RESOLUTION No. 19-197

A RESOLUTION OF THE MAYOR AND THE CITY COUNCIL OF THE CITY OF DORAL, FLORIDA, SITTING AS THE LOCAL PLANNING AGENCY, GOING FORWARD WITHOUT A RECOMMENDATION TO THE LOCAL GOVERNING BODY THE ADOPTION OF THE 5-YEAR CAPITAL IMPROVEMENT SCHEDULE ANNUAL UPDATE FOR FISCAL YEARS 2019-2020 AND 2023-2024 OF THE COMPREHENSIVE PLAN PURSUANT TO SECTION 163.3177(3)(B), FLORIDA STATUTES; PROVIDING FOR TRANSMITTAL OF THE 5-YEAR CAPITAL IMPROVEMENT SCHEDULE TO THE STATE LAND PLANNING AGENCY IN THE FLORIDA DEPARTMENT OF ECONOMIC OPPORTUNITY; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, pursuant to Section 163.3177(3)(b), Florida Statutes, local governments are required to undertake an annual review of the Capital Improvements Element to update the 5-Year Capital Improvement Schedule; and

WHEREAS, the schedule must be reviewed annually by the City to reflect the timing, location and funding of capital projects to achieve and maintain adopted level of service standards for public facilities that are necessary to implement the comprehensive plan; and

WHEREAS, the Planning and Zoning Department is submitting the 5-Year Capital Improvement Schedule update which identifies the local government's capital projects necessary for implementation of the comprehensive plan and to ensure that the adopted level of service standards for public facilities are achieved and maintained for the fiveyear planning period.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF DORAL, FLORIDA SITTING AS THE LOCAL PLANNING AGENCY THAT: **Section 1.** <u>Recitals.</u> The above recitals are confirmed, adopted, and incorporated herein and made a part of hereof by this reference.

Section 2. Adoption of the Capital Improvements Element Update. The LPA

hereby recommends going forward without a recommendation to the local governing body (City Council) to consider the adoption of the 5-Year Capital Improvement Schedule Annual Update for fiscal years 2019/2020 – 2023/2024 of the comprehensive plan pursuant to section 163.3177(3)(b), Florida Statutes. A copy of the 5-Year Capital Improvement Schedule is provided in "Exhibit A".

Section 3. <u>Effective Date.</u> This Resolution shall become effective immediately upon its adoption by the Local Planning Agency.

The foregoing Resolution was offered by Councilmember Cabrera who moved its adoption. The motion was seconded by Councilmember Cabral and upon being put to a

vote, the vote was as follows:

Mayor Juan Carlos Bermudez	Yes
Vice Mayor Claudia Mariaca	Yes
Councilwoman Digna Cabral	Yes
Councilman Pete Cabrera	Yes
Councilwoman Christi Fraga	Yes

TRANSMITTED WITHOUT A RECOMMENDATION TO THE LOCAL GOVERNING BODY (CITY COUNCIL) THIS 28 DAY OF AUGUST, 2019.

JUAN CARLOS BERMUDEZ, MAYOR

ATTEST: ONNIE DIAŻ, MMC **CITY CLERK**

APPROVED AS TO FORM AND LEGAL SUFFICIENCY FOR THE USE AND RELIANCE OF THE CITY OF DORAL ONLY:

LUIS FIGUEREDO, ESQ.

LUIS FIGUEREDO, ESQ CITY ATTORNEY

EXHIBIT "A"

DORAL COMPREHENSIVE PLAN CAPITAL IMPROVEMENTS ELEMENT UPDATE

August 12, 2019

Table of Contents

INTI	RO	DUCTION	. 3
١.	P	OPULATION ESTIMATES AND PROJECTIONS	.4
II.	LE	EVEL OF SERVICE ANALYSIS	. 5
A		Transportation	. 5
В	•	Potable Water Service	18
С	•	Sanitary Sewer Facilities	19
D).	Stormwater Management	19
E		Solid Waste	25
F		Parks and Recreation	26
G	i.	Education Facilities	30
III.	C	APITAL IMPROVEMENTS	32

Figures

Figure 1. 2016 Level-of-Service Roadway Conditions	7
Figure 2. 2025 Level-of-Service Roadway Conditions	. 8
Figure 3. Transit Routes in Doral (2016)	.12
Figure 4. Doral's Existing and Planned Bikeway Network	.14
Figure 5. Doral Canal System	.20

Figure 6. Prioritized Drainage Sub-Basins	23
Figure 7. Doral's Parks System	28

Tables

Table 1. Population Estimates and Projections	4
Table 2. 2016 Existing Intersection Conditions LOS Summary	9
Table 3. 2016 Existing Intersection Traffic with Mitigation LOS Summary	10
Table 4. City Transportation Projects FY 2019-2023	15
Table 5. Planned State and County Transportation Projects in Doral Area	16
Table 6. Miami-Dade WASD Water System Capacity and Demand Comparison	18
Table 7. Miami-Dade County WASD Regional Wastewater System Capacity	19
Table 8. City Stormwater Projects and Estimated Costs FY 2019-2023	24
Table 9. Solid Waste Generation	25
Table 10. Projected Parks Level-of-Service Acreage Needs	26
Table 11. Planned Parks Projects FY 2019-2023	27
Table 12. Public School 2017-18 Capacity and Enrollment	30
Table 13. 2017-18 Capacity and Enrollment for Charter Schools in Doral	31
Table 14. Private Schools in Doral	31
Table 15. Projected Revenues for Capacity-Related Projects by Funding Source	32
Table 16. Projected 5-Year Expenditures for Capital Improvements by Type	32
Table 17. Doral Schedule of Capital Improvements: FY 2019-2023	

INTRODUCTION

This document represents the annual update to the Capital Improvements Element (CIE) of the City of Doral Comprehensive Plan. Pursuant to Subsection 163.3177(3)(b)1, Florida Statutes, local governments are required to review the CIE on an annual basis and modify as necessary to maintain a financially feasible 5-Year Schedule of Capital Improvements (SCI).

The CIE Update includes all capital projects for which the City has fiscal responsibility, including stormwater management, parks and recreation, and transportation. The Update also includes capital improvement projects which are the responsibility of other government agencies and entities, including water supply, sanitary sewer, solid waste, public school facilities and transportation facilities. These "non-Doral" projects are funded by Miami-Dade County, Miami-Dade Public School Board, Miami-Dade Metropolitan Planning Organization (MPO) and the Florida Department of Transportation (FDOT).

This document also provides level of service (LOS) analyses for all public facilities in the City based on population projections and related data. Projects included in the updated 5-Year SCI are needed to address projected public facility needs in order to meet future LOS demand.

In addition, the CIE Update must demonstrate consistency with all other elements of the Comprehensive Plan. Each of the capital projects listed in the updated 5-Year SCI are consistent with applicable elements. When approved and adopted, this CIE update will supplement the adopted Comprehensive Plan. The 2019/20-2023/24 SCI herein will replace the current version in the adopted Plan and updated data, inventory and analysis (DIA) will replace the older DIA.

I. Population Estimates and Projections

Population projections in comprehensive plans are used to forecast demand on public facilities and services. The current population projections for Doral are contained in the adopted 2018 Capital Improvements Update.

In developing Doral's population projections for this CIE Update, various demographic sources including population estimates derived from the University of Florida, Bureau of Economic and Business Research (BEBR), and the U.S. Census were reviewed and analyzed. Recent population projections contained in Miami-Dade County's adopted 20-Year Regional Water Supply Plan also provides another source of current and future population trends.

Table 1 below shows the historical and current estimates, and future projections of Doral's population through the year 2030. The projections were derived from the City's Comprehensive Plan Update project being conducted this year.

YEAR	POPULATION
2000	21,000
2005	33,633
2010	45,704
2015	55,660
2016	59,306
2017	64,167
2018	68,244
2019	71,698
2020	75,152
2025	91,409
2030	103,421
Sources: 2010 U.S. Census and University of Florida BEBR 2011	2018; Iler Planning & City Staff (2019-2030).

Table 1: Population Estimates and Projections

The population levels in Table 1 are utilized as the City's current population projections in this CIE Update to determine the City's public facility needs during the 5-year planning period from 2019/20 to 2023/24. During the FY 2019-25 period the City is expected to grow by an estimated 4.6% per year which is similar to the growth experienced in the past 10 year period. City staff has calculated there are 5,737 dwelling units approved in site plans by the City but un-built as of May 2018 which provides an estimated future population capacity of 18,932. This future residential capacity has been factored into the projections above. With these approved units and available vacant land, Doral has residential inventory to accommodate future growth through 2024.

II. Level-of-Service Analysis

A. Transportation

There are approximately 206 lane miles of roads within Doral maintained by two (2) separate government jurisdictions: City of Doral and Miami-Dade County. Each jurisdiction provides routine maintenance for their roadways. However, all roadway traffic control such as speed limit signs, stop signs and traffic signals fall under the jurisdiction of, and are maintained by, Miami-Dade County. Doral maintains 64.2 miles of roadway. Over the years, the City has taken over maintenance jurisdiction for many public roads and streets in Doral through inter-local agreements with the County. The expressways surrounding Doral on three sides (SR 821/Homestead Extension of the Florida Turnpike, SR 836/Dolphin Expressway and SR 826/Palmetto Expressway) are either State-owned or County-owned.

The City completed the 2nd update of its Transportation Master Plan (TMP) in 2017. The TMP is a longrange 20-year plan that guides Doral's mobility improvements within the City and with regional destinations. The 2017 TMP update inventoried and analyzed level of service (LOS) for existing roadways and projected future roadway LOS in the years 2016, 2025 and 2040. It also addressed transit, bikeway and pedestrian facilities and needs. In addition, the Plan identified and prioritized projects needed to address current and future transportation deficiencies, and methods for financing transportation and capacity-related improvements necessary to maintain adopted LOS standards.

<u>Roadways</u>

Adopted level of service (LOS) standards for roadway facilities are contained in Policies 2.2.1, 2.2.2 and 2.2.3 of the City's Transportation Element. Generally, local roadways have an adopted LOS standard of "D"; where specialized transit exists, the LOS threshold is "D + 120%"; and on State facilities, the adopted LOS threshold is "E". The LOS analysis contained in this CIE update is based on 2018 traffic counts from the City of Doral Biennial Traffic Monitoring Report (dated October 16, 2018).

This section of the report addresses the performance of Doral's roadway system. Roadway vehicular counts were undertaken at various locations within the City. Using this data, level of service were calculated for each associated roadway segment on an AADT, Peak Hour Peak Directional, and Peak Hour Bi-directional basis. Traffic conditions were projected to 2025 using a combination of TPO and local growth factors, derived from an understanding of existing and planned future development. This provides an assessment of future conditions to determine project needs. Existing Conditions have been analyzed and traffic counts have been displayed in tabular form by facility. This serves as a handbook to detail the condition of each facility in the City. Categories of data include:

- Specific Link
- Number of Lanes
- Existence of a Median
- Road Jurisdiction
- Functional Classification
- Number of Traffic Signals
- Segment Length

- Signals per Mile
- Speed Limit
- Roadway Class
- Existing Level of Service Standard
- Service Volume at LOS C, D, E
- Average Annual Daily Traffic (AADT)
- Peak Hour Volume
- Remaining Capacity

Figure 1 shows the level-of-service (LOS) on the primary Doral roads in 2018. Roadways with average daily traffic flows exhibiting LOS "F" in 2018 were:

- 1. NW 58^{th} Street NW 87^{th} Avenue to NW 97^{th} Avenue.
- 2. NW 25th Street NW 92nd Avenue to NW 102nd Avenue
- 3. NW 107th Avenue NW 25th Street to NW 58th Street
- 4. NW 114th Avenue NW 34th Street to NW 58th Street
- 5. NW 117th Avenue NW 25th Street to NW 41st Street.

Figure 2 presents the projected level-of-service on the City's primary road system in 2025. Roadways with average daily traffic flows exhibiting LOS "F" in 2025 are projected to be:

- 1. NW 107th Avenue NW 25th Street to NW 41st Street
- 2. NW 97th Avenue NW 12th Street to NW 17th Street
- 3. NW 112th Avenue NW 25th Street to NW 34th Street
- 4. NW 114th Avenue NW 34th Street to NW 58th Street
- 5. NW 117th Avenue NW 25th Street to NW 41st Street
- 6. NW 25th Street NW 92nd Avenue to NW 117th Avenue
- 7. NW 41st Street Palmetto Expressway to NW 197th Avenue
- 8. NW 34th Street NW 112th Avenue to NW 114th Avenue
- 9. NW 74th Street NW 97th Avenue to NW 107th Avenue.

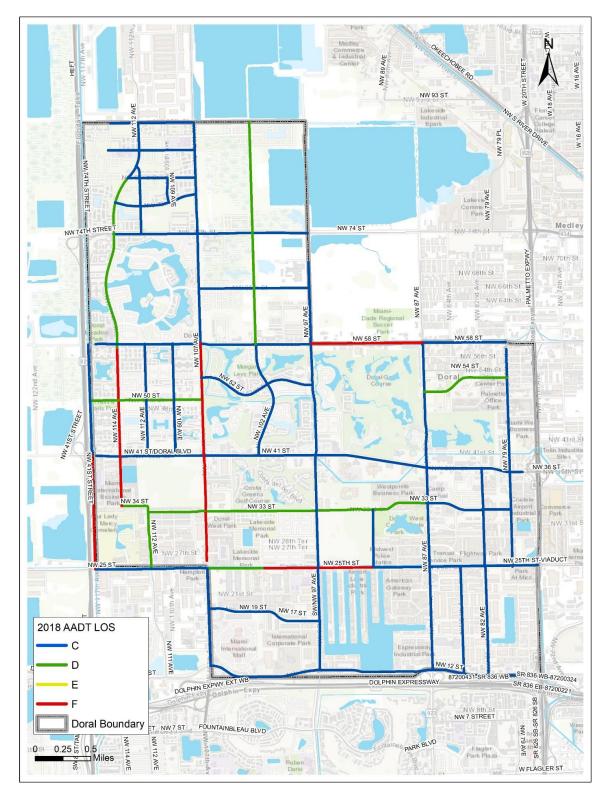


Figure 1: 2018 Level-of-Service Roadway Conditions

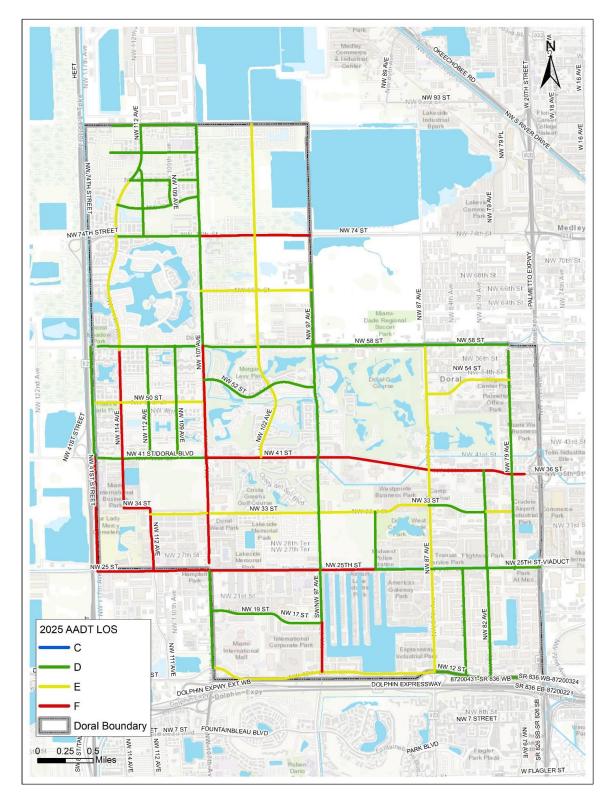


Figure 2: 2025 Projected Roadway Level-of-Service

The potential solutions to these documented and projected traffic conditions in the form of planned roadway and transit improvements were used as a primary input in the preparation of the FY 2020-2024 Schedule of Capital Improvements presented later in this report in Table 17.

Intersections

The City's Transportation Master Plan (2016) included a total of 30 intersections with 29 signalized and 1 unsignalized intersection. The traffic volumes collected in the field were checked for accuracy. Pedestrian volumes were also input and analyzed in the Synchro software. For signalized intersections, the existing signal timings were obtained from Miami-Dade County. The of the Levels-of-Service (LOS) analyses for the study intersections follow the procedures outlined in the 2010 Highway Capacity Manual (HCM), Transportation Research Board, Special Report 209, and the latest Synchro software. The LOS findings have been summarized for 2016 Existing Conditions and 2016 Existing Conditions with Proposed Mitigation. It should be noted that only for unsignalized intersection, HCM does not compute a LOS value for "Yield" and "Free Flow" traffic movements. Consequently, HCM does not determine an overall LOS for those particular unsignalized intersections. The intersections in Table 2 below resulted in an overall LOS E or F during morning and afternoon peaks.

Intersection				Approach LOS [2]				
No.	Name	Control Overall LOS/Delay [1]		NB	SB	EB	WB	
1	NW 12th Street & NW 107th Avenue	Signalized	E/55.9 sec (E/64.9 sec)	D (D)	D (D)	E (F)	E (F)	
2A	NW 12th Street & NW 97th Avenue (Off Ramp)	Signalized	C/20.3 sec (A/8.5 sec)	N/A	C (C)	С (В)	A (A)	
2B	NW 12th Street & NW 97th Avenue (On Ramp)	Signalized	A/9.8 sec (B/10.5 sec)	С (В)	N/A	A (A)	B (B)	
3	NW 12th Street & NW 87th Avenue	Signalized	D/52.6 sec (D/54.6 sec)	C (D)	D (D)	F (F)	D (E)	
4	NW 12th Street & NW 82nd Avenue	Signalized	C/26.1 sec (B/19.1 sec)	N/A	С (В)	С (В)	C (C)	
5	NW 25th Street & NW 117th Avenue	Signalized	D/52.3 sec (E/72.6 sec)	E (F)	F (F)	D (D)	B (D)	
6	NW 25th Street & NW 107th Avenue	Signalized	E/63.7sec (E/65.0 sec)	E (E)	D (E)	E (E)	D (E)	
7	NW 25th Street & NW 97th Avenue	Signalized	D/43.9 sec (E/55.3 sec)	D (D)	D (E)	D (E)	D (D)	
8	NW 25th Street & NW 87th Avenue	Signalized	E/57.5 sec (E/61.1 sec)	D (D)	D (D)	E (F)	E (E)	
9	NW 25th Street & NW 82nd Avenue	Signalized	E/56.4 sec (D/53.1 sec)	E (E)	F (E)	C (D)	E (D)	
10	NW 25th Street & NW 79th Avenue	Signalized	D/37.7 sec (E/65.8 sec)	E (D)	E (F)	C (D)	C (C)	
11	NW 33rd Street & NW 107th Avenue	Signalized	F/85.2 sec (D/54.6 sec)	E (D)	F (C)	F (F)	D (E)	
12	NW 33rd Street & NW 97th Avenue	Signalized	E/69.0 sec (E/62.3 sec)	D (D)	E (D)	F (D)	E (F)	
13	NW 33rd Street & NW 87th Avenue	Signalized	E/55.4 sec (E/67.5 sec)	D (E)	D (D)	F (E)	E (F)	
15	NW 41st Street & HEFT NB Off -Ramp	Signalized	B/11.5 sec (A/7.9 sec)	A (B)	N/A	В (В)	A (A)	
16	NW 41st Street & NW 115th Avenue	Signalized	D/35.2 sec (D/36.3 sec)	C (E)	E (D)	C (C)	D (D)	
17	NW 41st Street & NW 114th Avenue	Signalized	E/72.4 sec (E/60.7 sec)	E (F)	F (F)	E (D)	D (D)	
18	NW 41st Street & NW 107th Avenue	Signalized	F/80.8 sec (E/77.8 sec)	F (E)	F (F)	E (E)	F (F)	
19	NW 41st Street & NW 102nd Avenue	Signalized	D/40.7 sec (D/36.1 sec)	F (E)	E (E)	C (C)	C (C)	

Table 2: Existing Intersection Conditions LOS Summary

20	NW 36th Street & NW 87th Avenue	Signalized	E/69.7 sec (E/70.2 sec)	D (E)	E (F)	F (E)	E (E)
21	NW 36th Street & NW 82nd Avenue	Signalized	C/32.1 sec (D/45.6 sec)	F (F)	F (F)	C (C)	B (B)
22	NW 36th Street & NW 79th Avenue	Signalized	E/68.4 sec (F/124.8 sec)	F (F)	F (F)	D (E)	E (E)
23	NW 58th Street & NW 114th Avenue	Signalized	D/53.7 sec (D/42.8 sec)	D (C)	C (D)	E (D)	F (D)
24	NW 58th Street & NW 107th Avenue	Signalized	E/62.9 sec (E/69.3 sec)	F (F)	D (E)	E (D)	E (E)
25	NW 58th Street & NW 97th Avenue	Signalized	E/69.1 sec (E/73.1 sec)	F (F)	F (F)	D (D)	D (E
26	NW 58th Street & NW 87th Avenue	Signalized	E/60.1 sec (F/91.1 sec)	F (F)	F (F)	C (C)	D (D)
27	NW 58th Street & NW 79th Avenue	Signalized	E/64.2 sec (F/95.4 sec)	F (F)	F (E)	E (E)	D (D)
28	NW 74th Street & NW 114th Avenue	Signalized	E/73.9 sec (F/143.9 sec)	F (F)	F (F)	D (D)	D (E)
29	NW 74th Street & NW 107th Avenue	Signalized	F/140.8 sec (F/91.3 sec)	C (C)	F (D)	F (B)	B (F)
30	NW 74th Street & NW 97th Avenue	Unsignalized	F/62.0 sec (F/67.7 sec)	F (F)	A (A)	B (C)	F (B)

Following review with the City staff of the information in Table 2, a mitigation strategy for each intersection with LOS E was developed. Mitigation includes adding lane capacity, removal of split phasing and signal timing optimization. Proposed improvements were analyzed with results included in Table 3. With the inclusion of proposed mitigation measures, the overall level of service for all the intersections improves, yet there are intersections that remain at LOS E or F.

	Intersection	Traffic		Approach LOS [2]			
No.	Name	Control Overall LOS/Delay [1]	NB	SB	EB	WB	
1	NW 12th Street & NW 107th Avenue	Signalized	D/53.1 sec (E/58.1 sec)	D (D)	D (D)	E (E)	D (E)
2A	NW 12th Street & NW 97th Avenue (Off Ramp)	Signalized	C/20.1 sec (A/8.4 sec)	N/A	C (C)	С (В)	A (A)
2B	NW 12th Street & NW 97th Avenue (On Ramp)	Signalized	A/7.4 sec (B/8.5 sec)	B (A)	N/A	A (A)	B (B)
3	NW 12th Street & NW 87th Avenue	Signalized	D/47.6 sec (D/46.1 sec)	D (C)	D (D)	F (F)	D (E)
4	NW 12th Street & NW 82nd Avenue	Signalized	C/26.1 sec (B/19.1 sec)	N/A	С (В)	С (В)	C (C)
5	NW 25th Street & NW 117th Avenue	Signalized	C/29.2 sec (D/43.1 sec)	D (D)	D (C)	C (C)	B (D)
6	NW 25th Street & NW 107th Avenue	Signalized	E/59.9 sec (E/61.4 sec)	D (D)	D (D)	E (E)	E (F)
7	NW 25th Street & NW 97th Avenue	Signalized	C/31.8 sec (D/40.6 sec)	C (C)	C (D)	C (D)	C (D)
9	NW 25th Street & NW 82nd Avenue	Signalized	D/50.2 sec (D/51.9 sec)	E (E)	E (E)	D (D)	D (D)
10	NW 25th Street & NW 79th Avenue	Signalized	D/38.9 sec (D/46.2 sec)	D (D)	E (D)	C (D)	D (C)
11	NW 33rd Street & NW 107th Avenue	Signalized	E/55.5 sec (D/44.5 sec)	E (D)	D (C)	E (E)	D (E)
12	NW 33rd Street & NW 97th Avenue	Signalized	E/56.4 sec (D/46.9 sec)	D (D)	D (D)	D (D)	E (D)
13	NW 33rd Street & NW 87th Avenue	Signalized	D/54.7 sec (D/50.8 sec)	D (D)	E (D)	D (D)	D (E)
16	NW 41st Street & NW 115th Avenue	Signalized	D/36.6 sec (D/39.1 sec)	D (D)	E (D)	D (C)	C (D)

Table 3: Existing Intersection Traffic with Mitigation LOS Summary

17	NW 41st Street & NW 114th Avenue	Signalized	E/58.1sec (D/51.8 sec)	D (E)	E (D)	E (D)	D (D)
18	NW 41st Street & NW 107th Avenue	Signalized	E/69.5 sec (E/73.1 sec)	E (E)	F (E)	E (E)	D (F)
19	NW 41st Street & NW 102nd Avenue	Signalized	C/30.5 sec (C/31.0 sec)	D (D)	D (D)	C (C)	C (C)
20	NW 36th Street & NW 87th Avenue	Signalized	E/62.1 sec (E/62.2 sec)	E (E)	E (E)	E (E)	D (E)
21	NW 36th Street & NW 82nd Avenue	Signalized	C/22.9 sec (C/23.4 sec)	E (E)	E (E)	В (В)	B (B)
22	NW 36th Street & NW 79th Avenue	Signalized	D/47.0 sec (F/103.9 sec)	D (F)	E (F)	D (F)	D (E
23	NW 58th Street & NW 114th Avenue	Signalized	D/38.0 sec (D/47.6 sec)	C (D)	C (D)	E (D)	D (D)
24	NW 58th Street & NW 107th Avenue	Signalized	D/47.9 sec (D/46.7 sec)	D (D)	D (D)	E (D)	D (D)
25	NW 58th Street & NW 97th Avenue	Signalized	D/42.4 sec (D/37.6 sec)	D (C)	D (C)	D (D)	C (D)
26	NW 58th Street & NW 87th Avenue	Signalized	D/41.8 sec (D/45.9 sec)	D (E)	E (D)	D (D)	C (D)
28	NW 74th Street & NW 114th Avenue	Signalized	D/40.8 sec (D/40.2 sec)	C (C)	C (C)	D (D)	D (E)
29	NW 74th Street & NW 107th Avenue	Signalized	D/53.8 sec (D/46.3 sec)	D (E)	E (E)	E (B)	C (D)
30	NW 74th Street & NW 97th Avenue	Signalized	B/10.0 sec (C/20.7 sec)	D (B)	A (A)	A (B)	B (C

<u>Transit</u>

The City of Doral is served by Miami-Dade Transit (MDT) routes 7, 36, 71, 87, 132, 137, 238, the 95-Express Earlington Heights Route (952) as well as by its local circulator, the Doral Trolley. Figure 3 shows the routes of Miami-Dade Transit within the City of Doral and the Doral Transit System's Trolley Route.

The free-fare Doral Trolley System launched on February 1, 2008. It is a local circulator which now serves the city through four (4) routes (R1, R2, R3 and R4), with route R1 providing connector service to MDT Metrobus routes at Miami International Mall and routes R2 and R3 providing connector service to the Miami-Dade Transit Metrorail via the Palmetto Metrorail Station in Medley. Route R4 commenced in August 2018 and provides service to Florida International University (FIU) along NW 107th Avenue. While these routes are intended to serve separate areas of the City, there is significant overlap between them. Because there are no dedicated trolley lanes, trolleys operate on the same roadways used by individual vehicles. The City conducts regular trolley ridership surveys which reveal that ridership is varied both in user numbers and trip purpose for all three routes. Ridership details provide insight into the route alignment and stops and Trolley frequency.

Route 1 has the highest ridership, followed by Routes 3, 4 and 2, respectively. Route 2 has a comparatively low overall ridership. High ridership boarding locations not only show the locations of high activity and indication of the demographics of route ridership, but where the routes intersect, provide insight into potential hub or corridor development areas. Conversely, low ridership indicates a need to consolidate stops. There are also lower performing stops on all three Routes. Stops falling into these categories should be specifically examined for elimination in a Route revision.

Figure 3: Transit Routes in Doral

Factors that affect both the level of ridership and the quality of trips include access to and amenities at Trolley stops. Trolley stop accessibility includes a sidewalk to the stop that meets ADA requirements including curb cuts, a lift area, and minimum unobstructed sidewalk widths. Amenities may include the Trolley guide and associate signage, benches, shelters, and trash cans.

Key locations within for transit ridership within the City of Doral include the Palmetto Metrorail Station, the residential areas in northwest Doral, Miami International Mall, and NW 41st Street/NW 97th Avenue.

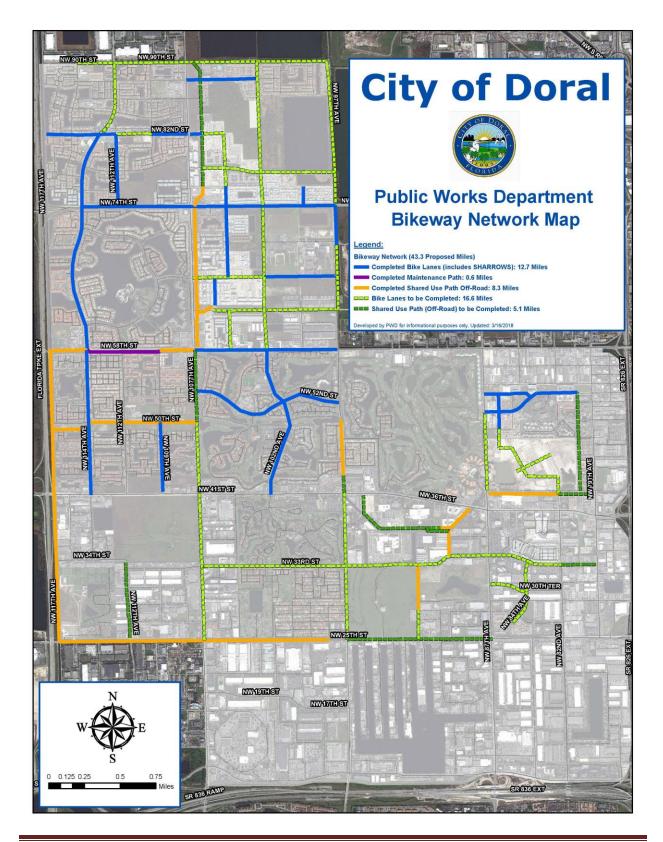
Bicycle/Pedestrian Facilities

The City's goal is to encourage intra-city trips by bicycle and walking. The majority of the City is interconnected by sidewalks. The City currently does not have designated bicycle facilities. However, the City has developed a Bikeway Network Plan that proposes a series of bike lanes and multi-use paths. Figure 4 shows the current and planned bikeway network in Doral.

De Minimus Impact Report

Pursuant to Section 163.3180(6), F.S. local governments must submit a de minimus impact report with the Capital Improvements Element update. A de minimus impact is defined as an impact that would not affect more than 1 percent of the maximum volume at adopted LOS of the affected transportation facility; no impact is a de minimus if the sum of the existing roadway volumes and the projected volumes from approved projects on a transportation facility would exceed 110 percent of the maximum volume at the adopted LOS and provided that an impact of a single-family home on an existing lot will constitute a de minimus impact on all roadways regardless of the level of deficiency of the roadway. Based on the above definition of a de minimus impact, the City has nothing to report.

Figure 4. Doral's Existing and Planned Bikeway Network



5-Year Level-of-Service Transportation Projects

To address the LOS deficiencies now and expected by 2023-24, the City has programmed 28 roadway and multi-modal capacity projects through the 5-year planning period. These projects are listed in Table 4 below and will be funded primarily through the City's Transportation Fund.

Table 4. City Transportation Projects FY 2020-2024

Project Location	Type of Work	Implementation Timeframe (Fiscal Year)
1. Citywide	City Sidewalks Phase 2	2021
2. Citywide	Trolley Circulator Fleet	2020-2022
3. Citywide	Traffic Monitoring Cameras	2020-2022
4. Citywide	Roadway Maintenance	2020-2024
5. Citywide	Traffic Calming Program	2020-2024
6. Citywide	Transit Mobility & Infrastructure	2020-2024
7. Citywide	NW 102 Av Bike Path and City Sidewalks	2023
8. Citywide	Intersection Improvements	2020-2024
9. Citywide	Do Not Block Box Intersections	2021-2023
10. Section 7	Traffic Calming Devices	2020
11. NW 102 Av Widening	NW 102 Av & 62 St Intersection	2023
12. NW 82 St - 112 Av Intersection	Traffic Signal	2020
13. NW 90 St Roadway Improvements	Section 7 Vacant Land	2020
14. NW 99 Av – New Roadway	From 64 St to 66 St	2022
15. NW 112 Av & 114 Av Intersection Improvements	NW 41 St to 58 St	2021-2022
16. NW 112 Av Roadway Improvements	NW 25 St to 34 St	2020
17. NW 114 Av Improvements	NW 34 St to 39 St	2022
18. NW 34 St Roadway Improvements	NW 117 Av to 112 Av	2024
19. NW 117 Av – New Roadway	NW 58 St to North of E. T. School	2022
20. NW 117 Av - New Roadway	NW 25 St to 34 St	2023
21. NW 33 St Roadway Improvements	NW 107 Av to 112 Av	2024
22. Turnpike Trail Bridge Over Doral Blvd.	Doral Blvd. just east of Turnpike	2020
23. NW 112 Av – New Roadway	Nw34 St to 41 St	2022
24. NW 112 Av – New Roadway	Land Acquisition for New Road	2021
25. New Roadway Connections on NW 82 Av & 84 Av	NW 14 St to 21 St	2022
26. NW 33 St Roadway Improvements	NW 79 Av to 82 Av	2024

In addition to the City-funded transportation projects listed above, a number of capacity improvement projects in the City have been identified in the current Miami-Dade County Metropolitan Planning Organization (MPO) Transportation Improvement Program (TIP). The TIP is a staged multi-year program that prioritizes all federally-funded transportation projects as well as all other priority transportation projects funded by State and/or local governments over the next 5-year period. The planned projects are shown in Table 5.

FACILITY	LIMITS	TYPE OF WORK	RESPONSIBLE AGENCY	CONSTRUCTION TIME FRAME	TOTAL COST FY 2020-2024
SR 826 (Palmetto Expressway)	SR 836 to SR 93/I-75	PD&E/EMO	FDOT		PYF*
SR 826 (Palmetto Expressway)	From SR 968 (W Flagler St to NW 154 St	PD&E/EMO	FDOT		\$6.6 million
SR 826 (Palmetto Expressway	Express Lanes Tolling & Ramp Signaling Operation	Technical Assistance	FDOT		\$4.338 million
City of Doral - Bicycle/Pedestrian Bridge Over Doral Blvd		Pedestrian/Wildlife Overpass	FDOT	2019-2022	\$2.815 million
Doral Freight Improvement Plan		FDOT D6 Sub-Area Freight Planning	FDOT	In Progress	PYF*
City of Doral- FIU/Panther Station Trolley Route		Transit Service Demonstration	FDOT	2019-2021	\$1.040 million
HEFT	MP 33.2 to MP 35.4 (SB) & MP 35.4 to 38.0 (NB)	Resurfacing	FL Turnpike Enterprise		PYF*
HEFT	MP 33.2 to MP 40.15	Thermoplastic For HEFT Resurfacing	FL Turnpike Enterprise		PYF*
HEFT	SR 836 (MP 32) to NW 106 St (MP 34)	6/8 to 10 Lanes Including Express Lanes	FL Turnpike Enterprise	2020-21	\$9.001 million
HEFT	SR 836 (MP 32) to NW 106 St (MP 34)	Signing/Pavement Marking	FL Turnpike Enterprise		PYF*
HEFT	HEFT-SR 836 Express Lanes Direct Connect Ramp S (MP 26)	Interchange Improvement	FL Turnpike Enterprise		PYF*
HEFT	SR 836 to I-75	Miscellaneous Construction	FL Turnpike Enterprise		PYF*
SR 836 Interchange Modifications at 87th Ave	SR 836 West of NW 82 Ave to NW 97 Ave	Interchange Improvements	MDX	2019-2020	\$12.357 million
SR 836 (Dolphin) New HEFT Ramp Connections	NB/SB HEFT	EB/WB SR 836 (Dolphin)	MDX	2019-2023	\$56.262 million
NW 58 St	NW 97 Ave to SR 826	Road Reconstruction	MDC	Under Design	PYF*
NW 97 Ave	NW 58 St to NW 70 St	Widen from 2 to 4 Lanes	MDC	Under Design	PYF*
NW 107 Ave	NW 12 St to NW 25 St	Resurfacing	MDC	Construction Completed	PYF*
NW 107 Ave and NW 12 St	NW 107 Ave and NW 12 St	Intersection Improvement	MDC	Design Completed	PYF*
NW 79 Ave and NW 36 St	NW 79 Ave and NW 36 St	Intersection Improvement	MDC	Under Construction	PYF*
NW 107 Ave and NW 41 St	NW 107 Ave and NW 41 St	Intersection Improvement	MDC	Design Completed	PYF*
NW 107 Ave and NW 58 St	NW 107 Ave and NW 58 St	Intersection Improvement	MDC	Under Design	PYF*
NW 97 Ave	NW 52 St to NW 58 St	Widen from 2 to 4 Lanes	MDC	Under Design	PYF*
NW 104 Ave and NW 33 St	NW 104 Ave and NW 33 St	Traffic Signal	MDC	Construction Completed	PYF*
Dolphin Station	HEFT and NW 12 Street	Transit Center with Park and Ride Lot	MDC	Project Completion Scheduled for Summer 2019	PYF*
NW 58 St and NW 99 Ave	NW 58 St and NW 99 Ave	Traffic Signal	MDC	Construction Completed	PYF*

Table 5: Planned State and County Transportation Projects in Doral Area FY 2020-2024

FACILITY	LIMITS	TYPE OF WORK	RESPONSIBLE AGENCY	CONSTRUCTION TIME FRAME	TOTAL COST FY 2020-2024
NW 74 St and NW 102 Ave	NW 74 St and NW 102 Ave	Traffic Signal	MDC	JPA** With City of Doral	PYF*
NW 74 St and NW 97 Ave	NW 74 St and NW 97 Ave	Traffic Signal	MDC	JPA** With City of Doral	PYF*
NW 25 Street	NW 117 Ave to NW 87 Ave	Widen from 4 to 6 Lanes	MDC	2019-2023	\$31.6 million
NW 87 Avenue	NW 12 Street to NW 21 Terrace	Resurfacing	MDC		PYF*
NW 87 Ave and NW 36 St	NW 87 Ave and NW 36 St	Resurfacing	MDC	Construction Completed	PYF*
NW 107 Ave	NW 41 St to NW 58 St	Resurfacing	MDC		PYF*
NW 107 Ave and NW 33 St	NW 107 Ave and NW 33 St	Intersection Improvement	MDC		PYF*

*PYF: Prior Year Funding

** JPA: Joint Participation Agreement

Source: Miami-Dade County MPO 2020 TIP, (2019-24) Approved June 20, 2019.

Other roadway improvement projects currently not programmed in the FY 2020-2024 schedule may be added in future CIE Updates as funding becomes available at the Federal, State and local levels of government.

The City is proactively addressing roadway deficiencies which occur primarily on its roadways and working closely with County and State agencies to address LOS needs on their roadways through 2023-24 and beyond.

B. Potable Water Service

Doral receives water service from Miami-Dade County Water and Sewer Department's (WASD) Hialeah/Preston Water Treatment Plant (WTP). The plant is owned and operated by WASD, who is responsible for maintaining the distribution and treatment facilities serving the City. All together, WASD owns and operates three (3) regional water treatment plants throughout the County. The capacity of WASD's regional water system is 473 million gallons per day (MGD). Infrastructure Element Policy 5A.1.1 of the City's Comprehensive Plan establishes the adopted level of service (LOS) standard for potable water at 126.82 gallons per capita per day.

Regional water system capacity projections have been developed based on current water system capacity, planned capacity projects, and current and projected demand from retail water customers within the County. A summary of WASD's projected potable water demand and rated capacity is provided in Table 6 below.

YEAR	RATED CAPACITY (MGD)	FINISH WATER DEMAND (MGD)	POPULATION SERVED
2015	463.93	327.37	2,266,092
2020	464.74	342.37	2,370,769
2025	464.74	357.25	2,475,446

Table 6: Miami-Dade WASD Water System Capacity and Demand Comparison

MGD = Million Gallons per Day.

Source: WASD Water Supply Facilities Work Plan.

Table 6 shows that the County will have sufficient water system capacity through 2020. Therefore, LOS is expected to be maintained through 2020 and beyond for the portion of the regional water system serving the City of Doral. The City has an adopted 20-Year Water Supply Facilities Work Plan. The goal of the water supply planning process is to determine the local water needs, and develop sound and workable solutions and policies to meet those needs. The Plan references the initiatives already identified by WASD to ensure adequate water supply for the City of Doral. According to the State guidelines, the Plan and the Comprehensive Plan must address the development of traditional and alternative water supplies, service delivery and conservation, and reuse programs necessary to serve existing and new developments for at least a 10-year planning period.

5-Year Level-of-Service Water Projects

Miami-Dade County's 20-Year Water Supply Facilities Work Plan identifies an Alternative Water Supply Project (AWSP) for the Hialeah/Preston WTP in three (3) phases to be planned and constructed from 2007 through 2027. The overall project will provide an additional capacity of 17.5 MGD for the Hialeah/Preston WTP. Phase 1 of the AWSP is complete and has added an initial 10 MGD of capacity.

C. Sanitary Sewer Facilities

The adopted level of service (LOS) standard for sanitary sewer in Doral is 100 gallons per capita per day, as noted in Policy 5B.1.1 of the Infrastructure Element of the Comprehensive Plan. Sanitary sewer service in the City is provided by Miami-Dade County's Water and Sewer Department (WASD). The LOS standard for wastewater in the County requires all regional water treatment plants to operate with a physical capacity of no less than the annual average daily sewage flow. According to the County's Evaluation and Appraisal Report (EAR), the County's system has historically maintained this baseline requirement. Currently, the County has a regional wastewater system capacity of 375.5 million gallons per day (MGD). Table 7 shows the projected regional system wastewater demand and system capacity through 2025.

YEAR	POPULATION SERVED	TREATMENT CAPACITY (MGD)	WASTEWATER FLOW (MGD)
2015	2,273,852	375.5	316
2020	2,424,933	394	328
2025	2,576,015	401	337

Table 7: Miami-Dade County WASD Regional Wastewater System Capacity

MGD = Million Gallons per Day.

Source: WASD Water Supply Facilities Work Plan).

According to Table 7, WASD's regional wastewater system will have enough capacity through 2025. Therefore, LOS for sanitary sewer will be maintained in the portions of the City served by WASD's wastewater collection system.

5-Year Level-of-Service Wasterwater Projects

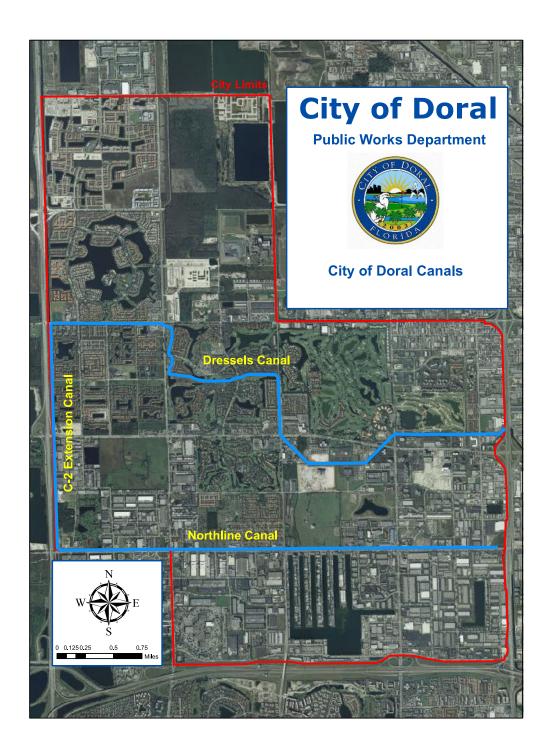
No capacity-related projects for the County's wastewater system have been identified for the 5-year period.

D. Stormwater Management

The City of Doral falls within the boundaries of the C-4 and C-6 Basins within the Central Miami-Dade Watershed. These basins drain into South Florida Water Management District (SFWMD) primary canals, the C-4 and the C-6 which flow from the Everglades to Biscayne Bay. There are three (3) main secondary canals which convey stormwater from the city to the C-4 and C-6 canals: the Northline Canal, located along the north side of NW 25th Street, the C-2 Extension Canal, located along NW 117th Avenue, and the Dressels Canal which crosses the City from NW 117th Avenue to the Palmetto Expressway. Figure 5 depicts the canal system in Doral.

Doral adopts the following system-wide drainage level of service (LOS) standards for new development and redevelopment in Policy 5C.1.1 of the Infrastructure Element:

Figure 5. Doral Canal System



* <u>Water Quality Standard</u>. Stormwater facilities shall meet the design and performance standards established in Chapter 62-25, Rule 25.025, Chapter 40-E, Chapter 40E-40, Florida Administration Code (FAC), and Section 24-48, of the Code, with the retention of the first inch of runoff onsite to meet the water quality standards required by Chapter 62-302, Rule 862-302.500, FAC, and Section 24-42 of the Code.

* <u>Water Quantity Standard</u>. Where two or more standards impact a specific development, the most restrictive standard shall apply:

+ Post-development runoff shall not exceed the pre-development runoff rate for a 25year storm event, up to and including an event with 24-hour duration.

+ Treatment of the runoff from the 5-year storm event, 24-hour duration, in accordance with Section D-4, Part 2, Miami-Dade County Public Works Manual and Sec. 24-48.3 (7) and Rule 40E-40.302, FAC, "Basis of Review, Volume IV Manual."

+ Treatment of the runoff from the first one inch of rainfall onsite or the first 0.5 inch of runoff from impervious areas, whichever is greater.

*<u>Flooding Standard.</u> During the 10-year return design storm event, flooding of minor arterials should be below the crown of the roadway.

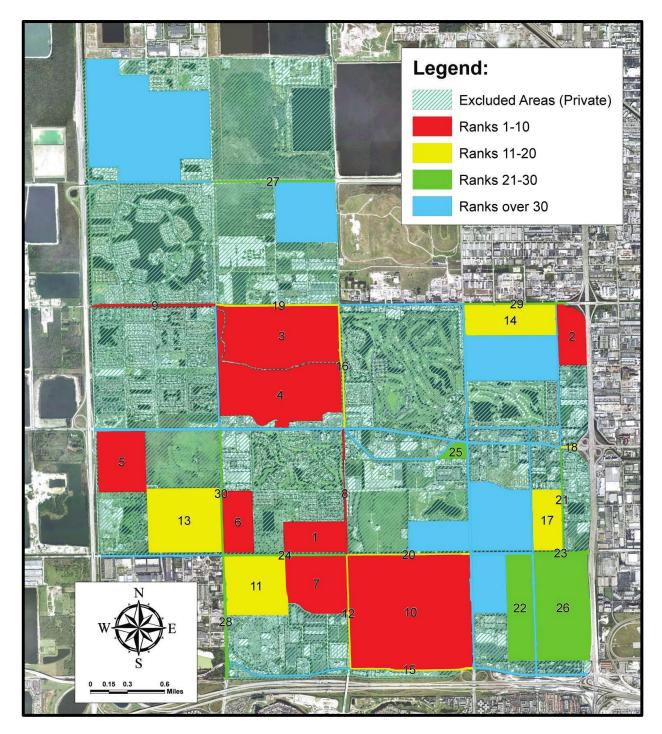
The City requires all new developments to provide adequate on-site drainage prior to the issuance of a building permit to maintain LOS standard for drainage. However, there were a number of pre-existing deficient drainage conditions when the City was incorporated in 2003. In 2006, Doral adopted its first Stormwater Master Plan to study existing stormwater drainage conditions, and to identify and prioritize projects to correct existing deficiencies and improve level-of-service. Since the adoption of the Stormwater Master Plan, the City's Public Works Department has completed all projects listed in the Plan except for those improvements which are the responsibility of the County or private property owners. In 2014 the City completed an updated Stormwater Master Plan which forms the basis for the Stormwater 5-year Schedule of Capital Improvements.

The City's Stormwater Master Plan (SWMP) serves as a planning-level engineering document that analyzes the current condition of the City's existing storm water management systems, identifies high priority flood prone areas, and establishes a five-year capital improvement plan to implement the most cost effective projects to address these areas. SWMP's are typically updated on 5-year cycles, at a minimum, and this current version of the SWMP supersedes the most recent SWMP update that was performed for the City in 2009. The analysis performed for this SWMP takes into consideration the primary components of the existing storm water management system (manholes, inlets, and major conveyance pipes), canals and lakes, topography, land uses, as well as groundwater elevations, and historical rainfall when analyzing the primary existing drainage infrastructure throughout the City. These elements are all combined and analyzed within a mathematical Hydraulic and Hydrologic model that simulates the performance of the City's primary drainage systems using design rainfall events. The City's secondary drainage storm water management systems, such as individual inlets, manholes, and minor conveyance systems which control drainage within the sub-basin, are not analyzed as a part of this SWMP because this SWMP is a planning-

level analysis. The secondary drainage systems are typically analyzed in the design phase and not in the Master Planning study phase.

The results of this SWMP analysis serve to help identify and prioritize general areas where major drainage systems are deficient and define the extent of the deficiencies. With problem areas identified, planning-level drainage projects can be developed and prioritized with the intent of alleviating flooding in flood prone areas. The City's drainage system deficiencies are identified through a series of sub-basins which are color coded for priority ranking purposes and depicted in Figure 6. This system allows the City to identify and prioritize the most cost-effective storm water management projects for inclusion in the 5-Year CIE Schedule of Capital Improvements and City Capital Improvement Program. Additionally, planning-level construction costs for these projects can be determined in order to budget and define the implementation schedule for the proposed planning-level projects. As with most planning-level documents of this type, the projects presented in this SWMP do not require the City to allocate funding for, or require the City to design and construct projects in this order or magnitude. The main intent of the contents of this SWMP is to serve as a guide for the City in order to identify problem areas, develop potential future projects, and correlating those future projects with a planning-level cost. With those items identified, the City can then internally decide which areas to concentrate engineering efforts and funding based on the recommendations of the SWMP.

Figure 6. Prioritized Drainage Sub-Basins



5-Year Level-of-Service Stormwater Projects

Although all projects have been completed in the Stormwater Master Plan, the City has continued to provide funding for repair and maintenance City-wide through the Stormwater Fund. Two (2) important projects are the Canal Bank Stabilization Program and Citywide general stormwater improvements and maintenance, including catch basin maintenance, street sweeping, canal maintenance, and floating debris removal. Table 8 below shows the projects and costs for planned stormwater improvements planned during the next 5 years. The total cost of the 5-year program is estimated to be \$5,024,064 million.

Project	FY 2019-20 (in \$\$s)	FY 2020-21 (in \$\$s)	FY 2021-22 (in \$\$s)	FY 2022-23 (in \$\$s)	FY 2023-24 (in \$\$s)
Sub Basin A-2	299,064				
NW 114 Av: NW 50 St - NW 58 St	500,000				
NW 50 St: NW 114 Av - NW 112 Av	200,000				
NW 24 Ter: NW 89 Pl - NW 25 St	150,000				
NW 78 Av: NW 12 St – NW 15 St		250,000			
NW 89 Pl: NW 23 St – NW 24 Ter		375,000			
NW 33 St: NW 87 Av – NW 82 Av			400,000		
NW 33 St: NW 97 Av – NW 103 Av			600,000		
NW 114 Av: NW 60 St – NW 74 St				500,000	
NW 89 Ct: NW 12 St – NW 15 St				275,000	
NW 88 Av: NW 13 Ter – NW 15 St				175,000	
NW 15 St: NW 87 Av – NW 89 Ct				275,000	
NW 113 Ter: NW 87 Av – NW 89 Ct					275,000
NW 115 Av: NW 31 St – Doral Blvd					750,000
TOTALS	1,149,064	625,000	1,000,000	1,225,000	1,025,000

Table 8: City Stormwater Projects and Estimated Costs FY 2020-2024

Source: Doral Public Works Dept., June 2019

E. Solid Waste

The City's adopted level of service (LOS) standard for solid waste is 9.4 pounds per capita per day in Infrastructure Element Policy 5D.1.2 of the Comprehensive Plan. Table 9 below shows the projected solid waste which could be generated in the City through 2030.

YEAR	POPULATION	LOS (lbs./capita/day)	SOLID WASTE GENERATED (tons/day)
2015	55,660	9.4	262
2020	71,282	9.4	335
2025	91,409	9.4	430
2030	103,421	9.4	486

Table 9: Solid Waste Generation 2015-2030

Source: Iler Planning (2019)

The City has an interlocal agreement with Miami-Dade County Department of Public Works and Waste Management (PWWM) for County collection, recycling and disposal of solid waste generated within Doral. According to the County's Comprehensive Development Master Plan, there will be sufficient landfill capacity to serve future development county-wide through 2025. The County's capacity analysis is based on projected demand generated by municipalities who have committed waste flows to the system by interlocal agreement, long-term contracts and anticipated non-committed waste flows in accordance with the County's adopted LOS standard. An average total of 775,000 tons of waste is landfilled per year.

The County has prepared a Solid Waste Master Plan which identifies new activities, programs, facilities and technologies to provide sustainable solid waste services to ensure public health and environmental protection for Miami-Dade County residents over the next 50 years. The Master Plan identifies solutions such as potential new technologies, operations or facilities, as well as a financial analysis and strategy for implementation.

Using the City's projected annual solid waste generation for the years 2018-19 through 2022-2023, the City will average approximately 134,630 tons per year annually through the 5-year period. There will be sufficient landfill capacity to accommodate the City's solid waste demand through 2023.

5-Year Level-of-Service Solid Waste Projects

No new capacity-related projects have been identified for the 5-year period. The County's solid waste LOS will be maintained with the operation of the county-wide solid waste management system.

F. Parks and Recreation

The level of service (LOS) standard for Doral's parks system is contained in Parks and Recreation Element Policy 7.1.1 which was amended in 2018 as follows:

2012-2014:	3.75 acres of developed park land per 1,000 population
2015-2020:	2.25 acres of developed public park land per 1,000 population
2021-2025:	3.00 acres of developed public park land per 1,000 population

The Doral's Parks System is shown in Figure 7. The City currently has 168 acres of developed parks which includes the 82-acre Doral Central Park. The current LOS standard is 2.25 acres per 1000 population which generates a total park acreage of 161 acres in 2019. The annual projected park acreage need is presented in Table 10 below through the year 2024. The City will need a total of 264 acres of public park land to meet the LOS in 2024; this will require an additional 96 acres of new parks.

PARK LOS NEED **PROJECTED POPULATION** YEAR (Acres) 2015 125 55,660 2016 59,306 133 2017 64,167 144 2018 68,244 154 2019 71,698 161 2020 75,152 169 2021 78,403 235 2022 245 81,654 2023 84,905 255 2024 88,156 264

Table 10: Projected Parks Level-of-Service Acreage Needs

Source: Iler Planning (2019)

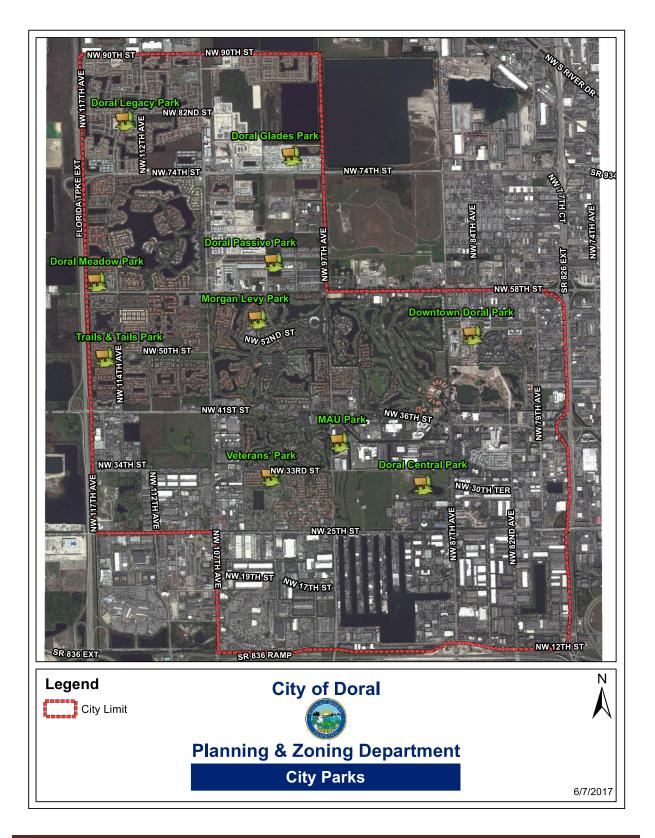
5-Year Level-of-Service Projects

The park development projects planned in FY 2020-2024 are shown in Table 11. Some of the projects are improvements to existing parks, however most represent new parkland acreage and thus will serve to increase the City's current parks LOS as follows:

	<u>Acres</u>
Linear Greenway Park	29.5
Retention Park	3.0
Downtown Doral Cultural Center	1.3
White Course	2.7
Total New Park Areas	

The proposed projects above will add an additional 36.5 acres of park land giving Doral a total of 204.5 acres by the year 2024 if all planned park improvements are constructed. This total is 59.5 acres less

Figure 7. Doral's Park System



than the parks acreage needed of 264 acres to maintain the adopted level-of-service standards of 2.25 (through 2020) and 3.00 public park acres per 1000 population through 2024.

Table 11: Planned Parks Projects FY 2020-2024

PROJECT	LOCATION	COMPLETION	SIZE (in Acres)
City:			
Doral Central Park	NW 87 th Ave. & 30 th St.	Sept. 2025	82
Linear Greenway Park	NW 50 th St. & NW 107 th Av.	Sept. 2024	29.5
Retention Park	NW 102 nd Av. & NW 62 nd St.	Dec. 2020	3.0
Downtown Doral Cultural Center	Adjacent to Downtown Doral Park	Jan. 2021	1.3
White Course	North of NW 41 st St & west of NW 84 th Av	Jan. 2021	2.7
Private:			
Environmental Passive Park	NW 107 Ave. and NW 74 St.	Concurrent with development – Sept. 2024	51
Grand Bay Preservation Park	NW 87 th St./NW 86 th St. (east of NW 107 th Ave.)	Concurrent with development – Sept. 2024	72

Source: Doral Parks Department, 2018

A detailed description of each proposed park improvement is provided below:

- 1. <u>Doral Central Park</u> Former known as J.C. Bermudez Park, this 82-acre park is the largest in Doral and home to major events such as EGGstravaganza and the Independence Day Celebration. Its open green spaces and scenic lake views are ideal for corporate gatherings and community events. Central Park is located in the community heart of Doral adjacent to the headquarters of Carnival Cruise Lines and the United States Southern Command. As part of the voter approved Parks Bond Referendum, this park will be redeveloped to include amenities such as a 70,000 square foot indoor recreation center, aquatic facility with competition and teaching pools, formal events lawn, basketball and tennis courts, playgrounds, and multi-purpose green spaces.
- 2. <u>Downtown Doral Cultural Center</u> This project includes the construction of a 9,000 square foot Cultural Arts Center and surrounding park space on the 1.3 acre parcel adjacent to the City's existing Downtown Doral Park. It will serve to celebrate the unique culture of Doral, as well as the variety of cultures, arts and experiences embraced by the City's residents. The building will include a large art gallery space, flexible multi-purpose room, multiple outdoor courtyards, catering area, dedicated vehicular drop-off area and public restrooms.
- <u>Retention Park</u> This proposed park site is located on 102nd Avenue and theoretical NW 62nd Street. The site will be used as a retention area for the Police/Public Works Building with 3 acres of the 5 acre parcel dedicated as a passive park site.

- 4. <u>Linear Greenway Park</u> Areas under FP&L transmission lines adjacent to streets are being used as multi-purpose trails as proposed in the City's Bicycle Master Plan and Parks and Recreation Element Policy 6.2.6. Facilities and features include: multi-purpose trail/service access route with trailhead, naturalistic planted areas/native habitat plantings and public art. The linear park system comprises 41 acres.
- <u>White Course Park</u> The project consists of the development of a 2.7 acre parcel located within Downtown Doral South. Proposed amenities include a shaded playground, flexible event plaza, outdoor fitness stations, off-leash dog area, multi-purpose green space, restrooms, and picnic shelters.
- 6. <u>Environmental Passive Park</u> This proposed private park site is located at NW 107th Avenue & 74th Street and contains wetlands. The site has been identified in the Parks System Master Plan as a future "Environmentally-Protected Park." Low impact observation walkways on the perimeter of the wetlands and educational kiosks are planned.
- 7. <u>Preservation Park (72 acres)</u> This proposed private park site (72 acres) is currently a highlyimpacted wetland located between two residential developments. This natural resource would be restored transforming the site into a unique passive recreation amenity for the residents of Doral. The City's goal is to make this preservation park a public access point; coordination with Miami-Dade County and the SFWMD will be required in the process.

Long-Term Planning

The City is meeting its parks level-of-service standard of 2.25 acres per 1000 population now, however in year 2021 the standard increases to 3.00 acres per 1000 population. Unless new park lands are identified and improved over the next five (5) years, the City will have a park level-of-service deficiency of 59.5 acres by 2024. Thus, the City is considering a number of long-term future projects to address this impending deficiency and grow Doral's parks system. Great parks are an integral part of Doral's future vision so this planning is critically important.

G. Education Facilities

Public school facility planning for Doral is provided by Miami-Dade County Public Schools (MDCPS). Every year, MDCPS is required to update and submit a Five-Year District Facilities Work Plan to demonstrate available and projected student capacity, and related information on project funding for capacity-related projects. The information below summarizes the current and projected level of service (LOS) for public schools serving Doral from the current MDCPS Five-Year District Facilities Work Plan.

The City has five (5) public schools located within its boundary. Table 12 provides the 2018 (October) capacity and enrollment for these public schools. It shows that 2 of the 4 grades K-8 public schools in Doral are currently operating above 100% of permanent capacity. Ronald Reagan / Doral Senior High School is operating at 102% of capacity. Total enrollment in Doral's public schools this year is 7,710 students.

Table 12: Public School Capacity and Enrollment (2018)

PUBLIC SCHOOL	PERMANENT CAPACITY	STUDENT ENROLLMENT	% CAPACITY
Eugenia B. Thomas K-8 Center	1,421	1,636	115%
John I. Smith K-8 Center	1,725	1,754	102%
Ronald Reagan/ Doral Senior High School 9-12	2,494	2,533	102%
Dr. Toni Bilbao Preparatory Academy K-8	670	595	89%
Dr. Rolando Espinosa K-8 Center	1,519	1,192	78%

Source: Based on October 2018 % Utilization Report, Miami-Dade County Public Schools, July 2019.

5-Year Capacity Projects in Doral

No projects have been identified.

Charter and Private Schools

Doral is also home to 11 charter schools serving a total of 8,524 students in 2018 as shown in Table 13 below. Of the five (5) charter schools where complete information is available, four (4) are operating at or below capacity.

CHARTER SCHOOL	PERMANENT CAPACITY	STUDENT ENROLLMENT	% CAPACITY
Doral Academy K-5	2,200	1,030	47%
Doral Academy Charter Middle School 6-8	1,438	1,465	102%
Doral Academy Charter High School 9-12		1,800	
Doral Academy of Technology K-8	300	300	100%
Doral International Academy K-8		886	
Just Arts and Management CMS	600	231	39%
Renaissance Elementary K-5		909	
Renaissance Middle Charter School 6-8		450	
Downtown Doral Charter Elementary K-5	2,287	950	42%
Downtown Doral Charter Upper 6-12		100	
Doral Performing Arts Academy 9-12		403	

Table 13: Enrollment and Capacity for Charter Schools in Doral (2018)

Source: Based on October 2018 % Utilization Report, Miami-Dade County Public Schools, July 2019.

III. CAPITAL IMPROVEMENTS

The data and analysis presented herein shows level of service (LOS) needs in transportation, parks and recreation, and stormwater management. The proposed Schedule of Capital Improvements (SCI) in Table 17 is intended to address the maintenance and improvement of public facilities.

FUNDING SOURCES	FY 2019/20 (in \$\$s)	FY 2020/21 (in \$\$s)	FY 2021/22 (in \$\$s)	FY 2022/23 (in \$\$s)	FY 2023/24 (in \$\$s)	5 YEAR TOTAL FY 2020-2024 (in \$\$s)
Parks & Recreation/ GF	0	0	36,000,000	36,000,000	35,500,000	107,500,000
Stormwater Fund	1,000,000	1,000,000	1,500,000	1,000,000	1,000,000	5,500,000
Park Impact Fee Fund	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	6,000,000
Transportation Fund	6,985,000	8,525,000	10,340,000	5,500,000	6,985,000	38,335,000
TOTAL	9,185,000	10,725,000	49,040,000	43,700,000	44,685,000	157,335,000

Table 15: Projected Revenues for Capacity-Related Projects by Funding Source

Source: City of Doral; Iler Planning & City of Doral, 2019.

Table 16: Projected 5-Year Expenditures for Capital Improvements by Type

Project Type	FY2019/20 (in \$\$s)	FY2020/21 (in \$\$s)	FY2021/22 (in \$\$s)	FY2022/23 (in \$\$s)	FY2023/2024 (in \$\$s)	5-YEAR TOTAL FY 2020-2024 (in \$\$s)
City-Funded Projects						
Parks	0	0	43,000,000	30,000,000	30,000,000	103,000,000
Drainage	1,149,064	625,000	1,000,000	1,225,000	1,025,000	5,024,064
Transportation	6,350,000	7,750,000	9,400,000	5,000,000	6,350,000	34,850,000
Total	7,499,064	8,375,000	53,400,000	36,225,000	37,375,000	142,874,064

Source: City of Doral; 2019.

Revenue projections for capital projects to be funded by Doral are presented in Table 15 and based on the City's adopted 2018-2019 budget and information provided by the City departments. City revenues for capital improvements by type are also identified in Table 15. For example, the Stormwater Fund is used for drainage improvements, the Park Impact Fee Fund is used to finance park improvements, and the Transportation Fund is used for roadway, transit and pedestrian projects. Table 16 summarizes the proposed expenditures for parks, drainage and transportation based on the Schedule of Capital Improvements for FY 2020-2024.

An analysis of the projected revenues and planned capital expenditures indicate that the City will maintain financial feasibility through the 5-year planning period. The City is projected to accumulate \$157,335,000 over the 5-year planning period to fund the capital improvements needed to maintain and improve public facility LOS, and has identified a total of \$142,874,064 in capital improvement expenditures over the planning period.

Capital Improvements Element Update

Schedule of Capital Improvements

 Table 17. Doral's Schedule of Capital Improvements 2019/20 - 2023/24

PROJECT / LOCATION	TYPE OF WORK	FY 2019-20 (in \$\$s)	FY 2020-21 (in \$\$s)	FY 2021-22 (in \$\$s)	FY 2022-23 (in \$\$s)	FY 2023-24 (in \$\$s)	TOTAL COST FY 2020-2024 (in \$\$s)	FUNDING SOURCE
TRANSPORTATION PROJECTS								
I. Citywide	City Sidewalks Phase 2	0	I,400,000	0	0	0	1,400,000	TF
2. Citywide	Trolley Circulator Fleet	200,000	0	400,000	0	0	600,000	TF
3. Citywide	Traffic Monitoring Cameras	50,000	0	50,000	0	0	100,000	TF
4. Citywide	Roadway Maintenance	300,000	300,000	300,000	300,000	300,000	1,500,000	TF, PTP
5. Citywide	Traffic Calming Program	I 50,000	I 50,000	I 50,000	150,000	I 50,000	750,000	GF, TF
6. Citywide	Transit Mobility & Infrastructure	1 50,000	150,000	150,000	150,000	150,000	750,000	TF
7. Citywide	NW 102 Av Bike Path & City Sidewalks	0	0	0	I,650,000	0	1,650,000	FG, TF
8. Citywide	Intersection Improvements	1 50,000	1 50,000	150,000	150,000	`150,000	750,000	TF
9. Citywide	Do Not Block Box Intersections	0	100,000	0	100,000	0	200,000	
10. Section 7	Traffic Calming Devices	200,000	0	0	0	0	200,000	TF
11. NW 102 Av Widening	NW 102 Av & 62 St Intersection	0	0	0	700,000	0	700,000	TF
12. NW 112 Av & 82 St Signal	Intersection of NW 112 Av & 82 St	600,000	0	0	0	0	600,000	TF
13. NW 90 St Roadway Improvements	Section 7 Vacant Land	250,000	0	0	0	0	250,000	TF
14. NW 99 Av – New Roadway	From 64 St to 66 St	0	0	800,000	0	0	800,000	TF

Capital Improvements Element Up	pdate
---------------------------------	-------

Schedule of Capital Improvements

PROJECT / LOCATION	TYPE OF WORK	FY 2019-20 (in \$\$s)	FY 2020-21 (in \$\$s)	FY 2021-22 (in \$\$s)	FY 2022-23 (in \$\$s)	FY 2023-24 (in \$\$s)	TOTAL COST FY 2020-2024 (in \$\$s)	FUNDING SOURCE
15. NW 112 Av & 114 Av Intersection Improvements	15. NW 112 Av & 114 Av Intersection Improvements From NW 41 St to 58 St		500,000	500,000	0	0	I,000,000	TF
16. NW 112 Av Roadway Improvements	From NW 25 St to 34 St	2,300,000	0	0	0	0	2,300,000	TF
17. NW 114 Av Improvements	From NW 34 St to 39 St	0	0	2,000,000	0	0	2,000,000	TF
18. NW 34 St Roadway Improvements	From NW 117 Av to 112 Av	0	0	0	0	2,000,000	2,000,000	TF
19. NW 117 Av – New Roadway	From NW 58 St to North of Eugenia Thomas School	0	0	800,000	0	0	800,000	TF
20. NW 117 Av – New Roadway	From NW 25 St to 34 St	0	0	0	I ,800,000	0	1,800,000	TF
21. NW 33 St Roadway Improvements	From NW 107 Av to 112 Av	0	0	0	0	2,000,000	2,000,000	TF
22. Turnpike Trail Bridge over Doral Blvd.	Doral Blvd. just east of Turnpike	2,000,000	0	0	0	0	2,000,000	TF
23. NW 112 Av – New Roadway From NW 34 St to 41 St		0	0	4,000,000	0	0	4,000,000	TF
24. NW 112 Av – Land Acquisition for New Roadway From NW 34 St to 41 St		0	5,000,000	0	0	0	5,000,000	GF
25. New Roadway Connections on NW 82 Av & 84 Av	From NW 14 St to 21 St	0	0	100,000	0	0	100,000	TF
26. NW 33 St Roadway Improvements	From NW 79 Av to 82 Av	0	0	0	0	I,600,000	I,600,000	TF
5 Year Transportation Cost Sub Total		6,350,000	7,750,000	9,400,000	5,000,000	6,350,000	34,850,000	

Source: City of Doral Public Works Dept., June 2019.

Capital Improvements Element Update

Table 17. 2018/19-2022/23 Doral's Schedule of Capital Improvements (continued)

Project/Location	Type of Work	FY FY 2019-20 (in \$\$s)	FY FY 2020-21 (in \$\$s)	FY FY 2021-22 (in \$\$s)	FY FY 2022-23 (in \$\$s)	FY FY 2023-24 (in \$\$s)	Total Cost FY 2020-24 (in \$\$s)	Fund Source
City Parks								
I. Doral Central Park	Construct Park Facilities	0	0	30,000,000	30,000,000	30,000,000	90,000,000	Approved Parks Bond
2. Downtown Doral South	White Course Park	0	0	4,000,000	0	0	4,000,000	Approved Parks Bond
3. Adjacent to Downtown Doral Park	Downtown Doral Cultural Center	0	0	9,000,000	0	0	9,000,000	Approved Parks Bond
Parks Cost Subtotal		0	0	43,000,000	30,000,000	30,000,000	103,000,000	
City Stormwater								
I. City Wide	Stormwater Drainage	1,149,064	625,000	1,000,000	1,225,000	1,025,000	5,024,064	SWF, SG
Stormwater Cost Subtotal		1,149,064	625,000	1,000,000	1,225,000	1,025,000	5,024,064	
Total City Capital Cost		7,499,064	8,375,000	53,400,000	36,225,000	37,375,000	142,874,064	

Source: Public Works and Parks Depts., City of Doral, June 2019.

Table Key: TF: Transportation Fund SWF: Stormwater Fund GF: General Fund SG: State Appropriation for Stormwater Improvements PTP: Peoples Transportation Fund (CITT) Capital Improvements Element Update