

# Kendall Corridor

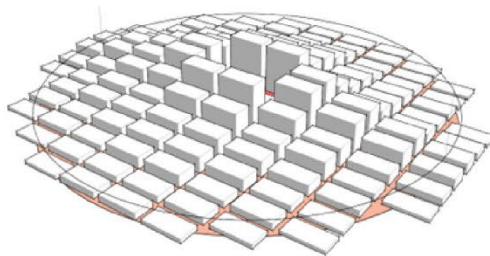
## Economic Mobility & Accessibility Study



### METROPOLITAN JOBS ORIENTED



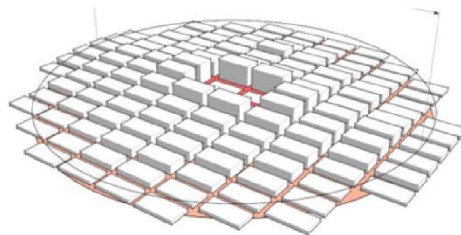
~10 to 20 stories



### COMMUNITY HOMES ORIENTED



~6 to 12 stories



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# 1.0 Introduction

The Kendall Corridor runs along SR 94/SW 88<sup>th</sup> Street/Kendall Drive from the Dadeland North station area to around ten miles west to Southwest 177<sup>th</sup> Avenue. Kendall is one of six Strategic Miami Area Rapid Transit (SMART) Plan corridors that form an interconnected premium transit system through Miami-Dade County. The ***Kendall Corridor Land Use Scenario and Visioning Planning Study*** (Vision Study) outlines the scenario planning process and the corridor vision emerging from the scenarios.

This ***Kendall Corridor Economic Mobility and Accessibility Study*** identifies the steps needed to implement the Vision Study. This report presents:

- Planning and design guidelines organize the intensity and mix of transit-oriented community areas (TOC) within each station area and multimodal access to and within the stations. The guidelines intend to clarify and aid in coordinating future planning and design efforts.
- Station area concept plans illustrate potential TOCs and the multimodal networks extending beyond the TOCs.
- Implementation recommendations specify possible strategies and projects, lead agencies, and the estimated timeframe for implementation.

This Study, along with the Vision Study, aims to further the goals and objectives of the Miami-Dade Transportation Planning Organization's (TPO) SMART Program and Miami-Dade County's Comprehensive Development Master Plan (CDMP). In addition, these studies were developed in coordination with the Kendall Corridor Project Development and Environment (PD&E) Study led by the Florida Department of Transportation (FDOT).

## 1.1 SMART Program

The SMART Program intends to develop six strategic rapid transit corridors (Figure 1) and a network system of Bus Express Rapid Transit (BERT) service to implement mass transit projects in Miami-Dade County. The SMART Program corridors will be the centerpieces of future higher-density development patterns and multimodal transportation investments throughout the county. They will provide an interconnected way to travel throughout the county rapidly. The accessibility afforded by the system is intended to:

- Support **economic development** by reducing travel times to jobs located within the corridors.
- Improve **livability** by increasing travel choices, improving health through walking and biking, and building a sense of community through street activity generated by walking and cycling in station areas.
- Improve **environmental health** by reducing urban sprawl and automobile emissions.

# Strategic Miami Area Rapid Transit SMART Plan

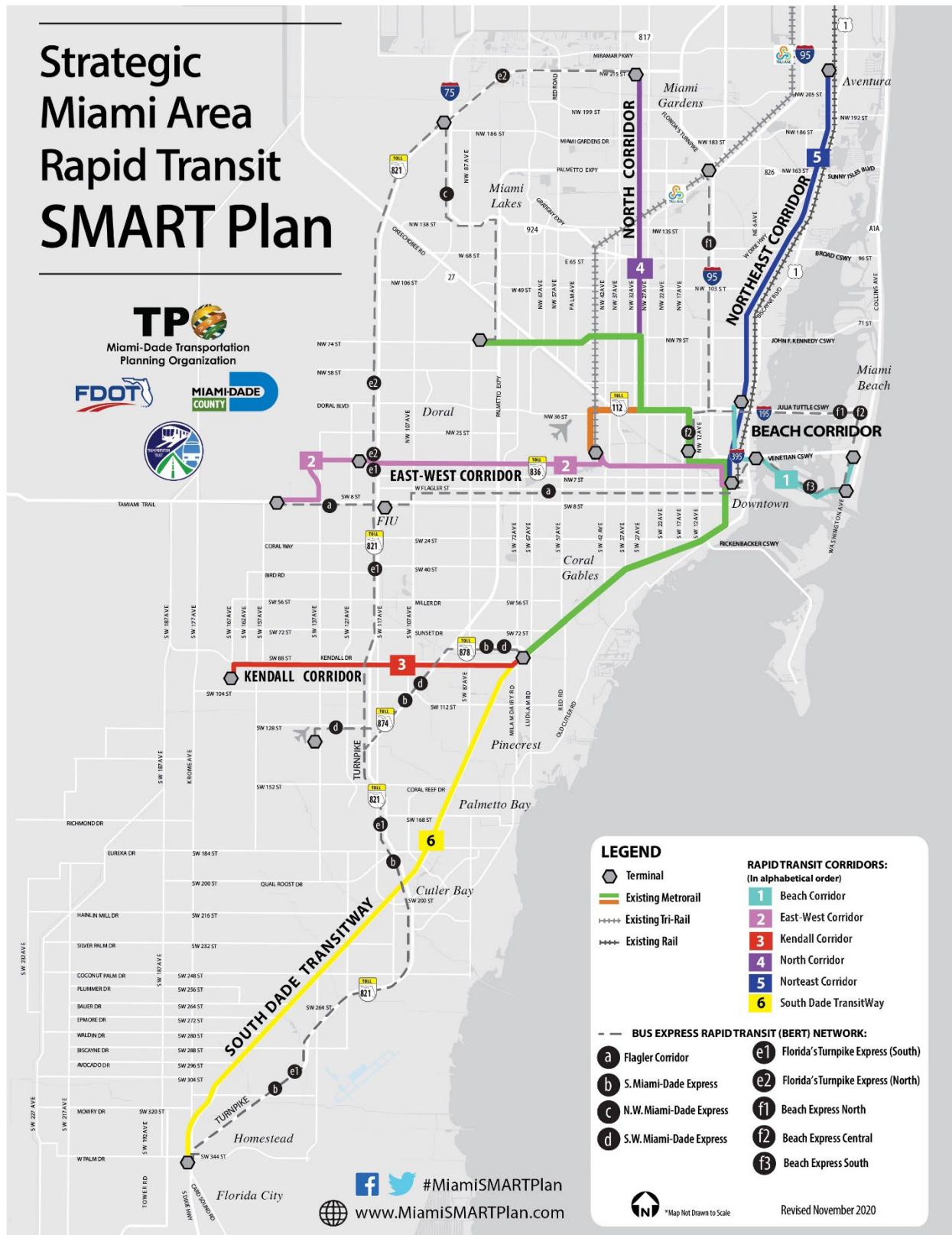


Figure 1 - SMART Program Corridors

## 1.2 Comprehensive Development Master Plan

As summarized on Miami-Dade County's CDMP web page:

"The CDMP establishes the broad parameters for government to do detailed land use planning and zoning activities, functional planning and programming of infrastructure and services. As such, it is a framework for use by other programs to be developed to support its long-range planning goals.

The CDMP's growth policy encourages development:

1. At a rate commensurate with projected population and economic growth.
2. In a contiguous pattern centered around a network of high-intensity urban centers well-connected by multimodal intra-urban transportation facilities.
3. In locations which optimize efficiency in public service delivery and conservation of valuable natural resources."<sup>1</sup>

The county's primary growth management implementation tools are the *Urban Development Boundary (UDB)*, which regulates outward urban expansion, and *Urban Centers (UC)*, which promote higher densities in selected locations (Figure 2). There are three designated Urban Centers along the Kendall Corridor, one in the Dadeland area, another extending to either side of the Kendall Drive / Florida Turnpike interchange, and a third at Southwest 137<sup>th</sup> Street.

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<sup>1</sup> <https://www.miamidade.gov/planning/cdmp.asp>

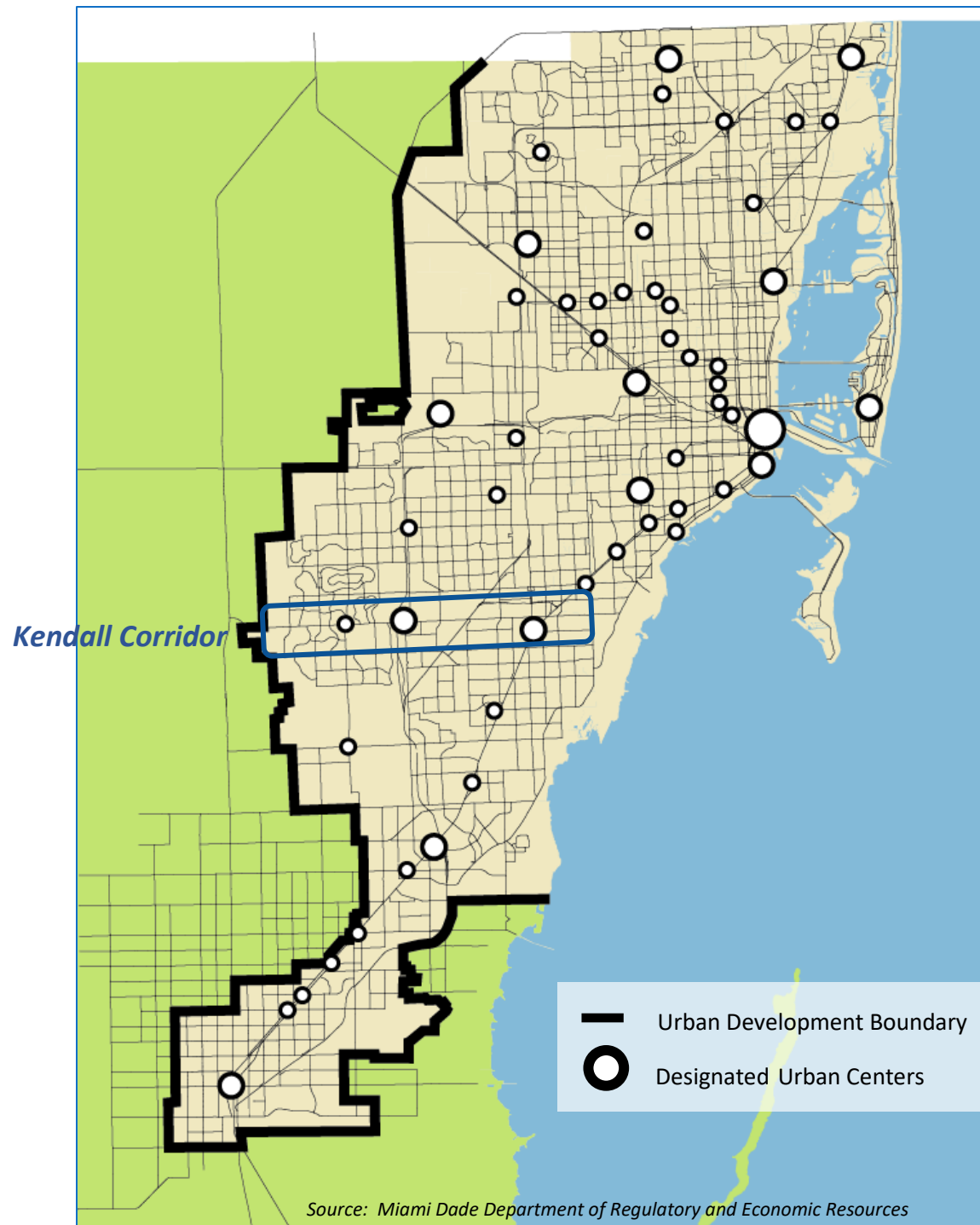


Figure 2 - Urban Development Boundary and Urban Centers<sup>2</sup>

<sup>2</sup> The varying circle sizes represent the three scales of Urban Centers as outlined in the CDMP: Regional, Metropolitan, and Community (from largest to smallest).

### 1.3 Kendall Corridor PD&E

The Kendall Corridor Project Development & Environment (PD&E) Study, conducted by FDOT, explored premium transit options along SR 94/Kendall Drive/SW 88<sup>th</sup> Street from approximately SR 997/Krome Avenue/SW 177<sup>th</sup> Avenue to the Dadeland North Metrorail Station (at approximately US-1/SR 5). The PD&E Study's objective is to improve travel options along Kendall Drive by implementing a cost-effective, high ridership, new rapid service supporting enhanced pedestrian and bicycle facilities. The premium transit will provide rapid transit connections to major activity centers beyond the corridor, including the Miami Intermodal Center (MIC), downtown Miami and Brickell area, and employment centers along the corridor, including the Baptist Hospital campuses, Palms at Town and Country, and Dadeland Mall. In addition, the PD&E Study explored the use of exclusive transit lanes for various transit modes, including Bus Rapid Transit (BRT) and Heavy Rail/Rail at grade.

As of the Spring of 2022, Kendall Corridor PD&E Study had identified BRT - Curbside Business Access Transit (BAT) lanes as the recommended alternative. FDOT and the Miami-Dade County Department of Transportation and Public Works (DTPW) recommended placing the Kendall PD&E Study on hold while implementing the Flagler Street SMART Demonstration project. The Flagler Demonstration Project will consist of repurposing the outside lanes, applying appropriate pavement markings, and installing signage to inform the public of the enhanced, dedicated bus infrastructure. The operation of the Flagler Demonstration Project would be monitored over a one-year period. Implementation of a demonstration project within the limits of the Flagler PD&E study will allow for collection of key performance data that would otherwise not be available. Data collected will allow FDOT, Miami-Dade TPO and DTPW to jointly evaluate and determine the feasibility of a dedicated curbside rapid transit lane concept on both Flagler and Kendall Corridors in the future.

### 1.4 Kendall Corridor Vision

The Vision Study, developed in concert with the PD&E Study, creates an integrated transportation and land use vision illustrating the transformation of what is now a suburban-oriented development pattern to a more urban, transit-oriented community pattern. The Vision also guides and aids in the coordination of future planning and design efforts undertaken by transportation/public agencies, landowners, and developers. Through a series of charrettes, the public reviewed three scenarios that resulted from the Vision Study efforts. The public's feedback helped to select and further refine the final vision for Kendall Drive, as presented in the Vision Study.

Figure 3 presents the Kendall Corridor Vision. It identifies TOC station area locations and TOC types along the corridor. The types correspond to the Urban Center typologies in the CDMP. Downtown Kendall on the eastern end of the corridor and the two station areas on either side of Florida's Turnpike are designated as higher intensity, jobs rich Metropolitan Centers, while the remaining station areas are designated as Community Centers.

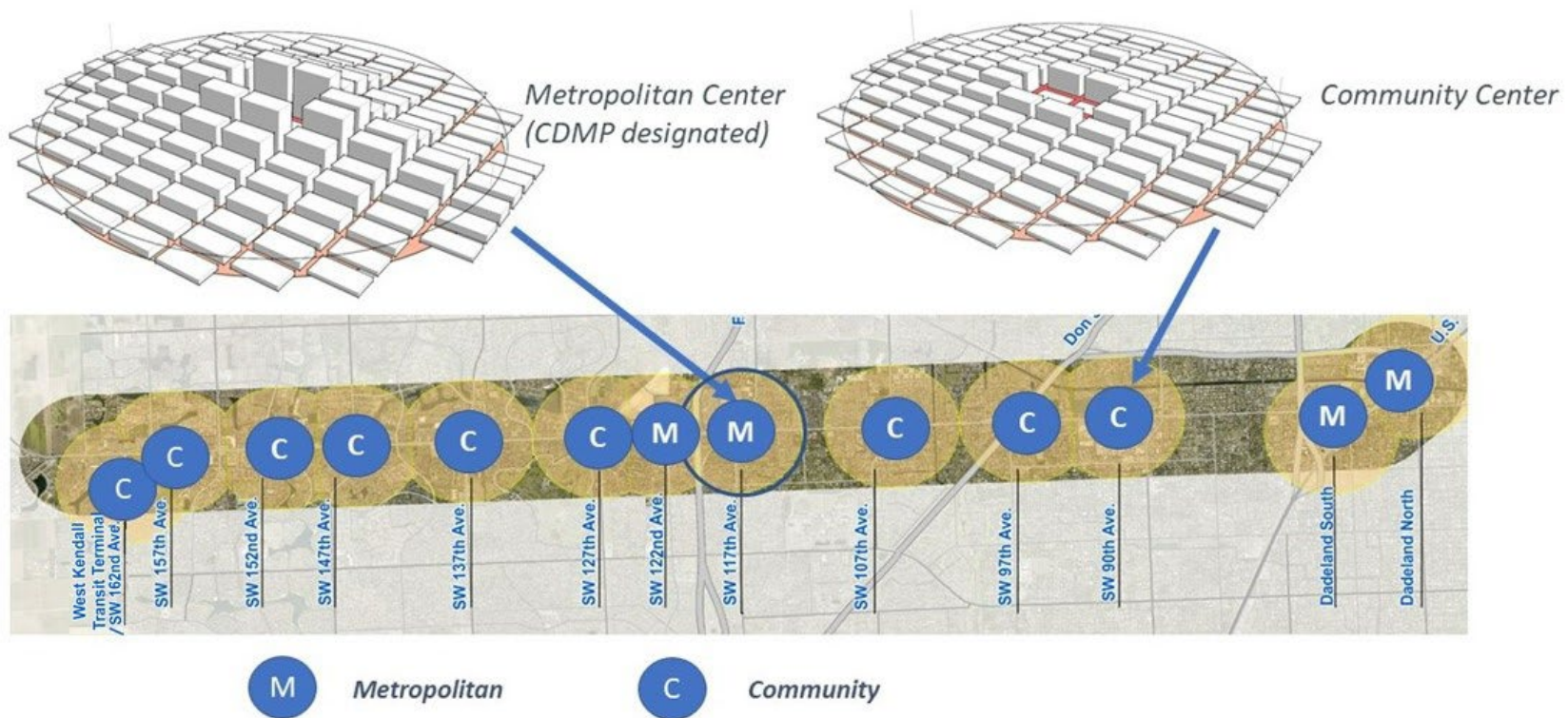


Figure 3 - Kendall Corridor Station Areas and Typologies

## 2.0 Planning and Design Framework

This section presents the TOC framework used to develop planning and design guidelines, station area concept plans, and implementation recommendations. It begins with *best practices* distilled from a literature review, which are translated into planning and design *considerations*. Those considerations influenced the development of planning and design guidelines and *criteria*.

### 2.1 Multimodal Accessibility

Multimodal accessibility is the foundational framework behind the principles, guidelines, and plans presented in this report. Simply defined, *accessibility* is the number of destinations a person can reach within a reasonable amount of time. The further away a destination is, the less attractive it is. While "reasonable amount of time" varies by person and travel purpose, travel time budget research indicates reasonable time averages around 20 minutes during the morning peak period travel. Results from the Southeast Florida Regional Planning Model version 7 (SERPM 7) support these research findings.

Accessibility can be improved in two ways:

1. Locate destinations closer to where people reside, or
2. Increase travel speed to maintain a "reasonable" travel time to reach a destination.

Accessibility evaluates the tradeoffs between **proximity** and **travel speed**.

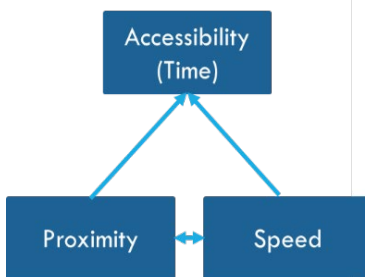


Figure 4 illustrates the relationship between proximity and speed in South Florida. The graph reflects AM peak period travel during a typical weekday in 2015 as simulated by SERPM 7. Each blue dot in the distribution reflects a traffic analysis zone (TAZ) in the SERPM 7 model. The location of each dot on the chart is determined by the average travel speed to destinations from that TAZ (y-axis) and the inverse of the average distance to destinations from the TAZ (x-axis). The distribution orients around a 20-minute travel time (as noted above) and demonstrates the inverse relationship between proximity and speed. TAZs where destinations are far away (low proximity zones, such as North Palm Beach County) rely heavily on speed. In contrast, TAZs with destinations nearby (high proximity, such as downtown Miami) rely on proximity.

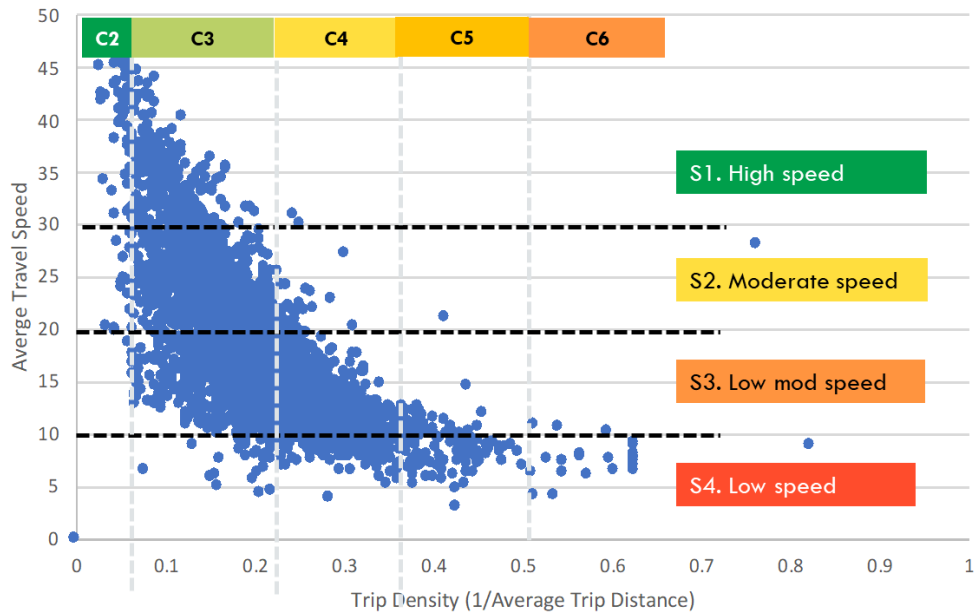


Figure 4 - Relationships of Proximity and Speed

The relationship between proximity and speed fundamentally influences the viability of travel modes. Figure 5 illustrates the average speed and distance traveled within a 20-minute commute by travel modes:

- walking speeds average around three miles per hour,
- bike speeds average approximately nine miles an hour,
- auto speeds on urban networks of local streets average around 25 miles per hour,
- premium transit speeds average about 30 miles an hour, and
- auto speeds on arterials and expressways oriented suburban networks average approximately 45 miles per hour.

As trip distances (proximity drops) increase and the need for speed increases, the viability of multimodal travel decreases.

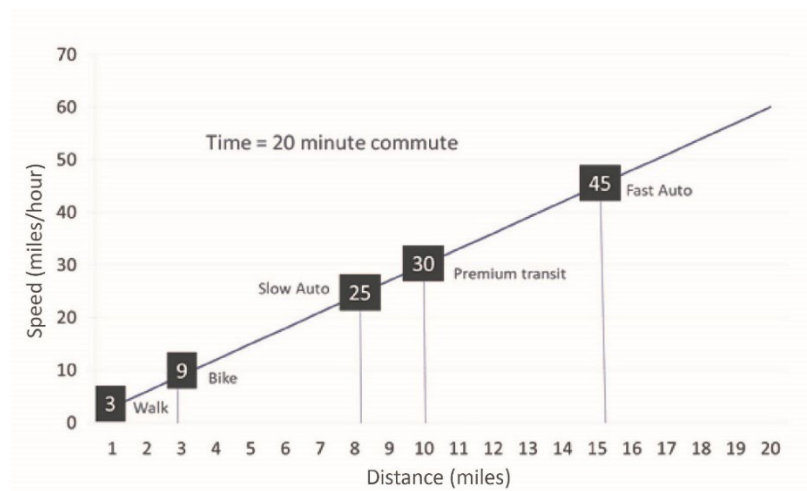


Figure 5 - Speed and Travel Modes

Kendall TAZs fall in the middle of the proximity/speed distribution shown in Figure 4. Average commute speeds range between 30 and 35 miles per hour, thereby limiting the viability of walking, biking, and slow auto modes. Premium transit along the corridor can provide the needed speed but requires the reorganization of land uses around stations to increase walking and biking access to maintain needed door-to-door travel speed. The reorganization and intensification of land development in station areas can increase proximity and promote non-transit related walking and biking. The resulting mode shifts could mitigate the congestion impacts of higher intensity development in the corridor, a primary concern along the highly congested Kendall corridor.

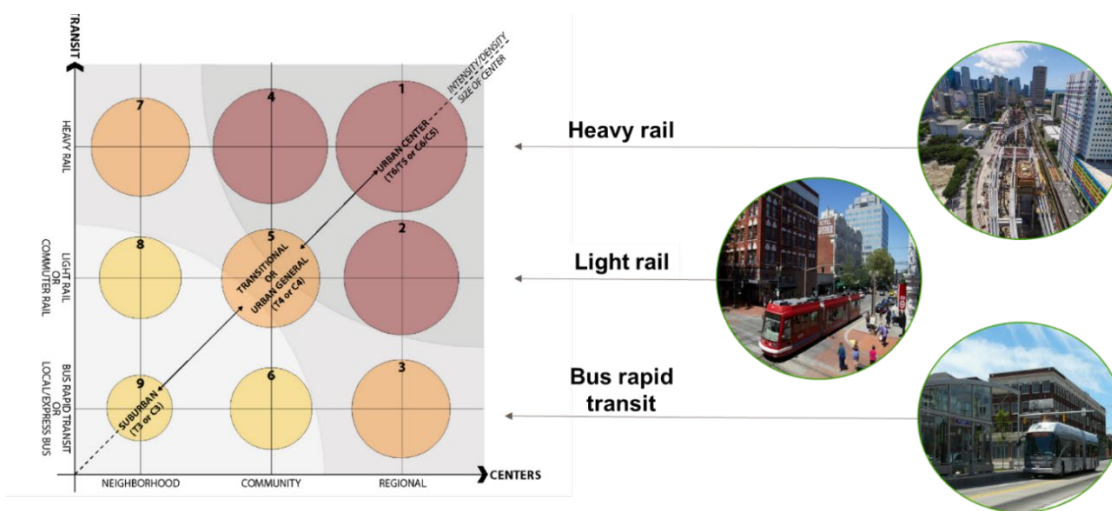
Given this backdrop, the overarching goal underpinning the guidelines, concept plans, and recommendations presented in this report is to integrate and optimize land use, development patterns, and multimodal network designs to enable travelers to reach various destinations via multiple travel modes within a reasonable amount of time.

## 3.0 Planning and Design Guidelines

Planning principles and guidelines translate the multimodal accessibility concept (presented in the previous section) into specific planning and design considerations that were used to develop station area concept plans and implementation strategies.

### 3.1 TOC Intensity and Mix

Transit ridership is one of the principal measures determining the viability of a premium transit investment in a corridor. The FDOT TOD<sup>3</sup> typologies, as shown in Figure 6, prescribe thresholds for density and diversity of uses to ensure a corridor has the needed ridership levels to support premium transit. These thresholds are purposeful and align with the Federal Transit Administration's (FTA) New Starts funding program criteria, which is an essential funding source for implementing a premium transit improvement. For that reason, the FDOT TOD typologies are crucial building blocks of the Kendall Corridor Vision and Land Use Scenario Study.



<sup>3</sup> [A Framework for Transit Oriented Development in Florida, March 2011](#)

Figure 6 - FDOT TOD Typology

As previously noted, the public engagement charrettes helped craft the Kendall Vision. The Vision identifies the TOC locations and types along the corridor (Figure 3). The typologies (also called place types) represent potential station areas for the premium transit improvement. Each typology has a different threshold need for ridership, density, and diversity, which, in turn, speaks to the characteristics of a station area's development. While FDOT's TOD typologies guide characteristics and thresholds, the Vision ultimately uses Urban Center designations from the CDMP. The CDMP provides specific guidance on the development of Metropolitan and Community Urban Centers.

### 3.2 Multimodal Network Guidelines

Traveling by car on roadway networks provides seamless door-to-door connectivity, particularly in prevalent auto-oriented suburban areas. Traveling by non-auto modes, on the other hand, depends heavily on context. Walking, for example, needs high proximity contexts to be desirable. In complex metropolitan areas, like Miami Dade County, non-auto travel often involves a combination of walking, biking, and/or transit modes. This puts a premium on network design and supportive land development patterns.

The overarching design principle guiding the multimodal *network design* along Kendall is to organize the network so that:

- non-auto modal travel paths (sidewalks, bikes, transit routes) provide timely, safe, and comfortable access to stations.
- non-auto travel paths provide timely, safe, and comfortable access to buildings and destinations within the core area around stations.
- network segments are designed to provide safe and comfortable travel for the mode(s) best suited for the segment (i.e., bikes on feeder roads).

Given these design principles, the overarching network design guidelines are to:

- focus non-auto travel networks on transit stations so that the stations become network focal points (multimodal hubs).
- maintain the traffic collection hierarchy for auto travel (i.e., local-to-collector-to-arterial-street).
- align the speeds from the auto network hierarchy with the average speeds, safety, and comfort needs of each mode (i.e., bike travel is promoted on local and collector streets, not arterials).

Table 1 - Design Principles and Guidelines by Travel Mode

MODE	GUIDING PRINCIPLE	GUIDELINES
Premium Transit	Develop and maintain average operating speeds of at least 30 miles per hour.	Maintaining such speeds requires dedicated rights of way for the transit vehicle, prioritizing transit operations over traffic operations, and adequate station spacing. Such details are the focus of the Kendall Corridor PD&E Study

MODE	GUIDING PRINCIPLE	GUIDELINES
		and will be finalized once the preferred alternative is selected.
Walk	Develop a seamless, well-defined walk network within ½ mile of the station.	Segments in the network should be safe and comfortable. For example, station area streets should have low traffic volumes and amenities such as other people walking, store fronts, street benches, shade trees, etc.
Bicycle	Develop a seamless, well-defined bike network within 3 miles of the transit station.	When bicyclists travel faster than walkers, it creates safety and comfort concerns for those walkers. Conversely, automobiles traveling faster than bikers create safety and comfort issues for bikers. Biking should not be promoted on higher volume, higher speed thoroughfares; instead, they should be on slower speed neighborhood connector streets and exclusive multi-use trails, where feasible.
Local circulator bus network	Develop effective walk paths to connect local bus stops with transit stations.	The travel speeds of local circulator buses are comparable to bicycles (between 10 to 15 miles per hour, when including stops), which extends the local bus circulator travel shed up to five miles from the station. As with bikes, a safe and comfortable pedestrian network makes walking a preferred travel mode within a half-mile of the station. As a result, local buses are most effective between a half-mile and five miles of the station (similar to bikes). The continuing operating cost of local buses and the challenge of coordinating premium transit and local bus operations puts local circulator buses at a competitive disadvantage with bikes, assuming a safe and

MODE	GUIDING PRINCIPLE	GUIDELINES
		comfortable bike network is available. However, local circulator buses do provide a needed travel mode for those who cannot bike. Nevertheless, local circulator buses should operate on collector and arterial streets with safe and convenient stop locations for passengers.
Park-and-ride auto	Provide park-and-ride spaces in parking garages on the edges of the core station area ( $\frac{1}{8}$ to $\frac{1}{4}$ mile from the station).	Park-and-ride lots next to the stations serve automobile access well, but it conflicts with walking access riders because the lots impede walking access to the stations, either by forcing walkers to walk around the lots because the lots are not hospitable to walkers or dangerously through the lots. As explained in the CDMP TOD design guidelines, parking is encouraged on the periphery of the core area (within a $\frac{1}{4}$ mile of the station). Locating parking spaces in edge lots eliminates the impediment of park-and-ride spaces next to the station. It also allows for adjustments in the number of spaces based on demand.
Kiss-and-ride and Transportation Network Companies (TNCs)	Provide passenger loading and unloading zones on streets on the edges of the core station area ( $\frac{1}{8}$ to $\frac{1}{4}$ mile from the station).	Like park-and-ride parking, loading and unloading passengers next to the station can impede walking access. On-street loading and unloading zones on the streets leading to the stations can serve both the transit station and nearby businesses. The number and location of the spaces can be adjusted to accommodate demand.
On-Demand Transit Services	Develop a seamless, well-defined first mile and last-mile network within 1-to-3-mile radius of the station.	On-demand transit network servicing a 1-to-3-mile radius from stations can offer various transit solutions. It can improve

MODE	GUIDING PRINCIPLE	GUIDELINES
		<p>mobility overall for residents by offering an alternative to walking or biking; it offers high-frequency and on-demand connections to close the gap between fixed route transit and trip origins and destinations, particularly in stations where a fixed-route is not feasible; it has the potential to simplify commutes and reduce the need for multiple transfers. Like local bus circulators, on-demand transit services should operate on collector and arterial streets with safe and convenient stop locations for passengers.</p>

### 3.3 Street Design Guidelines

While Kendall Drive is a state road under FDOT jurisdiction, Miami-Dade County maintains many crossroads adjacent to the station locations. For this study, the Miami-Dade **Complete Street Design Guidelines**<sup>4</sup> (CSDG) was used to apply policy and design guidelines to the streets that intersect or are adjacent to Kendall Drive. Several FDOT documents inform the CSDG.<sup>5</sup> However, the County and FDOT will need to collaborate to apply the relevant design standards to each street.

The existing and the proposed street network in the corridor were classified using the street typologies listed in the CSDG. Similarly, current and future land uses were classified using the land use typologies in the CSDG report. Table 2 presents an overview of the street typologies, including the characteristics of each street type and the features it contains for each travel mode (autos, transit, bike, and walk). Additional details on street design guideline are available in the CSDG document.

Most walking, biking, and transit travel occur on streets designed for autos. While there are examples of exclusive rights-of-way for a single mode (i.e., Metrorail, bike, and walk trails), combining modes into the street right-of-way is standard practice. The network design principle of aligning a street's auto functionality with modal needs was applied to the typologies in the CSDG.

Table 3 summarizes the relationships between street typologies and travel modes. The following section provides more detailed guidance on the desired relationships between street types and travel modes:

- **SMART Program Corridor (SPC)** – the Miami-Dade CSDG defines an SPC typology and articulates that SPC streets prioritize "*...the advancement of rapid transit corridors and transit support projects.*"<sup>6</sup> Kendall Drive's role in the corridor network is to serve long-distance travel by providing rapid transit (operating speeds between 20 and 30 MPH) and, to the extent possible, maintaining auto travel speeds of 30 to 35 MPH. Because of speed conflicts and high traffic volumes, Kendall Drive is not intended to be a primary path for bicyclists and pedestrians to access stations or destinations within the corridor. Bike and pedestrian improvements will be needed along Kendall Drive to ensure safety and close network gaps. The ongoing PD&E study will provide additional details on how the roadway will accommodate all modes.
- **Thoroughfares (TH)** are "...regionally significant roadways that play a key role in the movement of people" and "...support movement of large volumes of people and accommodate long trips." The specific role of thoroughfares in the Kendall network is providing auto, bus, and bicycle access to destinations beyond the corridor, not within the corridor, except for filling bicycle network gaps, to provide access to stations and destinations within the corridor.
- **Feeder roads (FR)** "*...provide access between urban centers, between urban centers and neighborhoods and between neighborhoods themselves.*" Because of their relatively slow speeds, feeder roads in the Kendall Corridor network are the primary paths for local auto and bicycle access to stations and destinations within station areas.

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<sup>4</sup> Miami Dade Complete Street Design Guidelines, December 2016.

<sup>5</sup> FDOT Plans and Preparation Manual (PPM), the Florida Greenbook, and the FDOT Complete Streets Implementation Plan (2015).

<sup>6</sup> Miami Dade Complete Street Design Guidelines, page 36.

- **Civic streets (CS)** *"...provide access to businesses and institutional facilities."* Civic streets in the Kendall network are station area "Main Streets" providing pedestrian access to stations and destinations within station areas.
- **Neighborhood streets (NS)** serve *"local trips"* and provide *"...access to parks, schools or institutional facilities as well as local retail and services."* A second type of neighborhood street, **station area neighborhood streets (SNS)**, is defined for the Kendall Corridor network to distinguish between subdivision streets and those providing pedestrian access to stations and destinations within station areas.
- **Service ways (SW)** *"...provide a secondary means of vehicular service, with a focus on commercial delivery and loading/unloading of goods."* Specifically, for the Kendall Corridor, station area service ways provide vehicular access from thoroughfares and feeder roads to parking areas with minimum disruption to pedestrian travel on civic streets and station area neighborhood streets.
- **Paseos (PS)** – the role of paseos is to *"...provide pedestrian access between streets, pedestrian amenities, or gathering places."* For the Kendall network, paseos provide connections between residential complexes and subdivisions to station area streets and other pedestrian paths to reduce walking times to stations and station area destinations.

Table 2 - Overview of Miami-Dade Complete Street Guidelines

	Spacing/block lengths	Network	Autos	Transit	Bike	Walk
<b>Thoroughfare (TH)</b>	1 mile spacing, $\frac{1}{8}$ to $\frac{1}{4}$ mile	Regional, long-distance auto and transit trips (bike and walk trips encouraged on other street types where possible)	High traffic volumes (greater than 20,000 ADT), relatively wide (4 to 6 lanes), and relatively high speeds (30 to 35 mph)	Regional high speed (30+ mph) premium transit in exclusive ROW, local buses	Cycle track or separated path	Separated sidewalks for safety
<b>Feeder Road (FR)</b>	$\frac{1}{2}$ mile, $\frac{1}{16}$ to $\frac{1}{8}$ mile	Moderate distance auto, transit, and bike trips between job centers and adjacent neighborhoods	Moderate traffic volumes (5 to 25,000 ADT), moderate width (2 to 4 lanes), and moderate speeds (20 to 30 mph)	Local buses, circulator buses	Bike lane	Sidewalk with landscaped buffer for safety
<b>Civic Street (CS)</b>	150 to 300 feet	Short trips, access to premium transit stations and street buildings	Low traffic volumes (3,000 to 15,000), narrow (2 lanes) low speeds (15 to 20 mph)	Local bus, walk access to premium transit stations	Bike lanes or shared	Sidewalks with landscaped buffer
<b>Neighborhood Street (NS)</b>	Less than 300 feet	Access to adjacent buildings	Low traffic volumes (less than 6,000), narrow (2 lanes), low speeds (10 to 20 mph)	None	Shared	Sidewalks with landscape buffer
<b>Service Way (SW)</b>	250 feet	Access to commercial buildings, parking lots	Low volumes and speeds (less than 25 mph)	NA	Shared	Shared
<b>Paseo (PS)</b>	As feasible	Exclusive pedestrian/bike passageway or walkway	NA	NA	Shared	Shared

Table 3 - Relationship of Street Types and Travel Modes

Street Typology	Regional auto	Local auto	Transit	Bike	Ped
Expressway					
SMART Program Corridor (Kendall)					
Thoroughfare					
Feeder road					
Civic street					
Station area street					
Neighborhood street					
Service way					
Paseo					

Legend	
	Regional auto
	Local auto
	Transit
	Bike
	Walk
* The intensity of the color reflects the compatibility of the mode with the facility type.	

### 3.4 Land Development Guidelines

The TOD typologies from the Vision Study provide development density and mix targets for each station area. The TOD place types are based on FDOT TOD typologies (Figure 7), where density and mix targets were determined based on viable transit ridership levels. Several of the TOD types are rich in jobs, others are rich in homes. The vision for Kendall Drive organizes the TOD typologies to achieve a corridor-wide balance between jobs and housing. Less frequented job-oriented TOD typologies are strategically placed so that transit riders from any station area could easily access jobs along the corridor.

Development is organized within each station area typology so that the highest development intensities are closest to the station area, along Kendall Drive. The recommended numbers of jobs and dwelling units for each TOD type were distributed to grid cells overlaid on each station area based on the distributions of total activity (jobs and dwelling units) illustrated in Figure 9. More activity (intensity) is allocated to cells closest to the station, less activity is on the fringes of the station area. Jobs/housing balance in the station area was also considered, with a higher mix of jobs near the station and a higher mix of dwelling units on the fringes of the station area. The final set of targets for the corridor's station areas is shown in Figure 8.

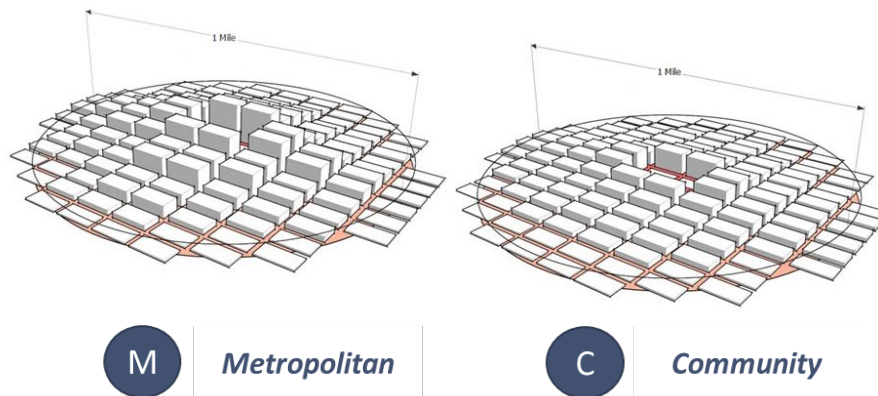
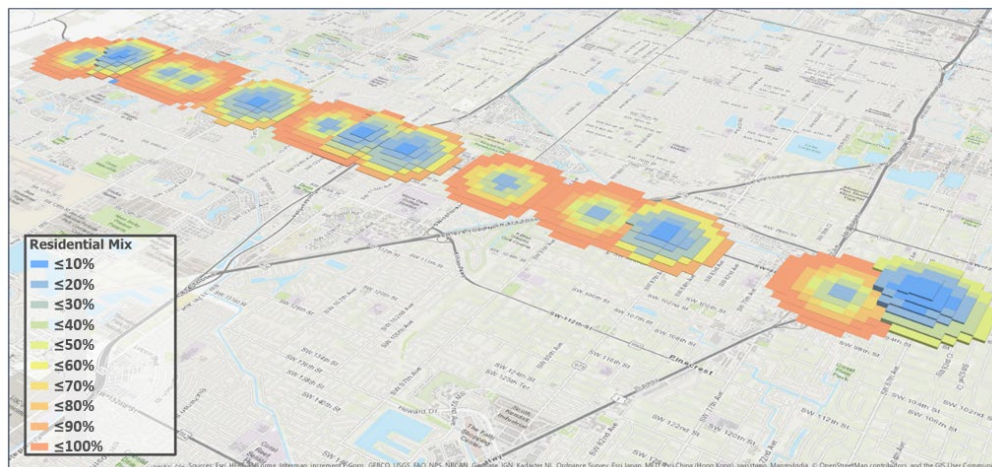


Figure 7 - TOD Place Type Intensity Targets



## 4.0 Station Area Model

The station area model integrates and illustrates the network, street type, and development design principles. The model was used to develop station area concept plans and will help guide future planning and design efforts. The following sections provide key design concepts underlying the station area model. The station area model supports the CDMP LU-7A objective to develop areas around rapid transit stations as Urban Centers.

The target block size for station area street networks is between 200 and 500 feet, allowing for maximum connectivity both to the station and to destinations within the station areas (Figure 9). The network street types follow the Miami-Dade CSDG with a few variations, as noted in the Street Design Guidelines section (Figure 10). The block types and their density thresholds and accompanying characteristics are consistent with CDMP policies for Urban Centers (LU-7A through LU-7G).

The three-block types in the station area model (Figure 11, Table 4) are:

- Type A "Core" blocks
  - Area located within a  $\frac{1}{8}$  to  $\frac{1}{4}$  mile of the station and having the following development and infrastructure characteristics:
    - Development intensity and mix: A-blocks have the highest development intensities and richest employment mixes in the station area. Around 30 to 60 percent of the station area's overall jobs and housing and between 60 to 100 percent of the station area's jobs should be located in A-blocks.
    - Parking: A portion of the parking is provided on-street and the rest in structured parking garages either within buildings or in locations at the periphery of the A-block area.
    - Parks and civic spaces: Public spaces are small (less than a quarter of a block), with preferred location next or near the station.
- Type B "Middle" blocks
  - Flank the A-blocks and have the following development and infrastructure characteristics:
    - Development intensity and mix: B-blocks have lower development intensities and a higher residential mix than A-blocks. Around 20 to 40 percent of the total jobs and housing and 10 to 30 percent of jobs should be in B-blocks.
    - Parking: A portion of the parking is provided on-streets and the rest in structured garages within or adjacent to buildings and in surface lots at the edge of the A-blocks.
    - Parks and civic spaces: Public parks are small to moderately sized (less than a half block) and located mid-block within a group of two to four blocks.
- Type C "Edge" blocks
  - Located on the outer edges of the station area and have the following development and infrastructure characteristics:
    - Development intensity: C-blocks have the lowest development intensities and richest residential mixes in the station area.
    - Parking: A portion of the parking is provided on-street parking and the rest in surface parking adjacent to buildings within a block.

- Parks and civic spaces: Parks and playgrounds within blocks or as blocks.

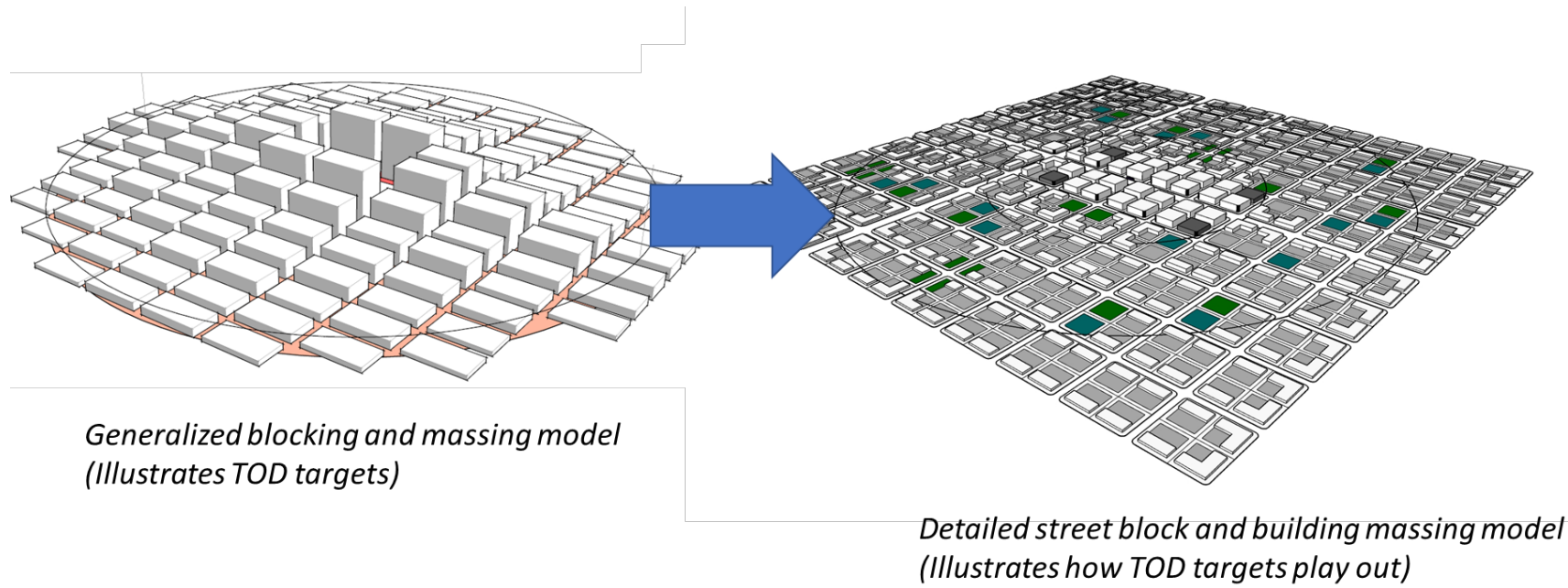


Figure 9 - TOD Typology and Station Area Model

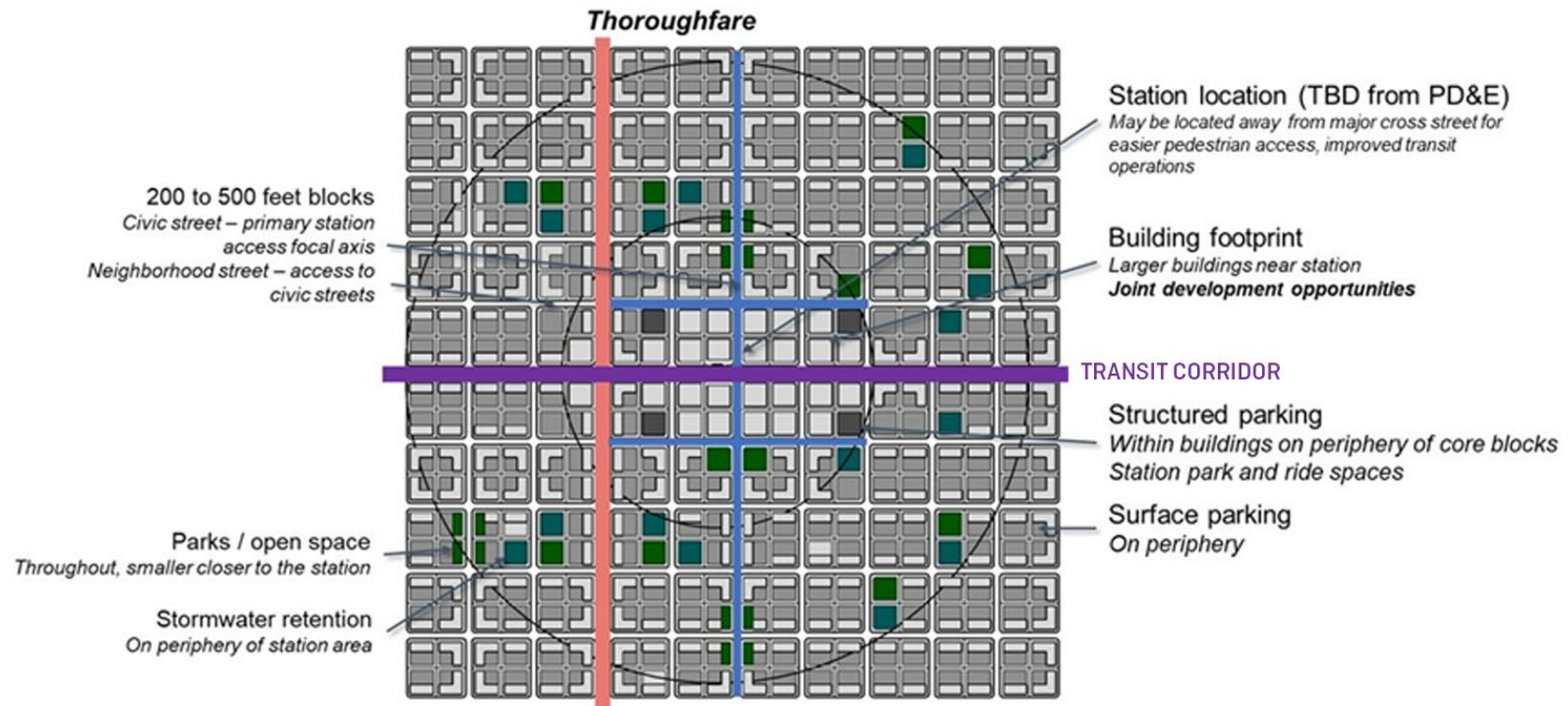


Figure 10 - Station Area Model Street Network, Parking, Parks, and Stormwater



Figure 11 - Station Area Model Block Types

Table 4 - Station Area Model Design Guidelines

	A Blocks	B Blocks	C Blocks
<b>Location</b>	Within a ⅛ to ¼ mile of the station	Beyond ⅛ mile and within ⅜ of a mile from the station	Beyond ¼ mile and within ½ miles of the station
<b>Development intensities</b>	Four to 20 story buildings (densities will vary by station area type)	Two to six story buildings (densities will vary by station type)	One to four story buildings (densities will vary by station type)
<b>Percent of total jobs and houses</b>	30 to 60	20 to 40	20 to 30
<b>Percent of total jobs</b>	50 to 90	10 to 30	0 to 20
<b>Parking</b>	On street parking, structured parking either within buildings, on the periphery of A blocks	On street parking, structured or surface parking adjacent to buildings within a block or on adjacent parking blocks	On street parking, surface parking adjacent to buildings within a block.
<b>Parks</b>	Small civic spaces adjacent to the station. Access to larger stations beyond A blocks	Public plazas or promenades within blocks	Parks and playgrounds within blocks or as blocks
<b>Stormwater retention</b>	Stormwater treated with street right-of-way and conveyed to treatment ponds beyond A blocks	Stormwater treated with street right-of-way and conveyed to treatment ponds beyond B blocks	Stormwater treated with street ROW and conveyed to treatment ponds within C blocks

## 5.0 Existing Conditions Assessment

### 5.1 Land Use Typologies

The land use typologies in the CSDG set the context for network and street design. Land development densities and diversities in urban contexts create enough proximity to make slow travel modes like walking and biking viable and support rapid transit. The lack of density and diversity in suburban contexts reduces the viability of non-auto modes and forces an auto-oriented network and street design.

Figure 12 illustrates the primarily suburban land-use types along the Kendall Corridor, with the only urban context being in the Dadeland north and south areas at the eastern end of the corridor. Suburban development patterns have resulted in auto-oriented networks and street designs.

### 5.2 Network Typologies

The corridor's current road network funnels auto traffic from local streets onto feeder roads and thoroughfares. Thoroughfares intersect at network focal points. Thus, commercial and office uses are located at these intersections to take advantage of the high traffic volumes. Current transit routes and operations fall in line with the predominant auto travel patterns, with routes located on major streets and transfer points near major intersections. While there are sidewalks and a few bike paths along network streets, the lack of pedestrian and bicycle travel results in no discernable walking and bike networks in the corridor.

Thoroughfare and feeder road designs reflect the auto orientation of the corridor. They have wide traffic lanes (12 feet), large intersections that prioritize the movement of cars, not other modes, and no on-street parking. Sidewalks are typically on both sides of the street, but there is little evidence that many people are walking on those sidewalks. A few roads towards the western end of the corridor have bike lanes. There is minimal landscaping on the street shoulders and along medians. However, many of the corridor's adjacent streets, particularly the two-lane roads, have the available right-of-way to add bike lanes and enhance landscaping and sidewalks.

As described in the next section, premium transit along the corridor creates the need for fundamental changes to network and facility design.

## KENDALL CORRIDOR

### COMPLETE STREETS LAND USE TYPOLOGIES BASED ON PROPERTY USE

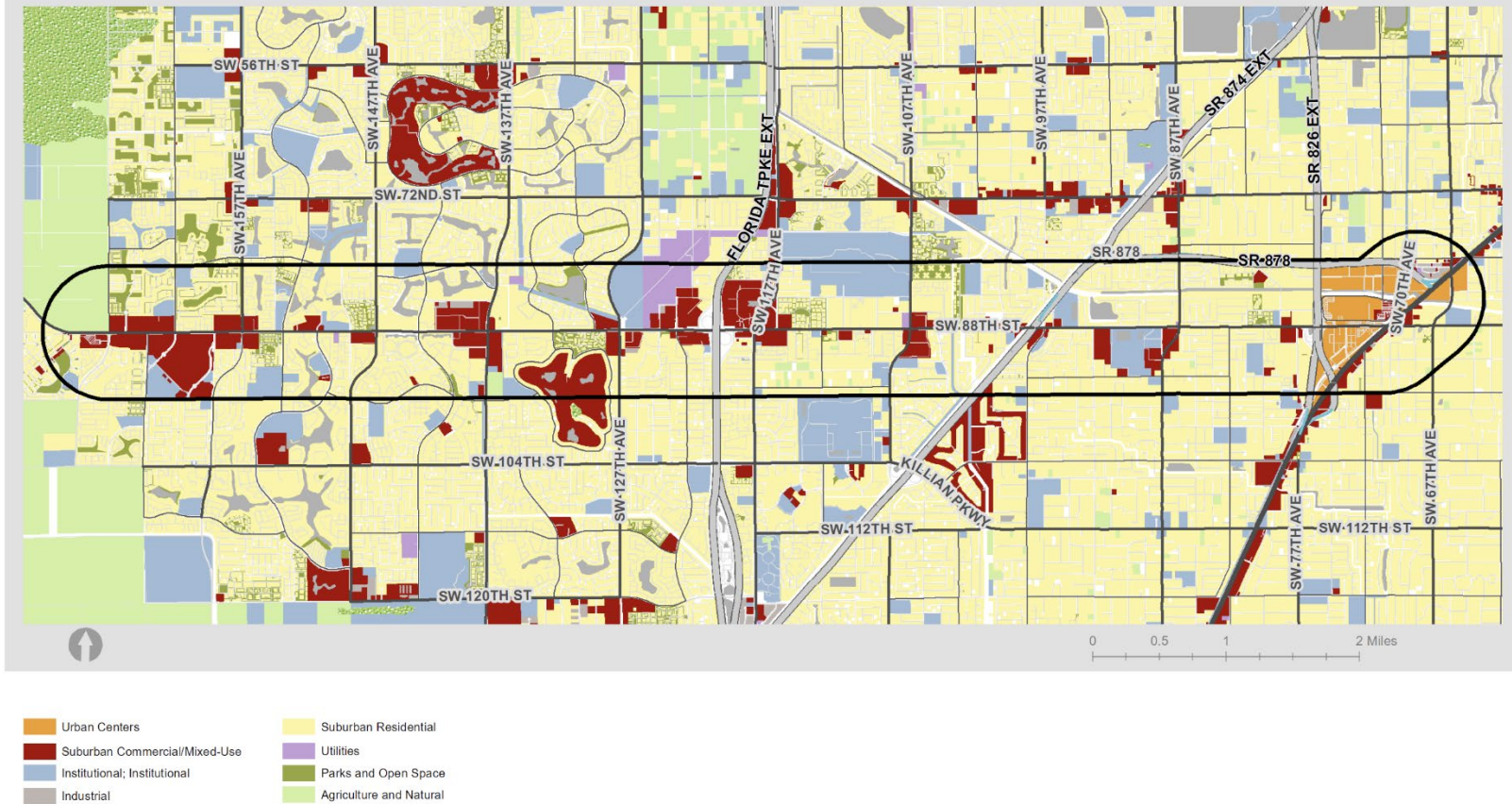


Figure 12 - Existing Land Use Typologies

## 6.0 Corridor and Station Area Strategies

### 6.1 Corridor Strategies

To further SMART Program goals and community aspirations, the Kendall Corridor Vision envisions a fundamental transformation of the corridor from a predominantly suburban, auto-oriented context to a multimodal context corridor. Premium transit stations along the corridor will serve as network focal points or hubs. Those network hubs will reorient land development patterns and pedestrian, bicycle, and transit networks. Transit-oriented communities, or TOCs, refers to the built environment around transit stations intentionally planned and designed to optimize access to and the use of transit. TOCs supported with high-quality transit service makes it convenient, safe, and attractive to get to and from daily activities without having to use a car. Research shows that the design of the built environment combined with the quality of the transportation options directly influences travel mode decisions. A well-designed TOC ensures safe and convenient non-auto access to opportunities for transit-dependent populations.

There are many types of TOCs each accommodating a variety of land uses and transportation modes. TOC planning accounts for density and mixes of institutional, commercial, residential, and recreational uses which provides convenient access for residents, workers, and visitors to a transit station, and from a transit station to nearby destinations. The different TOC types are organized along the Kendall corridor. The TOC types correspond to the Urban Center typologies identified in the CDMP. The TOC types define stations mix of uses (i.e., housing vs. jobs oriented) and intensities of development. The distribution of differing TOCs along the corridor balances jobs and housing, thereby internalizing a high percentage of trips and increasing transit ridership.

Miami-Dade County's CDMP identifies three Urban Center typologies – Regional, Metropolitan, and Community. The CDMP sets development mix and intensity thresholds for each Urban Center type. Table 1 lists the targets for each Urban Center type, Figure 13 illustrates the intensities for each Urban Center type. Figure 2 illustrates the location of Urban Centers across the County and in the Kendall Corridor. Downtown Miami is the County's only Regional Urban Center. Downtown Kendall is designated as a Metropolitan Center, with a second Metropolitan Center located around the interchange of Kendall Drive and Florida's Turnpike.

Table 5 – Urban Center Sizes and Densities, Source: Miami Dade Department of Regulatory and Economic Resources

	Regional	Metropolitan	Community
<b>Size</b>	1-mile radius from station	¼ to ½-mile radius from station/stop	700 to 1800-foot radius from stop
<b>Residential Density (maximums)</b>	500 DU/acre	250 DU/acre	125 DU/acre
<b>Floor Area Ratio (minimums)</b>	4.0 in core 2.0 in edge	3.0 in core 0.75 in edge	1.5 in core 0.5 in edge

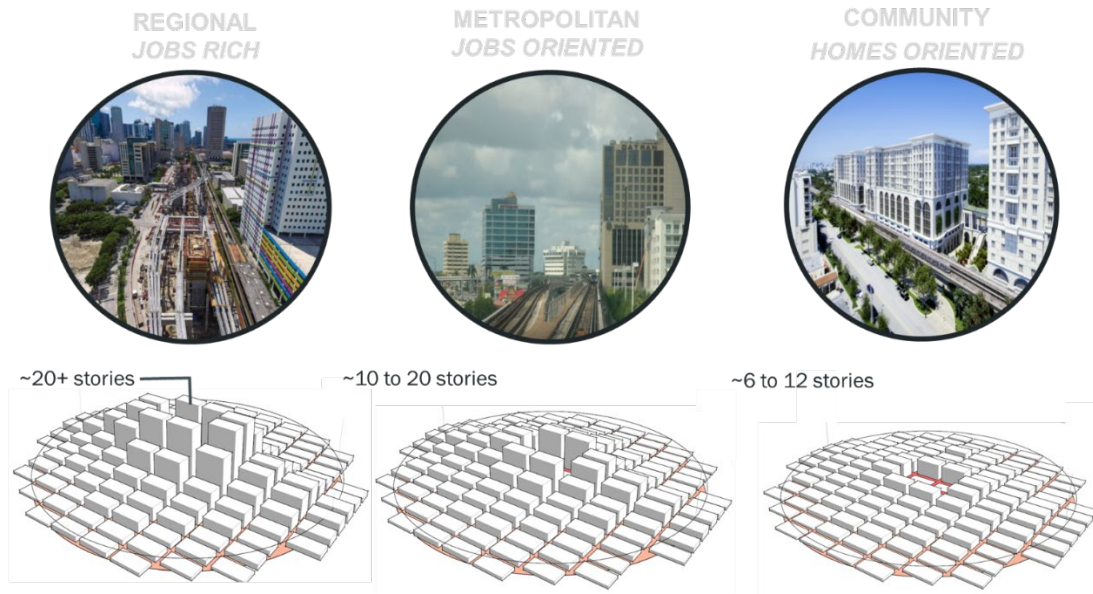


Figure 13 - CDMP Urban Center Types

Table 6 summarizes each station area's existing development patterns, network characteristics, and other influential features. Station area conceptual plans were prepared for potential locations, but as noted in the table, several may not be in the final PD&E recommendations. Figure 14 presents the corridor's TOC types based on the Vision Study, showing the transformation of what is now a predominately suburban context to an urban multimodal context.

Table 6 - Station Area Characteristics

Station Area	Size (acres)	Existing Characteristics
<b>Dadeland South (North of Kendall)</b>	380	Dadeland South Metrorail station area located North of Kendall Drive. Proposed Kendall premium transit station. Dadeland Mall. Designated as an Urban Center in the CDMP.
<b>Dadeland South (South of Kendall)</b>	240	Dadeland South Metrorail station area located South of Kendall Drive. Proposed Kendall premium transit station. High intensity, blocked development. Designated as an Urban Center in the CDMP.
<b>SW 79<sup>th</sup> Ave</b>	250	Mostly medium density residential with small scale commercial on Kendall Drive. Eastern side cut off from Dadeland South by SR 826/Palmetto Expressway. Station may not be in final PD&E recommendations.
<b>Baptist East</b>	332	Baptist hospital complex south of Kendall Drive, single family neighborhood to the north.
<b>SW 97<sup>th</sup> Ave</b>	306	Small scale commercial and low density residential. Western part of station area bisected by SR 874/Don Shula Expressway. Station may not be in final PD&E recommendations.
<b>SW 107<sup>th</sup> Ave</b>	298	Large shopping centers on Kendall Drive surrounded by residential complexes and neighborhoods.
<b>SW 117<sup>th</sup> Ave</b>	224	Large shopping centers on Kendall Drive surrounded by residential complexes and neighborhoods. Western side bisected by Florida's Turnpike. Designated as an Urban Center in the CDMP.
<b>SW 122<sup>nd</sup> Ave</b>	274	Large shopping centers on Kendall Drive surrounded by residential complexes and neighborhoods. Large County treatment site on north and west and eastern side bisected by Florida's Turnpike. Designated as an Urban Center in the CDMP.
<b>SW 127<sup>th</sup> Ave</b>	216	Large shopping centers on Kendall Drive surrounded by residential complexes and neighborhoods. Large County treatment site on north and eastern side.
<b>SW 137<sup>th</sup> Ave</b>	312	Large shopping centers on Kendall Drive surrounded by residential complexes and neighborhoods. Designated as an Urban Center in the CDMP.
<b>SW 147<sup>th</sup> Ave</b>	211	Small shopping centers on Kendall Drive surrounded by residential complexes and neighborhoods
<b>SW 152<sup>nd</sup> Ave</b>	196	Small shopping centers on Kendall Drive surrounded by residential complexes and neighborhoods. Station may not be in final PD&E recommendations.
<b>SW 157<sup>th</sup> Ave</b>	276	Large shopping centers on Kendall Drive surrounded by residential complexes and neighborhoods. Designated as an Urban Center in the CDMP.
<b>West Kendall Terminal/Baptist West</b>	250	Only station sited off of Kendall Drive. Baptist hospital complex to the southeast of the station and vacant land to the east.
<b>Total</b>	3,765	

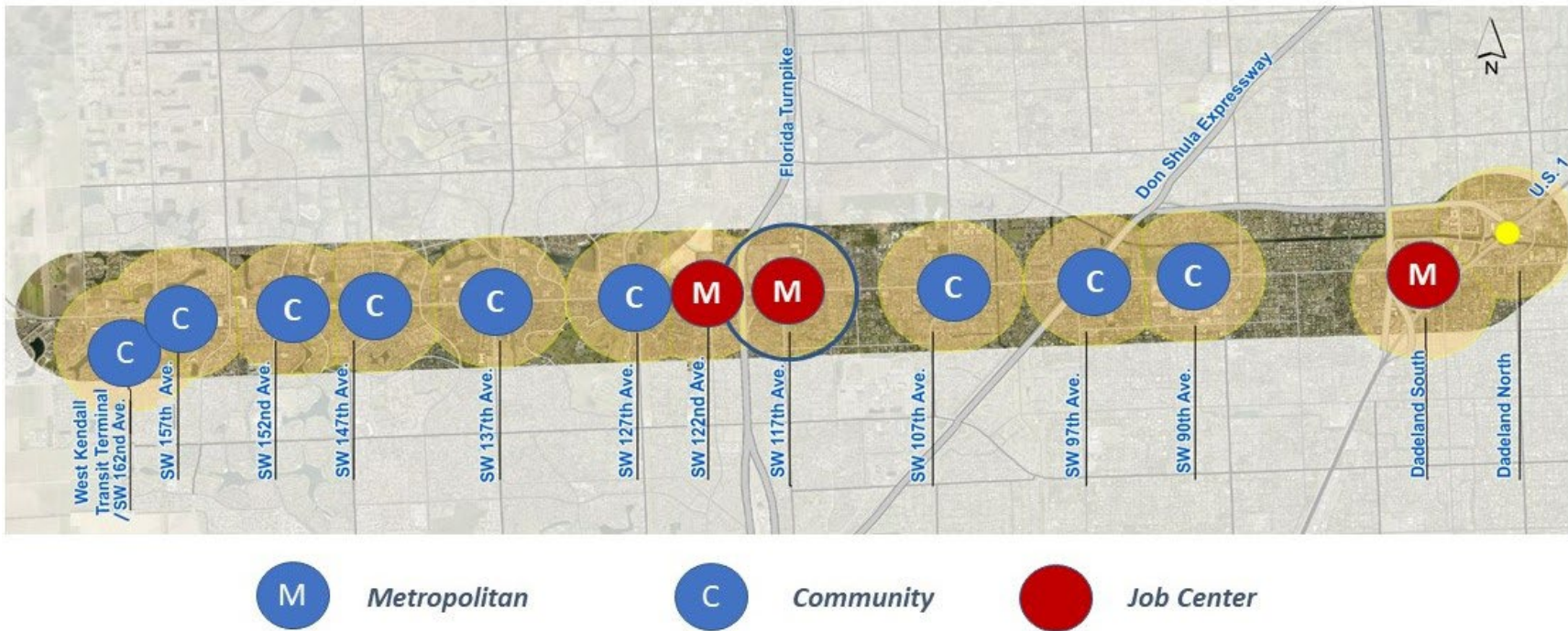


Figure 14 - Station Area Locations and TOD Type

## 6.2 Station Area Strategies

The station area strategies presented below illustrate how future street networks can be organized to best support walk and bike access to transit stations and destinations within each station area. The strategies help to define specific station area improvements and the correspondent agencies to implement them. It also provides a generalized framework for property owners, developers, and designers to use when creating future site plans.

Station area concept plans include two elements:

- Station location and amenities: As noted earlier, stations are intended to become multimodal network hubs and activity focal points along the Kendall Corridor. Their locations influence - and are influenced by - network design and the adjacent properties. Each strategy recommends a station location and details regarding walk, bike, transit, and auto access.
- Station area multimodal network: Each strategy illustrates the primary walk and bike access networks to and through each station area. The networks are based on the network design guidelines presented earlier. The network concepts in each plan are translated into improvement needs, which are detailed in the implementation section.

The station area strategies focus on the draft station areas and place types as they are defined in the Kendall Corridor Vision Study.

### *Multimodal Access Networks*

The first step in the concept plan development step defined paseo, bike, and local transit access to the station areas.

- Redevelopment creates the opportunities for building a **walk access network** within station areas that improve access to stations and other buildings. Such a network would create street blocks that help organize development and define pedestrian paths. Walk access networks are not shown in the concept plans. Their planning and design will coincide with potential redevelopment.
- **Paseos** were identified for neighborhoods and major condominium and apartment complexes adjacent to the transit-oriented community area. Paseos indicate a potential location for a pedestrian- and bike-only connection from the adjacent property to the station area walk network. Connection viability depends on the approval of property owners.
- As described in the design guidelines, **bike networks** (shown in purple on the concept plans) extend up to three miles from the stations. To the extent possible, they follow feeder roads and local roads that connect neighborhoods, not local roads within neighborhoods. Opportunities for exclusive pedestrian and bicycle paths off the street network were also identified.
- As described in the design guidelines, **transit connections** walking connections between bus stops for north / south local bus routes (shown by purple dashed lines on concept plans) and the station.

The design guidelines recommend that park-and-ride locations be in parking garages / lots on the periphery of the core area. Likewise, kiss-and-ride and share-a-ride drop off locations should be in mid-blocks along the civic streets leading to the stations. Both recommendations assume redevelopment in the transit-oriented community areas. Short term park-and-ride and kiss-and-ride locations should use

existing surface parking lot locations in station areas and be sized according to demand estimated by the PD&E and subsequent design efforts.

### Dadeland South Station Area

Figure 15 presents the concept plan for the Dadeland South station area, with separate analyses done for the area north of Kendall Drive and for the area to the south. The Dadeland South area includes a Metrorail station south of Kendall Drive and new stations serving premium transit on Kendall Drive. A walk access street network south of Kendall Drive is already in place and provides a real-life example of how such networks can be developed in other station areas. The street connecting the Kendall South Metrorail station to the Kendall premium transit station will become the focal axis for the station area. A network of bike paths, highlighted in purple, connect neighborhoods into the station area street grid.

Table 7 shows the 2015 (existing) and 2040 (projected) demographic characteristics for the Dadeland South station area south of Kendall Drive. The total number of persons and jobs are forecasted to increase by nearly 50 percent, with the number of jobs increasing at a slightly faster pace than residents.

*Table 7 - Dadeland South (South of Kendall Drive) Demographics and Development Characteristics*

Demographics	2015			2040			Increase
	Total Station Area	Transit Oriented Communities	Remainder	Total Station Area	Transit Oriented Communities	Remainder	
Persons	6,500	0	6,500	9,100	0	9,100	40%
Dwelling Units	3,250	0	3,250	4,600	0	4,550	42%
Employment	3,300	0	3,300	5,300	0	5,300	61%
<b>Activities (Persons and Jobs)</b>	<b>9,800</b>	<b>0</b>	<b>9,800</b>	<b>14,400</b>	<b>0</b>	<b>14,400</b>	<b>47%</b>

Table 8 shows the targeted demographic and employment characteristics for the Dadeland South station area north of Kendall Drive.

*Table 8 - Dadeland South (North of Kendall Drive) Demographic and Development Characteristics*

Demographics	2015			2040			Increase
	Total Station Area	Transit Oriented Communities	Remainder	Total Station Area	Transit Oriented Communities	Remainder	
Persons	4,600	0	4,600	7,300	2,400	4,900	59%
Dwelling Units	2,300	0	2,300	3,700	1,200	2,450	61%
Employment	10,900	4,100	6,800	13,800	6,100	7,700	27%
<b>Activities (Persons and Jobs)</b>	<b>15,500</b>	<b>4,100</b>	<b>11,400</b>	<b>21,100</b>	<b>8,500</b>	<b>12,600</b>	<b>36%</b>

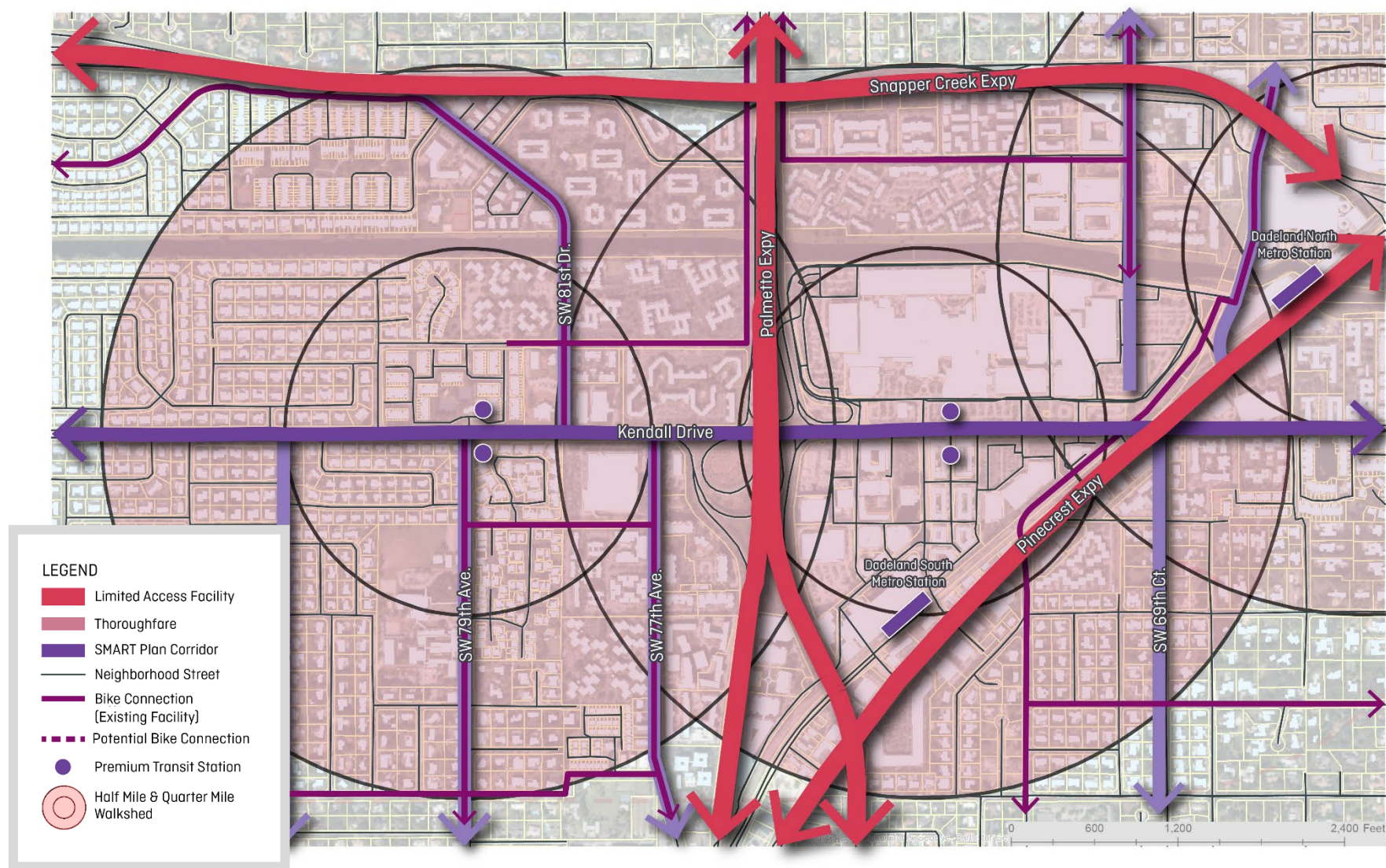


Figure 15 - Stations: Dadeland South and SW 79th Ave.

## Baptist East / SW 90<sup>th</sup> Avenue Station Area

Figure 16 presents the concept plan for the Baptist East station area. The Baptist hospital campus is in the southern portion of the station area. There are mainly single-family neighborhoods and vacant parcels north of the hospital owned by Baptist Hospital.

Table 9 presents the existing and forecast demographic and development characteristics for the station area. The increase in total activities (persons and jobs) is expected to be around 60 percent, with nearly all the increase due to jobs associated with the hospital.

*Table 9 - Baptist East / SW 90<sup>th</sup> Demographic and Development Characteristics*

Demographics	2015			2040			Increase
	Total Station Area	Transit Oriented Communities	Remainder	Total Station Area	Transit Oriented Communities	Remainder	
Persons	6,000	0	6,000	8,000	2,000	6,000	33%
Dwelling Units	3,000	0	3,000	4,000	1,000	3,000	33%
Employment	5,800	2,300	3,500	10,800	7,300	3,500	86%
<b>Activities (Persons and Jobs)</b>	<b>11,800</b>	<b>2,300</b>	<b>9,500</b>	<b>18,800</b>	<b>9,300</b>	<b>9,500</b>	<b>59%</b>

## SW 97<sup>th</sup> Avenue Station Area

Figure 16 presents the concept plan for the SW 97<sup>th</sup> Avenue station area. This is one of several station areas that may or may not come into being depending on the final station location decisions from the PD&E Study. The station area is currently bounded on the west by the SR 874/Don Shula Expressway. That road along with current development patterns present challenges for the area to transform.

Table 10 presents the existing and forecast demographic and development characteristics for the station area. The increase in total activities (person and jobs) is minimal.

Table 10 - 97th Demographic and Development Characteristics

Demographics	2015			2040			Increase
	Total Station Area	Transit Oriented Communities	Remainder	Total Station Area	Transit Oriented Communities	Remainder	
Persons	5,900	300	5,600	5,900	300	5,600	0%
Dwelling Units	2,950	200	2,750	3,000	200	2,800	2%
Employment	1,300	600	700	2,000	1,300	700	54%
<b>Activities (Persons and Jobs)</b>	<b>7,200</b>	<b>900</b>	<b>6,300</b>	<b>7,900</b>	<b>1,600</b>	<b>6,300</b>	<b>10%</b>

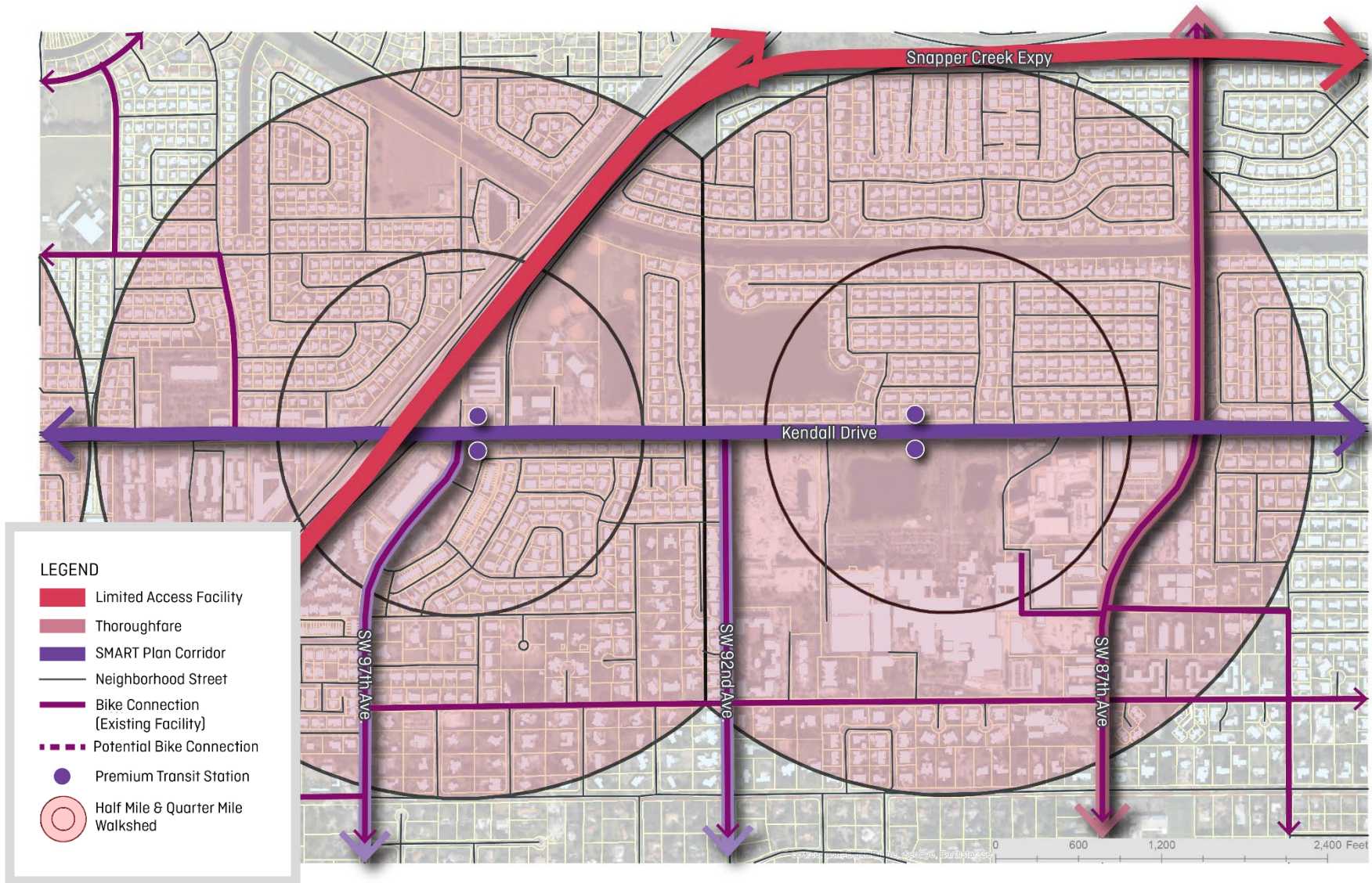


Figure 16 - Stations: Baptist Hospital and SW 97th Ave.

## SW 107<sup>th</sup> Avenue Station Area

Figure 17 presents the concept plan for the SW 107<sup>th</sup> Avenue station area. The station area includes nearly 50 acres of an existing shopping center and several non-residential parcels. It is also surrounded by multifamily complexes that are no anticipated to redevelop over the planning horizon.

Table 11 presents the existing and forecasted demographic and development characteristics for the station area. The increase in total activities (persons and jobs) is nearly 30 percent, with most of that increase due to an increase in jobs (over 50 percent increase).

Table 11 - 107th Demographic and Development Characteristics

Demographics	2015			2040			Increase
	Total Station Area	Transit Oriented Communities	Remainder	Total Station Area	Transit Oriented Communities	Remainder	
Persons	15,900	300	15,600	18,600	3,000	15,600	17%
Dwelling Units	7,950	200	7,750	9,300	1,500	7,800	17%
Employment	7,100	6,100	1,000	11,000	10,000	1,000	55%
<b>Activities (Persons and Jobs)</b>	<b>23,000</b>	<b>6,400</b>	<b>16,600</b>	<b>29,600</b>	<b>13,000</b>	<b>16,600</b>	<b>29%</b>

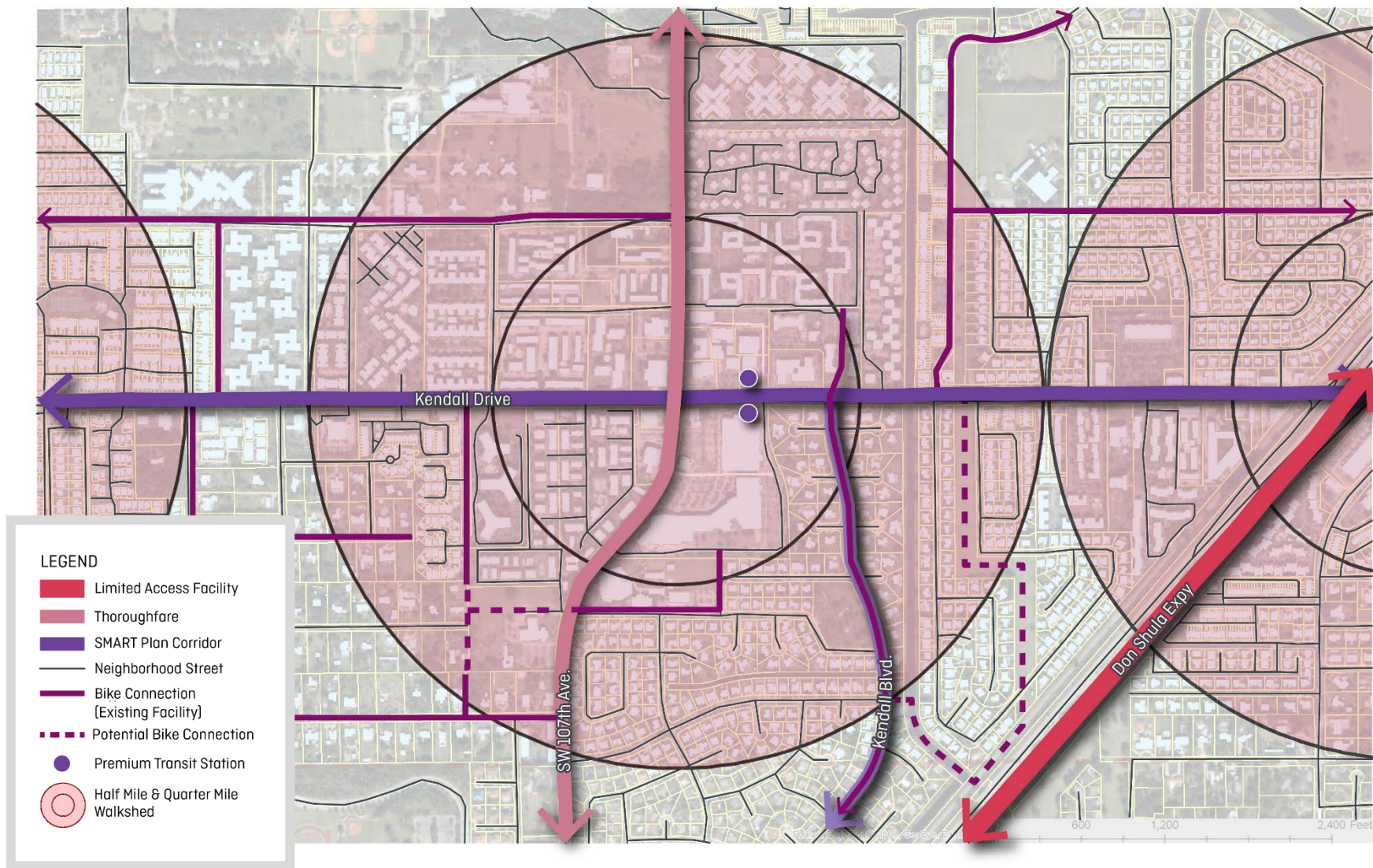


Figure 17 - Station: SW 107th Ave

## SW 117<sup>th</sup> Avenue Station Area

Figure 18 presents the concept plan for the SW 117<sup>th</sup> Avenue station area. The station area is within a CDMP designated Metropolitan Urban Center. It is bounded on the west by the Florida Turnpike and includes an existing shopping center, smaller retail out-parcels, and several medium-rise office buildings. The station area is also surrounded by established multifamily complexes and single-family neighborhoods.

Table 12 presents the existing and forecasted demographic and development characteristics for the station area. The increase in total activities (persons and jobs) is nearly 70 percent, with jobs nearly doubling.

*Table 12 - 117th Demographic and Development Characteristics*

Demographics	2015			2040			Increase
	Total Station Area	Transit Oriented Communities	Remainder	Total Station Area	Transit Oriented Communities	Remainder	
Persons	5,300	0	5,300	7,300	2,000	5,300	38%
Dwelling Units	2,650	0	2,650	3,700	1,000	2,650	40%
Employment	5,600	5,200	400	11,100	10,700	400	98%
<b>Activities (Persons and Jobs)</b>	<b>10,900</b>	<b>5,200</b>	<b>5,700</b>	<b>18,400</b>	<b>12,700</b>	<b>5,700</b>	<b>69%</b>

## SW 122<sup>nd</sup> Avenue Station Area

Figure 18 presents the concept plan for the SW 122<sup>nd</sup> Avenue station area. The station area is a companion of the SW 117<sup>th</sup> station area. It is within a CDMP designated Metropolitan Urban Center. It is bounded on the east by the Florida Turnpike and includes an existing shopping center and multiple retail out-parcels. It is surrounded by multifamily complexes and single-family neighborhoods and a large county-owned wastewater treatment area that extends to the north and east of Kendall Drive.

Table 13 presents the existing and forecasted demographic and development characteristics for the station area. The increase in total activities (persons and jobs) is just under 20 percent, with most of the increase attributed to jobs.

Table 13 – 122<sup>nd</sup> Demographic and Development Characteristics

Demographics	2015			2040			Increase
	Total Station Area	Transit Oriented Communities	Remainder	Total Station Area	Transit Oriented Communities	Remainder	
Persons	4,200	0	4,200	4,400	200	4,200	5%
Dwelling Units	2,100	0	2,100	2,200	100	2,100	5%
Employment	2,300	2,000	300	3,300	3,000	300	43%
<b>Activities (Persons and Jobs)</b>	<b>6,500</b>	<b>2,000</b>	<b>4,500</b>	<b>7,700</b>	<b>3,200</b>	<b>4,500</b>	<b>18%</b>

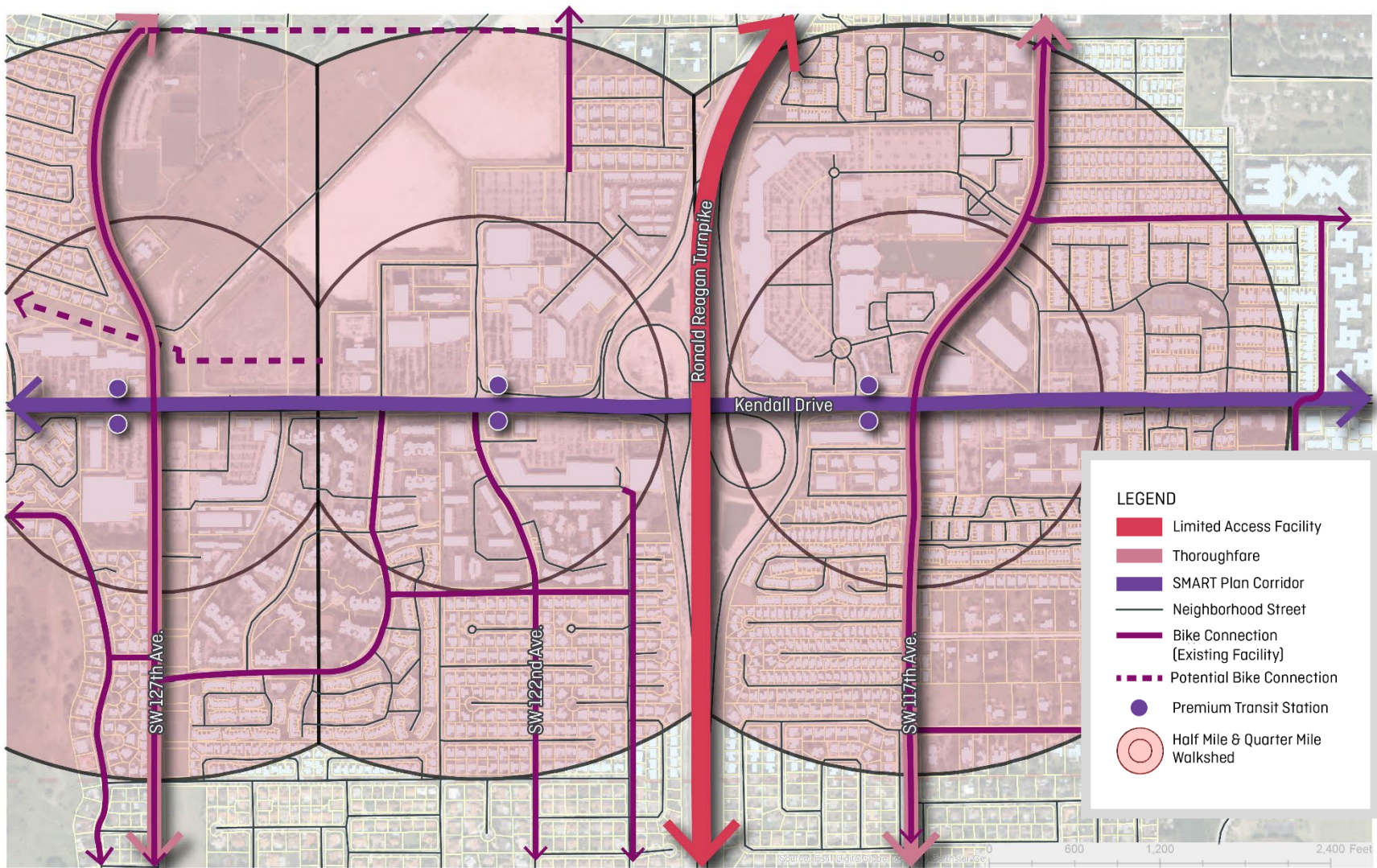


Figure 18 - Station: SW 117<sup>th</sup> Ave. and SW 122<sup>nd</sup> Ave.

## SW 127<sup>th</sup> Avenue Station Area

Figure 19 presents the concept plan for the SW 127<sup>th</sup> Avenue station area. The station area is located just to the west of the 122<sup>nd</sup> Street station area, with the County-owned wastewater treatment area located on its eastern side and a County-owned easement to its north. The station area includes two shopping centers and other non-residential parcels. It is surrounded by multifamily complexes and single-family neighborhoods and the County-owned properties, noted above.

Table 14 presents the existing and forecasted demographic and development characteristics for the station area. The increase in total activities (persons and jobs) is low (around 10 percent).

Table 14 – 127<sup>th</sup> Demographic and Development Characteristics

Demographics	2015			2040			Increase
	Total Station Area	Transit Oriented Communities	Remainder	Total Station Area	Transit Oriented Communities	Remainder	
Persons	10,600	0	10,600	11,900	1,300	10,600	12%
Dwelling Units	5,300	0	5,300	6,000	700	5,300	13%
Employment	4,800	3,800	1,000	5,000	4,000	1,000	4%
<b>Activities (Persons and Jobs)</b>	<b>15,400</b>	<b>3,800</b>	<b>11,600</b>	<b>16,900</b>	<b>5,300</b>	<b>11,600</b>	<b>10%</b>

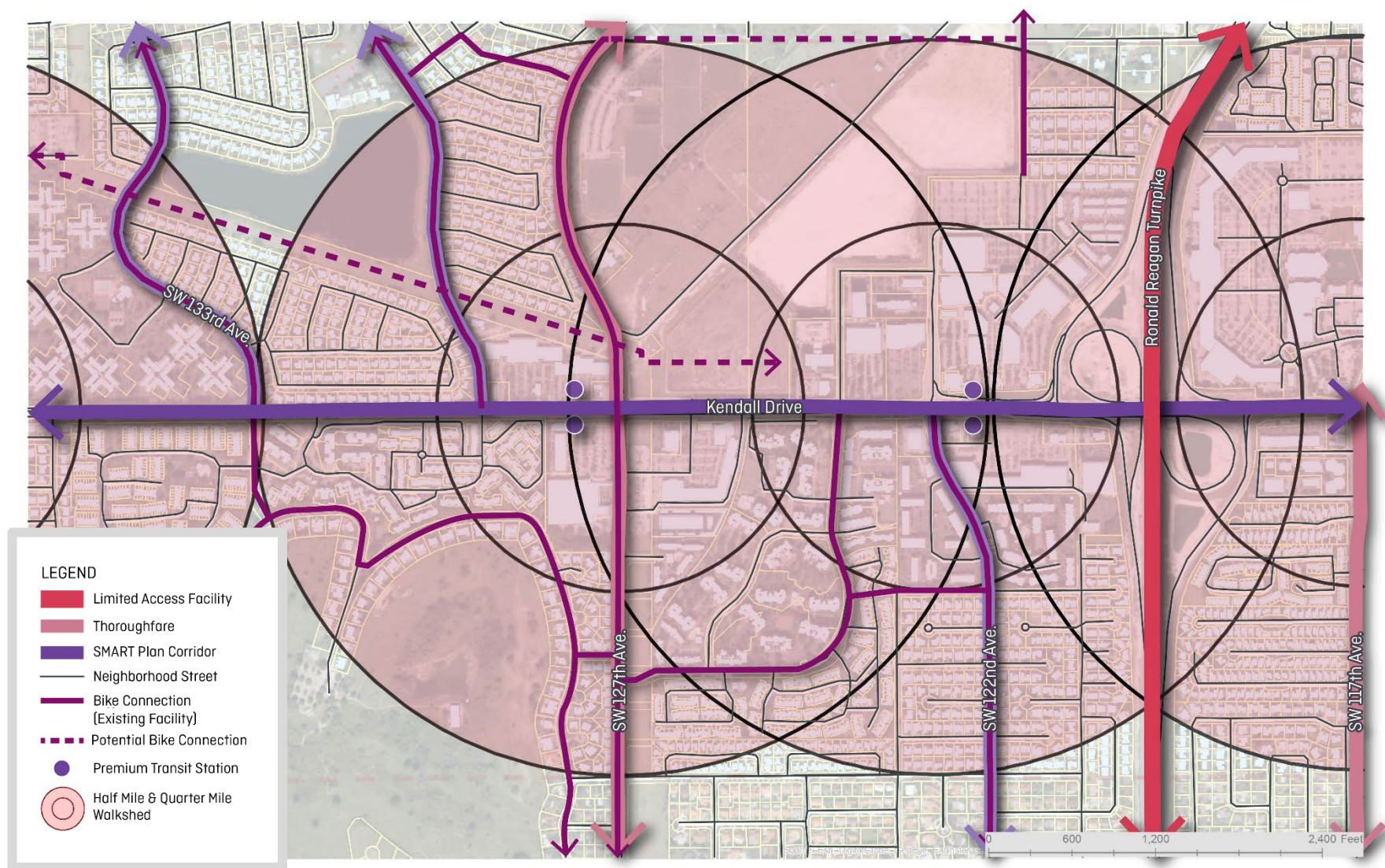


Figure 19 - Station: SW 127<sup>th</sup> Ave.

## SW 137<sup>th</sup> Avenue Station Area

Figure 20 presents the concept plan for the SW 137<sup>th</sup> Avenue station area. The station area is designated as a Community Urban Center in the CDMP. It includes two shopping centers and non-residential parcels and is surrounded by multifamily complexes and single-family neighborhoods that are not anticipated to redevelop over the planning horizon.

Table 15 presents the existing and forecasted demographic and development characteristics for the station area. The increase in total activities (persons and jobs) is low (around 14 percent).

Table 15 - 137th Demographic and Development Characteristics

Demographics	2015			2040			Increase
	Total Station Area	Transit Oriented Communities	Remainder	Total Station Area	Transit Oriented Communities	Remainder	
Persons	5,100	100	5,000	5,700	700	5,000	12%
Dwelling Units	2,550	100	2,450	2,900	400	2,500	14%
Employment	1,500	1,200	300	1,800	1,500	300	20%
<b>Activities (Persons and Jobs)</b>	<b>6,600</b>	<b>1,300</b>	<b>5,300</b>	<b>7,500</b>	<b>2,200</b>	<b>5,300</b>	<b>14%</b>

## SW 147<sup>th</sup> Avenue Station Area

Figure 20 presents the concept plan for the SW 147<sup>th</sup> Avenue station area. Most of the station area includes multifamily complexes and single-family neighborhoods.

Table 16 presents the existing and forecasted demographic and development characteristics for the station area. The increase in total activities (person and jobs) is low (around 13 percent).

Table 16 - 147th Demographic and Development Characteristics

Demographics	2015			2040			Increase
	Total Station Area	Transit Oriented Communities	Remainder	Total Station Area	Transit Oriented Communities	Remainder	
Persons	16,800	0	16,800	18,800	2,000	16,800	12%
Dwelling Units	8,400	0	8,400	9,400	1,000	8,400	12%
Employment	1,600	1,400	200	1,900	1,700	200	19%
<b>Activities (Persons and Jobs)</b>	<b>18,400</b>	<b>1,400</b>	<b>17,000</b>	<b>20,700</b>	<b>3,700</b>	<b>17,000</b>	<b>13%</b>

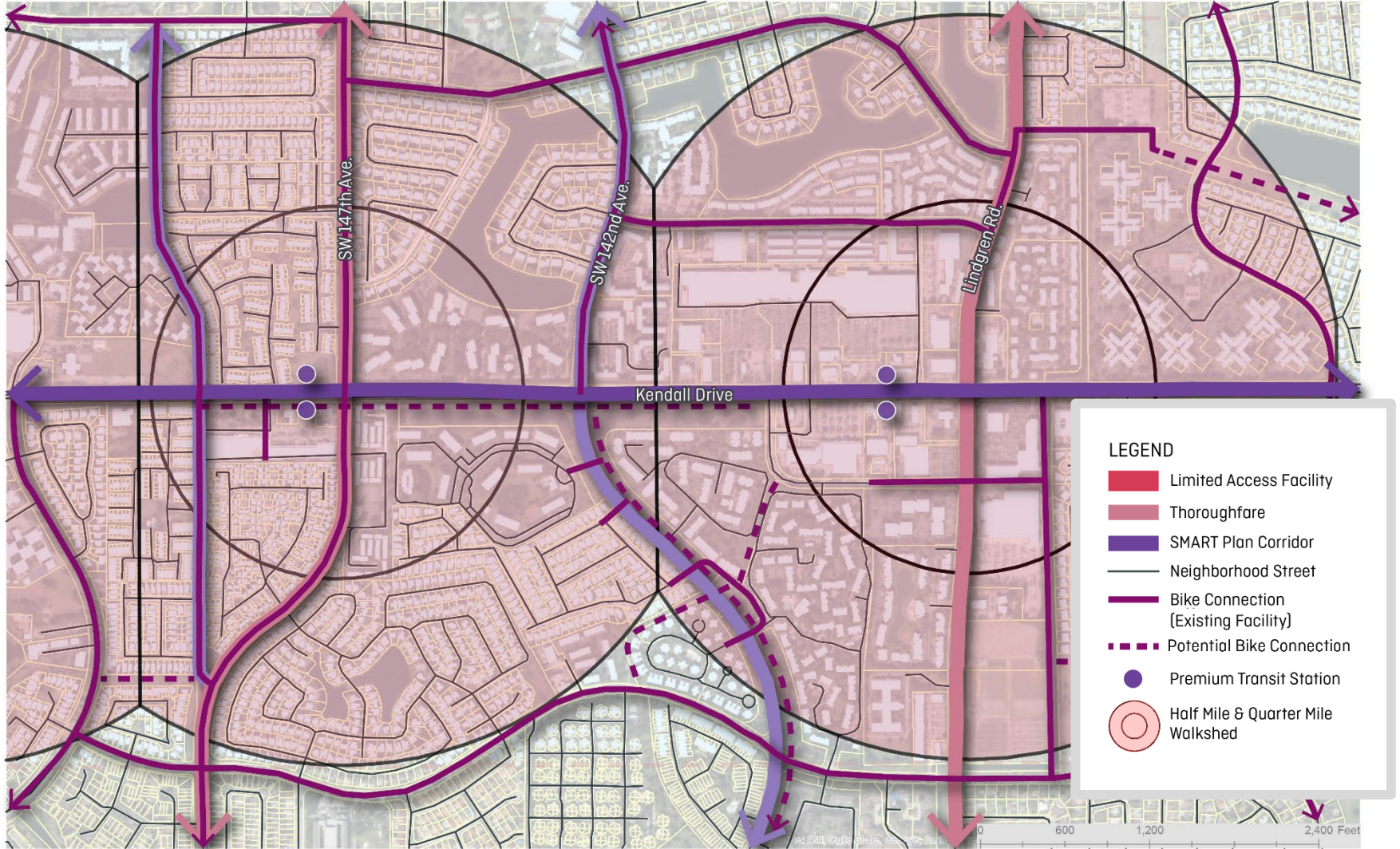


Figure 20 - Station: SW 137<sup>th</sup> Ave. and 147<sup>th</sup> Ave.

## SW 152<sup>nd</sup> Avenue Station Area

Figure 21 presents the concept plan for the SW 152<sup>nd</sup> Avenue station area. This is a station area that may or may not be included in the final PD&E recommendations. It includes a small shopping center and is surrounded by multifamily complexes and single-family neighborhoods that are not anticipated to be redeveloped over the planning horizon.

Table 17 presents the existing and forecasted demographic and development characteristics for the station area. The increase in total activities (persons and jobs) is very low (less than 5 percent) all of which is due to increases in dwelling units.

Table 17 – 152<sup>nd</sup> Demographic and Development Characteristics

Demographics	2015			2040			Increase
	Total Station Area	Transit Oriented Communities	Remainder	Total Station Area	Transit Oriented Communities	Remainder	
Persons	11,000	0	11,000	11,400	400	11,000	4%
Dwelling Units	5,500	0	5,500	5,700	200	5,500	4%
Employment	1,000	200	800	1,000	200	800	0%
<b>Activities (Persons and Jobs)</b>	<b>12,000</b>	<b>200</b>	<b>11,800</b>	<b>12,400</b>	<b>600</b>	<b>11,800</b>	<b>3%</b>

## SW 157<sup>th</sup> Avenue Station Area

Figure 21 presents the concept plan for the SW 157<sup>th</sup> Avenue station area. The station area overlaps with the Baptist West station area presented below. Both station areas are in a CDMP designated Community Urban Center. This is the only station area with a large amount of vacant land. It also has a shopping center and is surrounded by the multifamily complexes and single-family neighborhoods that are not anticipated to redevelop over the planning horizon.

Table 18 presents the existing and forecasted demographic and development characteristics for the station area. The increase in total activities (persons and jobs) is moderate (over 30 percent) with most of that growth attributable to new jobs.

Table 18 – 157<sup>th</sup> Demographic and Development Characteristics

Demographics	2015			2040			Increase
	Total Station Area	Transit Oriented Communities	Remainder	Total Station Area	Transit Oriented Communities	Remainder	
Persons	11,900	0	11,900	13,400	1,500	11,900	13%
Dwelling Units	5,950	0	5,950	6,700	800	5,950	13%
Employment	2,600	2,200	400	5,700	5,300	400	119%
<b>Activities (Persons and Jobs)</b>	<b>14,500</b>	<b>2,200</b>	<b>12,300</b>	<b>19,100</b>	<b>6,800</b>	<b>12,300</b>	<b>32%</b>

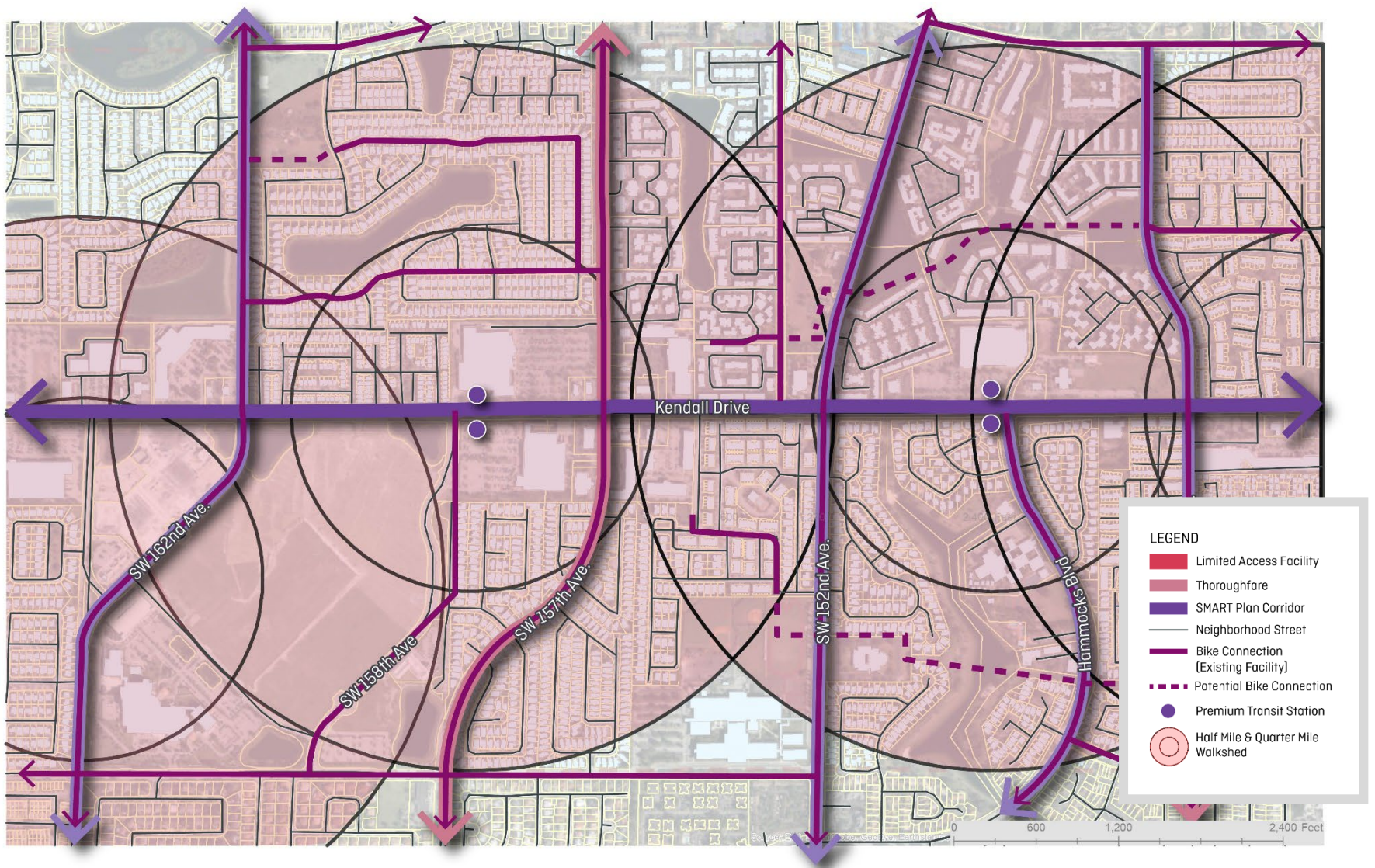


Figure 21 - Station: SW 152<sup>nd</sup> Ave. and SW 157<sup>th</sup> Ave.

## West Kendall Terminal/Baptist West Station Area

Figure 22 presents the concept plan for the Baptist West station area. This station area overlaps with the SW 157<sup>th</sup> Avenue station area presented above. It is within a CDMP designated Community Urban Center. It includes a medium sized area of vacant land. The vacant land is bordered on the south by the Baptist hospital and on all other sides by multifamily complexes and single-family neighborhoods that are not anticipated to redevelop over the planning horizon.

Table 19 presents the existing and forecasted demographic and development characteristics for the station area. The increase in total activities (persons and jobs) is high, with both the number of jobs and houses nearly doubling.

*Table 19 – West Kendall Terminal/Baptist West Demographic and Development Characteristics*

Demographics	2015			2040			Increase
	Total Station Area	Transit Oriented Communities	Remainder	Total Station Area	Transit Oriented Communities	Remainder	
Persons	3,800	0	3,800	9,000	1,800	7,200	137%
Dwelling Units	1,900	0	1,900	4,500	900	3,600	137%
Employment	2,200	500	1,700	4,500	1,000	3,500	105%
<b>Activities (Persons and Jobs)</b>	<b>6,000</b>	<b>500</b>	<b>5,500</b>	<b>13,500</b>	<b>2,800</b>	<b>10,700</b>	<b>125%</b>

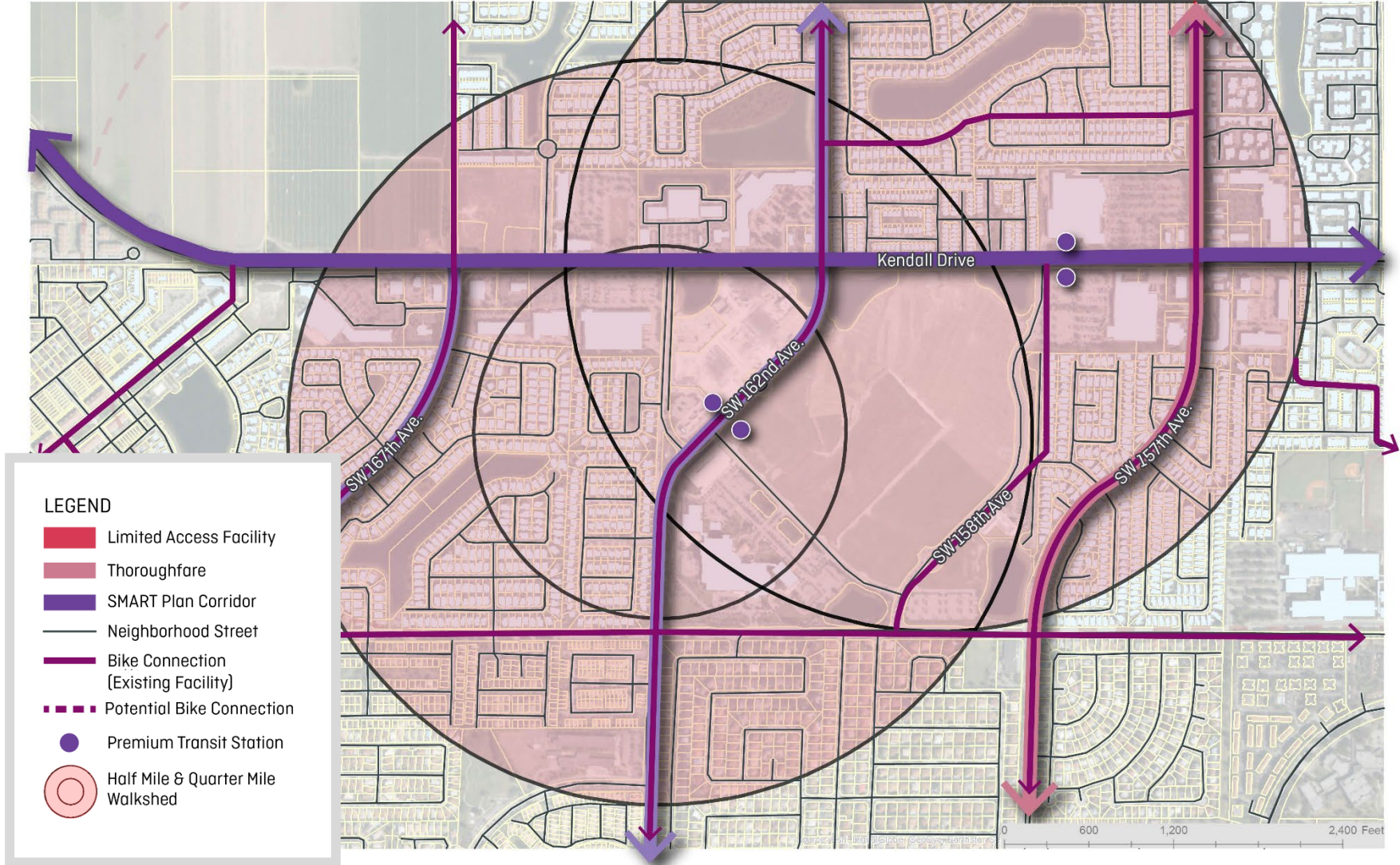


Figure 22 - Station: SW 162<sup>nd</sup> Ave. and West Kendall Terminal

## 7.0 Implementation Plan

As previously explained in the Planning and Design Guidelines section, the goal of the Kendall Corridor Vision is to shift the accessibility balance in the corridor from the current reliance on *speed* to a greater reliance on *proximity*, which requires major network and development transformations. The Planning and Design Guidelines describe the need to reorient network focal points from auto-centric arterial intersections to transit stations that function as multimodal hubs. The Kendall Corridor Vision and the planning and design guidelines also detail how to potentially reorient the area from auto-oriented shopping centers and office complexes around arterial intersections to mixed-use development with multimodal connections in the half-mile station areas surrounding the transit stations.

The sections that follow present the actions, strategies, and projects needed to transform the Kendall Corridor. They also recommend who should lead and who should support implementing the actions, strategies, and projects, including:

- Miami-Dade County (County): The Kendall Corridor lies fully within the county's jurisdiction. Planning and zoning are coordinated by the Department of Regulatory and Economic Resources (RER) and non-state streets and transit routes are maintained by the Department of Transportation and Public Works (DTPW).
- Miami-Dade Transportation Planning Organization (TPO): The TPO is responsible for planning and funding most of the transportation improvements made in the county. (i.e., the SMART Moves Municipal Program and its projects such as the City of Miami Update of the Bicycle Master Plan)
- Florida Department of Transportation (FDOT): FDOT is responsible for maintaining and improving state roads in the corridor, including Kendall Drive.
- Property owners and developers (PO&D): Implementation of the Kendall Corridor Vision will require private land development investments as well as public network investments. PO&D decide whether - and when - to redevelop corridor properties based primarily on market factors, but also on the timing and nature of public investments (such as premium transit) and development regulations. The goal of the Kendall Corridor Vision, the PD&E study, and this companion study is to provide clarity to property owners and developers about investments and development expectations.
- Residents and businesses (R&B): Residents and businesses provided the initial guidance for the Kendall Corridor Vision and must continue guiding the transformation.

As noted above implementing the Kendall Corridor Vision will take time, and strategies, actions, and projects must be planned and prioritized. Table 29 provides a summary of the implementation strategies described in subsequent sections.

### 7.1 Corridor Brand and Transformational Story

A brand and transformational story are recommended to support and sustain the Kendall Corridor Vision over the years it will take for the corridor to evolve. Both brand and story function as high level reference points for coordinating detailed planning and design activities among those responsible for the transformation. They provide continuing clarity and reassurance about how the corridor's transformation aligns with the values of those who live and work there. The story should build on the SMART Program

goals (economic development, livability, and environmental health) and the corridor-specific themes identified during the visioning charrettes, including:

- Providing a variety of travel choices.
- Preserving and protecting existing residential neighborhoods.
- Increasing the number of non-retail jobs in the corridor.
- Redeveloping portions of the corridor, with a focus on mix use high-density development

The Corridor Brand gives the Vision and the supporting implementation activities an easily recognized name, the same way the SMART Program branded six strategically important corridors in the county. The Kendall Corridor branding should complement the SMART Program brand and could expand beyond a transportation or land use focus. For instance, the Kendall Vision identified possible economic clusters along the corridor, including health care (building on the Baptist hospital complexes) and education (building on relationships with Florida International University (FIU) to the north and Miami Dade College (MDC) to the south. Figure 23 illustrates how the Healthline BRT in Cleveland is branded to tie in with the Cleveland Clinic and other health providers and businesses along the corridor and how developers along the Healthline BRT corridor are using the corridor brand to position their properties. Miami-Dade DTPW, in coordination with FDOT and the Miami-Dade TPO, should work with the community, particularly landowners along the corridor, to develop the brand and to refine and document the corridor's transformation story.



The One MidTown-RTA 'World Class' BRT Commuter Line—The [HealthLine](#) is Cleveland's first Bus Rapid Transit (BRT) system, serving the Euclid Corridor. It connects the two largest regional employment areas, Downtown and University Circle, and extends to the Louis Stokes Station at Windermere in East Cleveland. With visitors from all over the world, RTA regularly showcases the \$200 million HealthLine, the world-class standard for BRT. The HealthLine was named the '[Best' Bus Rapid Transit in North America](#) by the [Institute for Transportation & Development Policy](#) and was recognized for having the best return on investment for a transit project, regardless of mode, in the country. The HealthLine delivered more than \$6.3 billion in economic development along the Euclid Corridor -- a staggering \$114 gained for every dollar spent on creating and launching the new service.

*Figure 23 - HealthLine (Cleveland) Branding*

Table 20. Corridor Transformational

Lead	DTPW
Partners / Participants	<ul style="list-style-type: none"> <li>• FDOT</li> <li>• TPO</li> <li>• PD&amp;O</li> <li>• R&amp;B</li> </ul>
Key Products / Outcomes	<ul style="list-style-type: none"> <li>• Kendall Vision brand (complements SMART Program brand)</li> <li>• High level vision and corridor transition story posted on County / TPO web sites</li> </ul>
Cost Estimates	<ul style="list-style-type: none"> <li>• \$600,000 - \$800,000</li> </ul>

Brand and Story

## 7.2 Kendall Drive Potential Future Improvements

The PD&E Study will identify specific improvements to Kendall Drive, most importantly the locally preferred premium transit alternative. It will identify roadway cross sections, including bike and pedestrian improvements, and recommend station locations and amenities. The network improvements are intended to complement those recommended on Kendall Drive.

Table 21. Kendall Drive Design and Improvements

Lead	FDOT
Partners / Participants	<ul style="list-style-type: none"> <li>• DTPW</li> <li>• TPO</li> <li>• PD&amp;O</li> <li>• R&amp;B</li> </ul>
Key Products / Outcomes	<ul style="list-style-type: none"> <li>• Locally preferred alternative (LPA)</li> <li>• Street cross-sections</li> <li>• Transit and traffic operations recommendations</li> </ul>
Cost Estimates	<ul style="list-style-type: none"> <li>• The outcome of the PD&amp;E Study will determine the approximate cost.</li> </ul>

## 7.3 Complete Street Classification and Improvements

The arterial and collector roads in the Kendall corridor have a suburban, auto-oriented design, most with wide traffic lanes (12 feet). Sidewalks line both sides of most streets, but the sidewalks are not pleasant

to walk on because buildings are far away and oriented away from the sidewalks and landscaping and shade is lacking. Figure 24 illustrates the transformation sought by complete street improvements. A few of the roads towards the western end of the corridor have bike lanes. As noted, there is minimal landscaping within the street right-of-way, either on the shoulders or along medians. Many streets, particularly the two-lane roads, have available right-of-way to add bike lanes and enhance landscaping and sidewalks.



Figure 24 - Unpleasant versus Pleasant Sidewalks (from Miami-Dade Complete Street Design Guidelines)

Transforming the Kendall Corridor's existing arterial and collector streets into complete streets is a foundational implementation recommendation. The transformation should be completed in two steps:

- Step 1: Classify streets in the corridor using the Miami-Dade Complete Street Design Guidelines or FDOT Complete Streets standards, as appropriate.
- Step 2: Define planning, design, and improvement complete street project for roadway segment.

#### *Complete Street Classification*

The county should initiate a study to classify the existing street network in the corridor according to the typologies included in the [Miami-Dade Complete Street Design Guidelines](#) and in the [FDOT Context Classification Guide](#). The classification will also depend on whether the street is maintained by Miami-Dade County or by FDOT.

Figure 25 illustrates the relationship between the existing classifications and the Miami-Dade CSDG Complete Street types. Figure 26 shows the FDOT area classifications that dictate the Complete Streets improvements that should be applied to a street.

The station area concept plans make initial recommendations regarding street types, but those recommendations need more thorough vetting among the planning and design partners. The study should also indicate the priority, timing, project limits of the complete street planning and design studies described in the next section. The county should coordinate with the TPO and FDOT (for state streets) to incorporate complete street design and improvement projects into the Long-Range Transportation Plan (LRTP) and the Transportation Improvement Program (TIP).

	Thoroughfare	Feeder Road	Civic Street	Neighborhood Street, Service Way, Paseo
Primary Arterial				
Secondary Arterial				
Collector				
Local				

Figure 25 - Street Type Relationships from the Miami Dade Complete Street Guidelines



Figure 26 - Area Types from the FDOT Context Classification Guide

Table 22. Complete Street Classification

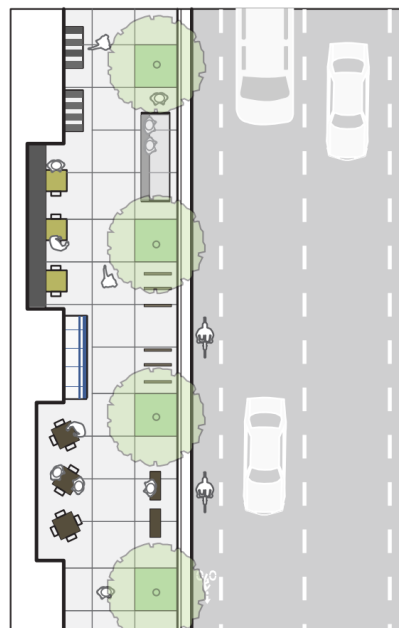
Lead	Miami-Dade DTPW
Partners / Participants	<ul style="list-style-type: none"> <li>• TPO</li> <li>• FDOT</li> </ul>
Key Products / Outcomes	<ul style="list-style-type: none"> <li>• Complete streets classifications for all existing corridor streets <ul style="list-style-type: none"> <li>○ Public map</li> <li>○ GIS layer</li> </ul> </li> <li>• Complete streets classification report describing method used for classifications</li> <li>• Priority, timing, and extent of complete street planning and design projects</li> </ul>
Cost Estimates	<ul style="list-style-type: none"> <li>• \$700,000 –\$1,000,000</li> </ul>
Potential Funding Source(s)	<ul style="list-style-type: none"> <li>• Local</li> <li>• Federal</li> </ul>

### Complete Street Planning, Design, and Improvement Projects

Planning and design projects can begin once existing streets are classified using the complete streets typologies and improvement projects are funded through the TIP. The planning and design phase of each project will rely on the Complete Street Design Guidelines and public and stakeholder review and feedback (Figure 27). The planning and design phase will follow the process inherent of the agency implementing the improvements/projects. Complete street improvement projects should commence soon after the design projects are completed. Either the DTPW or FDOT will lead the design projects, depending on the ownership of the road.

**TABLE 3-2 THOROUGHFARE SIDEWALK WIDTHS BY ZONE (IN FEET)**

A regionally significant roadway that plays a key role in movement of people, connects cities and districts and provides connectivity across barriers such as freeways and waterways. Supports movement of large volumes of people and accommodates longer trips.



*Thoroughfare in a Mixed-Use Context*

Context Zones			Thoroughfare (TH)			
			Frontage Zone	Pedestrian Zone	Furnishing Zone	Total Width
UC	Urban Center	Preferred	5	12	8	25
		Minimum	1	10	5	16
U	Urban	Preferred	1	10	6	17
		Minimum	1	8	5	14
RS	Suburban Residential	Preferred	0	6	8	14
		Minimum	0	5	5	10
MU	Suburban Commercial/Mixed-Use	Preferred	4	6	6	16
		Minimum	1	6	5	12
IN	Industrial	Preferred	1	6	5	12
		Minimum	1	5	0	6

*Figure 27 - Design Recommendations from Miami-Dade Complete Street Design Guidelines*

Table 23. Complete Street Planning, Design, and Improvements

Lead	DTPW or FDOT
Partners / Participants	<ul style="list-style-type: none"> <li>• TPO</li> <li>• County (RER)</li> <li>• FDOT (for state streets)</li> <li>• PD&amp;O</li> <li>• R&amp;B</li> </ul>
Key Products / Outcomes	<ul style="list-style-type: none"> <li>• Final design plans for bid</li> <li>• Estimated construction costs</li> <li>• Project bids</li> <li>• Complete street improvements</li> </ul>
Cost Estimates	<ul style="list-style-type: none"> <li>• Approximately \$3 million - \$8 million/mile depending on final design</li> </ul>
Potential Funding Source(s)	<ul style="list-style-type: none"> <li>• Local</li> <li>• Federal</li> <li>• State</li> </ul>

## 7.4 Corridor Bike Path Network and Improvements

The function of the proposed bicycle path network in the corridor is to provide multimodal access to transit stations and to destinations in the station areas. To the extent practical, the network follows collector streets (feeder streets in the Complete Streets typologies) and longer interconnecting local streets to keep slower traveling cyclists on roads with slower moving cars. Opportunities for exclusive pedestrian and bike paths are also identified on the concept plans.

A bike network study is recommended to more fully vet the network shown by the concept plans and to add further network design details such as:

- Branding the bike network in a way that reflects the overall branding of the corridor. Colors and designs of the brand can define the network using signs and pavement colors along network segments.
- Fully defining the network and segments in the network.
- Designing and siting wayfinding signs and markers along the network helping users navigate the system and find their way to destinations such as a transit stop or a park.
- Identifying cost-effective, short-term design treatments that can be implemented until complete streets improvements are made
- Augmenting complete streets designs
- Identifying the costs of needed improvements.

Figure 28, Figure 29, and Figure 30 illustrate bicycle network and wayfinding information from a [wayfinding plan prepared](#) by Fort Collins, CO. This plan provides a good reference for the proposed bike network study. The bicycle network can be developed by the county once the corresponding study is completed, and any implemented improvements must comply with the Manual on Uniform Traffic Control Devices (MUTCD).

Table 24. Corridor Bike Path Network and Improvements

Lead	FDOT & DTPW
Partners / Participants	<ul style="list-style-type: none"> <li>• TPO</li> <li>• PD&amp;O</li> <li>• R&amp;B</li> </ul>
Key Products / Outcomes	<ul style="list-style-type: none"> <li>• Network branding</li> <li>• Defined corridor bike network</li> <li>• Wayfinding guidelines</li> <li>• Short term treatments and improvements</li> </ul>
Cost Estimates	<ul style="list-style-type: none"> <li>• \$2 million - \$3 million</li> </ul>
Potential Funding Source(s)	<ul style="list-style-type: none"> <li>• Local</li> <li>• Federal</li> <li>• State</li> </ul>

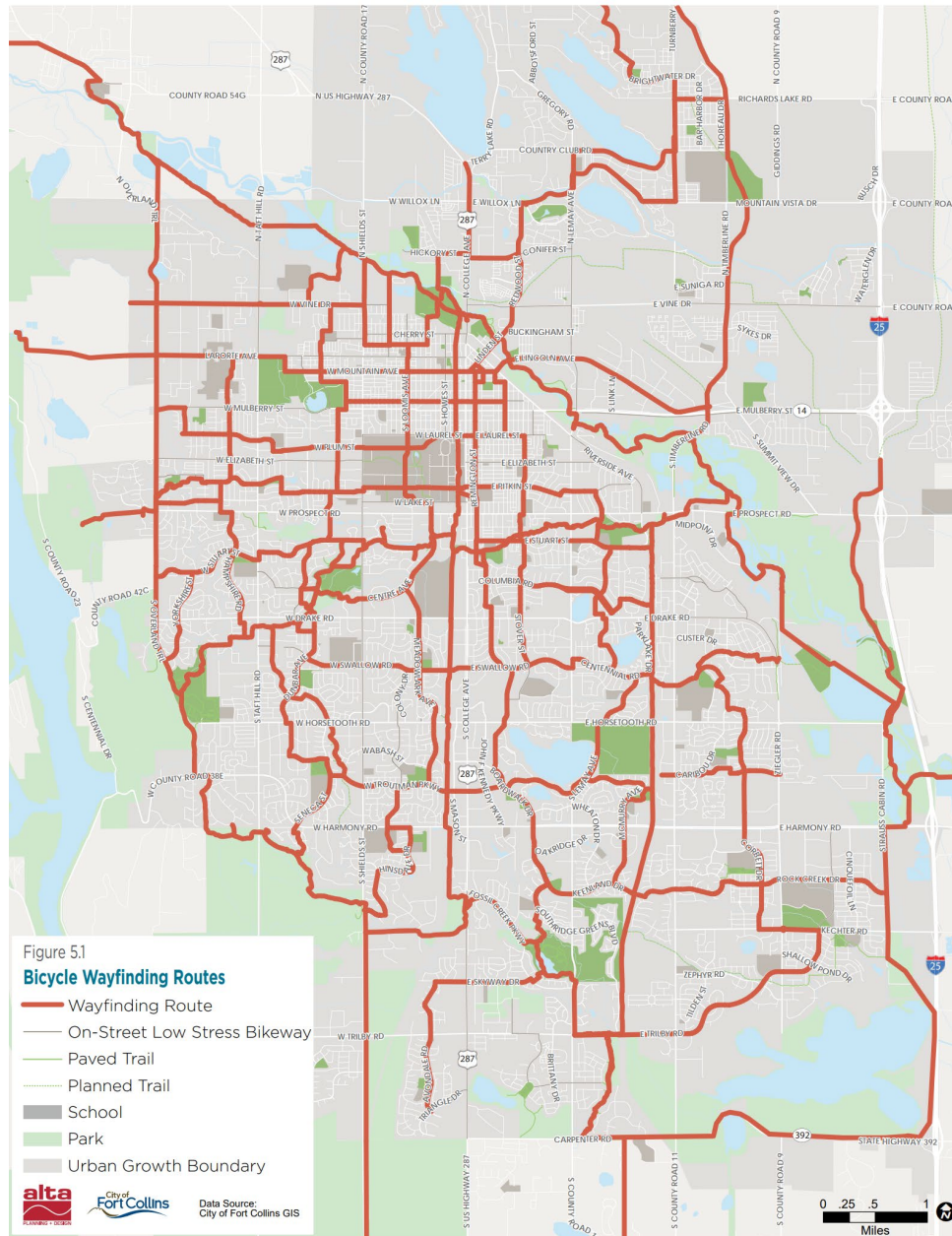
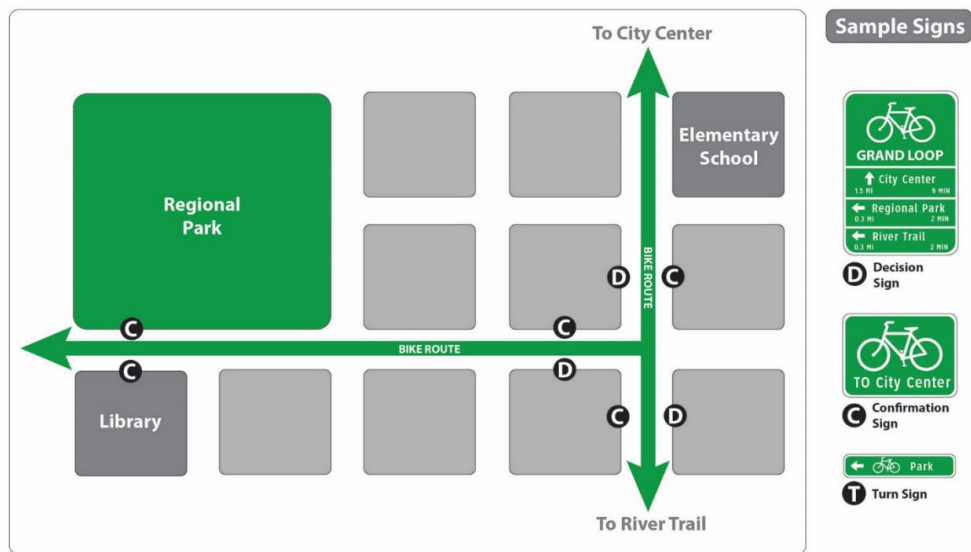


Figure 28 - Fort Collins Bicycle Network



Typical placement scenario showing a decision sign being located prior to an intersection of two bicycle facilities. A confirmation sign is provided after the turn movement as well as periodically along the route for reassurance.

Figure 29 - Wayfinding Guidance from Fort Collins Bicycle Wayfinding Plan

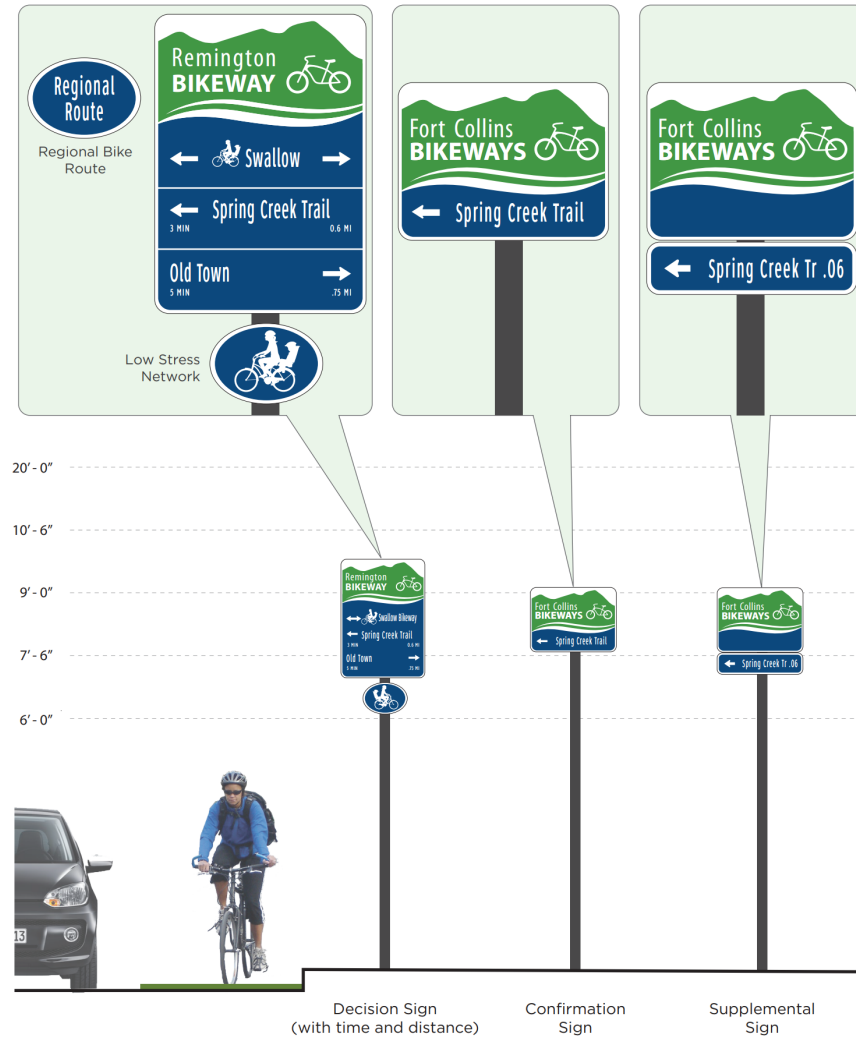


Figure 4.2  
Primary Wayfinding Signs

Figure 30 - Wayfinding Signs from Fort Collins Bicycle Wayfinding Plan

## 7.5 Transit-Oriented Community Areas

Providing direct, safe, and enjoyable walking paths within station area walk sheds will increase premium transit ridership in the Kendall Corridor. Planning and design guidelines recommend a gridded, pedestrian-friendly street network of blocks no larger than 500 feet by 500 feet and extending at least a quarter mile and preferably a half mile from the transit station. Currently, only the area south of Kendall Drive in the Dadeland South station area has a TOC pattern and walk network.

This section speaks to developing transit-oriented community areas, or TOCs. TOCs consist of large, non-residential parcels adjacent to some to the proposed stations where redevelopment is possible.

Shopping centers are designed for cars and structurally impede transit ridership, walking, and biking for the several reasons including:

- Distance: The front doors of stores are typically beyond a quarter mile walk from proposed transit stations, adding to door-to-door transit travel times and discouraging transit ridership.
- Structural Impediments: Parking lots between transit stations and stores are not inviting environments for walking, further discouraging ridership. Parking aisles are designed to funnel shoppers to stores creating indirect travel paths to transit stations. Parking aisles are designed for cars not pedestrians. While pedestrian enhancements, such as better-defined walkways and landscaping, can be made, they require the willingness of shopping center owners to fund these enhancements. While the enhancements can make it safer and more enjoyable to walk, they still do not overcome the walking distance issue.
- Single Use Centers: Centers are predominately retail-oriented and do not provide opportunities to walk to destinations other than another store. Even then, shoppers will often drive rather than walk between stores because distances between stores are greater than it is to the parked car and structural impediments discourage non-auto travel.
- Limited Market: The transit market for shopping trips is low compared with other trip purposes. When transit is a viable option, it will attract work trips and work-related trips more readily than retail trips.

Public feedback gathered during the Kendall Vision charrettes indicates a preference for redeveloping shopping centers and adding non-retail jobs in the corridor. Participants noted that the corridor is "over-retailed." This perspective may be due to the changing nature of retail as more brick-and-mortar retailers shift to internet sales and/or go out of business.

Table 25 – Transit-Oriented Community Areas Characteristics

Station Area (SA)	SA Size (acres)	Transit-Oriented Community Area (TOC) Characteristics	TOC Size (acres)
<b>Dadeland North</b>	380	No	0
<b>Dadeland South</b>	240	Yes – Dadeland Mall north of Kendall Drive	65
<b>SW 79<sup>th</sup> Ave</b>	250	No	0
<b>Baptist East</b>	332	Yes – parcels in front of hospital complex	74
<b>SW 97<sup>th</sup> Ave</b>	306	Yes – individual retail/office sites	30
<b>SW 107<sup>th</sup> Ave</b>	298	Yes – shopping center, retail and office sites	43
<b>SW 117<sup>th</sup> Ave</b>	224	Yes – shopping center, retail and office sites	60
<b>SW 122<sup>nd</sup> Ave</b>	274	Yes – 2 shopping centers, outparcels	61
<b>SW 127<sup>th</sup> Ave</b>	216	Yes – 3 shopping centers	32
<b>SW 137<sup>th</sup> Ave</b>	312	Yes – 2 shopping centers	124
<b>SW 147<sup>th</sup> Ave</b>	211	Yes – shopping center	9
<b>SW 152<sup>nd</sup> Ave</b>	196	Yes – shopping center	26
<b>SW 157<sup>th</sup> Ave</b>	276	Yes – shopping centers / vacant property	104
<b>West Kendall Terminal/ Baptist West</b>	250	Yes – vacant property	25
<b>TOTAL</b>	3,765		596

Master Plans for the transit-oriented community areas are recommended to leverage, guide, and coordinate redevelopment opportunities in the corridor. Each Transit-Oriented Community Area Master Plan should be a collaborative public / private process. A prototype Plan – including financial analysis - could be developed in the future with the engagement of all interested parties.

#### *Prototype Transit-Oriented Community Area Plan*

A *Prototype Transit-Oriented Community Area Plan* is recommended and would include:

- A market feasibility study that indicates likely demand for the property in the short term and the longer term with premium transit built and operating
- A phased development program indicating building square footage by use based on the market feasibility study and pro forma
- A development plan adhering to the TOD targets, design guidelines, and station area model presented in this report and including the following elements:
  - Station area street grid and street cross sections,
  - The size and location of infrastructure (parking, stormwater, parks)
  - The size and location of buildings according to the phased development program
- Funding strategies identifying who is responsible for paying for the street network and infrastructure (parking, stormwater, parks) in the transit-oriented community area and for impacts beyond the transit-oriented community area.

The Prototype Plan's objective is to demonstrate the viability of public / private collaboration. As such, all parties enter the process with the understanding that the plan is non-binding but that it could be used

as the basis for more detailed design and formal development agreements. Lessons learned from the Prototype Transit-Oriented Community Area Plan could be used to refine the design guidelines and station area models identified in the PD&E and other studies for the Corridor.

*Table 26. Prototype Transit-Oriented Community Area Plan*

Lead	County RER
Partners / Participants	<ul style="list-style-type: none"> <li>• DTPW</li> <li>• PO&amp;D</li> <li>• TPO</li> <li>• R&amp;B</li> </ul>
Key Products / Outcomes	<ul style="list-style-type: none"> <li>• Market feasibility study</li> <li>• Development pro forma</li> <li>• Development program</li> <li>• Development plan</li> </ul>
Cost Estimates	<ul style="list-style-type: none"> <li>• \$500,000 - \$ 1 million</li> </ul>
Potential Funding Source(s)	<ul style="list-style-type: none"> <li>• Local</li> <li>• Federal</li> <li>• Private</li> </ul>

#### *Transit-Oriented Community Area Plan*

The Prototype Transit-Oriented Community Area Plan could motivate property owners in other designated transit-oriented community areas to prepare a Transit-Oriented Community Plan. Those plans would include the same structure listed above as refined by the lessons learned from the Prototype Plan.

*Table 27. Transit-Oriented Community Area Plan*

Lead	RER
Partners / Participants	<ul style="list-style-type: none"> <li>• DTPW</li> <li>• PO&amp;D</li> <li>• TPO</li> <li>• R&amp;B</li> </ul>
Key Products / Outcomes	<ul style="list-style-type: none"> <li>• Market feasibility study</li> <li>• Development pro forma</li> <li>• Development program</li> <li>• Development plan</li> </ul>
Cost Estimates	<ul style="list-style-type: none"> <li>• \$3 million - \$5 million</li> </ul>
Funding Source(s)	<ul style="list-style-type: none"> <li>• Local</li> <li>• Federal</li> <li>• Private</li> </ul>

## 7.6 Walk Access Improvements

Current development patterns and walk access networks in nearly all station areas (excepting Dadeland South) do not support transit. Fundamental changes are needed to transform station areas, including developing pedestrian friendly street grids. Transit-Oriented Community Area Plans are envisioned to provide the guidance needed to realize these transformations.

Transforming the corridor will take time but there are walk access improvements that can be made in the interim, including:

- Making the corridor's existing arterials and collectors complete streets to improve safety and convenience for pedestrians
- Improving local streets within a quarter mile of proposed stations, as needed, for walking
- Designing and constructing pedestrian and bicycle connections (neighborhood gateways) between neighborhoods and apartment and condominium complexes adjacent to transit-oriented community areas. The station area concept plans identify potential locations for those connections.

### *Neighborhood Gateways*

Neighborhood gateways are pedestrian and bicycle connection points between discreet housing areas (multifamily complexes and single-family neighborhoods), existing or proposed transit-oriented community area streets, and/or roads leading to transit stations. Gateways can take several forms:

- Simple wayfinding signs on existing streets indicating directions to transit stations and potentially other points of interest near the station
- Improvements to existing streets enhancing the pedestrian experience, such as adding intersections

Paseos providing off-street connections. There are many multifamily complexes along the corridor where pedestrian- and bike-only access points could greatly reduce the travel distance to stations. Complex owners and residents would have to agree to the connections. It is recommended that a neighborhood gateway connection inventory be developed by the county, in cooperation with FDOT, for the walk access locations identified in the station area concept plans. The inventory would identify each station area residential complex and neighborhoods and locations of possible gateway connections. It would also identify the type of improvement needed at each location and prioritize the locations and improvements.

A wayfinding plan is also recommended for neighborhood gateways. Like the bicycle network wayfinding plan, the pedestrian network plan would identify differing types of wayfinding needed and the branding of wayfinding signs and markers.

Gateway designs and improvements would be completed once the inventory and wayfinding plans are completed.

*Table 28. Neighborhood Gateways*

Lead	County or TPO
Partners / Participants	<ul style="list-style-type: none"><li>• TPO</li><li>• County (RER and DTPW)</li><li>• PD&amp;O</li></ul>

	<ul style="list-style-type: none"> <li>• R&amp;B</li> </ul>
Key Products / Outcomes	<ul style="list-style-type: none"> <li>• Neighborhood gateway inventory</li> <li>• Station area pedestrian wayfinding guidelines and plan</li> <li>• Gateway designs and improvements</li> </ul>
Cost Estimates	<ul style="list-style-type: none"> <li>• \$800,000 – \$1.5 million</li> </ul>
Funding Source(s)	<ul style="list-style-type: none"> <li>• Local</li> <li>• Federal</li> </ul>

Table 29 Summary of Implementation Strategy

Implementation Strategy	Description	Lead	Partner/Participants	Key Products/Outcomes	Cost Estimate
<b>Corridor Brand and Transformational Story</b>	Develop a brand and transformational story to support and sustain the evolution. The brand could expand beyond land use and transportation but remain aligned with the established SMART Program brand.	DTPW	<ul style="list-style-type: none"> <li>• FDOT</li> <li>• TPO</li> <li>• PD&amp;O</li> <li>• R&amp;B</li> </ul>	<ul style="list-style-type: none"> <li>• Kendall Vision brand (complements SMART Program brand)</li> <li>• High-level vision and corridor transition story posted on County / TPO websites</li> </ul>	\$600,000 - \$800,000
<b>Kendall Drive Potential Future Improvements</b>	The PD&E Study will identify specific improvements to Kendall Drive, most importantly the locally preferred premium transit alternative. It will identify roadway cross sections, including bike and pedestrian improvements, and recommend station locations and amenities.	FDOT	<ul style="list-style-type: none"> <li>• DTPW</li> <li>• TPO</li> <li>• PD&amp;O</li> <li>• R&amp;B</li> </ul>	<ul style="list-style-type: none"> <li>• Locally preferred alternative (LPA)</li> <li>• Street cross-sections</li> <li>• Transit and traffic operations recommendations</li> </ul>	The outcome of the PD&E Study will determine the approximate cost.
<b>Complete Street Classification and Improvements</b>	Transform the existing roadways into complete streets in a two-step process: <ol style="list-style-type: none"> <li>1. Classify streets using the local and appropriate standard</li> </ol>	DTPW	<ul style="list-style-type: none"> <li>• TPO</li> <li>• FDOT</li> </ul>	<ul style="list-style-type: none"> <li>• Complete streets classifications for all existing corridor streets               <ul style="list-style-type: none"> <li>○ Public map</li> <li>○ GIS layer</li> </ul> </li> <li>• Complete streets classification report describing method used for classifications</li> </ul> <p>Priority, timing, and extent of complete street</p>	\$700,000 – \$1,000,000

				planning and design projects	
	2. Define planning, design, and improvement projects	DTPW or FDOT	<ul style="list-style-type: none"> <li>• TPO</li> <li>• County (RER)</li> <li>• FDOT (for state streets)</li> <li>• PD&amp;O</li> <li>• R&amp;B</li> </ul>	<ul style="list-style-type: none"> <li>• Final design plans for bid</li> <li>• Estimated construction costs</li> <li>• Project bids</li> </ul> Complete street improvements	Approximately \$3 million - \$8 million/mile depending on final design
<b>Corridor Bike Path Network and Improvements</b>	Propose a bicycle path network that provides multimodal access to transit stations and to destinations in the station areas.	FDOT & DTPW	<ul style="list-style-type: none"> <li>• TPO</li> <li>• PD&amp;O</li> <li>• R&amp;B</li> </ul>	<ul style="list-style-type: none"> <li>• Network branding</li> <li>• Defined corridor bike network</li> <li>• Wayfinding guidelines</li> </ul> Short term treatments and improvements	\$2 million - \$3 million
<b>Prototype Transit-Oriented Community Area Plan</b>	Develop a prototype TOC Area Plan that includes: <ul style="list-style-type: none"> <li>- A market feasibility study</li> <li>- A phased development program</li> <li>- A development plan that adheres to TOC targets</li> <li>- Funding strategies</li> </ul>	RER	<ul style="list-style-type: none"> <li>• DTPW</li> <li>• PO&amp;D</li> <li>• TPO</li> <li>• R&amp;B</li> </ul>	<ul style="list-style-type: none"> <li>• Market Feasibility study</li> <li>• Development pro forma</li> <li>• Development program</li> <li>• Development plan</li> </ul>	\$500,000 - \$1 million
<b>Transit-Oriented Community Area Plan</b>	Based on the results on the Prototype Plan, develop a corridor wide TOC Plan that incorporates the same elements as the Prototype	RER	<ul style="list-style-type: none"> <li>• DTPW</li> <li>• PO&amp;D</li> <li>• TPO</li> <li>• R&amp;B</li> </ul>	<ul style="list-style-type: none"> <li>• Market feasibility study</li> <li>• Development pro forma</li> <li>• Development program</li> <li>• Development plan</li> </ul>	\$3 million - \$5 million

	plan with refinements based on lessons learned				
<b>Neighborhood Gateways</b>	Neighborhood gateways are pedestrian and bicycle connection points between discreet housing areas (multifamily complexes and single-family neighborhoods), existing or proposed transit-oriented community area streets, and/or roads leading to transit stations.	County or TPO	<ul style="list-style-type: none"> <li>• TPO</li> <li>• County (RER and DTPW)</li> <li>• PD&amp;O</li> <li>• R&amp;B</li> </ul>	<ul style="list-style-type: none"> <li>• Neighborhood gateway inventory</li> <li>• Station area pedestrian wayfinding guidelines and plan</li> <li>• Gateway designs and improvements</li> </ul>	\$800,000 – \$1.5 million

## 8.0 Summary

The information in this report outlines and describes the steps needed to implement the Kendall Corridor Vision (Kendall Corridor Land Use Scenario and Visioning Planning Study). Both studies further the goals and objectives of the Strategic Miami Area Rapid Transit (SMART) Program and the Comprehensive Development Master Plan (CDMP) and both were developed in coordination with the Kendall Corridor Project Development and Environment (PD&E) study led by the Florida Department of Transportation (FDOT).

Specifically, this report provides:

- A set of clear and coordinated planning and design guidelines for TOCs in station areas and multimodal access to and at stations.
- Fourteen (14) station area strategies incorporating the TOC design guidelines.
- Strategy and project recommendations for implementation including lead agencies, priority, and timing.

**Multimodal accessibility** is the foundational framework underpinning the principles, guidelines, and plans presented in this report. **Accessibility** is improved by either getting closer to preferred destinations (increasing the **proximity** of destinations) or by getting to destinations faster (increasing the **travel speed** to the destinations). But the two are inversely related, resulting in an inherent tension often left unresolved by current land use practices (which focuses on proximity) and transportation planning practices (which focuses on speed-based mobility). The multimodal accessibility framework addresses this tension by keeping both in focus through complete trip travel time equilibrium (the invisible hand guiding the evolution of cities).

The SMART Program is intended to address the multimodal accessibility relationships in six selected corridors in the county. The Kendall corridor is one of the six corridors, and its current land development pattern and transportation network were created for travel via automobiles. Transforming the development patterns and transportation network requires an integrated land use and transportation planning process guided by the multimodal accessibility framework.

The **Planning and Design Guidelines** in this report translate the multimodal accessibility construct into actionable planning and design considerations supporting the corridor's transformation.

A **Corridor Concept Plan** envisions the fundamental transformation of the Kendall Corridor from a predominantly suburban, auto-oriented context to a multimodal context. Premium transit stations along the corridor will be a network focal points or hubs and network hubs reorient land development patterns and pedestrian, bicycle, and transit networks.

**Station area concept plans** for the potential station areas and place types defined in the draft Kendall Corridor Vision study show how street networks can be organized to best support walk and bike access to transit stations and to destinations within each station area. They provide a generalized framework for property owners, developers, and designers to use when creating the future of the Corridor. As summary of existing land development characteristics (acreage, building areas, etc.) is included for the entire station area and the transit-oriented community area parcels within the station area. TOD place type targets, defined in the Kendall Corridor Vision, determine the additional development needed in the station area

to meet activity targets (people plus jobs). The station area concept plans generated specific strategies and improvements included in the implementation plan.

Lastly, the **Implementation Plan** includes the actions, strategies, and projects needed to guide the substantive transformation of the Kendall Corridor from a predominantly suburban, auto-oriented context to an urban, multimodal context. Five actionable implementation strategies are recommended along with the critical information needed to advance it from plan to action.