



CORAL RIDGE COUNTRY CLUB ESTATES

NEIGHBORHOOD MOBILITY MASTERPLAN

Coral Ridge Country Club Estates

Neighborhood Mobility Masterplan

August 2015

Prepared for: Coral Ridge Country Club Estates
and
The City of Fort Lauderdale
Transportation and Mobility Department

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1 INTRODUCTION

PROJECT BACKGROUND

Coral Ridge Country Club Estates is an established, vibrant community located on the Intercoastal Waterway in Fort Lauderdale, Florida. Over time, community members have expressed a desire for a safer and more comfortable multimodal environment. In recognition of these desires, the City of Fort Lauderdale initiated the Coral Ridge Country Club Estates Neighborhood Mobility Masterplan.

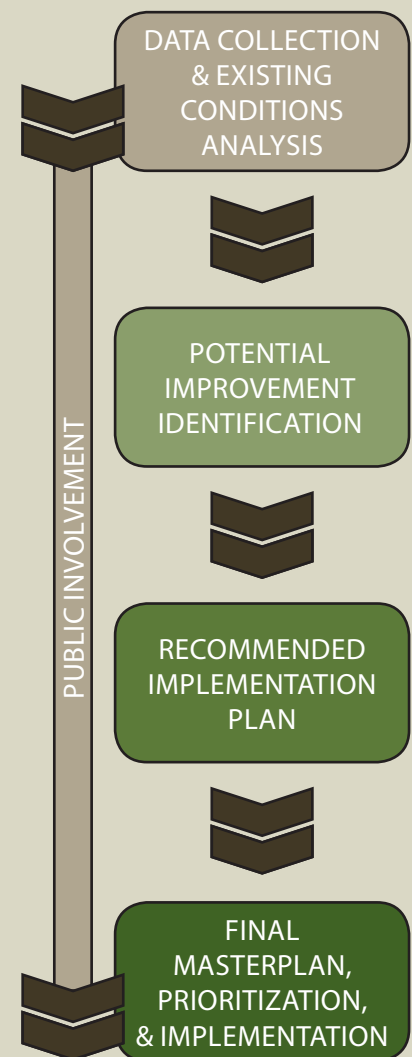
The City is experiencing a resurgence in development and is working to transform itself into a multimodal, active, vibrant community. In order to support this growth and change, the City is working to complete Neighborhood Mobility Master Plans that aim to address transportation, mobility, and access at the neighborhood level in a context sensitive and publicly informed manner.

The Coral Ridge Country Club Estates Neighborhood Mobility Masterplan examined the existing and future multimodal transportation system; the existing and future land uses; the demographics; and the crash history to better understand the issues in and around the neighborhood. In addition, the community was invited to provide input at various stages throughout the project through a series of public workshops. Based on the analysis and public input, a number of strategies were developed to calm traffic and enhance the pedestrian and bicycling environment in the neighborhood. Together, these strategies will enhance the accessibility, comfort, and overall livability within and around the Coral Ridge Country Club neighborhood.

STUDY PROCESS

The Coral Ridge Country Club Estates Neighborhood Mobility Masterplan was conducted over a period of eight months, beginning in January of 2015 and ending in August 2015. The project team took a “blank slate” approach, with no assumptions on the issues or needs coming in. This allowed the community members, supported by data and analysis, to identify the issues and importance of those issues. This process was completed in four phases, as seen in Figure 1. Beginning with data collection and analysis and stakeholder involvement, phase one identified the issues and opportunities in the neighborhood. In phase two, a general menu of potential improvements were identified and presented to the community. The community was then asked to choose the types of strategies they would like to see implemented in the neighborhood. In phase three, the improvement types decided on in phase two were applied to the specific issue and opportunity areas identified in phase one. Additionally, planning level cost estimates and project timing were developed for the improvements. These were presented to the community and the feedback received was used in phase four to create the final masterplan. Phase four is ongoing, and includes a final prioritization developed between the community members and the City of Fort Lauderdale as well as the implementation of the projects as funds become available.

FIGURE 1
STUDY PROCESS



REPORT ORGANIZATION

This report is organized into five sections as follows:

- 1. INTRODUCTION**
Describes the study purpose and background, the process, and the study area.
- 2. EXISTING & FUTURE CONDITIONS**
A comprehensive overview of the existing and future conditions in and around the neighborhood, including analysis of the demographics; land use and proposed developments; existing traffic calming devices; multimodal transportation environment; and safety aspects.
- 3. COMMUNITY ENGAGEMENT**
Describes the public involvement activities conducted throughout the study, including a high level overview of the results.
- 4. SYNTHESIS**
Combines the results of the data analysis and the public involvement efforts to create an overall assessment of the needs, desires, and opportunities in the community.
- 5. MASTERPLAN**
Delineates the recommended strategies to address the needs, desires, and opportunities uncovered throughout the project. Also discusses the planning level cost estimates for the recommendations in the study.
- 6. NEXT STEPS**
Presents the next steps for the community, including a discussion of the prioritization of the recommendations based on the prioritization methods approved in the City's [Connecting the Blocks](#) plan. This is meant to be a starting point for future prioritization efforts by the City and the Community.

STUDY AREA

Coral Ridge Country Club Estates is an established neighborhood in Northeast Fort Lauderdale. Figure 2 displays the project study area. It is bounded by Federal Highway (US 1) to the west, Oakland Park Boulevard to the south, the Intercoastal Waterway to the east, and Commercial Boulevard to the north.



Neighborhood Entrance on Bayview Drive. Credit: Kittelson & Associates, Inc.



Typical Neighborhood Street. Credit: Kittelson & Associates, Inc.

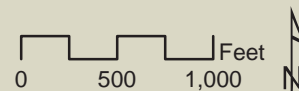


Typical Neighborhood Street. Credit: Kittelson & Associates, Inc.



Typical Neighborhood Street. Credit: Kittelson & Associates, Inc.

FIGURE 2
STUDY AREA







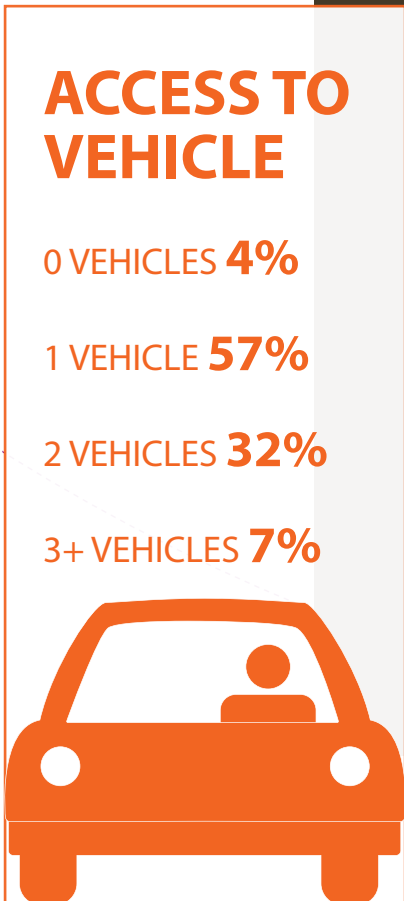
2 EXISTING & FUTURE CONDITIONS

DEMOGRAPHICS

According to 2013 estimates from the U.S. Census Bureau, the Coral Ridge County Club neighborhood is home to 4,932 people. Of those, 53 percent are men and 47 percent are women. 42 percent of the population are either under the age of 18 or over the age of 65. These populations are less likely to drive, and therefore require adequate pedestrian and bicycle facilities to get around. Most people have access to at least one vehicle, and 39 percent have access to two or more vehicles. The median household income is around \$95,000 per year, which is higher than the city as a whole, where the median income is \$58,000. 52 percent of the population has obtained a bachelor's degree or higher. As income and education levels increase, people become more likely to choose to make trips by walking and biking as opposed to driving, especially for recreational trips.¹ Even though most people have access to a vehicle, adequate pedestrian and bicycle facilities that connect to educational, recreational, and entertainment destinations is important for communities.

The central location of the neighborhood in the City of Fort Lauderdale allows for short commute times and a greater transportation mode split. 46 percent of the population commutes less than 10 miles to work, and 11 percent of the population uses alternative modes of transportation to commute to work. This is slightly higher than the City's average of 9 percent, which may be due to the above average walkability of the neighborhood.

¹ (Kuzmyak, Walters, Bradley, & Kockelman, 2014)



MODE SHARE

WORKERS AGE 16+

75.7%
DRIVE ALONE

6.7%
TELECOMMUTE

5.2%
Walk

4.7%
Transit

3.6%
CARPOOL

3.6%
OTHER

0.5%
BIKE

COMMUTE DISTANCE

45.8%
LESS THAN 10 MILES

MEDIAN HOUSEHOLD INCOME

\$94,045

32.8%
10 TO 24 MILES

9.5%
25 TO 50 MILES

11.9%
GREATER THAN 50 MILES

EDUCATION

AGE 25+

6%
LESS THAN
HIGH SCHOOL

21%
HIGH SCHOOL

16%
SOME COLLEGE

5%
ASSOCIATES
DEGREE

29%
BACHELORS
DEGREE

23%
MASTERS DEGREE
OR HIGHER

LAND USE AND DESTINATIONS

Figure 3 displays the Existing Land Use in Coral Ridge Country Club Estates. The neighborhood is unique in that while it is comprised largely of single- and some multi-family homes, it is surrounded by commercial and medical districts. It is also home to the Coral Ridge Mall (a regional shopping center with a movie theatre); the Coral Ridge Country Club and Golf Course (another regional attractor); Cardinal Gibbons High School; Bayview Park; a number of other retail and commercial uses; several hospitals, schools, and churches; and some of the last remaining developable land in Fort Lauderdale. That land is currently being developed as a retail shopping center, a linear park, and 45 future homes.

Because of this land use mix, it is possible to complete some daily activities without the need for a car and Coral Ridge Country Club Estates ranks 28 out of 61 neighborhoods in Fort Lauderdale for walkability, with a Walk Score of 56.² Additionally, this unique mix of uses means that the neighborhood must accommodate both residents and outside visitors on a regular basis.

² (Walk Score, 2015)



Bayview Park. Credit: Kittelson & Associates, Inc.



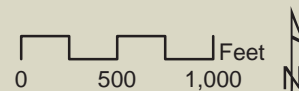
Coral Ridge Mall. Credit: Kittelson & Associates, Inc.

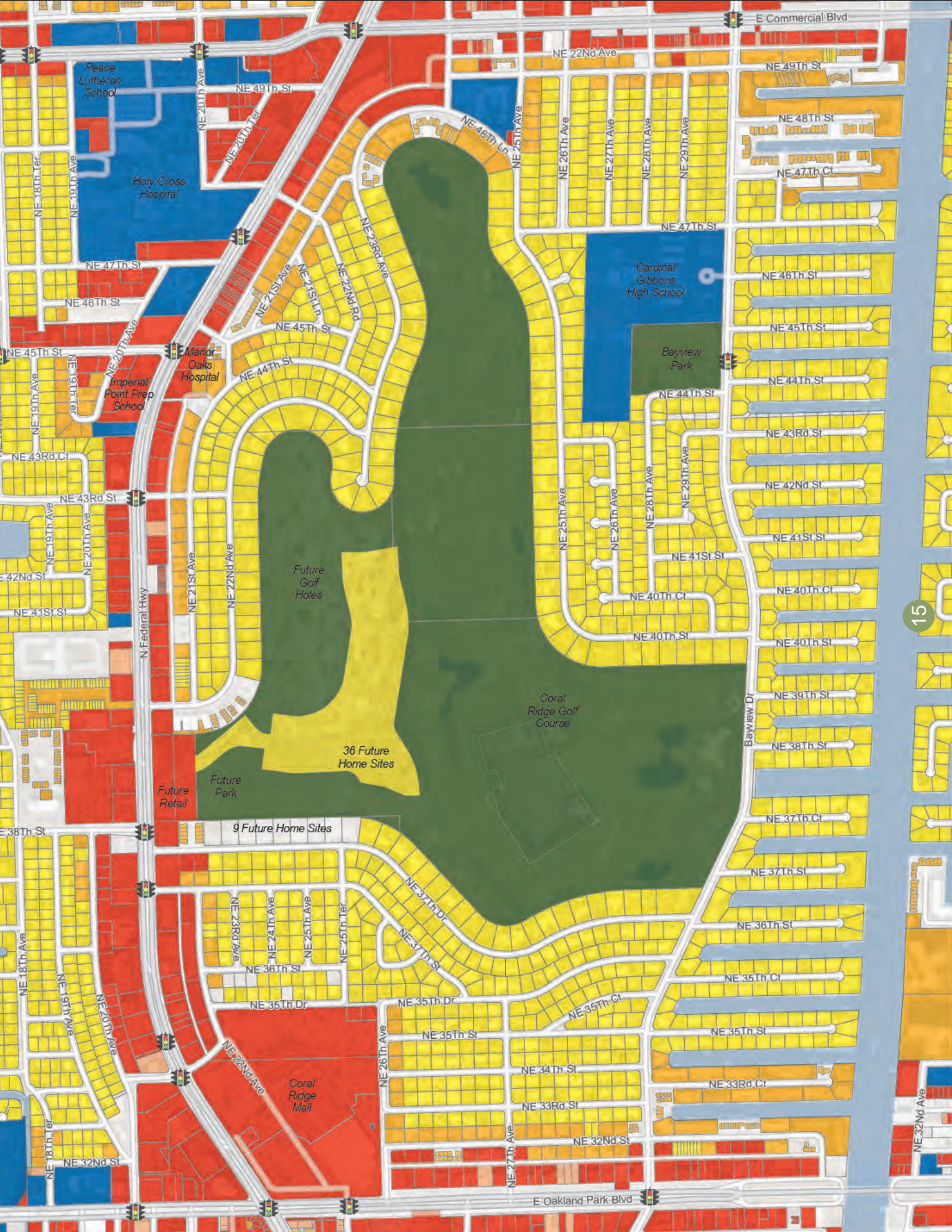
FIGURE 3
EXISTING LAND USE

Legend

Existing Land Use

- Vacant
- Single Family Residential
- Multi-Family Residential
- Commercial
- Mixed Use
- Recreation
- Industrial
- Institutional





STREET NETWORK

To support multimodal activity and development, the City of Fort Lauderdale has classified its streets according to the types of users as well as the surrounding land uses and environmental factors in its *Connecting the Blocks* plan. As shown in Figure 4, there are four types of streets found in and around Coral Ridge Country Club Estates:

Commercial Boulevards

Serve primarily commercial or mixed uses and act as main thoroughfares that connect activity centers and support constant medium- to high-volumes of traffic at moderate speeds. They also serve as primary transit routes and routes for goods movement. In general, they should include dedicated bicycle facilities, pedestrian enhancements, and transit accommodations.

Commercial Avenues

Connect development nodes, and act as secondary facilities to Commercial Boulevards, serving a more local population. They may have lower density uses with larger setback than would be found in activity centers, but they may also be transitioning to higher densities. They support transit routes and are still have somewhat higher speeds than other avenues. They should have wide sidewalks and bike lanes.

Residential Avenues

Are smaller in scale than Commercial Avenues and serve as lower-speed alternative routes that connect neighborhoods. Surrounding land uses are mainly residential and primarily carry local traffic. They also serve as primary pedestrian and bicycle routes, and may serve as local transit routes; therefore, they should have sidewalks and bicycle lanes.






Neighborhood Streets

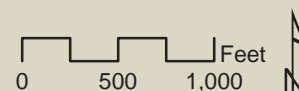
Can be commercial or residential in nature. They have low speeds and serve low traffic volumes. They are also considered essential for pedestrian and bicycle transportation. Depending on the speeds and volumes, vehicles may share the street with pedestrians and bicyclists or there may be designated pedestrian and bicycle facilities.

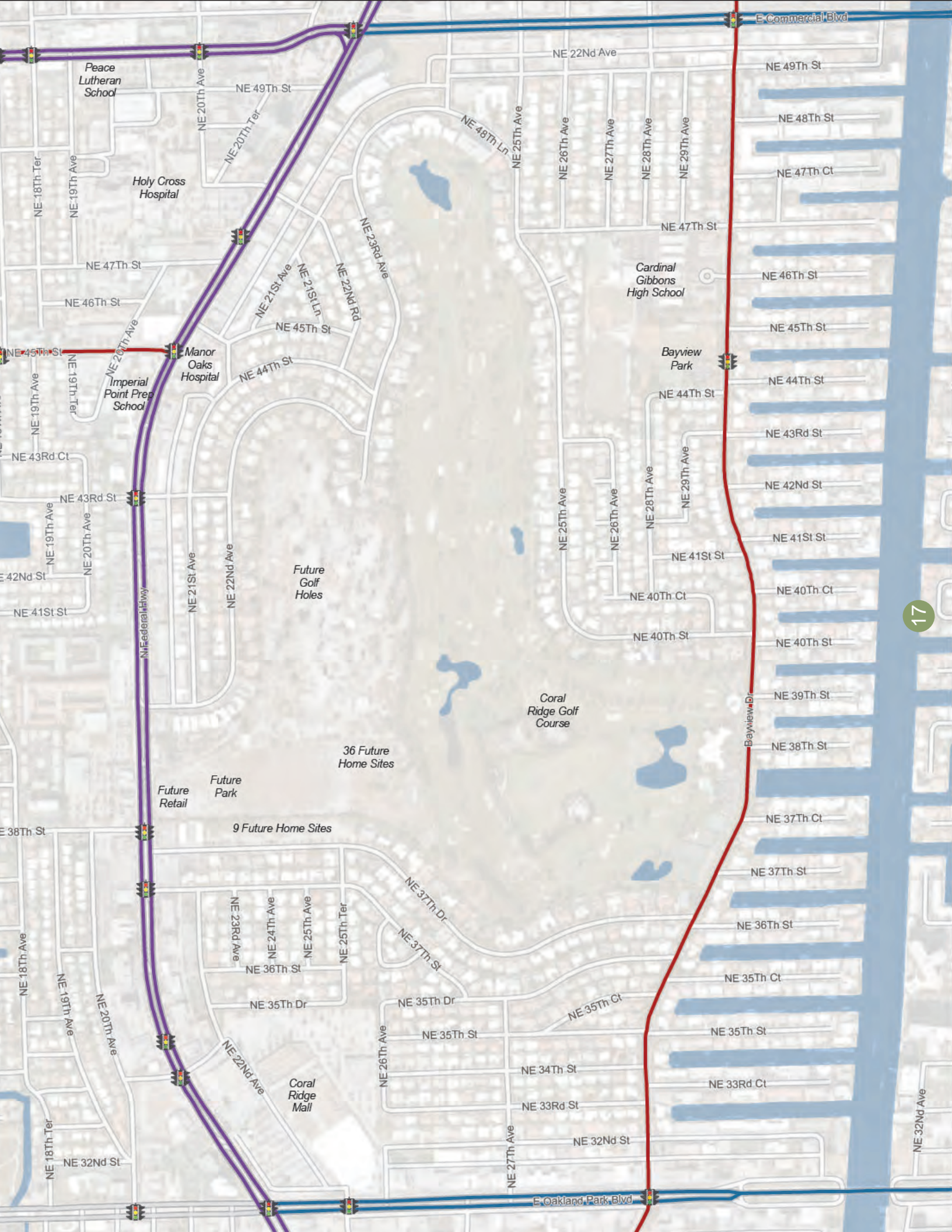
FIGURE 4
STREET NETWORK

Legend

Roadway Classification

-  Commercial Boulevard
-  Commercial Avenue
-  Residential Avenue
-  Neighborhood Street
-  Signal





EXISTING PEDESTRIAN AND BICYCLE FACILITIES

As can be seen in Figure 5, while there generally are sidewalks surrounding much of the neighborhood on the major roads, there are very few internal pedestrian and bicycle connections. While there are a number of destinations that people may wish to walk to, the lack of pedestrian facilities may make walking more difficult than driving. The exception to this is on Bayview Drive, where there is a sidewalk on at least one side of the road through the entire community. However, it is important to note that the sidewalk south of Bayview Park is located on the east side of the road, where the major destinations are on the west side. These destinations include Coral Ridge Golf Course, Bayview Park, and Cardinal Gibbons High school. The sidewalk alternates sides, requiring pedestrians to cross Bayview where there are not always crossings. Due to the lack of pedestrian infrastructure in that area, residents living in the southwest portion of the neighborhood may have a difficult time reaching those destinations on foot.

There is also a pedestrian connection to Coral Ridge Mall on NE 33rd Street and NE 32nd Street. However, there are no sidewalk connections within the neighborhood to connect to them. Additionally, there is no connectivity to the mall on NE 35th Drive and there is a fence blocking the mall off from the neighborhood on that road as well as NE 26th Avenue. Because of this, it is difficult to access the mall on foot, as the fence requires people to walk out of their way to access their destination. On the north side, the most noticeable issues is that sidewalks are lacking along Commercial Boulevard to connect to the transit infrastructure and surrounding retail.

There are no marked bicycle facilities in or around the community. While there are paved shoulders on parts of Federal Highway and Bayview Drive, these shoulders measure less than 4 feet in width. The high traffic volumes and speeds on Federal Highway create an unfriendly environment for bicyclists, and a shared use path or protected, marked facilities would be needed to create a more inviting environment for all riders. Bayview Drive is a well-known (although unsigned) bicycle route in the City due to its location as a parallel route to Federal Highway. However, the lack of comfortable bicycle facilities may cause it to be less accessible for recreational or inexperienced cyclists, as well as for children.





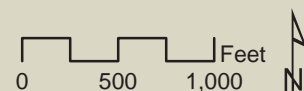
Cyclist on Bayview Drive. Credit: Kittelson & Associates, Inc.

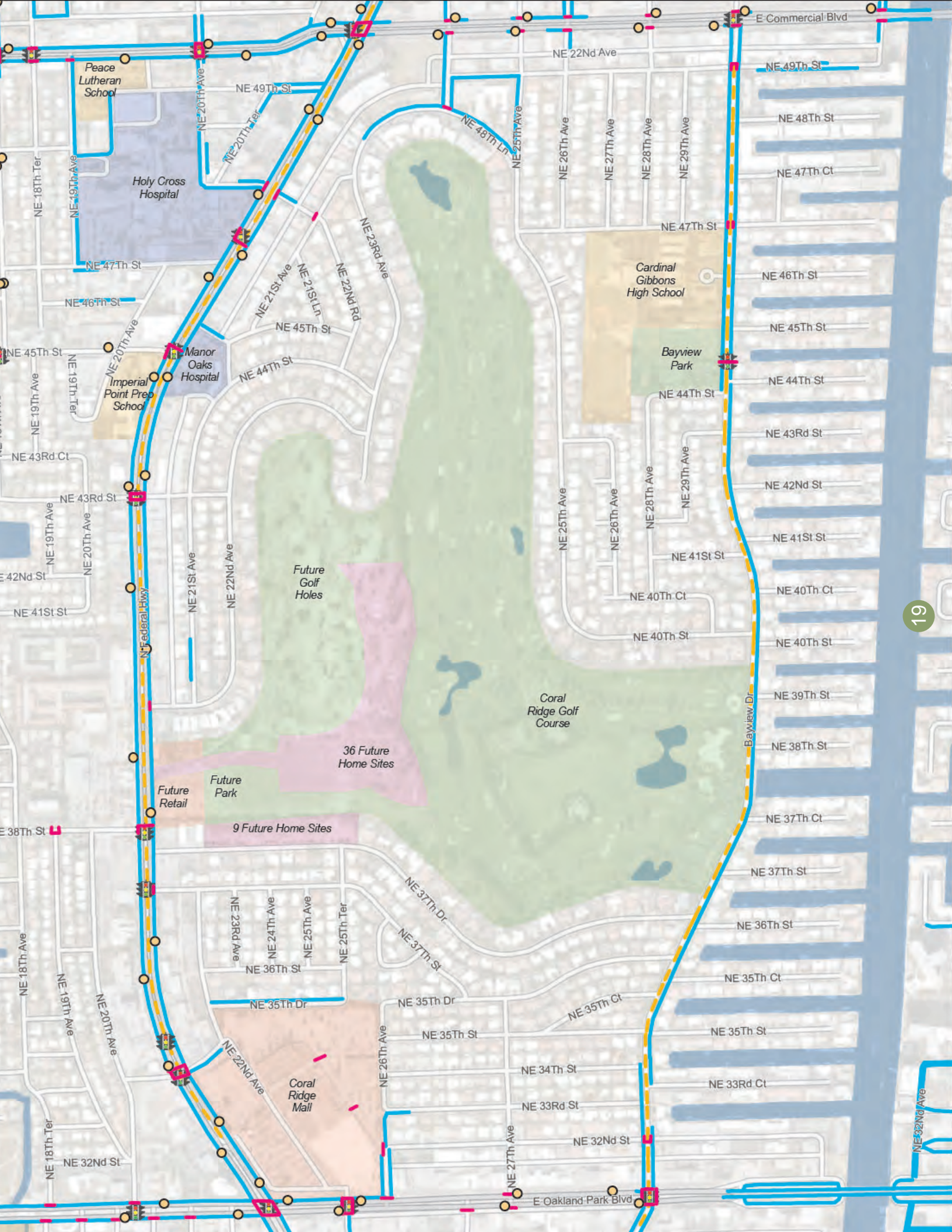
FIGURE 5
EXISTING BICYCLE
AND PEDESTRIAN
FACILITIES

Legend

Facilities

-  Crosswalk
-  Sidewalk
-  Paved Shoulder (<4')
-  Bus Stop
-  Signal





VEHICULAR ACCESS AND INTERSECTION CONTROLS

Figure 6 shows vehicular access points for Coral Ridge Country Club Estates and intersection controls within the neighborhood. A number of methods have been employed in the neighborhood to assist in traffic calming. To begin, access and egress are restricted in many areas. With the exception of signalized intersections, almost every exit allows only right turns. In most cases, it is permissible to turn left in, however traffic volumes and speeds make these movements less desirable than entering or exiting at signals.

Almost every intersection in the neighborhood has a form of traffic control such as a stop sign or yield sign on one or more legs. Figure 6 displays these controls. Bayview Drive, NE 37th Street, NE 22nd Ave, NE 25th Ave, and NE 47th Street function as through streets, with side streets generally yielding to traffic on those streets. Additionally, streets that provide access to the neighborhood are generally given the through movement.



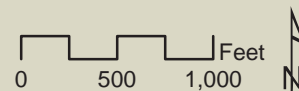
Typical Stop Controlled Intersection. Credit: Kittelson & Associates, Inc.

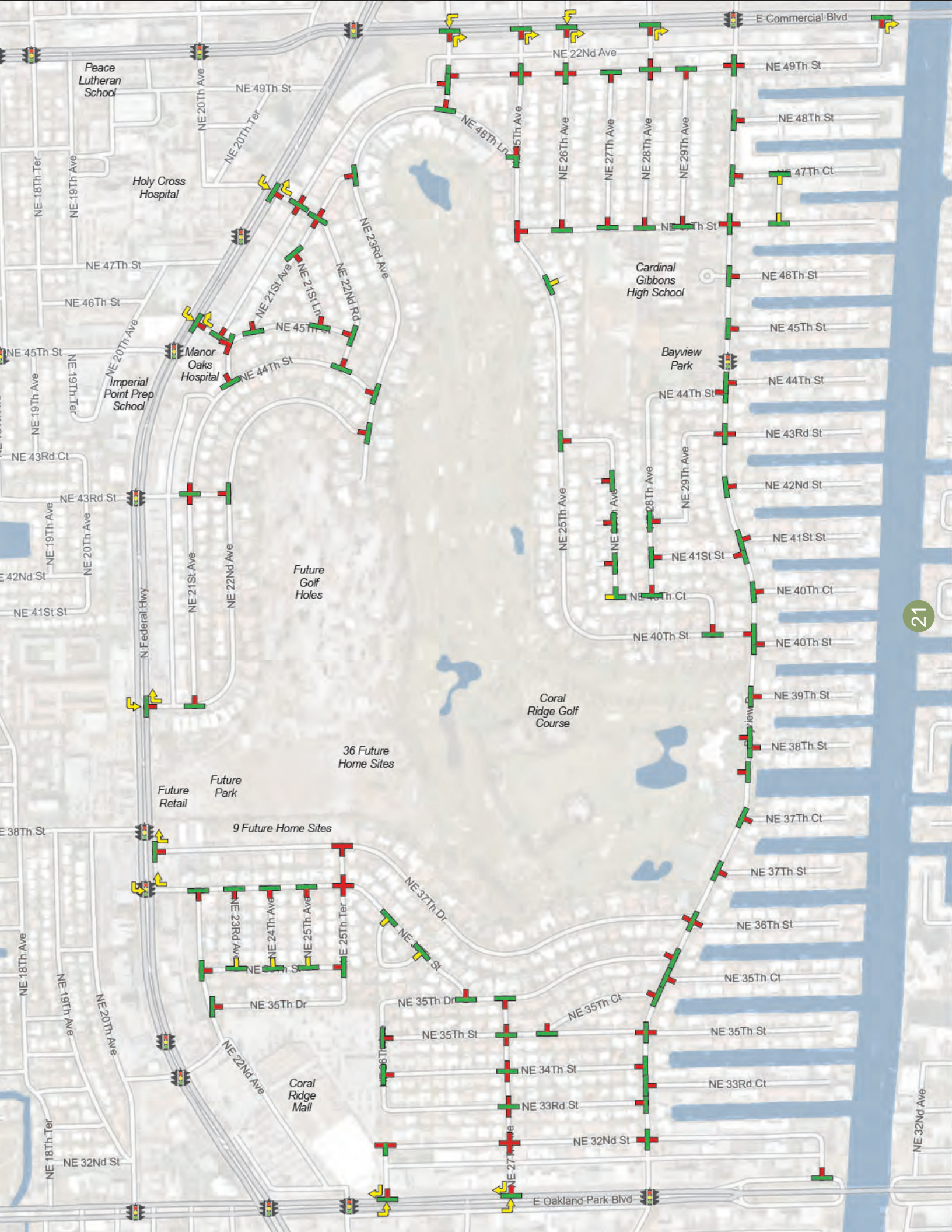
FIGURE 6
VEHICULAR ACCESS
AND INTERSECTION
CONTROLS

Legend

Facilities

-  Signal
-  Access Restriction
-  Intersection Control
-  Major Street
-  Yield
-  Stop





VEHICULAR TRAFFIC CALMING MEASURES AND POSTED SPEED LIMITS

Traffic calming measures in Coral Ridge Country Club Estates generally take the form of speed humps and road closures, as shown in Figure 7.

Speed humps are present on many streets within the neighborhood, particularly where there are long blocks that are uninterrupted by intersections. However, there is not a consistent pattern regarding their placement.

There are two street closures within the neighborhood. The first is on NE 25th Avenue between NE 32nd Street and NE 33rd Street, where only a pedestrian connection remains open. The second is along NE 35th Drive between NE 25th Terrace and NE 25th Avenue. Both road closures came about as a result of the South Neighborhood Roadway Plan, a plan funded by Coral Ridge Country Club Estates. The plan was not fully implemented and recommended further road closures. However road closures are no longer a desirable traffic calming feature, since they tend to increase traffic volumes on adjacent streets. Although these are not recommended, a map of the proposed road closures from the South Neighborhood Roadway Plan can be found in Appendix A.

Posted speed limits in Coral Ridge Country Club Estates range from 15 to 30 miles per hour (mph). The area speed limit is currently 25 mph and is posted at most entrances to the neighborhood. Along Bayview Drive, the posted speed limit is 30 mph, and there is a school zone in the vicinity of Cardinal Gibbons High School with a 15 mph speed limit from 7:35 to 8:05 AM and from 2:30 to 3:00 PM. Alleys within the neighborhood have 15 mph posted speed limits. Generally, 20 MPH is a preferable speed limit for neighborhood streets where pedestrians, bicycles, and cars may share the road.³

³ (Kulash, 2001)






Speed Hump on NE 25th Ave. Credit: Kittelson & Associates, Inc.





FIGURE 7
TRAFFIC CALMING MEASURES

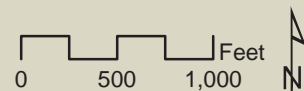
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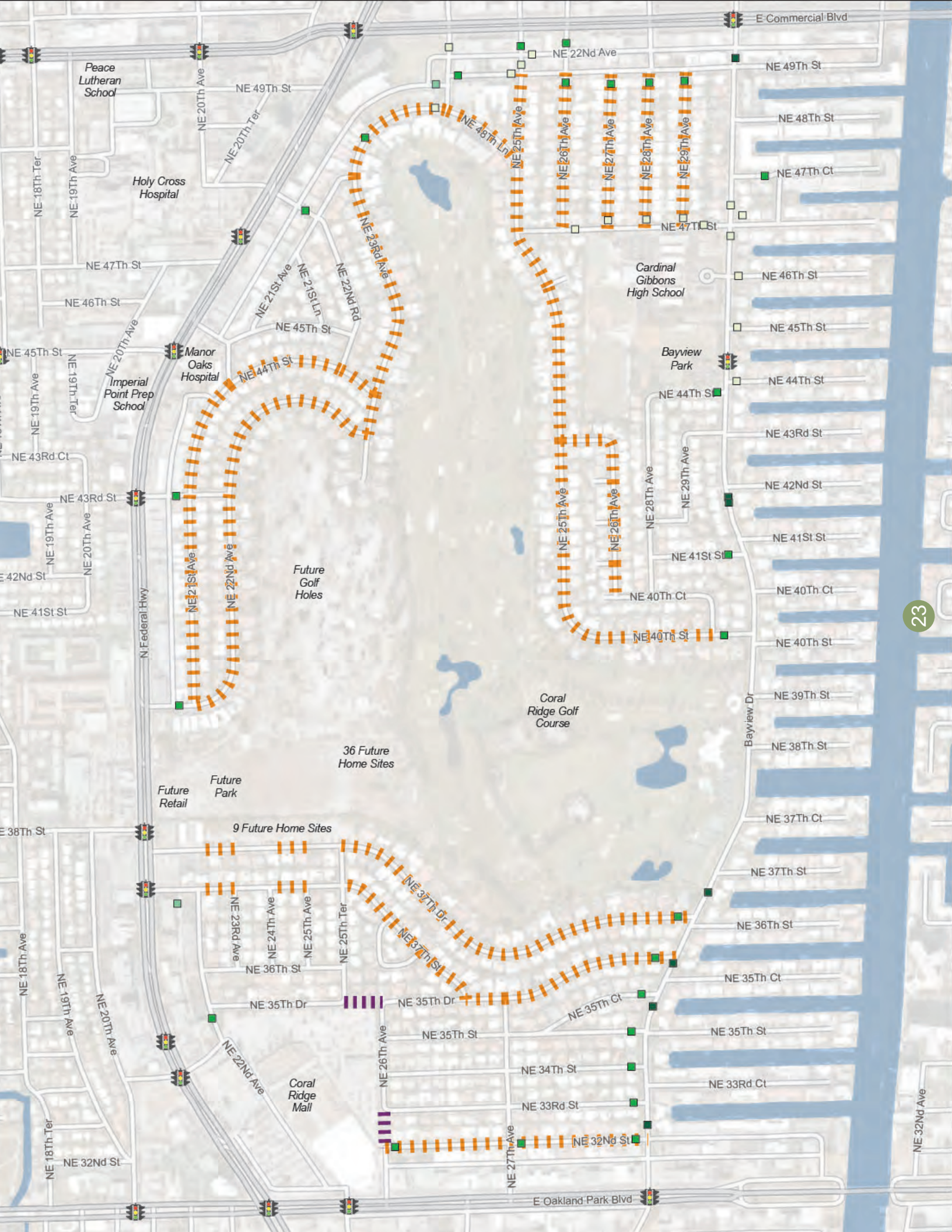
Facilities

-  Speed Humps
-  Road Closure
-  Signal

Speed Limit Signs

-  30 MPH
-  25 MPH Area Speed Limit
-  15 MPH
-  15 MPH School Zone





Peace Lutheran School

Holy Cross Hospital

Manor Oaks Hospital

Cardinal Gibbons High School

Bayview Park

Coral Ridge Golf Course

Future Golf Holes

36 Future Home Sites

Future Retail

Future Park

9 Future Home Sites

Coral Ridge Mall

E Commercial Blvd

NE 22Nd Ave

NE 49Th St

NE 48Th St

NE 47Th Ct

NE 47Th St

NE 46Th St

NE 45Th St

NE 44Th St

NE 43Rd St

NE 42Nd St

NE 41St St

NE 40Th Ct

NE 40Th St

NE 39Th St

NE 38Th St

NE 37Th Ct

NE 37Th St

NE 36Th St

NE 35Th Ct

NE 35Th St

NE 33Rd Ct

E Oakland Park Blvd

NE 32Nd Ave

NE 18Th Ter

NE 19Th Ave

NE 20Th Ave

NE 49Th St

NE 20Th Ter

NE 47Th St

NE 46Th St

NE 45Th St

NE 43Rd St

NE 19Th Ave

NE 42Nd St

NE 41St St

N Federal Hwy

NE 21St Ave

NE 22Nd Ave

NE 21St Ave

NE 21St Ln

NE 22Nd Rd

NE 45Th St

NE 44Th St

NE 25Th Ave

NE 26Th Ave

NE 27Th Ave

NE 28Th Ave

NE 29Th Ave

NE 28Th Ave

NE 29Th Ave

NE 28Th Ave

NE 29Th Ave

NE 40Th Ct

NE 40Th St

Bayview Dr

NE 37Th Ct

NE 36Th St

NE 35Th Ct

NE 35Th St

NE 33Rd Ct

NE 18Th Ave

NE 19Th Ave

NE 20Th Ave

NE 38Th St

NE 23Rd Ave

NE 24Th Ave

NE 25Th Ave

NE 25Th Ter

NE 36Th St

NE 35Th Dr

NE 22Nd Ave

NE 26Th Ave

NE 35Th St

NE 34Th St

NE 33Rd St

NE 27Th Ave

NE 35Th Ct

NE 35Th St

NE 34Th St

NE 33Rd St

NE 32Nd St

NE 18Th Ter

NE 32Nd St

NE 20Th Ave

NE 22Nd Ave

NE 26Th Ave

E Oakland Park Blvd

VEHICULAR TRAFFIC VOLUMES

As part of this study, traffic information was collected in January 2015 for the AM peak and PM peak periods. This includes vehicular and pedestrian counts; vehicular speeds; and turning movement counts at select locations. A map of the data collection locations can be found in Appendix B. The speed and volume data is available upon request from the City of Fort Lauderdale.

When considering the average daily traffic shown in Figure 8, it becomes clear that most of the traffic is concentrated along Bayview Drive and in the northern portion of the neighborhood. This was expected on Bayview Drive, as it is a north/south alternative connection for Federal Highway and is classified as a Residential Avenue.

In general, local streets (Neighborhood Streets) should serve 1,500 vehicles per day or less and Residential Avenues, such as Bayview Drive, serve more than 1,500 vehicles per day.⁴ However, there are other streets in the northern portion of the neighborhood that see over 1,500 vehicles per day. While these are classified as Neighborhood Streets, they may be serving more as low volume Avenues. These include NE 21st Avenue north of NE 43rd Street and NE 48th Lane, which may serve student trips to Cardinal Gibbons High School as well as serving as access points to neighborhood businesses.

In general, the traffic volumes relate to neighborhood or business access points. With the exception of Bayview Drive, the traffic is higher in areas that serve business of other destinations and lower in areas that serve mainly to provide internal connectivity.

⁴ (Kulash, 2001)



Bayview Drive. Credit: Kittelson & Associates, Inc.

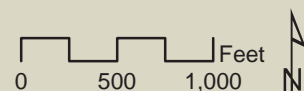
FIGURE 8
TRAFFIC VOLUMES

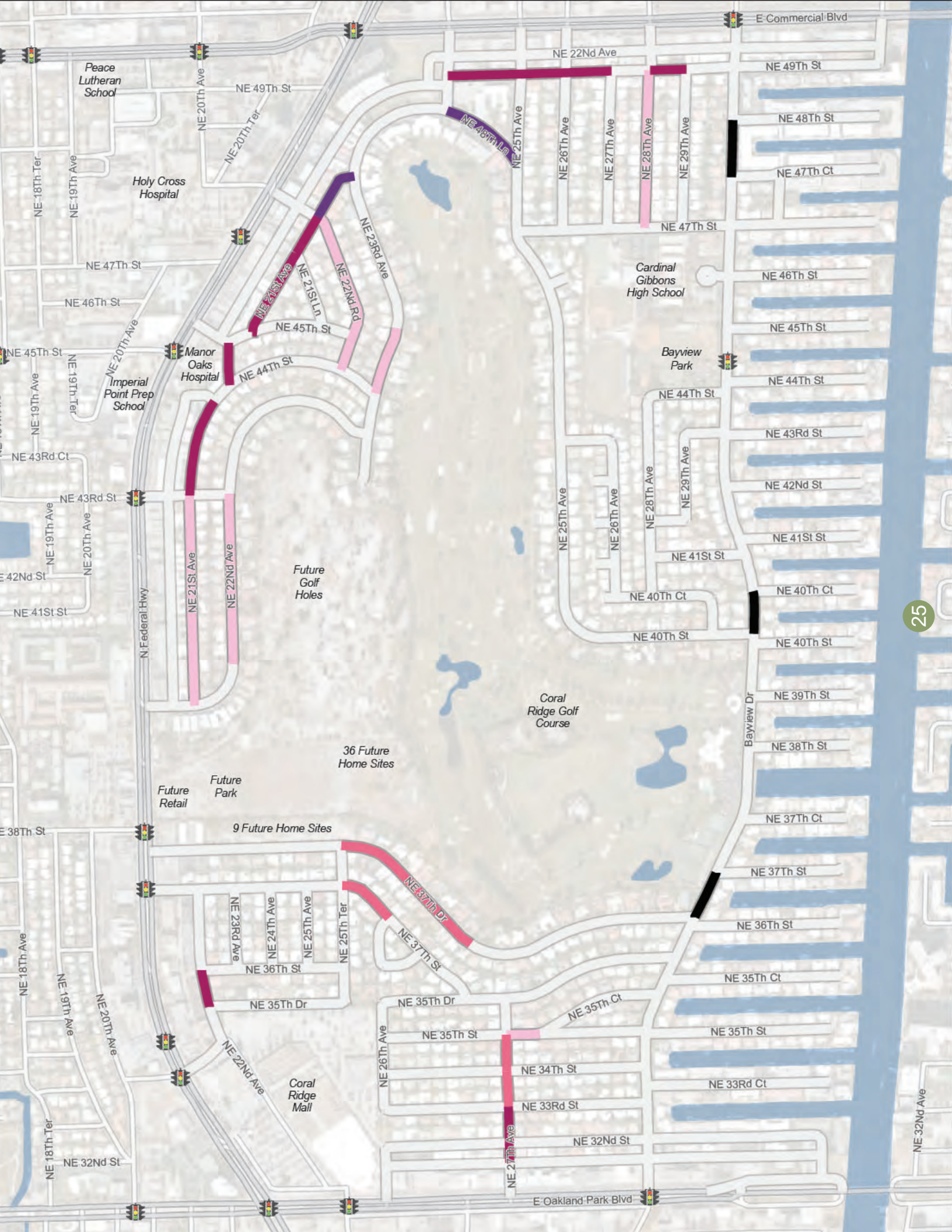
Legend

Average Daily Traffic

- No Data Collected
- 500 Vehicles or Less
- 500 - 1,000 Vehicles
- 1,000 - 1,500 Vehicles
- 1,500 - 2,500 Vehicles
- Greater than 2,500 Vehicles
- Signal

Note: Traffic volumes were collected at points along the roadway. These volumes were attributed to the entire segment where the count was located for analysis purposes, although actual volumes may vary.





E Commercial Blvd

NE 22Nd Ave

NE 49Th St

Peace Lutheran School

NE 49Th St

Holy Cross Hospital

NE 46Th Ln

NE 48Th St

NE 20Th Ave

NE 26Th Ave

NE 27Th Ave

NE 28Th Ave

NE 29Th Ave

NE 47Th Ct

NE 47Th St

NE 47Th St

Cardinal Gibbons High School

NE 46Th St

NE 46Th St

NE 45Th St

NE 21St Ave

NE 21St Ln

NE 22Nd Rd

NE 45Th St

Bayview Park

NE 44Th St

Manor Oaks Hospital

NE 44Th St

NE 44Th St

NE 43Rd St

NE 45Th St

NE 19Th Ave

NE 19Th Ave

NE 19Th Ave

NE 19Th Ave

NE 19Th Ave

NE 19Th Ave

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NE 19Th Ave

NE 19Th Ave

NE 19Th Ave

NE 19Th Ave

Future Golf Holes

NE 25Th Ave

NE 26Th Ave

NE 28Th Ave

NE 29Th Ave

NE 42Nd St

NE 41St St

NE 40Th Ct

NE 40Th Ct

NE 40Th St

NE 39Th St

NE 38Th St

NE 37Th Ct

NE 37Th St

NE 36Th St

NE 35Th Ct

NE 35Th St

NE 33Rd Ct

Coral Ridge Golf Course

36 Future Home Sites

Future Retail

Future Park

9 Future Home Sites

NE 37Th Dr

NE 37Th St

NE 23Rd Ave

NE 24Th Ave

NE 25Th Ave

NE 25Th Ter

NE 36Th St

NE 35Th Dr

NE 35Th Dr

NE 35Th St

NE 35Th Ct

NE 35Th St

NE 34Th St

NE 33Rd St

NE 32Nd St

Coral Ridge Mall

E Oakland Park Blvd

25

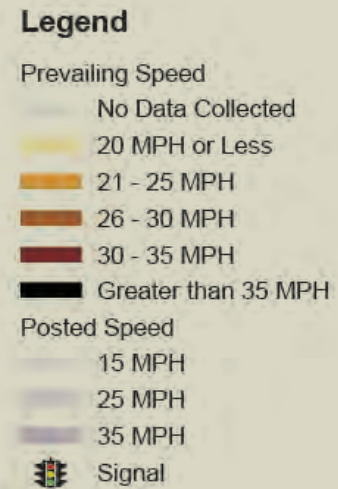
NE 32Nd Ave

VEHICULAR TRAFFIC SPEEDS

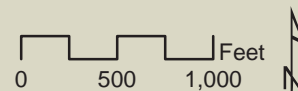
Speed data was collected at several locations throughout the community as well. A map of the data collection locations can be found in Appendix B. The speed and volume data is available upon request from the City of Fort Lauderdale. Based on this data, drivers generally exceed the posted speed limit of 25 miles per hour on, NE 22nd Avenue, NE 37th Street, NE 21st Avenue, and NE 49th Street. Prevailing speeds along Bayview Drive are also higher than the posted speed limit of 30 miles per hour, reaching up to 38 miles per hour. Additionally, it should be noted that construction was occurring along NE 37th Drive while the counts were collected. This may have affected the actual speeds.

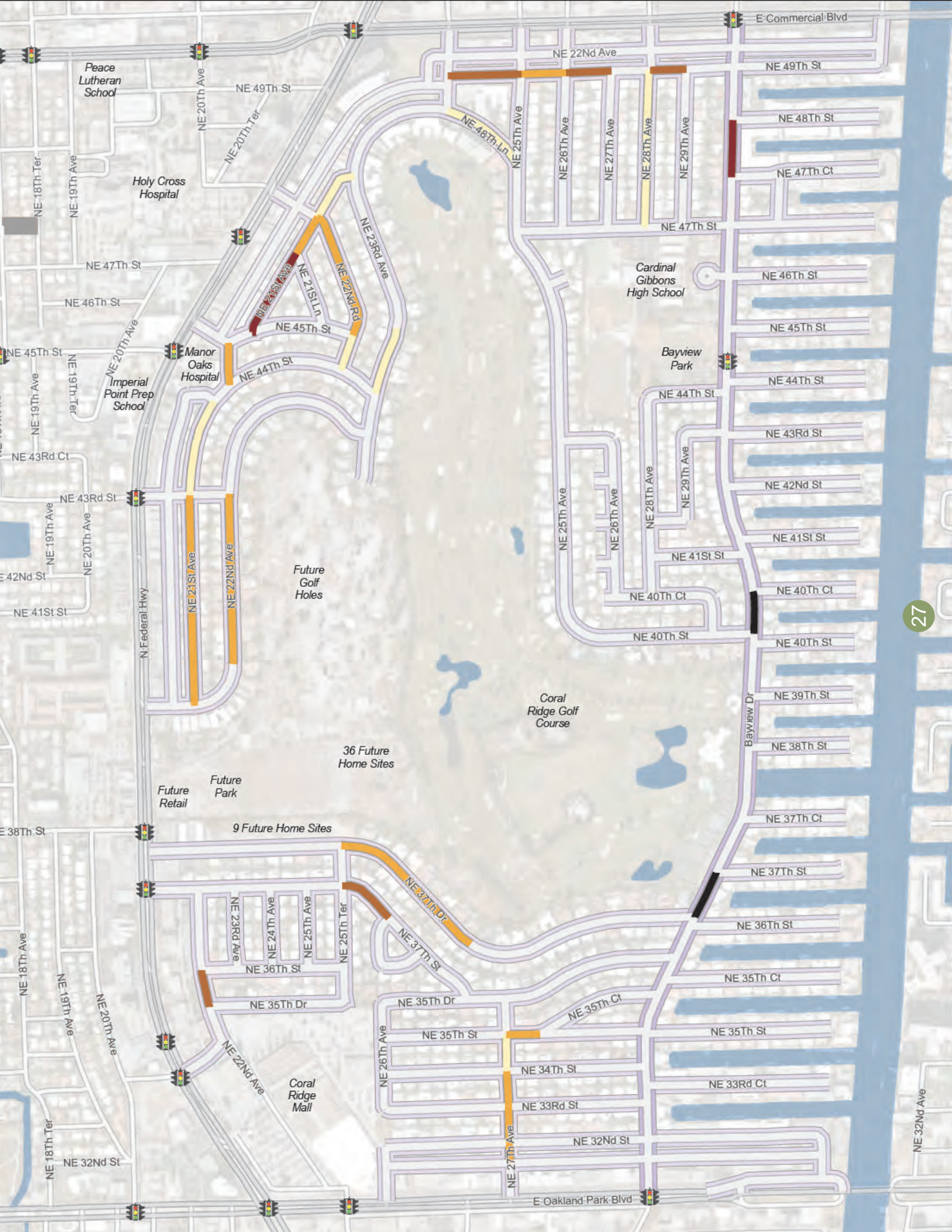
When the traffic speed results are evaluated relative to the placement of existing stop signs as compared to the speeds, the data suggests that drivers are either speeding in between stop signs or running them. This is true on NE 21st Avenue, NE 49th Street, and NE 27th Avenue, in particular. When considering the placement of speed humps and the locations where drivers are exceeding the speed limit, it appears that in general, drivers are less likely to exceed the speed limit in places where speed humps exist. However, even in some of those areas, drivers are still traveling faster than the desired speed of 20 mph in most cases. This suggests that a combination of measures may be needed to slow drivers down.

FIGURE 9
TRAFFIC SPEEDS



Note: Traffic speeds were collected at points along the roadway. These speeds were attributed to the entire segment where the count was located for analysis purposes, although actual speeds may vary.





Peace Lutheran School

Holy Cross Hospital

Manor Oaks Hospital

Imperial Point Prep School

Cardinal Gibbons High School

Bayview Park

Future Golf Holes

Coral Ridge Golf Course

36 Future Home Sites

Future Retail

Future Park

9 Future Home Sites

Coral Ridge Mall

INTERSECTION OPERATIONS







Existing vehicular traffic operations were analyzed for several intersections within Coral Ridge Country Club Estates using the traffic counts that were collected. The turning movement count data is available upon request from the City of Fort Lauderdale. The intersection analysis was performed at the intersections with the eight highest traffic volumes using the current Highway Capacity Manual analysis standards and focused on the worst-case intersections that have the highest traffic volumes.

Figure 10 summarizes the results of the intersection operations assessment. All of the highest-volume intersections analyzed within the neighborhood operate below capacity, with less than 85 percent of the traffic capacity used during the peak periods. Based on these results, the lower volume intersections are also estimated to operate below capacity.

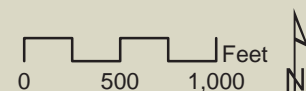
FIGURE 10
INTERSECTION
OPERATIONS

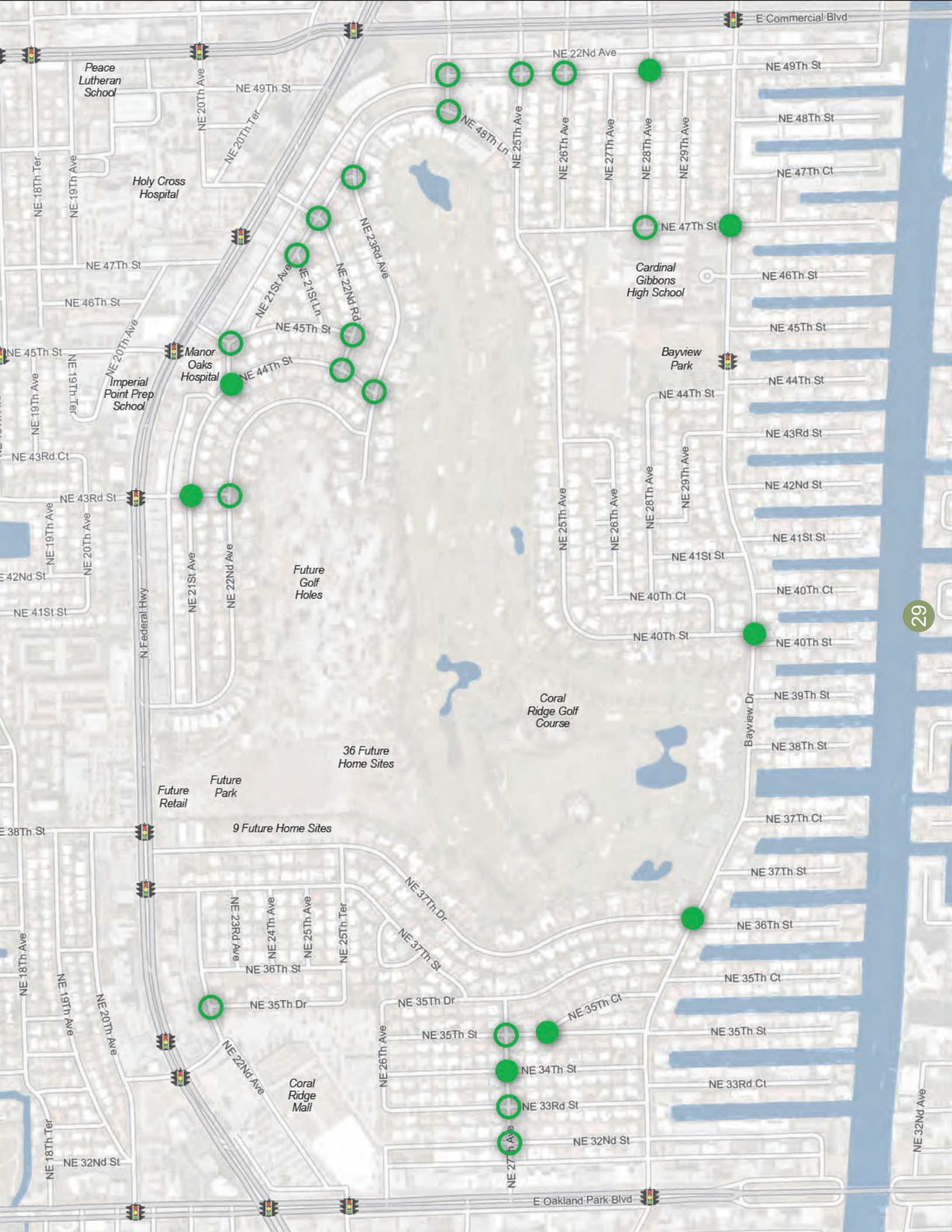
Legend

Intersection Operations

Key*		
	Capacity Analyzed	Capacity Estimated
	Poor (Over 100% Capacity)	
	Fair (85% - 100% Capacity)	
	Good (Below 85% Capacity)	
	Signal	

*Note: Solid circles designate representative intersections selected for analysis based on having the highest traffic volumes of count locations within the community.





29

Peace Lutheran School

Holy Cross Hospital

Manor Oaks Hospital

Imperial Point Prep School

Cardinal Gibbons High School

Bayview Park

Coral Ridge Golf Course

Future Golf Holes

36 Future Home Sites

Future Retail

Future Park

9 Future Home Sites

Coral Ridge Mall

E Oakland Park Blvd

E Commercial Blvd

NE 32nd Ave

PEDESTRIAN AND BICYCLE EXPERIENCE

As discussed earlier, the majority of streets within Coral Ridge Country Club Estates lack sidewalks and bicycle lanes. As such, pedestrians and bicyclists currently share the travel way with automobiles. While this situation may not pose concerns for certain streets, it creates safety conflicts when there is fast-moving traffic or high traffic volumes.

To assess the quality of the existing pedestrian and bicycle environment, traffic volumes and speeds were analyzed within the neighborhood. The analysis was also intended to assist in prioritizing needed improvements within the neighborhood. Figures 11 - 13 show the results of this evaluation. Bayview Drive was analyzed separately, as discussed later in this section. Neighborhood streets with low volumes (fewer than 500 vehicles per day) and low speeds (less than 20 miles per hour) were considered to have a more favorable environment for pedestrians and bicyclists sharing the travel way with automobiles. Streets with higher traffic volumes and faster vehicle speeds were considered to have a less favorable environment, and separate facilities for pedestrians and bicyclists should be considered. Neighborhood streets with the poorest environment for pedestrians and bicyclists using the street include NE 21st Ave, NE 49th St, NE 37th St, NE 37th Dr, NE 22nd Ave and NE 27th Ave.

BAYVIEW DRIVE MULTIMODAL LEVEL OF SERVICE

Pedestrian and bicycle level of service conditions were analyzed along Bayview Drive using Multimodal Level of Service (MMLoS) analysis standards. The pedestrian LOS addresses the safety and comfort for those walking along the street and for those crossing the street. The bicycle LOS addresses the safety and comfort of those bicycling along the street.

As can be seen in Figure 11, The pedestrian LOS analysis showed poor conditions during the PM peak hour, when vehicular traffic is greater. Within the neighborhood, there is only one signalized crossing of Bayview Drive, which is problematic given the traffic volumes and speeds. The bicycle LOS analysis (Figure 12) showed fair conditions along the corridor; however the safety and comfort for bicyclists can be improved through bike lanes or other accommodations.

FIGURE 11
PEDESTRIAN LOS -
BAYVIEW DRIVE

Time Period	Pedestrian Movement	LOS
AM Peak	Walking northbound	C
	Walking southbound	D
	Crossing the street	D
PM Peak	Walking northbound	C
	Walking southbound	E
	Crossing the street	F

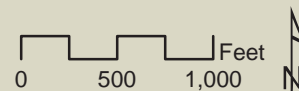
FIGURE 12
BICYCLE LOS - BAYVIEW
DRIVE

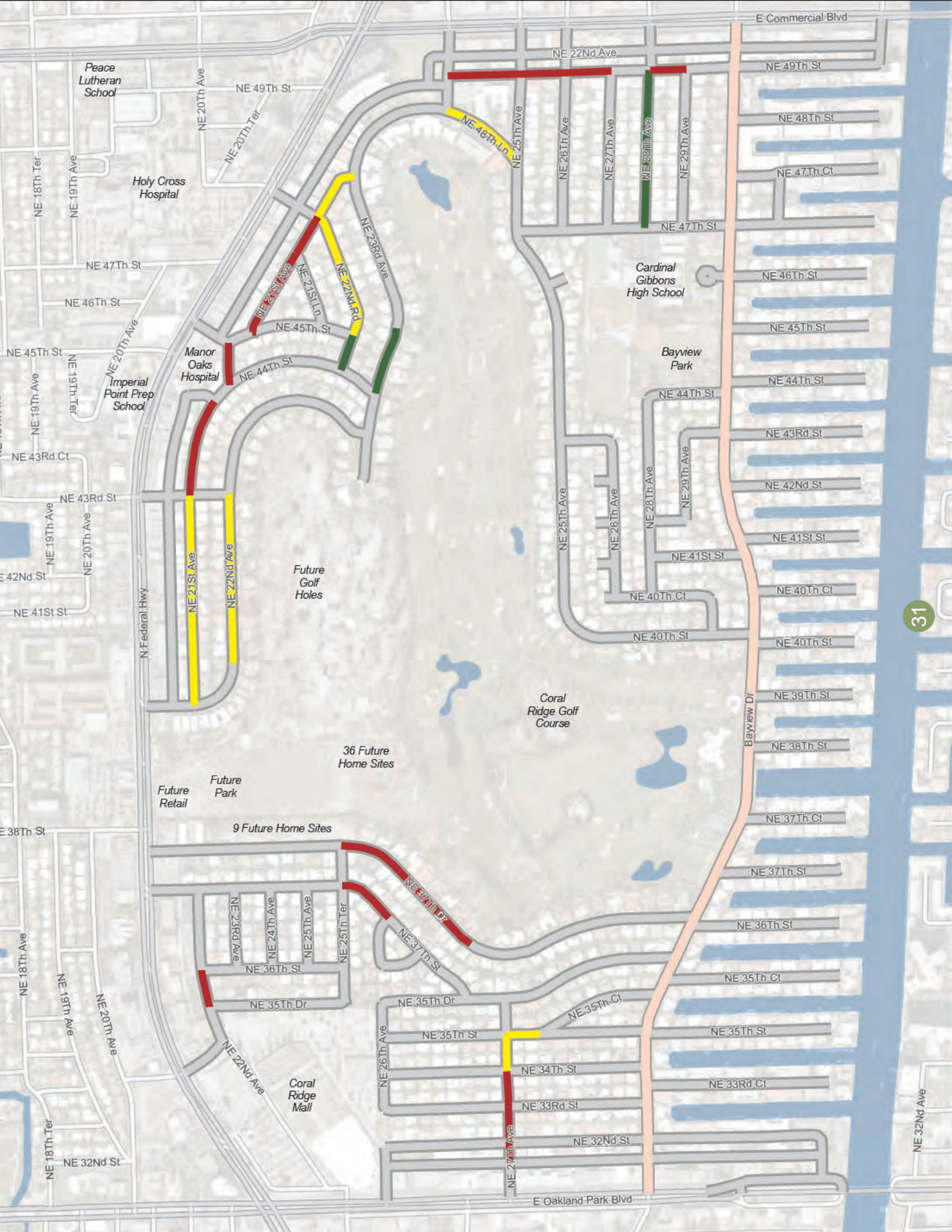
Time Period	Bicycle Movement	LOS
AM Peak	Traveling northbound	D
	Traveling southbound	C
PM Peak	Traveling northbound	D
	Traveling southbound	C

FIGURE 13
PEDESTRIAN AND
BICYCLE ENVIRONMENT

Legend

- Pedestrian and Bicycle Environment
- Not Analyzed
 - Analyzed Separately
 - Poor: Speeds > 20 MPH and Volume > 500 ADT
 - Fair: Speeds > 20 MPH or Volume > 500 ADT
 - Good: Speeds < 20 MPH and Volume < 500 ADT





Peace Lutheran School

Holy Cross Hospital

Manor Oaks Hospital

Imperial Point Prep School

Cardinal Gibbons High School

Bayview Park

Coral Ridge Golf Course

Future Golf Holes

36 Future Home Sites

Future Retail

Future Park

9 Future Home Sites

Coral Ridge Mall

NE 18Th Ter

NE 19Th Ave

NE 47Th St

NE 46Th St

NE 45Th St

NE 43Rd Ct

NE 43Rd St

NE 42Nd St

NE 41St St

NE 38Th St

NE 18Th Ave

NE 19Th Ave

NE 20Th Ave

NE 18Th Ter

NE 32Nd St

NE 20Th Ave

NE 49Th St

NE 20Th Ter

NE 20Th Ave

NE 21St Ave

NE 22Nd Ave

NE 21St Ave

NE 21SLLD

NE 22Nd Rd

NE 23Rd Ave

NE 45Th St

NE 44Th St

NE 22Nd Ave

NE 25Th Ave

NE 26Th Ave

NE 27Th Ave

NE 28Th Ave

NE 29Th Ave

NE 47Th St

NE 49Th St

NE 48Th St

NE 47Th Ct

NE 46Th St

NE 45Th St

NE 44Th St

NE 43Rd St

NE 42Nd St

NE 41St St

NE 41St St

NE 40Th Ct

NE 40Th St

NE 39Th St

NE 38Th St

NE 37Th Ct

NE 37Th St

NE 36Th St

NE 35Th Ct

NE 35Th St

NE 33Rd Ct

NE 35Th Ct

NE 35Th Dr

NE 35Th St

NE 34Th St

NE 33Rd St

NE 32Nd St

E Oakland Park Blvd

Bayview Dr

NE 32Nd Ave

CRASHES

Crash data was collected for the five year period between 2010 and 2015 using data collected from Signal Four Analytics, a compendium of crash data collected from law enforcement agencies across the State of Florida and managed by the University of Florida. There were a total of 1,030 crashes in the study area, with 666 (65%) occurring within 100' of an intersection and 364 (35%) occurring along segments outside of the intersection influence areas. The majority of the crashes in the area occurred along the major roads outside of the community (Federal Highway, Commercial Boulevard and Oakland Park Boulevard). These crashes were considered separately from those occurring within the community. Figure 14 and Figure 15 display the breakdown of the external and internal crash types, respectively, and Figure 16 displays all crash locations.

EXTERNAL ROADWAYS

There were a total of 892 crashes on the roads surrounding the neighborhood. The majority of these occurred within 100 feet of an intersection. The intersections with the highest numbers of crashes include Federal Highway at Oakland Park Boulevard, at Commercial Boulevard, at NE 33rd Street, and at NE 47th Street. The most common crash types were 'Other' crashes and 'Rear End' crashes, making up 288 and 248 of the 896 crashes, respectively. There were also 21 pedestrian crashes and 19 bicycle crashes. There was one fatality, which was a pedestrian fatality, and there were 331 injuries. This equates to one in three crashes on the roads surrounding Coral Ridge Country Club Estates resulted in an injury. The majority of these crashes occurred close to pedestrian generators including the Coral Ridge Mall and near the transit stops in front of Holy Cross Hospital. It should be noted that although pedestrians are crossing at this location, there are no marked pedestrian crossings.

INTERNAL ROADWAYS

There were a total of 138 crashes on the streets within the neighborhood. The majority of these were also within 100' of an intersection, and the intersections with the highest numbers of crashes were all on Bayview Drive. They are located at NE 32nd Street, NE 46th Street, NE 47th Court, and NE 49th Street. While the most common type of crashes were 'Other', 'Rear End', and 'Angle' crashes, making up 39, 29, and 23 of the 134 crashes, respectively. There were no fatalities, but 39 injuries, meaning that more than one in four crashes within the community resulted in an injury. There were five pedestrian crashes and two bicycle crashes. The bicycle crashes occurred mainly at intersections and exclusively in the northern portion of the neighborhood. The pedestrian crashes occurred mid-block, with two occurring along NE 32nd Street (which leads to Coral Ridge Mall), and the remaining three occurring in the northern portion of the study area.

FIGURE 14
EXTERNAL CRASHES

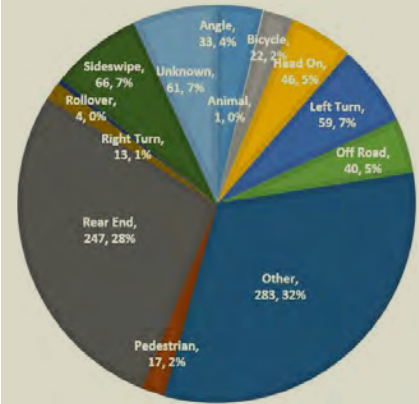


FIGURE 15
INTERNAL CRASHES

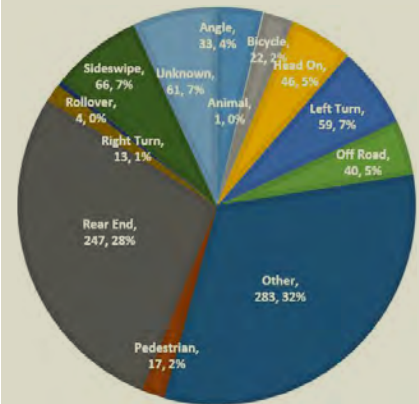
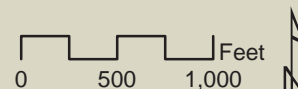
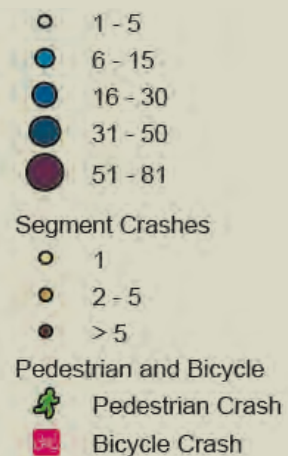
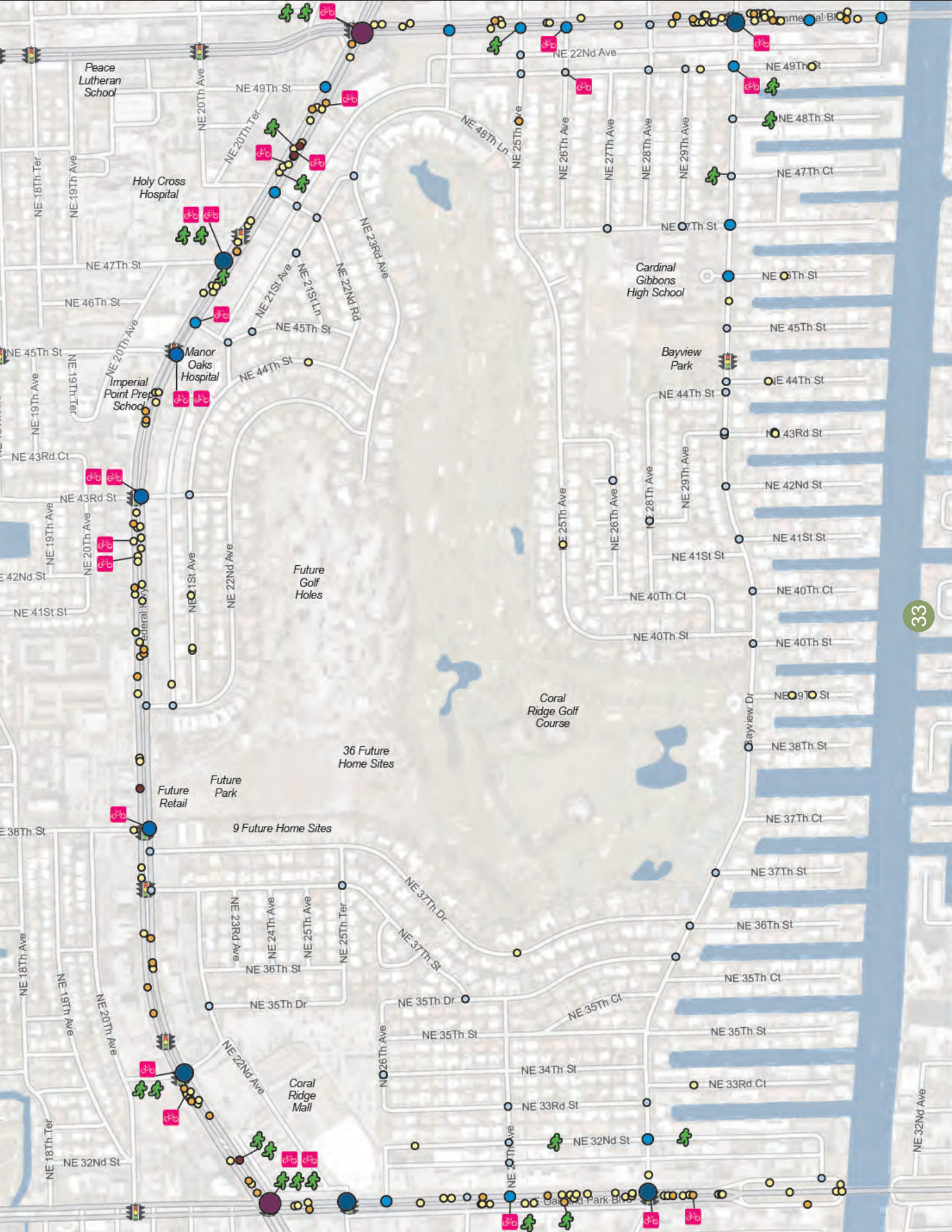


FIGURE 16
CRASH MAP





Peace Lutheran School

Holy Cross Hospital

Manor Oaks Hospital

Imperial Point Prep School

Cardinal Gibbons High School

Bayview Park

Future Golf Holes

Coral Ridge Golf Course

36 Future Home Sites

Future Retail

Future Park

9 Future Home Sites

Coral Ridge Mall



3 COMMUNITY ENGAGEMENT

COMMUNITY ENGAGEMENT

While created and supported by strong technical analysis, this plan is intended primarily to represent the needs and desires of the community. In order to do this, a series of public workshops were held at three Coral Ridge Country Club Estates Home Owner's Association meetings at Cardinal Gibbons High School. The first was held on January 22, 2015 at 7:00 PM, the second was held on April 23rd, 2015 at 6:30 PM, and the third was held on June 25th, 2015 at 6:30 PM. Each meeting had a different focus, and each one is summarized in this section. For more information, including a list of attendees from each meeting and a full summary of the issues, comments, and responses, please see the Public Involvement Summary Technical Memorandum, available from the City of Fort Lauderdale.

The first workshop provided community members with an introduction to the project and allowed for initial comment on the issues and opportunities in the neighborhood. A total of 62 community members and 6 project team members attended the first workshop. At this workshop, community members were asked to post their issues and concerns on a series of maps. Feedback was also solicited through comment forms and via phone and email. This feedback was used as the basis for the recommendations and framework of the plan. The main issues identified were the need for traffic calming; better pedestrian and bicycle connectivity; stormwater management; and neighborhood beautification.

At the second workshop, the results of the existing conditions analysis were presented along with a synthesis map of the issues and opportunities and a menu of potential solutions. A total of 40 residents and 8 project team members attended the second workshop. To help the community members evaluate the potential solutions, high level measures of effectiveness for traffic calming and the pedestrian and bicycle environment were presented. Residents were able to comment on the issues and opportunities identified, as well as

point out where issues were missed. They also selected their favorite strategies and discussed the ones they did not want to see in their neighborhood. A total of 382 comments were received when considering the strategies and improvement locations combined, which were used to help select the draft recommendations for the masterplan. The most liked strategies included mini-roundabouts, chicanes, mini median islands, sidewalks, landscaped medians, and bike lanes.

The third meeting tied the project together for the community. The draft Masterplan, which was created utilizing a combination of the information, values, and opinions gathered from the previous meetings and the other data and analysis, was presented for comment. Additionally, high level cost estimates were provided for the strategies and the plan as a whole. A total of 27 residents and 8 project team members attended the third meeting. In general, most residents were happy with the recommendations. There were a total of 44 comments received, and most were focused on the strategies. This resulted in several strategies being added for traffic calming. Additionally, there was some debate about sidewalks. While they were clearly supported along Bayview Drive and around Cardinal Gibbons High School, the desire for them in other parts of the neighborhood was divided. It was determined that sidewalks would remain in the masterplan, however the neighbors would prioritize them as they desire. As this plan is a living document, the sidewalks can be built if, when, and where the neighbors ultimately decide.

A future meeting to prioritize the strategies will be held for the community by City staff. At this meeting, each strategy will be given a priority. It is intended to be the Community's plan, as they have the largest stake in it. The City and other agencies will, in the future, be able to continue to work with Coral Ridge Country Club Estates to implement the strategies once they are prioritized and as funding becomes available.





4 SYNTHESIS

SYNTHESIS

Based on the stakeholder involvement and the analysis of the existing transportation, land use, and socioeconomic conditions, the following primary conclusions for the Coral Ridge Country Club Estates study area can be drawn:

There are a **number of destinations** in the study area. Because of their proximity to the residential uses and the good overall connectivity in the study area, they create key pedestrian and bicycle desire lines. The majority of these fall along major roads, which suggests increased need for pedestrian and bicycle paths.

There is a **need for additional traffic calming** along major roads, as they currently exhibit speeds that exceed the desired maximum for the area. This is especially true when considering the potential for pedestrian and bicycle trips along those roads.

Key intersections and streets for pedestrian, bicycle, and vehicular connectivity are apparent in several locations where major roads meet. These intersections and streets **should support all modes**, including providing safe crossings for bicyclists and pedestrians.

There are several areas where **pedestrian and bicycle crashes are concentrated**. The majority of these lie along Federal Highway. In these stretches, there are bus stops and attractors on either side of the road. However, marked crosswalks are not as frequent as may be desired in the area based on the character. Additionally, long signal cycle lengths require long waits for pedestrians at marked crossings. These factors may encourage people to cross at undesignated locations.

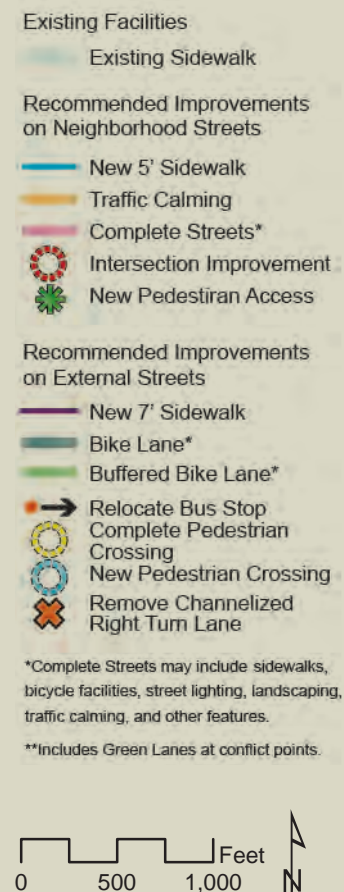
THREE GOALS

In general, the synthesis points to the following goals:

1. Calm Traffic
2. Reduce Cut Through Traffic
3. Enhance Pedestrian and Bicycle Environment

Figure 17 presents the issues and opportunities uncovered from the synthesis. The issues identified generally focus on areas where multimodal connectivity, access, comfort, and safety improvements can be made to achieve the three aforementioned goals. This map does not represent solutions; rather, it was a starting point for discussion with community members about the issues and opportunities in Coral Ridge Country Club Estates. Therefore, the masterplan (i.e. solutions) map reflects different information.

FIGURE 17
DATA SYNTHESIS





5 MASTERPLAN

MASTERPLAN

Based on the analysis and community input conducted throughout the project, a number of context sensitive strategies were developed to calm traffic and enhance the pedestrian and bicycling environment in the neighborhood. Together, these strategies will enhance the accessibility, comfort, and overall livability within and around the Coral Ridge Country Club neighborhood.

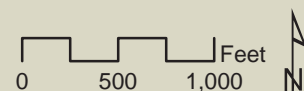
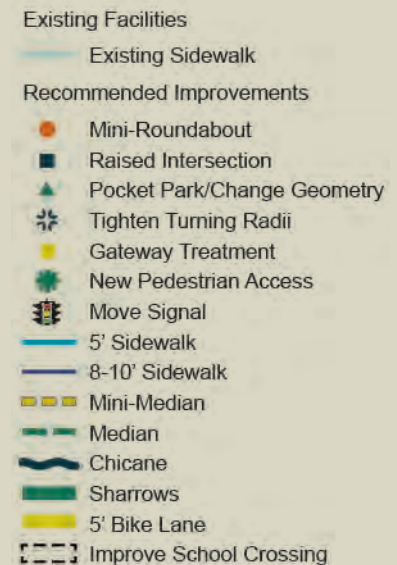
The overall masterplan is split into two parts: the Neighborhood Streets Masterplan and the External Streets Masterplan. The Neighborhood Streets Masterplan generally focuses on internal streets located within Coral Ridge Country Club Estates. The External Streets Masterplan considers the three state roadways that bound the neighborhood: Oakland Park Boulevard, Federal Highway, and Commercial Boulevard.

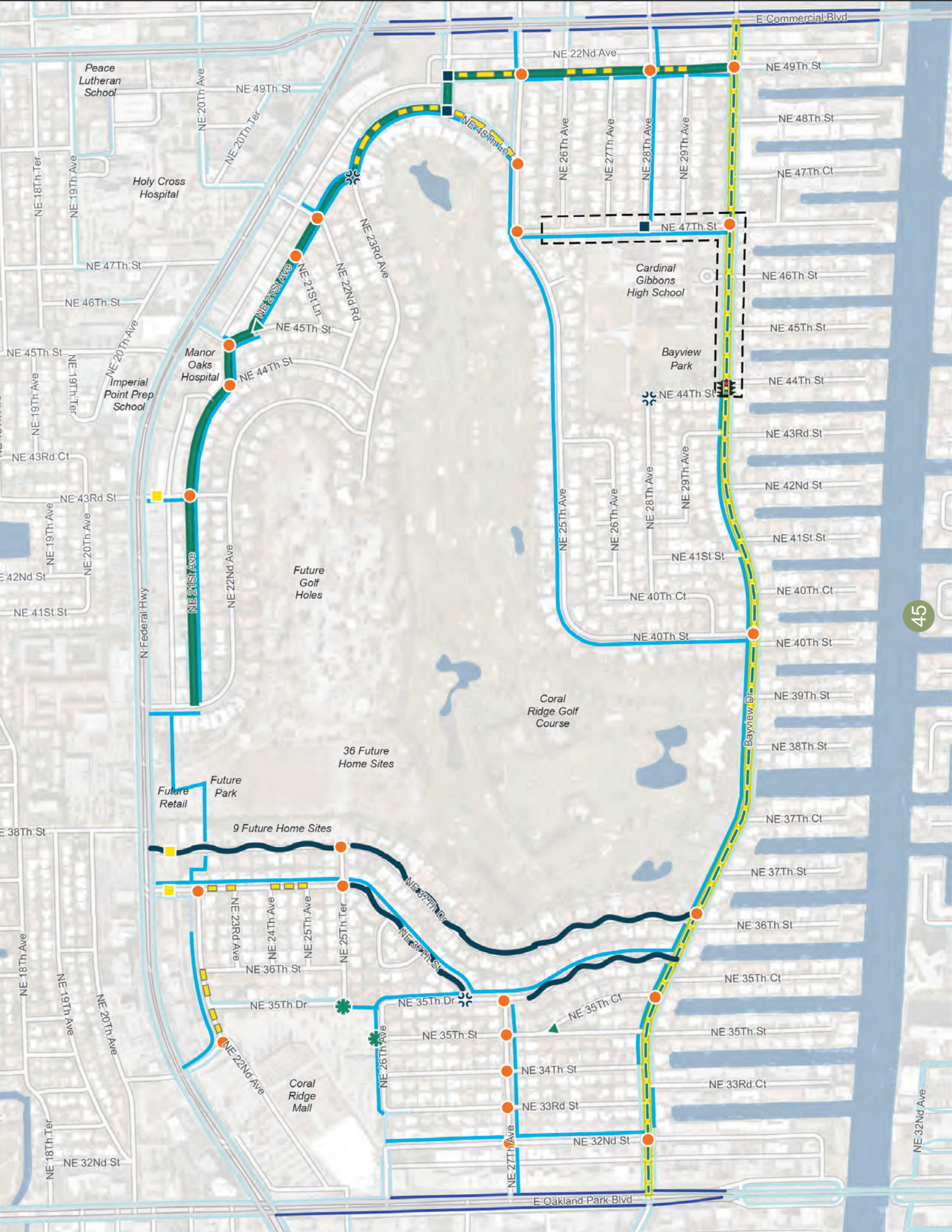
NEIGHBORHOOD STREETS MASTERPLAN

The Neighborhood Streets Masterplan focuses on streets internal to Coral Ridge Country Club Estates. These streets generally function as internal connections for residents, with the exception of Bayview Drive which carries trips to neighborhood destinations and beyond.

In order to achieve the neighborhood's goals, the Neighborhood Streets Masterplan recommends intersection, mid-block, and street focused traffic calming strategies as well as enhancements to the pedestrian and bicycling network. Figure 18 presents a comprehensive summary of the recommendations. The images and descriptions on the following pages provide various details and examples for each strategy.

FIGURE 18
NEIGHBORHOOD
STREETS MASTERPLAN





● MINI ROUNDABOUT

A small circular or oblong island used in the middle of intersections and intended to force vehicular traffic to slow and negotiate around it. They also increase vehicular safety. It may or may not be landscaped and has mountable curbs for emergency vehicle access.



Flagler Village Mini Roundabout. Credit: Kittelson & Associates, Inc.

■ RAISED INTERSECTION

The entire area of an intersection is raised above normal pavement surface level to reduce vehicle speed through the intersection and provide a better view of pedestrians and motorists in the intersection. These were recommended in areas with high pedestrian activity.



Miami Road Raised Intersection. Credit: Kittelson & Associates, Inc.

⚙️ TIGHTEN TURNING RADII

Large turning radii facilitate faster vehicle turning movements and increase crossing distance for pedestrians. Reducing the curb radii will aid in reducing vehicular speeds as well as the potential for pedestrian-vehicular interaction.



■ GATEWAY TREATMENT

Gateway treatments provide a clear indicator to drivers that they are entering a neighborhood. These treatments can be attractive landmarks that foster a greater sense of community. Treatments may vary and should be designed and agreed upon by the community and the City.



Coral Ridge Country Club Estates Gateway. Credit: Kittelson & Associates, Inc.

* NEW PEDESTRIAN ACCESS AT CORAL RIDGE MALL

Street closures at NE 35th Drive and NE 26th Avenue require residents to travel out of their way to reach the Coral Ridge Mall when walking or bicycling. New pedestrian access points would allow for better access from the southwest and central portions of the neighborhood.



Potential Entry Point. Credit: Kittelson & Associates, Inc.

🚦 MOVE BAYVIEW PARK SIGNAL

The current signal location does not provide good access to the entrance of Bayview Park. Moving it to the intersection at NE 44th Street will allow for a more direct route for pedestrians and smoother traffic operations.



Current Signal Location. Credit: Kittelson & Associates, Inc.

IMPROVE SCHOOL CROSSING

It was requested that crossing opportunities for students be improved in the school zone around Cardinal Gibbons High School. In addition to improvements along NE 47th Street and at NE 44th Street, a new marked pedestrian crossing is recommended at NE 47th Street and Bayview Drive. This could be supplemented with a crossing guard during school hours if desired.



POCKET PARK/CHANGE GEOMETRY

In this scenario, pocket parks are intended to help tighten the curb radii at wide intersections. At the same time, they beautify the area by adding a community open space that will also slow down traffic turning movements. The pocket parks will be mostly passive spaces with shade trees. Additionally, each park will have one to two benches to provide a comfortable resting space for users.



CHICANE

A series of fixed objects, usually extensions of the curb, which alter a straight roadway into a zigzag path to slow vehicles. Chicanes reduce the speed of motorists but are still easy to navigate. They facilitate one- or two-way traffic.



MEDIANS AND MINI MEDIAN ISLANDS

Islands constructed between travel lanes can help to narrow the lanes and thus slow down traffic. Additionally, they may be landscaped, helping to beautify the neighborhood. Mini median islands, which are generally the appropriate treatment at the neighborhood scale, remain short so as not to block access to driveways or back-out parking lots throughout the neighborhood. Medians are longer and wider, and are better suited for collector streets like Bayview Drive where there is less back-out parking.



SIDEWALK

Sidewalks provide a minimum level of comfort for pedestrians, absent of any other features. However, sidewalks are missing throughout the neighborhood and pedestrians are forced to walk in the street. An interconnected network of sidewalks will improve pedestrian comfort and accessibility. A 3' grass buffer will separate the sidewalk from the street.



Sidewalk in Coral Ridge Country Club Estates. Credit: Google

BIKE LANE (BAYVIEW DR)

Bike lane markings designate a portion of the street for non-motorized bicycle use, separated from vehicles by pavement markings. They improve safety and comfort by increasing the visibility and awareness of cyclists, and help bicycling to better appeal to all levels of experience.



Las Olas Boulevard Bike Lane. Credit: Kittelson & Associates, Inc.

SHARROW

A sharrow is a pavement marking that can be used where space does not allow for a bike lane. Sharrows remind motorists of the presence of bicycles and indicate to cyclists where to safely ride within the street. Sharrows are designated on streets with higher bicycle volumes.

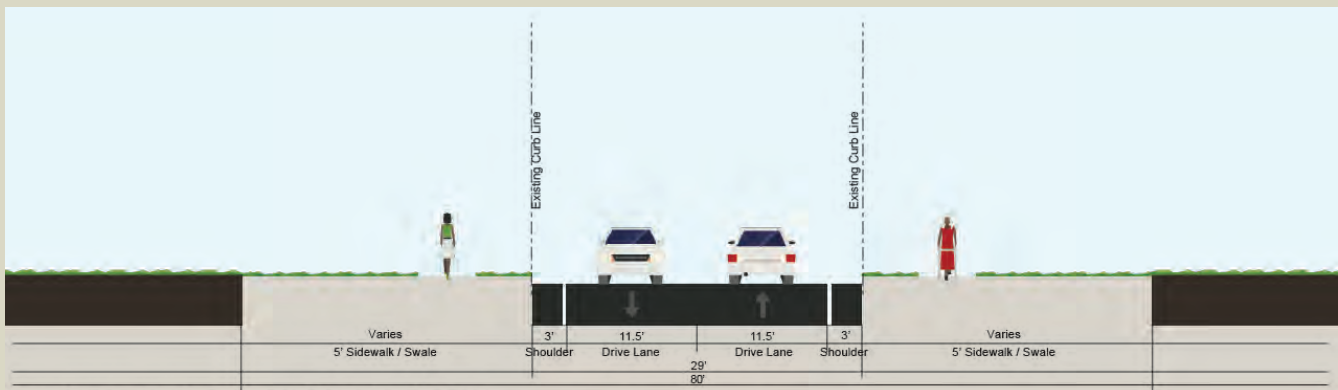


NE 8th Street Sharrows. Credit: Kittelson & Associates, Inc.

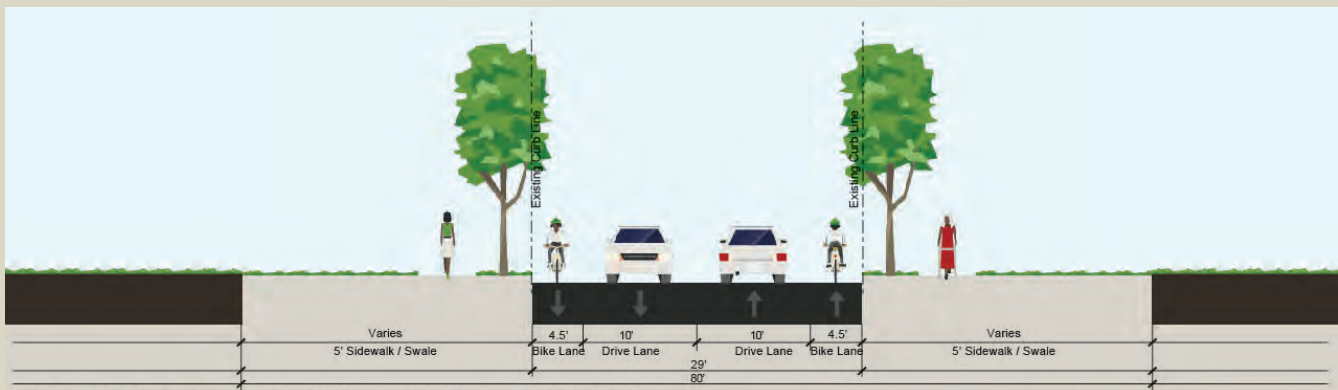
BAYVIEW DRIVE IMPROVEMENTS

Bayview Drive is the main thoroughfare in Coral Ridge Country Club Estates. It also serves as a parallel route to Federal Highway, connecting from Sunrise Boulevard and the Galleria Mall to northern Fort Lauderdale. Due to this, it carries the highest traffic volumes in the neighborhood. However, because of its prime location and connectivity, it also serves as a main pedestrian connector. Since it has relatively lower speeds and traffic volumes in comparison to Federal Highway, it is a good parallel route for bicycles as well. For these reasons, Bayview Drive has been considered for a Complete Streets treatment. Due

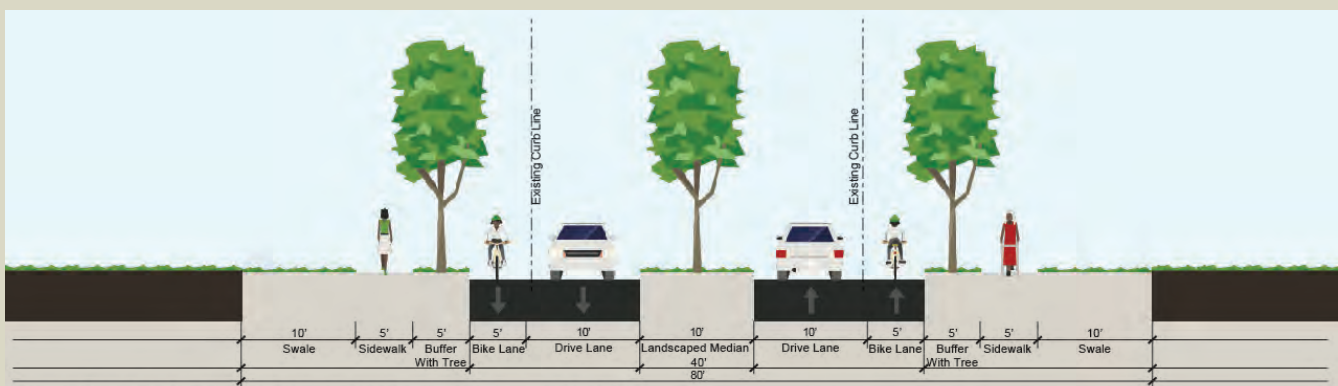
to funding availability and time, the redevelopment is phased. The short-term solution can be achieved within the existing street and includes 10-foot travel lanes with 5-foot bike lanes in each direction. The long term solution involves landscaped medians, bike lanes, and sidewalks, and fits within the existing 80' right-of-way. However existing landscaping within the right of way may potentially need to be removed to accommodate the long term vision. This will require further coordination with the property owners who may be impacted prior to implementation.



EXISTING TYPICAL SECTION ON BAYVIEW DRIVE



PROPOSED TYPICAL SECTION ON BAYVIEW DRIVE - SHORT TERM



PROPOSED TYPICAL SECTION ON BAYVIEW DRIVE - LONG TERM

EXTERNAL STREETS MASTERPLAN

The External Streets Masterplan focuses on the three state roadways surrounding Coral Ridge Country Club Estates: Oakland Park Boulevard, Federal Highway, and Commercial Boulevard. Although they are all utilized by pedestrians, bicyclists, and transit riders, none of the streets currently have bicycle facilities and Commercial Boulevard does not have pedestrian facilities.

The main goal of the External Streets Masterplan is to improve these streets for pedestrians, bicyclists, and transit riders. Although this plan is part of the overall Coral Ridge Country Club Estates Neighborhood Masterplan, the designation of these streets as state highways as well as the fact that they serve to provide regional connectivity as well as local connectivity suggests that the improvements will likely be funded by different sources and in a different manner than the neighborhood streets. Additionally, due to the complex nature of these streets, these improvements are intended to be high level suggestions that may change based on further analysis.

The external streets are owned by the Florida Department of Transportation, and therefore the final definition and implementation of improvements are up to the Department. Even so, there are opportunities to influence improvements, especially during resurfacing projects and for safety improvements.







Many of these improvements are based on recommendations delineated in *Connecting the Blocks*, Fort Lauderdale's multimodal connectivity masterplan and therefore more detailed analysis was not performed as part of this plan. The images and descriptions on the following pages provide various details and examples for each strategy.

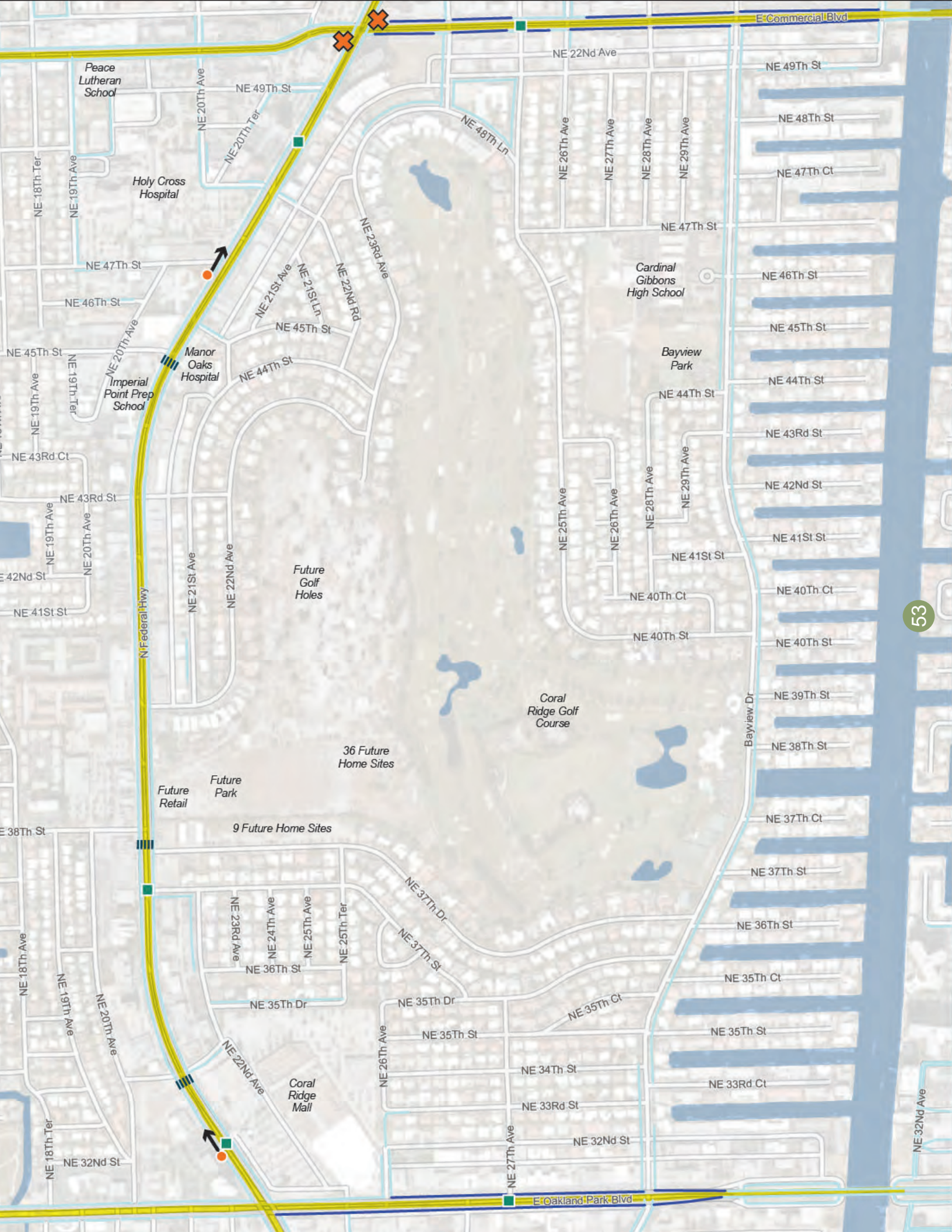
FIGURE 19
EXTERNAL STREETS
MASTERPLAN

Existing Facilities

Existing Sidewalk (Increase to 8-10' as redevelopment occurs)

Recommended Improvements

-  Relocate Bus Stop
-  Remove Channelized Right Turn Lane
-  New Pedestrian Crossing
-  Add Crosswalk Leg
-  8-10' Sidewalk
-  Buffered Bike Lane



■■■■ ADD CROSSWALK LEG

There are three locations along Federal Highway where crosswalk legs are missing on one side of a signalized intersection. It is recommended that the missing legs are completed to allow for better pedestrian accessibility. Further study may be necessary to determine precise placement of crosswalks.



— CONSTRUCT 8' - 10' SIDEWALK

The external streets have the potential to facilitate a large number of pedestrian trips based on land uses and destinations. In order to allow for this and to improve pedestrian comfort, 8-10' sidewalks should be constructed on both sides of the external streets. Where possible, sidewalks should be separated from the street by a 3' grass buffer and should be shaded by shade trees. Additionally, existing sidewalks should be expanded or redeveloped to meet these minimums. This may occur as part of a larger project or piecemeal as redevelopment occurs.



✗ REMOVE CHANNELIZED RIGHT TURN LANE

Channelized right-turn lanes provide vehicles with a free-flowing lane with which to make right turns. This can create a dangerous condition for pedestrians as drivers are traveling at higher speeds, unimpeded, and often looking backwards for gaps in traffic. Although many channelized right-turn lanes feature pedestrian crosswalks, yielding compliance among drivers may not always occur. Because of the potential for pedestrian activity, it is recommended that the feasibility of removing channelized right turn lanes be assessed.



●➔ RELOCATE BUS STOP

There are two locations on Federal Highway where relocating bus stops may help better serve transit riders. The more southern of the two locations serves the Coral Ridge Mall, and is currently positioned well. However, if a new pedestrian crossing is created at the mall entrance, the stop should be relocated north of the intersection to allow the bus to stop prior to the intersection, reducing the impact to traffic flow. The northern stop relocation brings the stop closer to the nearest pedestrian crossing to facilitate easier crossing of Federal Highway for transit riders. These potential stop relocations will require coordination with Broward County Transit, and will require further study.



■ NEW PEDESTRIAN CROSSING

There are not many existing opportunities for pedestrians to cross the external streets in the study area, although there are a number of destinations and transit stops on either side of the streets. In some cases, distances between crossings exceed a quarter mile. Because of this, several new crossings are recommended. None of them are currently signalized, and therefore would require coordination with both Broward County and the Florida Department of Transportation to install new signals and change the signal timing. Additionally, a warrant analysis has not been performed on any of these locations, and therefore further study is required. These recommendations are generally based on the distance between pedestrian crossings, the location of bus stops, the location of

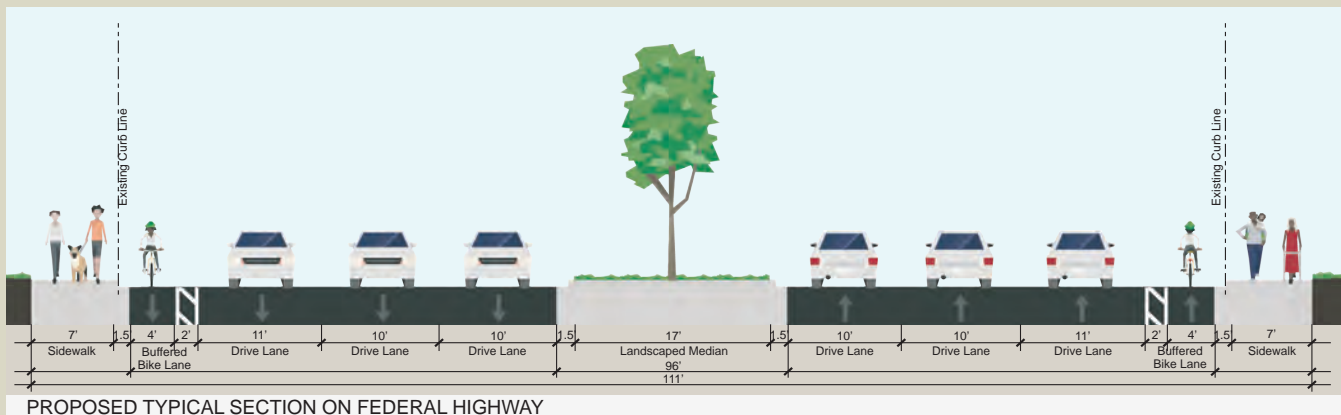
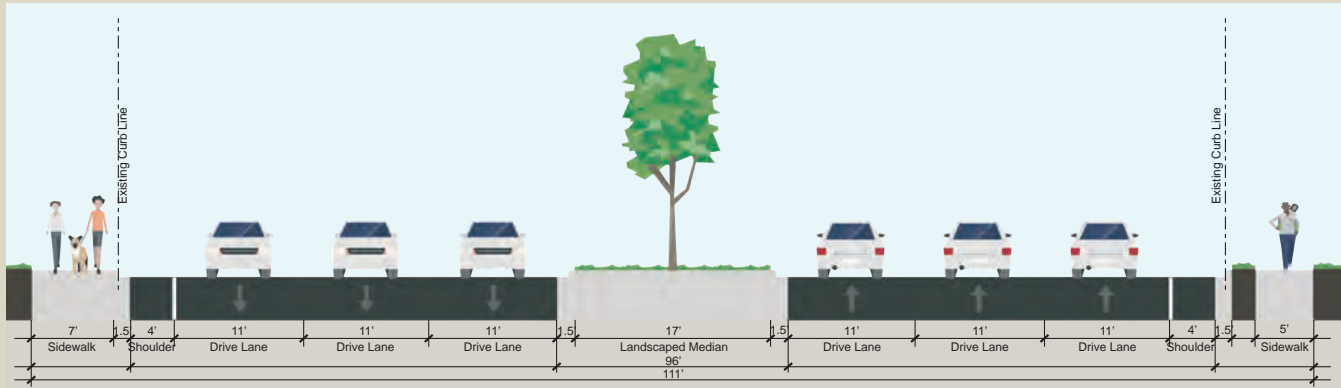
destinations, the crash history from 2010 to 2015, and the desire for greater pedestrian connectivity. For example, the proposed crossing in front of Coral Ridge Mall would serve transit riders using the bus stop at that location. Currently, the nearest crossing is located 360 feet south of the stop, requiring riders to travel a total of 720 feet (4 minutes, not including time delayed at the signal or crossing the street) out of their way. This location also saw two pedestrian crashes over the past five years, meaning that people are crossing there regardless of the lack of an official crossing. Additionally, the crossing distance at this point is 100 feet, whereas the distance at the nearest existing crossing is 130 feet and requires crossing eight lanes of traffic.



BUFFERED BIKE LANES

Connecting the Blocks recommends that the lanes be narrowed on all three external streets and bike lanes be striped. State policy requires these lanes to be buffered to provide a greater level of comfort and safety to riders. However, if right-of-way does not allow for buffers, 5' bike lanes should be painted. While further study is required to determine the

availability of right-of-way on the streets, an example cross section was created for Federal Highway and submitted to FDOT for consideration for an upcoming roadway rehabilitation project. This cross section proposes narrowing roadway lanes to 10 or 11 feet to provide enough space for buffered bike lanes within the existing roadway.



SUSTAINABILITY BEST PRACTICES

As a coastal city, Fort Lauderdale depends on and is sustained by water. This has been one of the City's greatest assets since its inception, however it has also posed some unique challenges. The City is frequently the target of hurricanes during hurricane season and continuously faces the impacts of climate change, such as sea level rise, flooding, salt water intrusion into the water supply, and other related issues. To prepare for and address these issues, Fort Lauderdale has implemented adaptive measures to ensure the sustainability of the City's infrastructure and strives to incorporate sustainable practices into daily living. These efforts are supported by policy in the City's 2035 Vision, Fast Forward Fort Lauderdale, and in the 2018 Strategic Plan, Press Play Fort Lauderdale.

In recognition and support of the City's goals and vision, it is recommended that strategies to support sustainability be woven throughout the improvements recommended in the Coral Ridge Country Club Estates Neighborhood Mobility Masterplan. The strategies discussed can be incorporated into the design of some of the improvements that is implemented as a result of this plan. Not only do they provide resiliency, but they improve the environment and beautify the surroundings. These treatment details were not presented to the community, but they are generally accepted practices for sustainability should the community wish to include them.

MANAGE STORMWATER RUNOFF

It was noted throughout the project that drainage and flooding is an issue along Bayview Drive and in some other portions of the neighborhood. In addition to the use of pervious surfaces, tree-lined streets, and native landscaping, there are other methods of managing stormwater (and associated drainage issues). For example, rain gardens can be planted in small parks that collect, store, and filter rainwater. They, and other retention and filtration techniques, can also be incorporated into curb extensions, chicanes, and street planters.



Rain Garden in Swale. Credit: Edward Belden, Los Angeles and San Gabriel Rivers Watershed Council

PERMEABLE SURFACES

Impermeable surfaces, such as traditional roads, driveways, sidewalks, and any other surface that prevents water penetration into the soil disrupt the flow of water into natural drainage cycles. Therefore, the use of impervious surfaces can exacerbate stormwater runoff and associated flooding and pollution issues. Permeable pavements should be considered for all new sidewalk, street, and driveway projects to help alleviate these issues. The aesthetics of permeable paving can also give the illusion of a narrower street and help to calm traffic.



Permeable pavement at PNC Bank in Fort Lauderdale. Credit: Kittelson & Associates, Inc.

TREE-LINED AND SHADED STREETS

Street trees help create a sense of enclosure along the road (sometimes referred to as a “street wall”), narrowing a driver’s field of vision and thus encouraging lower vehicle speeds. If placed between the road and the sidewalk, they can help provide a physical and visual buffer between pedestrians and vehicles. They also help to lower temperatures, provide shade for pedestrians, and absorb stormwater and airborne pollutants.



Tree Lined Street in Victoria Park. Credit: Kittelson & Associates, Inc.

NATIVE LANDSCAPING

Native landscaping involves using plants and other vegetation that is indigenous to the Fort Lauderdale area. Plants native to a specific region have adapted to the local soil, conditions, and weather patterns. Therefore, native plants are low maintenance and do not require much (or any) pesticides, fertilizers, watering, or mowing. As a whole, this improves the quality of the air, water, and environment while conserving water, energy, and money.



Native landscaping at PNC Bank in Fort Lauderdale. Credit: Kittelson & Associates, Inc.

COST ESTIMATES AND TIMING

Planning-level cost estimates and typical construction timelines were developed for this plan. The cost estimates and project timelines in Figure 20 are intended to assist the community in prioritizing improvement solutions. The timelines include the length of time for design and construction of each improvement. The masterplan map has been included for reference on the opposite page.

Due to multiple agencies being responsible for the maintenance and operations for the roadways in the

External Streets Masterplan, available funding and costs are not reflected herein. Those costs and funding will need to be determined outside of this plan among the various responsible agencies. The costs for the reconstruction of Bayview Drive are listed separately from the other improvements because it is assumed that Bayview Drive will be completed as one project. Additionally, costs for long term redesign of Bayview Drive are not included as they depend highly on the future corridor design.

FIGURE 20
COST ESTIMATES AND TIMING

The cost estimates present a high level picture of the costs for the improvements for planning purposes only. They include construction costs but do not take into account the costs of design, construction engineering inspection, the movement of utilities, or impacts or changes to existing drainage structures. Additionally, appropriate resources should be used to create a context-sensitive concept in the design of each improvement from which to base a more

detailed cost estimate.

The timing estimates associated with each improvement represent the general length of time from design through construction. They do not represent prioritization or actual project timelines, and are intended to provide a general picture of the length of time that it may take to complete a project once it has begun.

Improvement	Quantity (Number or total feet)	Cost Per Improvement (in 2015 Dollars)		Total Cost (in 2015 Dollars)		Timing
		Low End	High End	Low End	High End	
Internal Streets (Excluding Bayview Drive)						
Mini Roundabout	18	\$40,600	\$45,600	\$730,800	\$820,800	●
Mini Median Island	10	\$13,300	\$14,900	\$133,000	\$149,000	●
Chicane	10	\$29,200	\$32,800	\$292,000	\$328,000	●
Move Bayview Drive Signal	1	\$265,100	\$298,200	\$265,100	\$298,200	●
Raised Intersection	3	\$31,800	\$35,800	\$95,400	\$107,400	●
5' Sidewalk	38,190 Feet	\$3,900	\$4,400	\$1,485,500	\$1,676,000	●
Sharrows	7,140 Feet	\$5,800	\$6,500	\$82,800	\$92,800	●
Tighten Turning Radii	2	\$2,500	\$3,000	\$5,000	\$6,000	●
Pocket Park	2	\$2,600	\$3,500	\$5,700	\$6,400	●
Gateway Treatment	3	Based on Agreed Upon Design				●
Bayview Drive						
Short Term Includes Mini Roundabouts, Bike Lanes, and Sidewalks	N/A	N/A	N/A	\$447,200	\$501,900	●
Long Term Includes Complete Street Reconstruction	N/A	Based on Future Corridor Concept Design				●

Notes: *Cost estimates include construction costs but do not include design and construction engineering inspection costs.
 *Low end estimate is based on a 20 percent contingency and high end estimates are based on a 30 percent contingency.
 *Costs for improved pedestrian crossings included in costs for associated improvements: Signal at Bayview Drive and NE 44th Street; Raised Intersection at NE 47th Street and NE 28th Avenue; and Mini-Roundabout at Bayview Drive and NE 47th Street.

IMPROVEMENT TIMING/PHASING KEY

- Less than 1 Year
- 1 to 2 Years
- 2 to 5 Years
- More than 5 Years



6 NEXT STEPS

NEXT STEPS

The Coral Ridge Country Club Estates Neighborhood Mobility Masterplan is a community driven plan based on input from community members and supported by data and analysis. It is intended to provide a roadmap to a safe, connected, comfortable, and multimodal transportation network within and around the Coral Ridge Country Club Estates neighborhood. It is also one piece of the greater puzzle that, when complete, will help to achieve the City of Fort Lauderdale's vision for a connected and vibrant future.

This plan is comprehensive and is intended to be implemented over time as funds become available and the community members see fit. Therefore, further prioritization is needed to ensure that the implementation schedule accurately represents the needs and desires of the community members. This prioritization is left to the discretion of the community members, however the City of Fort Lauderdale staff intends to help guide the community in developing this prioritization. To assist in the prioritization process, each internal street improvement has been assigned a number of points based on the prioritization methodology developed in the City's [Connecting the Blocks](#) plan. External streets were also considered as part of this to help quantify the benefits

of the improvements even though they will likely be made as FDOT, developers, or the City implements other projects. The methodology takes into account the prioritization needs developed by the City and the Broward Metropolitan Planning Organization. However, because the improvements were ranked on a project basis as opposed to as a whole, the scoring should not be considered comprehensive and instead should be taken as one data point in the overall prioritization process. The scoring and scoring criteria can be found in Appendix C.

Regarding the funding of the plan, a variety of sources are available now and more will likely become available in the future. The creation and adoption of this plan enables the Coral Ridge Country Club Estates neighborhood to be eligible for those funds, and neighborhood support increases the likelihood that improvements will be built. Possible funding sources include private developers as new construction occurs around the community; grants applied for by the community, the City, Broward County, the Broward Metropolitan Planning Organization, and the Florida Department of Transportation; and a variety of other innovative sources as they are developed.

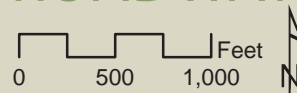


APPENDIX

A



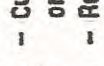
SOUTH NEIGHBORHOOD ROADWAY PLAN

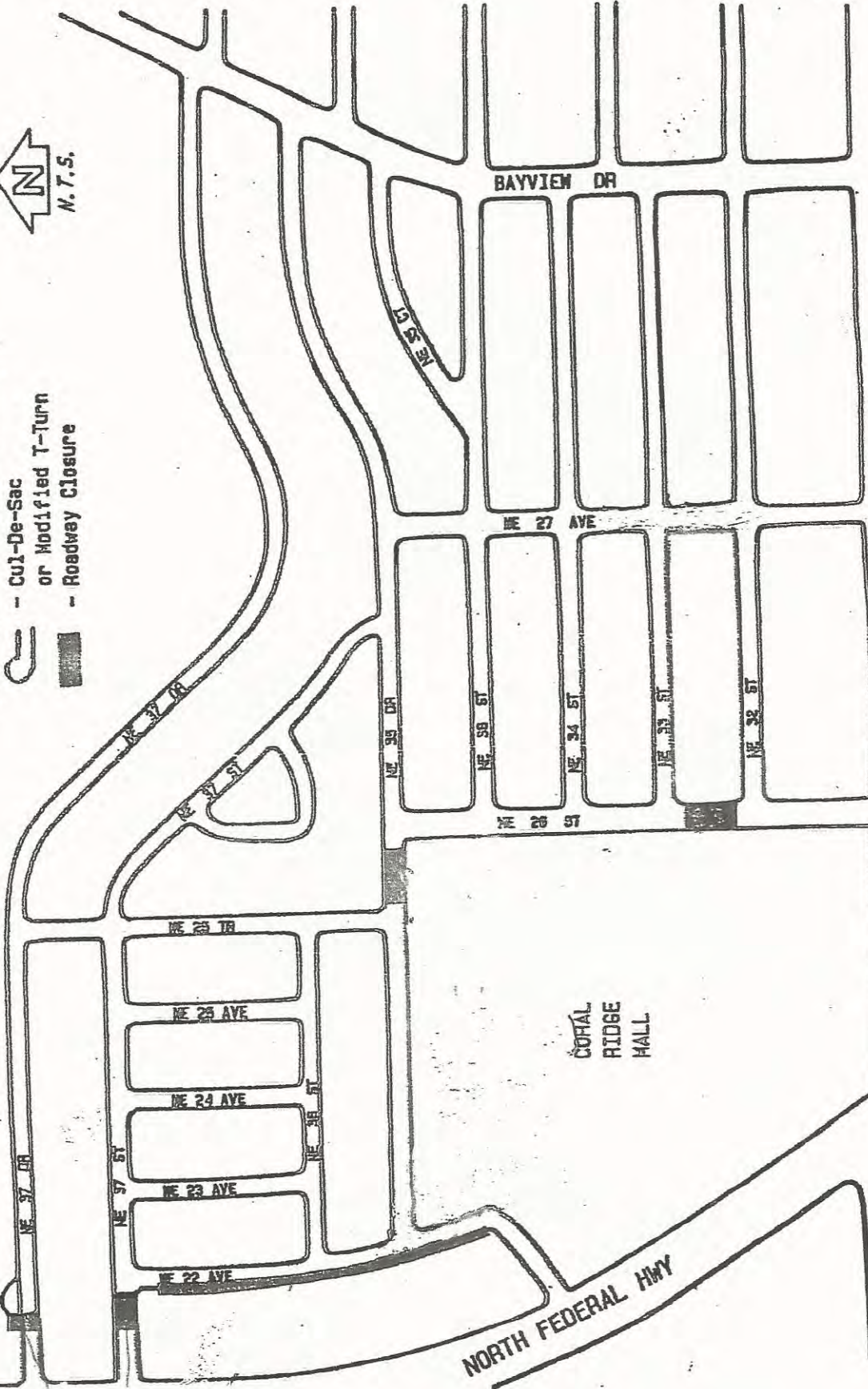
SOUTH NEIGHBORHOOD ROADWAY PLAN





LEGEND

-  - Cul-De-Sac
-  or Modified T-Turn
-  - Roadway Closure



WALTER H. KELLER JR., INC.
 Consulting Engineers & Planners
 Coral Springs, Florida

NORTH CORAL RIDGE NEIGHBORHOOD
PROPOSED SOUTH NEIGHBORHOOD ROADWAY PLAN

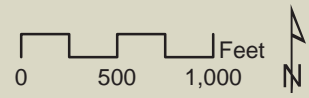


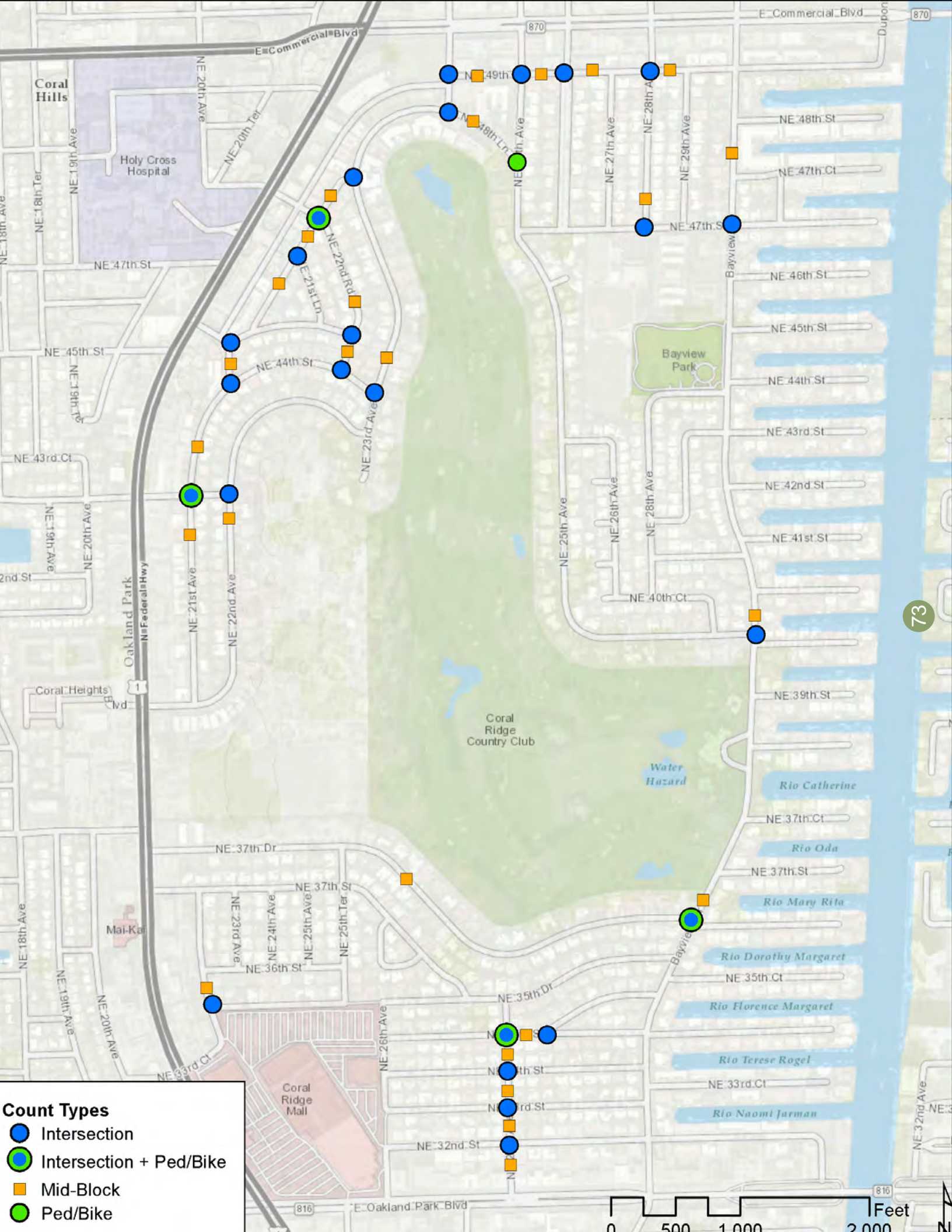
APPENDIX

B

MAP OF SPEED AND
VOLUME COUNT
LOCATIONS

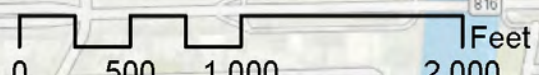
SPEED AND VOLUME COUNT LOCATIONS





Count Types

- Intersection
- Intersection + Ped/Bike
- Mid-Block
- Ped/Bike



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APPENDIX

C

PLANNING LEVEL
PRIORITIZATION SCORING

PRIORITIZATION CRITERIA, WEIGHT, AND THRESHOLDS

TABLE 21. PRIORITIZATION CRITERIA, WEIGHTS, AND THRESHOLDS

MEASURE		WEIGHT	BENEFIT CATEGORIES	DESCRIPTION	THRESHOLDS	POINTS
PROJECT BENEFITS						
1	Anticipated improvement in pedestrian/bicyclist safety	2	Safety	Project type typically improves pedestrian and bicyclist safety.	Minimal Moderate Substantial	0 1 2
2	Anticipated safety benefit to segment with history of fatal or severe injury pedestrian and bicycle crashes	2	Safety	Based on most recent crash maps for City of Fort Lauderdale.	Minimal Moderate Substantial	0 1 2
3	Support of regional transit services and/or premium transit services	3	Travel Choices, Sustainability	Planned premium transit services shown in the LRTP are in the corridor.	Minimal Moderate Substantial	0 1 2
4	Enhancement of transit stops	1	Travel Choices, Sustainability	Project creates space for enhanced transit stops (e.g., sidewalk buffer)	Minimal Moderate Substantial	0 1 2
5	Closure of sidewalk network gaps	5	Connectivity, Safety, Travel Choices, Health Benefits	New sidewalks constructed to close gaps and make new connections.	Minimal Moderate Substantial	0 1 2
6	Closure of bicycle network gaps	5	Connectivity, Safety, Travel Choices, Health Benefits	New bicycle facilities constructed to close gaps and make new connections.	Minimal Moderate Substantial	0 1 2
7	Improvement of street crossings for non-automobile modes	3	Connectivity, Safety, Travel Choices, Health Benefits	Project enhances street crossings.	Minimal Moderate Substantial	0 1 2
8	Support of active transportation	5	Quality of Life, Sustainability, Economic Benefit	Project improves areas with high Active Transportation Demand Scores	Minimal Moderate Substantial	0 1 2
9	Improvement of multimodal system quality	4	Quality of Life, Travel Choices, Economic Benefit	Project adds pedestrian-scale lighting, shade, buffers, and other quality elements	Minimal Moderate Substantial	0 1 2
10	Incorporation of sustainability elements to adapt to climate change	4	Sustainability, Safety, Connectivity	Project adds stormwater management, shade, LED lighting, and drought resistant features.	Minimal Moderate Substantial	0 1 2
PROJECT FEASIBILITY						
11	Opportunity to qualify for federal or other funding	1	N/A	Corridor study and/or livability study involving multiple jurisdictions and/or agencies	Minimal Moderate Substantial	0 1 2
12	Freedom from obstacles to implementation	5	N/A	Timeline, agency approvals, need for land acquisition, contract capacity, etc.	Minimal Moderate Substantial	0 1 2
13	Community support	5	N/A	Consistency with the Multimodal Connectivity Map	Minimal Moderate Substantial	0 1 2

Details of the Project Benefits criteria in TABLE 21 and the proposed scoring procedure are as follows:

- **Anticipated improvement in pedestrian/bicyclist safety.** Crossing enhancements score a 1. Projects that reduce crossing distance score a 2. Projects that separate bicyclists from automobiles score a 2. (The Highway Safety Manual (HSM) indicates that these project types tend to improve pedestrian/bicyclist safety.)
- **Anticipated improvement to segment with history of fatal or severe injury pedestrian/bicycle crashes.** This applies only to segments with a history of fatal or severe injury pedestrian/bicycle crashes. Projects that create separation between pedestrians and automobiles or between bicyclists and automobiles score a 2. Other project types that the HSM indicates tend to improve pedestrian/bicyclist safety score a 1.
- **Support of regional and premium transit services.** Projects that create new regional and premium transit services score a 2. Projects that enhance existing regional and premium transit services score a 1. This also applies to pedestrian/bicycle projects that are within 1/4 mile of The Wave and Tri-Rail. Projects that create pedestrian/bicycle connections to The Wave and Tri-Rail score a 2. Projects that enhance existing pedestrian/bicycle connections to The Wave and Tri-Rail score a 1.
- **Enhances transit stops.** Projects that add a sidewalk buffer score a 1. Projects that add bus stop amenities score a 2.
- **Closure of sidewalk network gaps.** Projects that complete existing sidewalks score a 1. Projects that construct more extensive, new sidewalks score a 2.
- **Closure of bicycle network gaps.** Projects that complete existing bicycle facilities score a 1. Projects that construct more extensive, new bicycle lanes score a 2. Projects that add sharrows score a 1.
- **Improves street crossings for non-automobile modes.** Projects that include 1-2 crossing enhancements score a 1. Projects that include 3 or more crossing enhancements score a 2.

- **Supports active transportation.** Projects that serve Census tracts ranked in the top 1-10 for Active Transportation Demand score a 2. Projects in the top 10-20 score a 1.2. (Active Transportation Demand Score is an index developed by the City of Portland, Oregon, for use in prioritizing multimodal projects. It accounts for population density, business density, percent of population less than 17 years old, percent of population greater than or equal to 65 years old, percent of population that is non-white, percent of households below the poverty line, and percent of households with no access to an automobile. These demographic characteristics are traditionally tied to propensity to travel by non-automobile modes.
- **Improves multimodal system quality.** Projects that add 3-4 of sidewalk buffers, bicycle lane buffers, pedestrian-scale lighting, and shade score a 2. Projects that add 1-2 of those elements score a 1.
- **Incorporation of sustainability elements to adapt to climate change.** Projects that add 3-4 of stormwater management, shade, LED lighting, and drought resistant features score a 2. Projects that add 1-2 of those elements score a 1.

Details of the Project Feasibility criteria in TABLE 21 and the proposed scoring procedure are as follows:

- **Opportunity to qualify for federal or other funding.** Projects score a 1 if they are located in a major corridor, are located in corridors that affect multiple jurisdictions, or are livability projects. Projects score a 2 if they are consistent with projects identified in the CIP, Transportation Improvement Program (TIP), or LRTP.
- **Freedom from implementation obstacles.** Projects on State and County roads score a 1. Projects on City roads score a 2.
- **Community support.** Projects consistent with the previously supported neighborhood plans (which were created with public input) score a 1. Projects consistent with the City Commission approved Neighborhood or Master Plans score a 2.

INTERSECTION IMPROVEMENTS - INTERNAL STREETS

Location	Treatment	Reason
Bayview Dr & NE 32nd St	Roundabout	Traffic Calming
Bayview Dr & Burning Tree Drive (NW 35th Ct)	Roundabout	Traffic Calming
Bayview Dr & NE 37th Dr	Roundabout	Traffic Calming
Bayview Dr & NE 40th St	Roundabout	Traffic Calming
Bayview Dr & NE 44th St	Move midblock signal to this intersection; add crossing	Pedestrian Access
Bayview Dr & NE 47th St	Roundabout	Traffic Calming
Bayview Dr & NE 49th St	Roundabout	Traffic Calming and Neighborhood Gateway
NE 21st Ave & NE 21st Ln	Mini Roundabout	Traffic Calming
NE 21st Ave & NE 22nd Rd & NE 48th St	Mini Roundabout	Traffic Calming and Neighborhood Gateway
NE 21st Ave & NE 23rd Ave	Tighten curb radii	Traffic Calming
NE 21st Ave & NE 24th Terrace & NE 48th Ln	Raised Intersection	Pedestrian Access
NE 21st Ave & NE 43rd St	Mini Roundabout	Traffic Calming and Neighborhood Gateway
NE 21st Ave & NE 44th St	Mini Roundabout	Traffic Calming
NE 21st Ave & NE 45th St (E)	Pocket Park and Tighten Curb Radius (both sides)	Traffic Calming, recreation area
NE 21st Ave & NE 45th St (W)	Mini Roundabout	Traffic Calming and Neighborhood Gateway
NE 22nd Ave & NE 33rd St	Mini Roundabout	Traffic Calming
NE 22nd Ave & NE 37th St	Mini Roundabout	Traffic Calming and Neighborhood Gateway
NE 24th Terrace & NE 49th St	Raised Intersection	High ped and bike activity, Traffic Calming
NE 25th Ave & NE 47th St	Mini Roundabout	Traffic Calming
NE 25th Ave & NE 48th Ln	Mini Roundabout	Traffic Calming
NE 25th Ave & NE 49th St	Mini Roundabout	High ped and bike activity, Traffic Calming
NE 25th Terrace & NE 35th Dr	New secured pedestrian access to Coral Ridge Mall	Pedestrian Access
NE 25th Terrace & NE 37th Drive	Mini Roundabout	Traffic Calming
NE 25th Terrace & NE 37th St	Mini Roundabout	Traffic Calming
NE 26th Ave & NE 35th St	New secured pedestrian access to Coral Ridge Mall	Pedestrian Access
NE 27th Ave & NE 32nd St	Mini Roundabout	Traffic Calming
NE 27th Ave & NE 33rd St	Mini Roundabout	Traffic Calming
NE 27th Ave & NE 34th St	Mini Roundabout	Traffic Calming
NE 27th Ave & NE 35th Dr	Mini Roundabout	Traffic Calming
NE 27th Ave & NE 35th St	Mini Roundabout	Traffic Calming
NE 28th Ave & NE 47th St	Raised Intersection	Traffic Calming
NE 28th Ave & NE 49th St	Mini Roundabout	Traffic Calming
NE 35th Ct & Burning Tree Drive (NE 35th St)	Pocket Park and Tighten Curb Radius (both sides)	Traffic Calming, Recreation Area
NE 35th Dr & NE 37th St	Tighten curb radii (90* intersection)	Traffic Calming
NE 28th Ave & NE 44th St	Tighten turning radii closer to 90*	Traffic Calming
NE 37th Drive east of Federal Highway	Gateway Treatment	Traffic Calming, Neighborhood Gateway
NE 37th Street east of Federal Highway	Gateway Treatment	Traffic Calming, Neighborhood Gateway
NE 43rd Street east of Federal Highway	Gateway Treatment	Traffic Calming, Neighborhood Gateway

Comments	Prioritization Score	Measure												
		1	2	3	4	5	6	7	8	9	10*	11	12	13
	27	1	0	0	0	0	0	1	0	0		2	2	2
	27	1	0	0	0	0	0	1	0	0		2	2	2
	27	1	0	0	0	0	0	1	0	0		2	2	2
	27	1	0	0	0	0	0	1	0	0		2	2	2
The signal should be pedestrian actuated	25	0	0	0	0	0	0	1	0	0		2	2	2
	27	1	0	0	0	0	0	1	0	0		2	2	2
	27	1	0	0	0	0	0	1	0	0		2	2	2
	25	1	0	0	0	0	0	1	0	0		0	2	2
Need to do so with landscaping and reduced pavement	25	1	0	0	0	0	0	1	0	0		0	2	2
	27	2	0	0	0	0	0	1	0	0		0	2	2
	25	1	0	0	0	0	0	1	0	0		0	2	2
	25	1	0	0	0	0	0	1	0	0		0	2	2
	25	1	0	0	0	0	0	1	0	0		0	2	2
	27	2	0	0	0	0	0	1	0	0		0	2	2
	25	1	0	0	0	0	0	1	0	0		0	2	2
	25	1	0	0	0	0	0	1	0	0		0	2	2
Driveway	25	1	0	0	0	0	0	1	0	0		0	2	2
	25	1	0	0	0	0	0	1	0	0		0	2	2
Need to address the circular drive access to round-about	25	1	0	0	0	0	0	1	0	0		0	2	2
Needs to have a traversable median for back out parking	25	1	0	0	0	0	0	1	0	0		0	2	2
Need to address parking on NW lot.	25	1	0	0	0	0	0	1	0	0		0	2	2
Coordinate with mall owners	20	0	0	0	0	0	0	0	0	0		0	2	2
	25	1	0	0	0	0	0	1	0	0		0	2	2
	25	1	0	0	0	0	0	1	0	0		0	2	2
Coordinate with mall owners	20	0	0	0	0	0	0	0	0	0		0	2	2
	25	1	0	0	0	0	0	1	0	0		0	2	2
	25	1	0	0	0	0	0	1	0	0		0	2	2
	25	1	0	0	0	0	0	1	0	0		0	2	2
	25	1	0	0	0	0	0	1	0	0		0	2	2
	25	1	0	0	0	0	0	1	0	0		0	2	2
	25	1	0	0	0	0	0	1	0	0		0	2	2
There is a circular driveway on the northeast corner that needs to be addressed. Options are to have it exit to 35th Drive or create a "P" shaped driveway	27	2	0	0	0	0	0	1	0	0		0	2	2
	27	2	0	0	0	0	0	1	0	0		0	2	2
	27	2	0	0	0	0	0	1	0	0		0	2	2
	20	0	0	0	0	0	0	0	0	0		0	2	2
	20	0	0	0	0	0	0	0	0	0		0	2	2
	20	0	0	0	0	0	0	0	0	0		0	2	2

*Note: Measure 10 not reviewed because these features can vary and should be determined in design. It is encouraged that sustainable features be incorporated into each improvement to the extent possible.

INTERSECTION IMPROVEMENTS - EXTERNAL STREETS

Location	Treatment	Reason
Federal Hwy & Coral Ridge Mall Entrance	New Signalized Pedestrian Crossing	Access to bus stops and destinations
Federal Hwy & NE 33Rd St	Complete Pedestrian Crossing (Southern Leg)	Pedestrian Access
Federal Hwy & NE 37Th St	New Signalized Pedestrian Crossing	Access to bus stops and destinations
Federal Hwy & NE 38Th St	Complete Pedestrian Crossing (Southern Leg)	Pedestrian Access
Federal Hwy Between NE 48th St & 49th St	New Signalized Pedestrian Crossing	Access to bus stops and destinations
NE 25Th Ave & Commercial Blvd	New Signalized Pedestrian Crossing	Access to bus stops and destinations
NE 27Th Ave & Oakland Park Blvd	New Signalized Pedestrian Crossing	Access to bus stops and destinations
Federal Hwy and Commercial Blvd (SW Corner)	Remove Channelized Right Turn Lane	Traffic Calming; Ped/Bike Comfort
Federal Hwy and Commercial Blvd (NE Corner)	Remove Channelized Right Turn Lane	Traffic Calming; Ped/Bike Comfort
BCT Stop 865	Move stop N of NE 47th Street	Bring stop closer to pedestrian crossing
BCT Stop 4419	Move stop north of new signal (if signalized)	Pedestrian crossing will be on north side

Comments	Prioritization Score	Measure											
		1	2	3	4	5	6	7	8	9	10*	11	12
Requires signalization; FDOT Roadway	24	1	0	0	0	0	0	2	0	0	1	1	2
	24	1	0	0	0	0	0	2	0	0	1	1	2
Already signalized; just need to add crosswalks	24	1	0	0	0	0	0	2	0	0	1	1	2
	24	1	0	0	0	0	0	2	0	0	1	1	2
Requires signalization; FDOT Roadway	24	1	0	0	0	0	0	2	0	0	1	1	2
Requires signalization; FDOT Roadway	21	1	0	0	0	0	0	1	0	0	1	1	2
Requires signalization; FDOT Roadway	25	1	0	0	0	0	0	1	0	0	0	2	2
FDOT Roadway; requires more analysis	26	2	0	0	0	0	0	2	0	0	1	1	2
FDOT Roadway; requires more analysis	23	2	0	0	0	0	0	1	0	0	1	1	2
Need to coordinate with BCT & Analyze feasibility	18	0	0	0	2	0	0	0	0	0	1	1	2
Need to coordinate with BCT & Analyze feasibility	18	0	0	0	2	0	0	0	0	0	1	1	2

*Note: Measure 10 not reviewed because these features can vary and should be determined in design. It is encouraged that sustainable features be incorporated into each improvement to the extent possible.

SEGMENT IMPROVEMENTS - INTERNAL STREETS

Street	From	To	Treatment	Reason
Bayview Drive	Oakland Park Blvd	Commercial Blvd	Sidewalks on Both Sides	Connectivity
Bayview Drive	Oakland Park Blvd	Commercial Blvd	Landscaped Medians	Traffic Calming
Bayview Drive	Oakland Park Blvd	Commercial Blvd	Paint Bicycle Lanes	Connectivity
NE 21st Ave	NE 39th St	NE 24th Terrace	Sidewalk on east side	Connectivity
NE 21st Ave	NE 37th Street	NE 39th Street	Pedestrian connection	Connectivity
NE 21st Ave	NE 23rd Ave	NE 24th Terrace	Mini Median Island (2)	Traffic calming
NE 21st Ave	NE 23rd Ave	End of sidewalk on west side	Sidewalk on West Side	Connectivity
NE 22nd Ave	Federal Hwy	NE 37th Street	Sidewalk on West Side	Connectivity
NE 22nd Ave	NE 33rd St	NE 35th Drive	Mini Median Island	Traffic calming
NE 22nd Ave	NE 35th Drive	NE 36th St	Mini Median Island	Traffic calming
NE 25th Ave	Bayview Drive	Commercial Blvd	Sidewalk on west side	Connectivity
NE 25th Terrace	NE 35th Drive	NE 37th Drive	Sidewalk on East Side	Connectivity
NE 26th Ave	Mall Access	NE 35th Drive	Sidewalk on West Side	Connectivity
NE 27th Ave	Oakland Park Blvd	NE 35th Drive	Sidewalk on east side	Connectivity
NE 28th Ave	NE 47th Street	Commercial Blvd	Sidewalk on east side	Connectivity
NE 32nd Street	NE 25th Ave	Bayview Drive	Sidewalk on North Side	Connectivity
NE 35th Drive	NE 27th Ave	Bayview Drive	Lateral Shift	Traffic Calming
NE 35th Drive	NE 26th Ave	Bayview Drive	Sidewalk on North Side	Connectivity
NE 35th Drive	NE 25th Terrace	NE 35th Drive	New Pedestrian Access	Connectivity
NE 37th Drive	Federal Hwy	Bayview Drive	Lateral Shift	Traffic calming
NE 37th Street	Federal Hwy	NE 35th Drive	Sidewalk on North Side	Connectivity
NE 37th Street	NE 22nd Ave	NE 23rd Ave	Mini Median Island	Traffic Calming
NE 37th Street	NE 24th Ave	NE 25th Ave	Mini Median Island	Traffic Calming
NE 37th Street	NE 25th Terrace	NE 35th Drive	Lateral Shift	Traffic Calming
NE 39th St	Federal Hwy	NE 21st Ave	Sidewalk on South Side	Connectivity
NE 43rd St	Federal Hwy	NE 21st Ave	Sidewalk on South Side	Connectivity
NE 45th St	Alley	NE 21st Ave	Sidewalk on North Side	Connectivity
NE 47th Street	NE 25th Ave	Bayview Drive	Sidewalk on South Side	Connectivity
NE 48th Ln	NE 24th Terrace	NE 25th Ave	Mini Median Island	Traffic calming
NE 48th Ln	NE 24th Terrace	NE 25th Ave	Sidewalk on South Side	Connectivity
NE 48th St	Alley	NE 21st Ave	Sidewalk on North Side	Connectivity
NE 49th Street	NE 24th Terrace	Bayview Drive	Sidewalks on South Side	Connectivity
NE 49th Street	NE 24th Terrace	NE 25th Ave	Mini Median Island	Traffic Calming
NE 49th Street	NE 26th Ave	NE 27th Ave	Mini Median Island	Traffic Calming
NE 49th Street	NE 28th Ave	NE 29th Ave	Mini Median Island	Traffic Calming
NE 21st Street	NE 39th Street	NE 29th Terrace	Paint Sharrows	Connectivity
NE 24th Terrace	NE 21st Street	NE 49th Street	Paint Sharrows	Connectivity
NE 49th Street	NE 24th Terrace	Commercial Blvd	Paint Sharrows	Connectivity

Potential Issues	Priority Score	Measure												
		1	2	3	4	5	6	7	8	9	10*	11	12	13
	36	2	0	0	0	2	0	0	0	0		2	2	2
Consider driveway access	22	0	0	0	0	0	0	0	0	0		2	2	2
	36	2	0	0	0	0	2	0	0	0		2	2	2
	34	2	0	0	0	2	0	0	0	0		0	2	2
Need to resolve access issues	34	2	0	0	0	2	0	0	0	0		0	2	2
	20	0	0	0	0	0	0	0	0	0		0	2	2
	34	2	0	0	0	2	0	0	0	0		0	2	2
	34	2	0	0	0	2	0	0	0	0		0	2	2
Head in parking needs to be removed from surrounding developments	20	0	0	0	0	0	0	0	0	0		0	2	2
	20	0	0	0	0	0	0	0	0	0		0	2	2
Head in parking needs to be removed from surrounding developments	34	2	0	0	0	2	0	0	0	0		0	2	2
	34	2	0	0	0	2	0	0	0	0		0	2	2
	34	2	0	0	0	2	0	0	0	0		0	2	2
	34	2	0	0	0	2	0	0	0	0		0	2	2
	34	2	0	0	0	2	0	0	0	0		0	2	2
	20	0	0	0	0	0	0	0	0	0		0	2	2
	34	2	0	0	0	2	0	0	0	0		0	2	2
	30	0	0	0	0	2	0	0	0	0		0	2	2
	20	0	0	0	0	0	0	0	0	0		0	2	2
	34	2	0	0	0	2	0	0	0	0		0	2	2
	20	0	0	0	0	0	0	0	0	0		0	2	2
	20	0	0	0	0	0	0	0	0	0		0	2	2
	20	0	0	0	0	0	0	0	0	0		0	2	2
	34	2	0	0	0	2	0	0	0	0		0	2	2
	34	2	0	0	0	2	0	0	0	0		0	2	2
	34	2	0	0	0	2	0	0	0	0		0	2	2
	34	2	0	0	0	2	0	0	0	0		0	2	2
	20	0	0	0	0	0	0	0	0	0		0	2	2
Head in parking needs to be removed from surrounding developments	34	2	0	0	0	2	0	0	0	0		0	2	2
	34	2	0	0	0	2	0	0	0	0		0	2	2
	34	2	0	0	0	2	0	0	0	0		0	2	2
	20	0	0	0	0	0	0	0	0	0		0	2	2
	20	0	0	0	0	0	0	0	0	0		0	2	2
	20	0	0	0	0	0	0	0	0	0		0	2	2
	25	0	0	0	0	0	1	0	0	0		0	2	2
	25	0	0	0	0	0	1	0	0	0		0	2	2
	25	0	0	0	0	0	1	0	0	0		0	2	2

*Note: Measure 10 not reviewed because these features can vary and should be determined in design. It is encouraged that sustainable features be incorporated into each improvement to the extent possible.

SEGMENT IMPROVEMENTS - EXTERNAL STREETS

Street	From	To	Treatment	Reason
Oakland Park Blvd	Federal Highway	Beach	Add bicycle Lanes (buffered if possible)	Connectivity
Oakland Park Blvd	Federal Highway	Beach	Add 8'-10' Sidewalks Where Missing	Connectivity
Oakland Park Blvd	Federal Highway	Beach	Widen sidewalks to 8'-10' Where Narrower	Ped/Bike Comfort
Federal Highway	Oakland Park Blvd	Commercial Blvd	Add bicycle Lanes (buffered if possible)	Connectivity
Federal Highway	Oakland Park Blvd	Commercial Blvd	Add 8'-10' Sidewalks Where Missing	Connectivity
Federal Highway	Oakland Park Blvd	Commercial Blvd	Widen sidewalks to 8'-10' Where Narrower	Ped/Bike Comfort
Commercial Blvd	Federal Highway	Beach	Add bicycle Lanes (buffered if possible)	Connectivity
Commercial Blvd	Federal Highway	Beach	Add 8'-10' Sidewalks Where Missing	Connectivity
Commercial Blvd	Federal Highway	Beach	Widen sidewalks to 8'-10' Where Narrower	Ped/Bike Comfort

Potential Issues	Priority Score	Measure												
		1	2	3	4	5	6	7	8	9	10*	11	12	13
Right of Way, FDOT Roadway	39	2	2	0	0	0	2	0	0	1		2	1	2
	35	2	2	0	1	1	0	0	0	1		2	1	2
	27	0	0	0	1	1	0	0	0	1		2	1	2
Right of Way, FDOT Roadway	39	2	2	0	0	0	2	0	0	1		2	1	2
	35	2	2	0	1	1	0	0	0	1		2	1	2
	27	0	0	0	1	1	0	0	0	1		2	1	2
Right of Way, FDOT Roadway	39	2	2	0	0	0	2	0	0	1		2	1	2
	35	2	2	0	1	1	0	0	0	1		2	1	2
	27	0	0	0	1	1	0	0	0	1		2	1	2

*Note: Measure 10 not reviewed because these features can vary and should be determined in design. It is encouraged that sustainable features be incorporated into each improvement to the extent possible.



CITY OF FORT LAUDERDALE