with pockets of commercial and industrial uses located at or near major arterial roadway crossings. Because the Ludlam Trail Corridor is proposed to be developed within the existing right-of-way of an abandoned railroad, relocation impacts to properties located along the trail are not anticipated.

The proposed project, as presently conceived, will not displace any residences or businesses within the community. Should this change over the course of the project, a Right of Way and Relocation Assistance Program will be carried out in accordance with Florida Statute 421.55, Relocation of displaced persons, and the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 91-646 as amended by Public Law 100-17).

5.0 PUBLIC INVOLVEMENT

5.1 Coordination and Participation

The Ludlam Trail has been envisioned since the early 2000s with extensive planning studies and support by the FDOT, MDPROS, the Transportation Planning Organization (TPO), Friends of Ludlam Trail, community residents, and other stakeholders. This section provides a summary of the extensive public involvement process and meetings held with opportunities for public engagement, participation, and comments. The public involvement process culminated in the 2017 establishment of the Ludlam Trail Corridor District via amendment to the County's Comprehensive Development Master Plan (CDMP), that codified a greenway trail within the majority of the corridor and limits mixed-use development to three areas centered proximate to major intersections.

Prior to initiating the Ludlam Trail Corridor PD&E Study, Miami-Dade County completed extensive public involvement activities during the planning phase of the proposed Ludlam Trail Corridor that resulted in a community-supported consensus plan for a trail through the length of the corridor, with mixed-use development concentrated in nodes at the major intersections.

As part of the PD&E Study, a public involvement program is currently being implemented for the Ludlam Trail. The program is documented in the Public Involvement Plan (PIP), a companion document to this PD&E Study. The PIP will be updated and amended throughout the project development process to incorporate the latest public involvement policies and techniques as they evolve during the life of the study. The purpose of the PIP is to outline the public involvement approach to be taken with the project, provide and share project information with people living and working in the area, consider ideas and concerns, and solicit and incorporate input received during the PD&E Study process.

The following is a summary of the public outreach efforts associated with this regionally significant project. For more detailed information on the PD&E Public Involvement, please see the PIP.

5.1.1 Development Approvals – Charette, CDMP, Zoning, and Planning Studies

Miami-Dade County has been a proponent of the Ludlam Trail Corridor for many years culminating in a revision to the Miami-Dade County Comprehensive Development Master Plan (CDMP) in April 2015. In May 2014, a subsidiary of Florida East Cost Industries (FECI) filed an application to amend the CDMP requesting that a new land use category, entitled "Ludlam Trail Corridor", be created for the 5.6-mile long Ludlam Corridor.

As part of this process, a series of public hearings were held including:

- September 23, 2014 for Kendall Community Council (Area 12)
- September 29, 2014 for North Central Community Council (Area 8)
- September 30, 2014 for Community Council (Area 10)
- Planning Advisory Board (PAB) hearing was held October 20, 2014
- November 19, 2014, Miami Dade Board of County Commissioners (BCC) public hearing for CDMP amendments

The application, as proposed by FECI, envisioned a continuous trail with development throughout the length of the corridor. Based on initial community opposition to intensive mixed-use development in the

entire length of the corridor adjacent to single family homes; FECl withdrew its application at the December 4, 2014 CDMP hearing. At the meeting, the BCC directed County staff to seek input from the community through a charrette process and to file a CDMP amendment application based on public input received (BCC Resolution No. R-350-15).

Charette

In response to the Resolution R-350-15, and the directive from the Board of County Commissioners, a series of charette meetings were facilitated by the County for an inclusive, public input process for the Ludlam Corridor CDMP. Extensive effort was made so that the area residents and the local community were aware of the planning process through advertisements and outreach. All meetings were advertised in the Miami Herald and notifications of meeting dates and times were sent via postcard to property owners within one-half mile of the corridor.

Charrette workshops for public involvement and input were held on:

- February 28, 2015 for a Public Charette at West Miami Middle School
- March 2-4, 2015 for “Open House” work sessions on charette plans at A.D. “Doug” Barnes Park
- March 9, 2015 for a Public Charette at South Miami Senior High School
- March 10-12, 2015 for “Open House” work sessions on charette plans at Gibson Bethel Community Center

Members of the public in attendance gathered into groups, with each provided an aerial photo of a one-mile section of the study area overlaid with trace paper. For each one-mile segment, groups of approximately ten participants discussed community issues and drew their ideas onto the paper. These drawings and concepts would become the “Citizens’ Plans”. For a period of three days following each charrette, Miami-Dade’s Urban Design Center staff hosted open house work sessions at A.D. “Doug” Barnes Park and Gibson Bethel Community Center where the public was invited to visit and engage with staff regarding further development of the planning concepts for the Ludlam Trail Corridor.

On April 21, 2015, the BCC adopted Resolution No. R-350-15 directing that the plans developed as a result of the public charrettes be submitted in a staff application to amend the CDMP for the Ludlam Trail Corridor.

Presentation of the Charette Plan concepts were shown to the community for their review and comments at two subsequent public meetings held on:

- April 23, 2015 at West Miami Middle School
- April 29, 2015 at South Miami Senior High School

CDMP Amendment by the County (2015-2017)

In response to Resolution R-350-15, Miami-Dade County’s Regulatory and Economic Resources (RER) Department developed a CDMP application to amend the land use map and establish the Ludlam Trail Corridor District based on the community’s input as reflected in the Charette Plans.

As part of the CDMP process, public hearings were held on:

- September 21, 2015 for Kendall Community Council (Area 12)
- September 28, 2015 for Westchester Community Council (Area 10)

- September 30, 2015 for North Central Community Council (Area 8)
- October 4, 2015 for a City of Miami public hearing.
- October 19, 2015 for a Planning Advisory Board (PAB) hearing
- November 18, 2015 for a BCC hearing on small-scale amendments

The initial opposition to FECl’s proposed residential development throughout the length of the corridor, was addressed via the extensive public involvement process of the charettes and CDMP, resulting in a community supported consensus plan based on the vision developed in the public charrette workshops. The charrette plan and proposed CDMP amendment include a recreational trail through the length of the corridor, with mixed-use development limited to three (3) nodes at the major intersections. The community supports the development of a recreational trail in the corridor, and has demonstrated through the Friends of the Ludlam Trail and other advocacy groups that area residents are eagerly anticipating the implementation of the charrette plan and CDMP amendment via the development of a recreational trail in the Ludlam corridor.

The BCC approved and adopted Ordinance No. 17-54, a Standard Amendment to the CDMP for the County on July 19, 2017. This was a culmination of a three-year process including extensive public involvement and opportunities for public input. The CDMP Ordinance codified the community’s vision for the development of a recreational trail in areas adjacent to existing residences; and new mixed use development is to be concentrated in three (3) nodes adjacent to existing commercial or industrial use at the major intersections of SW 40th St, SW 24th St and SW 8th St.

The CDMP amendment states that *“The purpose of the Ludlam Trail Corridor District is to enhance the regional mobility, provide opportunities for physical activity, and improvement of the economic vitality of the area by facilitating the conversion of the former railway corridor into a continuous publicly accessible primarily pedestrian and bicycle trail while ensuring that development along the corridor occurs at appropriate locations, and in a manner that is sensitive to and compatible with adjacent uses. Several regional and local studies have identified an opportunity for a regionally significant trail and greenway along the Corridor that will connect to the County’s greenway and trail network, link the surrounding communities, and provide vital neighborhood connections.”*

Zoning

On November 21, 2017, Miami Dade County Board of County Commissioners approved Ordinance No. 17-91, creating Article XLIV of Chapter 33 of the Miami Dade Zoning Code which established a new zoning district, the Corridor District; which provides a regulatory framework for the redevelopment and transformation of former railway corridors or other linear pathways into recreational trails and mixed use development areas in a manner that is consistent with the CDMP.

Per Sec. 33-481(B), it is the intent of the Corridor District to enhance regional mobility, provide opportunities for physical activity and improve the economic vitality of former railway corridors... by providing a continuous pedestrian and bicycle trail while ensuring that development along the corridors occurs at appropriate locations in a manner that is sensitive to and compatible with adjacent uses. If a pedestrian and bicycle trail is developed over the length of the corridor, such a public trail would allow for alternate modes of transportation and may provide connections that do not currently exist. Recognizing these and other benefits, Article XLIV and the CDMP allow for certain residential density bonuses if a public trail is developed over the length of the corridor.

On January 24, 2019, at a Public Hearing the Board of County Commissioners approved Z-18-052 rezoning 59-acres of land from SW 8th Street to SW 80th Street within the former FEC railroad corridor to the Corridor District classification. This zoning designation represents the desires of the community as codified in the charette plans, CDMP amendment and zoning designation; for a continuous recreational trail throughout the length of the corridor and mixed-use development concentrated in three (3) nodes proximate to major intersections at SW 40th Street, SW 24th Street, and SW 8th Street.

Development Areas

As provided for within the CDMP Ordinance No. 17-54, adopted by the Miami-Dade Board of County Commissioners on July 19, 2017:

Development Areas shall be developed in a manner that is compatible with adjacent uses. Open space shall be provided in the form of a minimum 15-foot wide continuous trail within each Development Area. Building features oriented toward the recreational trail shall have a human scale, and design variations at short intervals to create interest for users of the trail. The maximum development allowed within the Ludlam Trail Corridor District, without a publicly accessible trail component, was a total of: (i) 582 residential units and 256,132 square feet of industrial uses, or (ii) a combination of 281 residential units, 256,132 square feet of industrial uses, 103,572 square feet of office uses, and 39,377 square feet of retail uses. If a publicly-accessible trail is developed along the length of the Corridor, or a legally binding instrument or recordable agreement running with the land is executed by the property owner(s) of the Corridor, demonstrating to the satisfaction of the County Mayor or Mayor's designee(s) when and how the publicly-accessible trail will be accomplished, then development shall be permitted up to the maximum allowable density and/or floor area ratio and building heights specified for each Development Area below.

Upon execution and recording of an Easement Agreement for each of the three development node areas in November 2018, between the County and FECI LT1 LLC and LR 13-18 LLC (subsidiaries of FECI), including commitments of when and how the publicly accessible trail will be accomplished, the density for the development nodes was increased to the allowable density and/or floor area ratio and building heights specified for each Development Area below.

Tamiami Trail Development Area: The Tamiami Trail Development Area includes those portions of the corridor located between SW 8th Street/Tamiami Trail and SW 12th Street. Development shall be limited as follows:

- Maximum Density: 125 dwelling units per gross acre
- Maximum Floor Area Ratio: 5.0
- Maximum Building Height: Twelve (12) stories

Coral Way Development Area. The Coral Way Development Area includes those portions of the corridor located between 270 feet north of the centerline of SW 24th Street/Coral Way and 240 feet south of the centerline of SW 24th Street/Coral Way. Development shall be limited as follows:

- Maximum Density: 60 dwelling units per gross acre
- Maximum Floor Area Ratio: 2.5
- Maximum Building Height: Six (6) stories

Bird Road Development Area. The Bird Road Development Area includes those portions of the corridor located between ±248 feet north of the centerline of SW 40th Street/Bird Road to ±2,600 feet south of the centerline of SW 40th Street/Bird Road. Development shall be limited as follows:

- Maximum Density: 90 dwelling units per gross acre
- Maximum Floor Area Ratio: 2.5
- Maximum Building Height: Six (6) stories

Planning Studies

Since the early 2000s, Ludlam Trail has been the subject of several regional and local transportation studies which have identified the corridor as an opportunity to create a regionally significant trail and greenway.

In 2002, FDOT completed the Ludlam Trail Research Memorandum, which recommended that further studies be conducted to assess the opportunities and constraints of the corridor.

In 2003, FDOT District 6 initiated the Ludlam Trail Non-Motorized Corridor Study Planning & Environmental Study (Phase 1). As a part of this process, FDOT Environmental Management Office staff recommended the project be categorized as Programmatic Categorical Exclusion. Greg Williams, P.E. District Transportation Engineer of the Florida Highway Administration, approved this preliminary recommendation.

Presentations were made to the committees and individuals listed below during the course of the study:

- Transportation Planning Council on November 7, 2002
- Citizens' Transportation Advisory Committee on October 23, 2002
- Bicycle and Pedestrian Advisory Committee on August 29, 2002 and December 11, 2002
- Public Workshop #2 at South Miami Middle School on October 2, 2002 (120 People)
- Public Workshop #1 at South Miami Middle School on August 7, 2002 (275 people)
- Transportation Aesthetics Review Committee on January 8, 2003
- Federal Highway Administration on January 30, 2003

In 2011, MDPROS completed the *Miami-Dade County Trail Design Guidelines and Standards: Ludlam Trail Case Study* report. As part of this process, presentations were made to the following MPO committees during the course of the study:

- Transportation Planning Council on March 15, 2010 (informational Item)
- Bicycle Pedestrian Advisory Committee on February 24, 2010 (Resolution #5-2010)
- Transportation Aesthetic Review Committee on February 3, 2010 (Resolution #2-10)

In 2015, the County hosted a series of public charette workshops as detailed in the aforementioned section on development approvals. As a part of that process, a planning effort by the County with extensive community input resulted in the Ludlam Trail Charette Plans which were adopted by the BCC on April 21, 2015, the BCC adopted Resolution No. R-350-15.

5.1.2 Early Regional and Local Studies

Presentations were made to the committees and groups listed below during the course of the study:

- Citizens' Transportation Advisory Committee on October 23, 2002

- Transportation Planning Council on November 7, 2002
- Bicycle and Pedestrian Advisory Committee on August 29, 2002 and December 11, 2002
- Public Workshop #1 at South Miami Middle School on August 7, 2002 (275 people)
- Public Workshop #2 at South Miami Middle School on October 2, 2002 (120 People)
- Transportation Aesthetics Review Committee on January 8, 2003
- Federal Highway Administration on January 30, 2003

In 2010, MDPROS completed the *Ludlam Trail Design Guidelines and Standards* report. As part of this process, presentations were made to the following MPO committees during the course of the study:

- Transportation Aesthetic Review Committee on February 3, 2010 (Resolution #2-10)
- Bicycle Pedestrian Advisory Committee on February 24, 2010 (Resolution #5-2010)
- Transportation Planning Council on March 15, 2010 (informational Item)

5.1.3 Advocacy Groups – Local Community and Neighborhood Support

The Friends of Ludlam Trail (FOLT) is a non-profit advocacy group that includes community members, neighborhood associations, and area residents. Information regarding FOLT may be viewed on their website (www.ludlamtrail.org). FOLT is highly supportive of the re-development of the Ludlam Corridor with a publicly accessible recreational trail. FOLT has organized and hosted numerous events within and in support of the Ludlam Trail.

Over 20 events have been hosted by FOLT, FECL, and MDPROS in support of development of the trail. Events have taken place both within the corridor and at nearby locations including: nearby Family Fun Day A.D. “Doug” Barnes Park, Ludlam Days: Fall Festival (November 7, 2015), Ludlam Days: WHEELS Group Run, Ludlam Days: Ludlam Lights, movie nights, bat house installation adjacent to the corridor, Global Youth Service Day, Great Backyard Bird Count, hikes, bike rides, yoga and Zumba events, Halloween, Carnival, and the From Rooftop to Tree Tops exhibit at the Coral Gables Museum. The events have generally been well attended and provide opportunities for the community to enjoy and use the Ludlam Trail Corridor for non-motorized transportation and recreational purposes.

5.1.4 Public Information Meeting

MDPROS hosted an online Public Information Meeting on November 19, 2020 from 6:00 to 8:00 pm to engage the public, gather additional input and, inform neighbors and the community about the ongoing progress of the project. In compliance with COVID-19 guidelines, the event was held virtually via Zoom with an interactive format affording the public the opportunity to submit questions and comments, and answer polling questions regarding the project. The event was advertised through mail-outs, newspaper ads, email distribution to mailing lists, the Miami-Dade County website, social media, flyers, and stakeholder meetings.

More than 400 people participated in the 2-hour interactive online Public Information Meeting event. Additionally, a recording of the meeting and a copy of the presentation were posted to the Ludlam Trail project website at <https://www.miamidade.gov/global/recreation/ludlam-trail/home.page>. A 21-day public comment period followed the virtual information meeting during which 291 written comments were received. The comments were reviewed by staff, responses were sent to the submitter, and the feedback was incorporated into the project. The primary topics of the comments received include:

- **Design Considerations**– 119 Comments (41%) • Lighting within project corridor: How will they impact adjacent properties • Landscaping and planting selections: consider native and more shade trees • How will existing fences be impacted • What will the trail look like and width of the bicycle and pedestrian lanes • Requests to see designs • Requests for more detail on road crossings
- **Overall Safety and Trail Comfort** – 57 Comments (20%) • Concerns about shelters attracting vagrants • Amenities along trail like restrooms and other concessions • Privacy of adjacent private properties • Parking and distance to trail • Security of trail after dark • Hours of operation for public
- **Connections and Trail Access** – 34 Comments (11%) • Access from adjacent private properties • Access to lakes and canals along trail • Timing of public access to trail • ADA access for wheelchair users, cyclists, and strollers, etc.
- **Trail Use** – 16 Comments (5%) • Pet friendly trail with water stations • Suggestions for horses on part of the trail • Restrictions on electric or motorized bicycles or wheelchairs • Delivery and drop-off lanes near trail
- **Next Steps** – 22 Comments (8%) • Effects on property values along trail • Timing of construction and phasing • Cost benefit analysis on the trail • Funding for project • Maintenance of proposed trail
- **Other Topics** – 43 Comments (15%) • Concerns about flooding on adjacent property • Interest in historical monuments or interpretive signage along trail • Requests to stay involved in process • Events like “Ludlam Lights” were a success; bring that back • Potential encroachments along the trail right-of-way: How will it be managed

5.1.5 Public Hearing

The public involvement effort is ongoing with continued engagement planned through the duration of the project. A public hearing is currently scheduled to be held in August 2021. Public comment submitted at the hearing will receive response and be incorporated into the environmental document.

5.2 Environmental Justice, Civil Rights, and Related Issues

The proposed project has been developed in accordance with the requirements of Title VI of the Civil Rights Act of 1964. This project is being conducted without regard to race, color, national origin, age, sex, religion, disability, or family status. Title VI of the Civil Rights Act provides that no person shall, on the grounds of race, color, religion, sex, national origin, marital status, handicap, or family composition be excluded from participation in, or be denied the benefits of, or be otherwise subject to discrimination under any program of federal, state, or local government.

Executive Order (EO) 12898, Federal Actions to Address Environmental Justice in Minority Populations, signed by the President on February 11, 1994, directs federal agencies to take appropriate and necessary steps to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law.

As previously discussed in Chapter 3 and based on the analysis conducted for this PD&E Study, the recommended alternative will not cause disproportionately high or adverse effects on any minority or

low-income population, in accordance with the provisions of the President’s EO on Environmental Justice (EO 12898). Therefore, no further Environmental Justice analysis is required.

Additionally, as noted in the demographic tables presented in Section 4.1, the percentage of the population that is considered Limited English Proficient (LEP) is higher in the SCE Study Area than in Miami-Dade County, 41.3 percent compared to 34.7 percent; the percentage of LEP is considered high in the SCE Study Area. Presidential EO 13166: Improving Access to Services for Persons with Limited English Proficiency directs that people with LEP have meaningful access to programs and activities of agencies receiving federal financial assistance. Guidance implementing EO 13166 identifies four factors to be balanced in assessing whether LEP services are needed on a case-by-case basis. These factors are:

- The number or proportion of LEP persons eligible to be served or likely to be encountered by a program, activity, or service of the recipient of grantee.
- The frequency with which LEP persons come in contact with the program.
- The nature and importance of the program, activity, or service provided by the recipient to people’s lives.
- The resources available to the recipient and the costs.

Utilizing the four (4) LEP factors, project meeting information and newspaper advertisements included language in Spanish and Creole containing a number to call to request Spanish or Creole translation services be made available at the public meetings. No requests for Spanish or Creole translation services have been made to date. However, due to the high number of LEP persons in the SCE Study Area, the Public Hearing flyer will be mailed in English, Creole, and Spanish. Similar to the previous meeting, Spanish and Creole translation services will be offered in the newspaper advertisement.

5.3 Recommendations and Commitments

The purpose of the Ludlam Trail Corridor is to enhance overall accessibility to schools, parks, transit stations, and bus stops for more than 30,000 residents living within two (2) miles of the proposed project corridor, as described in the Miami-Dade County Trail Benefits Study. The proposed project will serve bicyclists, pedestrians, and other types of recreational uses, as well as provide a safe, dedicated, and direct means for users of non-motorized transportation to and from areas of residences, work, schools, parks, and shopping centers. The proposed project is expected to enhance sociocultural issues as described in this SCE Evaluation.

There are currently no project commitments related to SCE issues.

5.4 Summary of Project Effects

This SCE Evaluation is intended to be a proactive planning tool that ensures that community values, quality of life, and socioeconomic impacts are adequately considered and addressed in the project delivery process. Potential social, economic, land use, mobility, aesthetic, and relocation impacts that may result from the project are identified and evaluated. As documented in this evaluation, the Ludlam Trail Corridor improvements will have no long-term negative impacts on the SCE Study Area, and upon completion, is projected to increase the quality of life through enhancing overall accessibility to schools, parks, transit stations, and bus stops, as well as provide a safe, dedicated, and direct means of non-motorized transportation to and from areas of residences, work, schools, parks, and activity centers. Impacts on the six key areas are documented in **Table 5-1**.

The FDOT Efficient Transportation Decision Making (ETDM) Screening Summary evaluates the potential effects of the proposed project. The final ETDM Summary Report was published on July 2, 2019. The ETDM degrees of effect are a consistent with the findings of this SCE evaluation and are as follows:

- Social – Enhanced
- Economic – Enhanced
- Land Use Changes – Minimal
- Mobility – Enhanced
- Aesthetic Effects – Enhanced
- Relocation Potential – None

Table 5 - 2: Project Effects Overview Summary

Issue	Impact	Degree of Effect
Social	Temporary disruptions during construction Long-term quality of life improvements Enhanced mobility options Enhanced non-motorized transportation accommodations No neighborhood division or social isolation Enhance community cohesion Reduced congestion Improving opportunities for physical activity	Enhanced
Economic	Temporary disruptions during construction Stimulates the economic vitality of the area Property values will increase within walkable area Nodes of responsible development will generate additional property and sales tax revenue	Enhanced
Land Use Changes	Consistent with the existing and future land use vision for the project area	Minimal
Mobility	Temporary disruption to traffic patterns Provides transportation options for transportation disadvantaged Improved mobility, connectivity, and accessibility Safe crossings at intersections Regionally significant trail	Enhanced
Aesthetic Effects	Noise and vibration concerns during construction Loss of some existing vegetation Enhanced landscaping and hardscape Replacement of an abandoned railroad corridor with an active, well-maintained, and aesthetically pleasing trail	Enhanced
Relocation Potential	No relocations	None

5.5 Mitigation and Enhancement Actions

None anticipated at this time.

5.6 Findings Regarding Disproportionate Adverse Effects

Based on the above discussion and analysis, the proposed project alternative will not cause disproportionately high and adverse effects on any minority or low-income populations in accordance

with the provisions of EO 12898 and FHWA Order 6640.23a, and no further Environmental Justice analysis is required.

APPENDICES

Appendix A: Concept Plans

**[[To be updated,
Pending Public Hearing in August 2021]]**

Appendix B: Summary of Public Comments

[[To be updated,
Pending Public Hearing in August 2021]]