



THA Consulting, Inc.

40 NW 3<sup>rd</sup> Street, Suite 1102 Miami, FL 33128 (305) 592-7123

February 9, 2022

Michael Daniels Planning and Zoning Director City of Green Cove Springs 321 Walnut Street Green Cove Springs, FL 32043

**RE:** Downtown and US 17 Corridor Parking Study – Final Report

Green Cove Springs, Florida

Dear Mr. Daniels,

Attached is our Final Report summarizing the Green Cove Springs Downtown and US 17 Corridor Parking Study. We have incorporated your comments into this Final Report. Thank you for the opportunity to work with you on this project.

Sincerely,

Vicky Gagliano, CAPP, LEED AP

Director of Parking Studies, Associate

Project Manager

PLANNING I PARKING I ENGINEERING I DESIGN I MOBILITY

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#### INTRODUCTION

THA Consulting, Inc. (THA) has been retained by the City of Green Cove Springs (the City) to perform a parking study for downtown Green Cove Springs as well as along US 17 (Orange Avenue). US 17 is a major arterial road running through the City from north to south and connects motorists to cities such as Jacksonville to the north and the Orlando metropolitan area to the south.

Green Cove Springs serves as the county seat of Clay County (the County) and there are several County buildings with their own parking facilities. The city is centrally located on the eastern edge of Clay County midway between the Duval and Putnam County



boundaries. Also, the City's population, as of 2020, is 9,786, a 41% increase from 2010.

The parking study area is linear in nature with the Clay County facilities located in the northern end of the study area and the Downtown located in the southern end of the study area. In addition, Spring Park, which is one of the major destinations and event locations in the City is also located in the southern portion of the study area.

### **Study Area**

The City of Green Cove Springs is located along the St. Johns River, approximately 30 miles south of Jacksonville and 25 miles west of St. Augustine. A map depicting the location of Green Cove Springs in relation to Jacksonville, St. Augustine, and the St. Johns River is shown below.

Jacksonville 95 **Green Cove** 

Figure 1: Map of Green Cove Springs

Source: Google Maps, 2022

The study area is roughly bordered by Governor Street, Magnolia Avenue, Oak Street, and Pine Avenue. We have also analyzed parking within a smaller sub-area "Core Sub-Area" in order to better understand the specific challenges in that area of high demand. The Core Sub-Area is roughly bordered by Palmer Street to the north, Ferris Street to the south, Orange Avenue to the west, and St. Johns Avenue to the east. Due to the natural pedestrian barrier formed by US 17 (Orange Avenue), we have not extended this sub-area farther west. A map depicting the boundaries of the Overall Study Area and the Core Sub-Area is included on the following page. Facilities that allow parking during special events have been indicated in a purple outline for Public City-owned Lots, and a green outline for Private Lots.

**Springs** 

Figure 2: Map of the Study Area



Source: Google Maps, 2022

#### **2021 PARKING CONDITIONS**

The parking resources in the study area are utilized by multiple user groups consisting of residents, retail customers, local business employees, and visitors. The following section of the report outlines the 2021 parking supply, demand, and occupancy based on THA's data collection activities and field observations.

Our team physically surveyed all of the on- and off-street parking areas within the 53-block study area during multiple site visits occurring on November 9<sup>th</sup>, 10<sup>th</sup>, and 11<sup>th</sup>, December 14<sup>th</sup>, 15<sup>th</sup>, 16<sup>th</sup>, and 18<sup>th</sup>, 2021. During those visits, we were able to drive around the study area to make observances as a motorist, as well as walk around to understand the pedestrian experience. Our time in Green Cove Springs allowed us to experience the charm of the historic City as we dined and interacted with several residents and other visitors.



While the study area extends only 1.5 miles from Governor Street to Oak

Street along US 17 (Orange Avenue), the perception from a pedestrian and motorist standpoint is that it is a much longer distance between County service buildings and the downtown. This perception is due to the number of lanes along US 17, the speed of travel (exceeding the posted speed limit), sidewalk width (minimal/no buffer between moving vehicles), roadway geometry (i.e. curve with the loss of line-of-sight), and the current mix of properties (i.e. buildings and vacant parcels) along the corridor.

Due to the linear nature of this area and the fact that the County parking facilities are reaching capacity while serving County employees and visitors, we have separated out the parking facilities associated with the Clay County Buildings in our analysis. While we acknowledge the County parking facilities are vacant during the evening hours as well as on holidays and weekends, we do not believe those parking locations are well suited to accommodate downtown/Spring Park event attendees unless a shuttle service was implemented, as the 20-30 minute walk may be excessive.

# **Parking Supply**

The total parking supply within our study area consists of approximately 2,139 parking spaces. At this time, the City is the minority owner of parking within the study area. Of the total supply, only 382 spaces, just 18%, are City owned while the remaining 82% are owned by County and private entities. The City owned parking resources consist of 92 striped spaces, approximately 110 unstriped spaces and 180 City owned off-street parking spaces are located in the six (6) City parking lots which serve the general public and visitors to the area. Unstriped space means there are no pavement markings on the roadway to depict where each vehicle should park, and therefore our team estimated the capacity based on industry design standards for parallel parking with consideration of the existing intersections, driveways, and curb cuts. While the unstriped on-street parking spaces are legal to use, many motorists would not likely consider parking in those areas under normal circumstances. We understand the City intends to permanently mark or stripe the areas noted as unstriped. A breakdown of the parking supply is shown on the following page.

Figure 3: Current Parking Supply

Study Area Parking Type	<b>Total Supply</b>	%
City Owned Parking		
On-Street Striped	92	4%
On-Street Unstriped	110	5%
Off-Street Public/City	180	8%
Subtotal City Owned Parking	382	18%
Other Parking		
Off-Street Public/County	669	31%
Off-Street Private	1,088	51%
Subtotal Other Parking	1,757	82%
Total Study Area Parking	2,139	

Core Sub-Area City Owned Parking - City Owned Parking								
On-Street Striped	45	2%						
On-Street Unstriped	16	1%						
Off-Street Public/City	136	6%						
Total Sub Core Area	197	9%						

Private/County 82%

City-Owned

Source: THA Consulting, Inc., 2022

While this study includes the county and private parking facilities, we noted and observed that the use of those parking facilities is limited and/or restricted during most of the weekday, daytime hours. However, it has been noted that approximately 364 privately owned parking spaces are made available to serve the general public during special events. Based on our field collection efforts, we understand the usage of the privately owned parking facilities and we are unable to identify any specific shared parking opportunities. As development and redevelopment occurs, strategic private partnership opportunities may arise and be mutually beneficial to both parties depending on project specifics and land use compatibility.

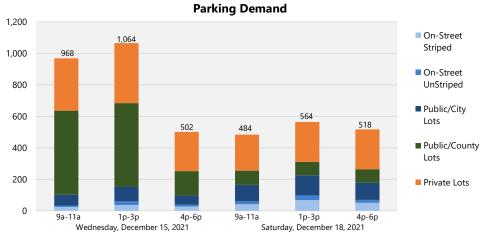
For the general public visiting Green Cove Springs, the available number of unrestricted or assigned parking spaces is limited to 202 on-street parking spaces, (92 striped and marked on-street spaces and another 110 unstriped and unmarked on-street spaces) and 180 off-street parking spaces located in one of the City lots for <u>a total of 382 general public parking spaces (just 18% of the total parking supply surveyed)</u>. Presently, the perception and first impression of parking in Green Cove Springs is that there is an abundance of available parking. However, the number of parking spaces actually owned and controlled by the City for general public use is limited to only 382 parking spaces. More importantly, in the Core Sub Area, there are less than 200 City-owned and controlled parking spaces.

# **2021 Survey Day Parking Demand and Occupancy**

Parking Demand refers to the number of parked vehicles observed or recorded at a specific time and date. Parking Occupancy refers to the portion, represented as a percentage, of parking spaces that are occupied by vehicles at a specific time and date. THA conducted field observations and collected parking data on Wednesday, December 15, 2021, from 9AM to 6PM and on Saturday, December 18, 2021, from 9AM to 6PM. Each parking occupancy count was performed over a two-hour period. During our collection days, the weather was typical for the time of year and there was no precipitation or other conditions that would negatively impact the data collected. The weekday and weekend survey day parking demand and occupancy details are shown on the following page and heatmaps are included on Pages 8 and 9.

Figure 4: 2021 Survey Day Parking Demand and Occupancy

<u>-</u>	Parking Weekday Demand and Occupancy			су	V	Veekend	Deman	d and O	ccupan	су			
Туре	Supply	9AM-11AM		1PM-	-3PM	4PM	-6PM	9AM-	11AM	1PM	-3PM	4PM	-6PM
City Owned Parking													
On-Street Striped	92	24	26%	37	40%	28	30%	42	46%	68	74%	51	55%
On-Street Unstriped	110	9	8%	23	21%	11	10%	18	16%	30	27%	18	16%
Off-Street Public/City	180	68	38%	91	51%	58	32%	105	58%	128	71%	109	61%
Subtotal City Owned Parking	382	101	26%	151	40%	97	25%	165	43%	226	59%	178	47%
Other Parking													
Off-Street Public/County	669	534	80%	533	80%	156	23%	91	14%	85	13%	87	13%
Off-Street Private	1,088	333	31%	380	35%	249	23%	228	21%	253	23%	253	23%
Subtotal Other Parking	1,757	867	49%	913	52%	405	23%	319	18%	338	19%	340	19%
Total Study Area Parking	2,139	968	45%	1,064	50%	502	23%	484	23%	564	26%	518	24%
Core Sub Area City Owned Parkin	g - City Ow	ned Par	king										
On-Street Striped	45	8	18%	24	53%	18	40%	32	71%	45	100%	33	73%
On-Street Unstriped	16	1	6%	10	63%	4	25%	10	63%	17	106%	14	88%
Off-Street Public/City	136	46	34%	63	46%	46	34%	100	74%	116	85%	98	72%
Total Sub Core Area	197	55	28%	97	49%	68	35%	142	72%	178	90%	145	74%



Source: THA Consulting, Inc., 2022

Within the Overall Study Area, City-owned parking assets reached a peak weekday occupancy of 40% between 1pm and 3pm, with 151 vehicles parked in the 382 City-owned parking spaces. During the weekend and despite the overall lower occupancy throughout the study area, City-owned parking facilities were 59% occupied between 1pm and 3pm with 226 vehicles parked. The higher utilization was mostly likely a result of the Saturday Market that was taking place in the City Hall parking lot. The high utilization of the County lots during the weekday caused the overall study area parking occupancy to reach 50% despite a majority of the other parking facilities experiencing a much lower parking occupancy.

Within the smaller Core Sub-Area, City parking assets reached around 50% occupancy during the peak weekday hours and were at 90% during the peak weekend hours. It should be noted that the 29-space City Hall parking lot was closed due to the Saturday Market event and vendor booths.

On both weekday and weekend surveys, THA noticed that on-street striped parking spaces were better utilized than the unstriped parking spaces. As previously noted, many motorists would not know that the unstriped areas are a legal place to park, and therefore, would seek other marked on-street locations or lots.

During our visit on December 18th, the Saturday Market in the Park was taking place from 10AM to 2PM within the City Hall parking lot. Due to this event, the parking occupancy data was likely higher than what would be observed during a typical weekend without any such events. However, we did observe a large amount of visitors enjoying Spring Park, including a small middle school concert and a wedding ceremony.





Saturday Market in the Park Event







Wedding Ceremony

All of the Public/City lots are located in the southern portion of the study area near Spring Park. During most of the weekday, daytime hours, the occupancy at the City lots was below 50%. However, during the weekday evening and weekend hours, those facilities were more utilized. On the night of December 15<sup>th</sup>, our team performed field observations during the Parade of Trees and noted a considerable amount of activity and vehicles parked in the vicinity of Spring Park throughout the evening hours. Likewise, those areas were also well-utilized throughout the weekend parking surveys which was partially due to the Saturday Market, although activity levels remained high even after the market event was over.

Based on our multiple visits, the on-street parking along Walnut Avenue (east of Orange Avenue) was consistently utilized throughout the day. In addition, the City lots adjacent to Spring Park were all consistently utilized during events and through the weekend as Spring Park is a major destination for families. Spring Park facilities include a swimming pool and splash pad (open seasonal), playground areas, picnic areas, kayak launch, fishing pier, recreational sports, and shaded pavilions.

As expected, the Public/County lots were almost fully utilized during the weekday, daytime hours and were mostly empty during the evening and weekend hours with the exception of some employees working during those times and County vehicles that are stored in those locations. Most of the vacant parking spaces observed during the weekday, daytime hours were either marked as reserved for a specific use or ADA. On average, private parking facilities were only 35% utilized during the peak weekday, daytime hours and 23% utilized during the weekend hours. We did note that the parking lots serving Sweet Sensations and Spring Park Coffee Plaza were well-utilized during the weekday and weekend lunch hours. There was also high demand observed during the weekday, daytime hours at the plaza serving Dollar Tree. Other private lots adjacent to the Spring Park area were all fully occupied during the weekend hours.

19 \$ 35 36 Legend 85% to 100% Occupancy 70% to 84% Occupancy 69% to 55% Occupancy Less than 54% Occupancy

Figure 5: Weekday Peak Hour Occupancy Heat Map by Location (1PM-3PM)

Source: THA Consulting, Inc. and Google Maps, 2022

Figure 6: Weekend Peak Hour Occupancy Heat Map by Location (1PM-3PM)

Source: THA Consulting, Inc. and Google Maps, 2022

# **Effective Parking Supply**

Effective supply is a common term used in the parking industry. The effective supply is essentially a "cushion" used to account for parking spaces lost due to misparked vehicles, construction, the difficulty to locate parking (i.e. line of sight via major roadways), and the natural ebb and flow of vehicles. Simply stated, it considers that a parking supply operates at a peak efficiency when parking occupancy is less than 85% to 95% of the supply. When occupancy exceeds this level, patrons may experience delays and frustration while searching for the last few remaining spaces. This creates a perception that the supply is inadequate even when there are some spaces still available.

For the study area, we have assigned a 15% cushion (85% effective supply factor) to all on-street parking spaces and a 10% cushion (90% effective supply factor) to all off-street parking spaces for an average 10% cushion. The result is 1,915 effective parking spaces which reflect a cushion of 224 spaces. Table 1 summarizes the effective supply factor assumptions and the effective parking supply.

Table 1: Effective Parking Supply

Study Area Parking Type	<b>Total Supply</b>	Effective Supply Factor	Effective Supply
ity Owned Parking			
On-Street Striped	92	85%	78
On-Street Unstriped	110	85%	94
Off-Street Public/City	180	90%	162
Subtotal City Owned Parking	382	87%	334
ther Parking			
Off-Street Public/County	669	90%	602
Off-Street Private	1,088	90%	979
Subtotal Other Parking	1,757	90%	1,581
otal Study Area Parking	2,139	90%	1,915
Core Sub-Area City Owned Parkin	g - City Owned Pa	rking	
On-Street Striped	45	85%	38
On-Street Unstriped	16	85%	14
Off-Street Public/City	136	90%	122
Total Core Sub-Area	197	88%	174

Source: THA Consulting, Inc., 2022

The result is a 224-space cushion, 1,915 effective parking spaces. within the Overall Study Area and a 23-space cushion, 174 City-owned spaces, within the Core Sub-Area.

# 2021 Design Day Parking Demand

The weekday and weekend parking occupancy data collection efforts were conducted in December 2021, and December is often considered an atypical month from a parking perspective due to school breaks, vacations, and the holidays. For that reason, our team requested monthly data that could be used as an indicator of the seasonality of parking during the year. Unfortunately, available data was very limited and therefore to calibrate our survey day data for seasonal variations, we utilized 2018 and 2019 Clay County Validated Tax Receipts Data by month. We understand this data may not have a high correlation to parking, however, other data (such as sales tax revenue) was not available. Based on the information provided, December activity levels fell in the lower quartile of monthly activity for each respective year.

A parking management best practice is to provide parking to accommodate peak demand for 85% of the year as that allows for a balance between meeting the parking needs and utilizing valuable land for other uses. As such, we looked at the activity level during the second busiest month (July) to quantify an appropriate adjustment. The following table outlines the rationale for determining the adjustment factor for the Design Day Parking demand.

Table 2: Clay County Validated Tax Receipts Data in 2018 and 2019

Month/Year	Tax Revenue	Percentage	Rank	Adjustment
January 2018	\$529,247,283	10.2%	1	
February 2018	\$378,580,454	7.3%	12	
March 2018	\$406,859,731	7.9%	7	
April 2018	\$485,032,030	9.4%	3	
May 2018	\$405,222,423	7.8%	8	
June 2018	\$403,918,066	7.8%	9	
July 2018	\$493,361,754	9.5%	2	126%
August 2018	\$407,804,475	7.9%	6	
September 2018	\$399,573,217	7.7%	10	
October 2018	\$444,308,350	8.6%	4	
November 2018	\$429,796,489	8.3%	5	
December 2018	\$390,374,313	7.5%	11	
Total	\$5,174,078,585	100.0%		

Month/Year	Tax Revenue	Percentage	Rank	Adjustment
January 2019	\$552,345,800	10.4%	1	
February 2019	\$401,112,664	7.6%	11	
March 2019	\$386,843,374	7.3%	12	
April 2019	\$470,655,339	8.9%	3	
May 2019	\$445,678,123	8.4%	5	
June 2019	\$439,922,455	8.3%	6	
July 2019	\$478,251,444	9.0%	2	116%
August 2019	\$448,125,237	8.4%	4	
September 2019	\$433,284,541	8.2%	7	
October 2019	\$424,779,881	8.0%	8	
November 2019	\$418,900,862	7.9%	9	
December 2019	\$410,584,650	7.7%	10	
Total	\$5,310,484,371	100.0%		

Average 121%

Source: Clay County and THA Consulting. Inc, 2022

To determine the 2021 Design Day Parking demand, we adjusted the December 2021 Survey Day Parking Demand by a factor of 1.21 to reflect the demand we would expect to observe during the second busiest month of the year, or 85<sup>th</sup> percentile.

Table 3: 2021 Design Day Parking Demand and Occupancy (121% Seasonality Adjustment)

T	Parking	V	Veekday	Deman	d and O	ccupano	у	V	Veekend	Deman	d and O	ccupano	у
Туре	Supply	9AM-11AM		1PM	1PM-3PM		4PM-6PM		9AM-11AM		1PM-3PM		-6PM
City Owned Parking											000000000000000000000000000000000000000		
On-Street Striped	92	29	32%	45	49%	34	37%	51	55%	82	89%	62	67%
On-Street Unstriped	110	11	10%	28	25%	13	12%	22	20%	36	33%	22	20%
Off-Street Public/City	180	82	46%	110	61%	70	39%	127	71%	155	86%	132	73%
Subtotal City Owned Parking	382	122	32%	183	48%	117	31%	200	52%	273	72%	216	57%
Other Parking											000000000000000000000000000000000000000		000000000000000000000000000000000000000
Off-Street Public/County	669	646	97%	645	96%	189	28%	110	16%	103	15%	105	16%
Off-Street Private	1,088	403	37%	460	42%	301	28%	276	25%	306	28%	306	28%
Subtotal Other Parking	1,757	1,049	60%	1,105	63%	490	28%	386	22%	409	23%	411	23%
Total Study Area Parking	2,139	1,171	45%	1,287	60%	607	28%	586	27%	682	32%	627	29%
Core Sub-Area City Owned Parkin	g - City Ow	ned Par	king										
On-Street Striped	45	10	22%	29	65%	22	48%	39	86%	54	121%	40	89%
On-Street Unstriped	16	1	8%	12	76%	5	30%	12	76%	21	129%	17	106%
Off-Street Public/City	136	56	41%	76	56%	56	41%	121	89%	140	103%	119	87%
Total Core Sub-Area	197	67	34%	117	60%	82	42%	172	87%	215	109%	176	89%

Source: THA Consulting, Inc., 2022

# 2021 Parking Adequacy (Surplus/Shortage)

In order to calculate the parking adequacy (parking surplus or shortage) we compare the 2021 Design Day Parking Demand against the effective parking supply as previously calculated. The 2021 Design Day parking adequacy reflects a 627-space parking surplus during the weekday, daytime hours and a 1,233-space parking surplus during the weekend, daytime hours within the Overall Study Area was only 151 and 61-space City-owned parking surplus. Further, the weekday adequacy within the Core Sub-Area was only 57 parking spaces and there is a projected Design Day weekend shortage of 41 spaces. Table 4 summarizes the parking adequacy for each type of facility surveyed in this analysis. Based on this analysis, the City parking resources within the Core Sub-Area are already fully utilized and likely to experience worse conditions in the future.

Table 4: 2021 Design Day Parking Adequacy (Surplus/Shortage)

<b>-</b>	Effective	W	eekday Adequa	су	W	eekend Adequa	су
Туре	Supply	9AM-11AM	1PM-3PM	4PM-6PM	9AM-11AM	1PM-3PM	4PM-6PM
City Owned Parking							
On-Street Striped	78	49	33	44	27	(4)	16
On-Street Unstriped	94	83	66	81	72	58	72
Off-Street Public/City	162	80	52	92	35	7	30
Subtotal City Owned Parking	334	212	151	217	134	61	118
Other Parking							
Off-Street Public/County	602	(44)	(43)	413	492	499	497
Off-Street Private	979	576	519	678	703	673	673
Subtotal Other Parking	1,581	532	476	1,091	1,195	1,172	1,170
Total Study Area Parking	1,915	744	627	1,308	1,329	1,233	1,288
Core Sub Area City Owned Parkin	g - City Ow	ned Parking					
On-Street Striped	38	28	9	16	(1)	(16)	(2)
On-Street Unstriped	14	13	2	9	2	(7)	(3)
Off-Street Public/City	122	66	46	67	1	(18)	3
Total Core Sub-Area	174	107	57	92	2	(41)	(2)

Source: THA Consulting, Inc.

#### **FUTURE PARKING CONDITIONS**

#### **Normal Growth**

To determine the increase in parking demand from changes in normal growth, we researched historical population data for the City of Green Cove Springs as well as Census Tract 314 as it most closely coincides with our study area boundaries.

Since 2015, the population of Green Cove Springs increased steadily from 2015 to 2019. There was an average annual population increase of 3.0% and a 5-year increase of 12.3%. When looking at the same information for Census Tract 314, there is an average annual growth of -0.6% and a 5-year average of -2.5%.

Table 5: City of Green Cove Springs and Census Tract 314 Data from 2015 to 2019

Year	City of G	reen Cove	Census 1	Γract 314
2015	7,054		5,216	
2016	7,205	2.1%	5,238	0.4%
2017	7,345	1.9%	5,077	-3.1%
2018	7,639	4.0%	5,153	1.5%
2019	7,923	3.7%	5,083	-1.4%
Annual Avg. Change		3.0%		-0.6%
5-Year Change		12.3%		-2.5%

Source: United Census Bureau., 2016 – 2019 and THA Consulting, Inc. 2022

Based on conversations with City representatives, we applied the annual future growth rates as shown in the City of Green Cove Springs Future Land Use report dated December 2021. The following table summarizes the growth projections provided by the City as well as the growth rates used to project future demand from 2021 to 2031.

Table 6: Clay County and City of Green Cove Springs Population Projections from 2020 to 2045

			Green Cove Springs								
				on 2020 Esti	mates	Based on updated Census Data					
Year	Clay	County		5-Year	Annual		5-Year	Annual			
			Population	Population	Population	Population	Increase %	Avg.	Population	Increase %	Avg.
				Increase			iliciease 76	Increase %			
2020	218,245		8,054			9,786					
2025	237,300	8.7%	9,988	24.0%	4.8%	11,859	21.2%	4.2%			
2030	252,400	6.4%	12,152	21.7%	4.3%	14,143	19.3%	3.9%			
2035	264,600	4.8%	14,210	16.9%	3.4%	16,297	15.2%	3.0%			
2040	274,800	3.9%	16,195	14.0%	2.8%	18,363	12.7%	2.5%			
2045	283,900	3.3%	16,529	2.1%	0.4%	18,768	2.2%	0.4%			
Annual A	vg. Change	5.4%		15.7%	3.1%		14.1%	2.8%			

Year(s)	Annual Growth Rate
2022-2025	4.2%
2026-2030	3.9%
2031	3.0%

Source: City of Green Cove Springs. 2022

Florida is experiencing a surge of population growth, only second behind Texas in the nation. We applied the above stated growth rates to the peak weekday and weekend parking demand from 2021 to 2031 as follows:

Table 7: Estimated Future Parking Demand and Adequacy (Weekday and Weekend) from Normal Growth

<u>_</u>	Effective	We	ekday Den	nand	<u>_</u>	Effective	Wee	ekend Dem	nand
Туре	Supply	2021	2026	2031	Туре	Supply	2021	2026	2031
City Owned Parking					City Owned Parking				
On-Street Striped	78	45	55	66	On-Street Striped	78	82	101	121
On-Street Unstriped	94	28	34	41	On-Street Unstriped	94	36	45	53
Off-Street Public/City	162	110	135	162	Off-Street Public/City	162	155	190	228
Subtotal City Owned Parking	334	183	224	269	Subtotal City Owned Parking	334	273	335	402
Other Parking					Other Parking				
Off-Street Public/County	602	645	791	948			103	126	151
Off-Street Private	979	460	566	678			306	375	450
Subtotal Other Parking	1,581	1,105	1,357	1,626	Subtotal Other Parking	1,581	409	501	601
Total Study Area Parking	1,915	1,287	1,581	1,894	Total Study Area Parking	1,915	682	837	1,003
Core Sub Area City Owned Parkin	g - City Ov	ned Parki	ng		Core Sub Area City Owned Parkin	ıg - City Ov	vned Parki	ng	
On-Street Striped	38	29	36	43	On-Street Striped	38	54	67	80
On-Street Unstriped	14	12	15	18	On-Street Unstriped	14	21	25	30
Off-Street Public/City	122	76	93	112			140	172	206
Total Sub Core Area	174	117	144	172	Total Sub Core Area	122 <b>174</b>	215	264	317
	Effective	Was	kday Adec	macv.		Effective Weekend Adequacy			
Туре					Туре				
••	Supply	2021	2026	2031	**	Supply	2021	2026	2031
City Owned Parking	Supply	2021	2026	2031	City Owned Parking	Supply	2021	2026	2031
City Owned Parking On-Street Striped	Supply 78	<b>2021</b> 33	2026	<b>2031</b>	City Owned Parking On-Street Striped	Supply 78	(4)	(23)	(43)
City Owned Parking On-Street Striped On-Street Unstriped	78 94	33 66	2026 23 59	2031 12 53	City Owned Parking On-Street Striped On-Street Unstriped	78 94	(4) 57	(23) 49	2031 (43) 40
City Owned Parking On-Street Striped On-Street Unstriped Off-Street Public/City	78 94 162	33 66 52	2026 23 59 27	2031 12 53 0	City Owned Parking On-Street Striped On-Street Unstriped Off-Street Public/City	78 94 162	(4) 57 7	(23) 49 (28)	2031 (43) 40 (66)
City Owned Parking On-Street Striped On-Street Unstriped Off-Street Public/City Subtotal City Owned Parking	78 94	33 66	2026 23 59	2031 12 53	City Owned Parking On-Street Striped On-Street Unstriped Off-Street Public/City Subtotal City Owned Parking	78 94	(4) 57	(23) 49	2031 (43) 40
On-Street Striped On-Street Unstriped Off-Street Public/City Subtotal City Owned Parking Other Parking	78 94 162 334	33 66 52 151	2026 23 59 27 110	2031 12 53 0 65	City Owned Parking On-Street Striped On-Street Unstriped Off-Street Public/City Subtotal City Owned Parking Other Parking	78 94 162 334	(4) 57 7 <b>60</b>	(23) 49 (28) (2)	(43) 40 (66) (68)
On-Street Striped On-Street Unstriped Off-Street Public/City Subtotal City Owned Parking Off-Street Public/County	78 94 162 <b>334</b> 602	33 66 52 151 (43)	2026 23 59 27 110 (189)	2031 12 53 0 65 (346)	City Owned Parking On-Street Striped On-Street Unstriped Off-Street Public/City Subtotal City Owned Parking Other Parking Off-Street Public/County	78 94 162 <b>334</b>	(4) 57 7 <b>60</b>	(23) 49 (28) (2) 476	2031 (43) 40 (66) (68) 451
On-Street Striped On-Street Unstriped On-Street Public/City Subtotal City Owned Parking Off-Street Public/County Off-Street Public/County Off-Street Private	78 94 162 334 602 979	33 66 52 151 (43) 518	2026  23  59  27  110  (189)  412	2031 12 53 0 65 (346) 300	City Owned Parking On-Street Striped On-Street Unstriped Off-Street Public/City Subtotal City Owned Parking Other Parking Off-Street Public/County Off-Street Private	78 94 162 334 602 979	(4) 57 7 <b>60</b> 499 672	(23) 49 (28) (2) 476 603	2031 (43) 40 (66) (68) 451 528
On-Street Striped On-Street Unstriped Off-Street Public/City Subtotal City Owned Parking Off-Street Public/County	78 94 162 <b>334</b> 602	33 66 52 151 (43)	2026 23 59 27 110 (189)	2031 12 53 0 65 (346)	City Owned Parking On-Street Striped On-Street Unstriped Off-Street Public/City Subtotal City Owned Parking Other Parking Off-Street Public/County	78 94 162 <b>334</b>	(4) 57 7 <b>60</b>	(23) 49 (28) (2) 476	2031 (43) 40 (66) (68) 451
City Owned Parking On-Street Striped On-Street Unstriped Off-Street Public/City Subtotal City Owned Parking Off-Street Public/County Off-Street Public/County Off-Street Private Subtotal Other Parking Total Study Area Parking	78 94 162 334 602 979 1,581 1,915	33 66 52 151 (43) 518 476 627	2026  23 59 27 110  (189) 412 224 334	2031 12 53 0 65 (346) 300 (46)	City Owned Parking On-Street Striped On-Street Unstriped Off-Street Public/City Subtotal City Owned Parking Other Parking Off-Street Public/County Off-Street Private Subtotal Other Parking Total Study Area Parking	78 94 162 334 602 979 1,581 1,915	(4) 57 7 60 499 672 1,171 1,232	2026 (23) 49 (28) (2) 476 603 1,079	2031 (43) 40 (66) (68) 451 528 979
On-Street Striped On-Street Unstriped On-Street Unstriped Off-Street Public/City Subtotal City Owned Parking Off-Street Public/County Off-Street Public/County Off-Street Private Subtotal Other Parking Total Study Area Parking Core Sub Area City Owned Parkin	78 94 162 334 602 979 1,581 1,915 g - City Ow	33 66 52 151 (43) 518 476 627 wned Parki	2026  23 59 27 110  (189) 412 224 334	2031 12 53 0 65 (346) 300 (46) 20	City Owned Parking On-Street Striped On-Street Unstriped Off-Street Public/City Subtotal City Owned Parking Other Parking Off-Street Public/County Off-Street Private Subtotal Other Parking Total Study Area Parking Core Sub Area City Owned Parking	78 94 162 334 602 979 1,581 1,915 g - City Ov	(4) 57 7 60 499 672 1,171 1,232 vned Parki	2026 (23) 49 (28) (2) 476 603 1,079	2031 (43) 40 (66) (68) 451 528 979 911
On-Street Striped On-Street Unstriped On-Street Unstriped Off-Street Public/City Subtotal City Owned Parking Off-Street Public/County Off-Street Public/County Off-Street Private Subtotal Other Parking Total Study Area Parking Core Sub Area City Owned Parkin On-Street Striped	78 94 162 334 602 979 1,581 1,915 g - City Ow	33 66 52 151 (43) 518 476 627 wned Parki	2026  23 59 27 110  (189) 412 224 334  ng 3	2031 12 53 0 65 (346) 300 (46) 20	City Owned Parking On-Street Striped On-Street Unstriped Off-Street Public/City Subtotal City Owned Parking Other Parking Off-Street Public/County Off-Street Private Subtotal Other Parking Total Study Area Parking Core Sub Area City Owned Parking On-Street Striped	78 94 162 334 602 979 1,581 1,915 g - City Ov 38	(4) 57 7 <b>60</b> 499 672 <b>1,171</b> <b>1,232</b> vned Parki	2026 (23) 49 (28) (2) 476 603 1,079 1,077	2031  (43) 40 (66) (68)  451 528 979 911
On-Street Striped On-Street Unstriped On-Street Unstriped Off-Street Public/City Subtotal City Owned Parking Off-Street Public/County Off-Street Public/County Off-Street Private Subtotal Other Parking Total Study Area Parking Core Sub Area City Owned Parkin	78 94 162 334 602 979 1,581 1,915 g - City Ow	33 66 52 151 (43) 518 476 627 wned Parki	2026  23 59 27 110  (189) 412 224 334	2031 12 53 0 65 (346) 300 (46) 20	City Owned Parking On-Street Striped On-Street Unstriped Off-Street Public/City Subtotal City Owned Parking Other Parking Off-Street Public/County Off-Street Private Subtotal Other Parking Total Study Area Parking Core Sub Area City Owned Parking	78 94 162 334 602 979 1,581 1,915 g - City Ov	(4) 57 7 60 499 672 1,171 1,232 vned Parki	2026 (23) 49 (28) (2) 476 603 1,079	2031 (43) 40 (66) (68) 451 528 979 911

Source: THA Consulting, Inc. 2022

174

Total Sub Core Area

We anticipate a surplus when considering normal growth and the Overall Study Area. <u>However, when looking at the Core Sub-Area, we are seeing future parking shortages under normal growth conditions.</u> While we did capture an event on the weekend, we understand it was one of the smaller events that take place in the City throughout the year. Based on normal growth projections, the on-street areas and City-owned parking lots that are currently well-utilized, will likely experience full occupancy and parking shortages in greater frequency than they do today.

**Total Sub Core Area** 

#### **Development Growth**

Two projects were analyzed within this study: 1.) The Dollar Tree Plaza Redevelopment Project located at 200-206 Orange Avenue and, 2.) The Prelude Development located between Bay and Cove Street and Orange and Magnolia Avenue.

#### **Dollar Tree Plaza Redevelopment**

Plans for the 200-206 South Orange Avenue site dated 10/11/2021 were provided by the City and include two new building outparcels with 1,502 SF and 1,504 SF respectively. In order to accommodate the outparcel buildings, the existing 62-space lot (59 regular plus 3 ADA spaces) is reduced to 47 spaces (43 regular plus 4 ADA spaces) for a total loss of 15 parking spaces. According to our site visit in November and December, 2021, there are only 55 parking spaces on the site (52 standard and 3 ADA).

We have estimated the additional weekday and weekend demand for those new buildings using standard retail base ratios per ULI (Urban Land Institute) and ITE (Institute of Transportation Engineers) data. Based on that analysis, we anticipate an additional demand of approximately 11 customer/employee vehicles during the weekday daytime hours and 12 customer/employee vehicles during the weekend daytime hours. Please note, a change from retail to restaurant would significantly increase the projected demand figures.

According to the Design Day parking demand projections, the peak hour weekday, daytime demand for the existing plaza is 53 vehicles and the peak hour weekend demand is 30 vehicles. When adding the demand associated with the new outparcels, the overall weekday, daytime demand is 64 spaces and the overall weekend, daytime demand is 42 spaces. The result is a weekday, daytime shortage of 17 spaces and a weekend, daytime surplus of 5 spaces. A copy of the site plan is included on the following page.

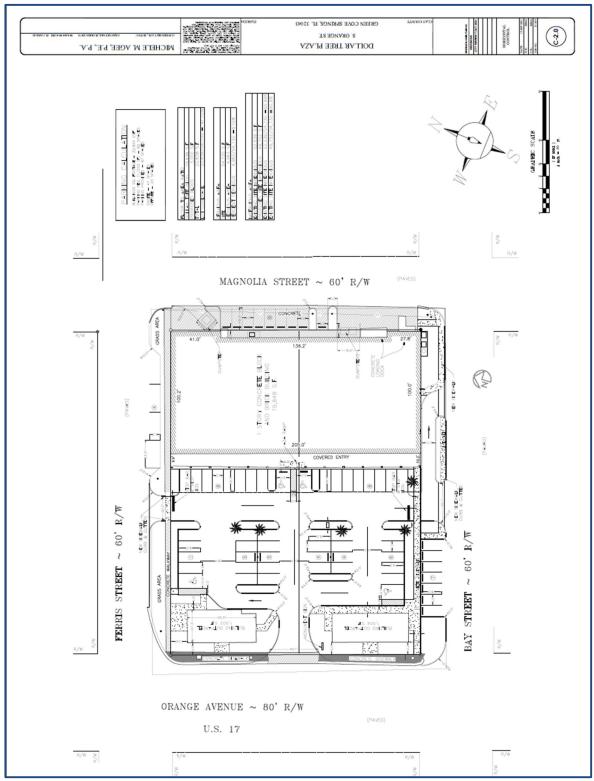
#### **Prelude Development**

This project includes 38 residential units (12 efficiency, 14 1-bedroom, and 12 2-bedroom units), 7,181 SF of restaurant, and 8,064 SF of retail. Based on the site plan dated 10/5/2021, there will be 81 parking spaces on-site plus 6 ADA parking spaces. We have estimated the additional weekday and weekend demand for the project using base parking ratios for retail use per ULI (Urban Land Institute) and ITE (Institute of Transportation Engineers) along with a shared parking model that incorporates regional, demographic, and hourly trends by land use type.

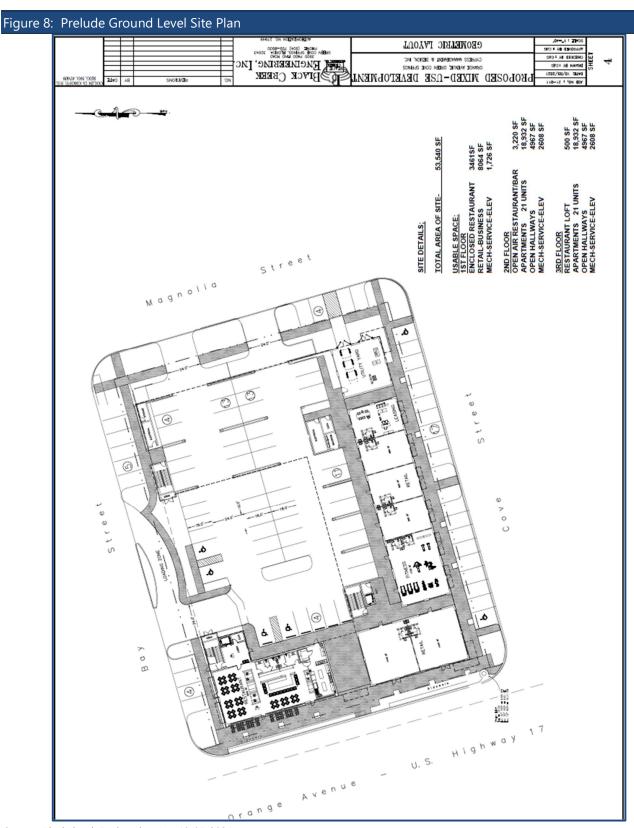
According to the most recent conversations with the developers and the City, we anticipate there will be a need for approximately 182 (95 additional) parking spaces during the peak weekday hour (8pm) and approximately 203 (116 additional) parking spaces during the peak weekend hour (8pm). When looking at the demand (from 1pm to 3pm) on the weekday and weekend (which is the current peak demand hours in the study area), the parking demand for this project will exceed the number of spaces on site resulting in a shortage of approximately 22 spaces each. During those times, we understand residents, employees, and customers will utilize available parking resources in the area including the City Hall parking lot, and the parking areas at and surrounding Spring Park.

When examining the current Design Day demand in the public parking facilities (City Hall, Walnut Street Lot, Walnut Street, and Spring Park), there is a weekday surplus of 34 spaces and an 11-space shortage on the weekend. While the public parking resources may be able to accommodate the overflow Prelude users during the weekday daytime hours, they will not likely be capable of accommodating them during the weekend daytime hours nor during any special events. During the evening hours, the nearby public lots (approximately 128 parking spaces) should mostly be vacant and would be capable of accommodating the additional 95 to 115 spaces needed to meet the demand of the project. However, during events located at Spring Park, all of the nearby public parking facilities are very well utilized and will not likely be capable of meeting the overflow demand associated with the development, resulting in a parking shortage. A copy of the site plan is included on page 17.

Figure 7: Dollar Tree Plaza Site Plan



Source: Michele M. Agee, P.E. September 12, 2021



# **Development Impact Summary**

The impact of the two proposed development projects, coupled with normal growth, will further burden the already well utilized public parking facilities located at and around Spring Park. These developments are projected to create an additional demand of 118 spaces on the weekday daytime peak and 122 spaces on the weekend daytime peak creating a public parking shortage in City-owned parking facilities <u>during the daytime hours on non-event weekdays and weekends.</u>

Table 8: Estimated Demand, Adequacy, and Additional Public Demand by Development Project

	Parking	Weekday				Wee	kend
Project	Provided	Demand	Adequacy	Add'l Public Demand	Demand	Adequacy	Add'l Public Demand
Prelude	81	182	(101)	101	203	(122)	122
Dollar Tree Plaza	47	64	(17)	17	42	5	None
Total	128	246	(118)	118	245	(117)	122

Source: City of Green Cove Springs and THA Consulting, Inc. 2022

Table 9: Estimated Future Parking Demand and Adequacy with Normal and Development Growth

Type	Effective	We	ekday Den	nand	_	Effective	We	ekend Den	and
Type	Supply	2021	2026	2031	Туре	Supply	2021	2026	2031
City Owned Parking					City Owned Parking				
On-Street Striped	78	45	55	66	On-Street Striped	78	82	101	121
On-Street Unstriped	94	28	34	41	On-Street Unstriped	94	36	45	53
Off-Street Public/City	162	110	253	303	Off-Street Public/City	162	155	312	374
Subtotal City Owned Parking	334	183	342	410	Subtotal City Owned Parking	334	273	457	548
Other Parking					Other Parking				
Off-Street Public/County	602	645	791	948	948 Off-Street Public/County		103	126	151
Off-Street Private	979	460	694	832	Off-Street Private	979	306	498	597
Subtotal Other Parking	1,581	1,105	1,485	1,779	Subtotal Other Parking	1,581	409	624	748
Total Study Area Parking	1,915	1,287	1,827	2,189	Total Study Area Parking	1,915	682	1,082	1,297
Core Sub Area City Owned Parkir	ng - City Ov	vned Parki	ing		Core Sub Area City Owned Parkin	g - City Ov	vned Parki	ng	
On-Street Striped	38	29	36	43	On-Street Striped	38	54	67	80
On-Street Unstriped	14	12	15	18	On-Street Unstriped	14	21	25	30
Off-Street Public/City	122	76	211	253	Off-Street Public/City	122	140	294	353
Total Sub Core Area	174	117	262	314	Total Sub Core Area	174	215	386	463
	Effective	Weekday Adequacy		nuacy		Effective Weekend Adequacy			uacv
Туре	Supply	2021	2026	2031	Туре	Supply	2021	2026	2031
C' O ID II					City Owned Parking				
City Owned Parking				1					
On-Street Striped	78	33	23	12	On-Street Striped	78	(4)	(23)	(43)
<u> </u>	78 94	33 66	23 59	12 53		78 94	(4) 57	(23) 49	(43) 40
On-Street Striped					On-Street Striped		. ,	,	( - /
On-Street Striped On-Street Unstriped	94	66	59	53	On-Street Striped On-Street Unstriped	94	57	49	40
On-Street Striped On-Street Unstriped Off-Street Public/City Subtotal City Owned Parking	94	66 71	59 (91)	53 (141)	On-Street Striped On-Street Unstriped Off-Street Public/City	94 162	57	49 (150)	40 (212)
On-Street Striped On-Street Unstriped Off-Street Public/City Subtotal City Owned Parking	94	66 71	59 (91)	53 (141)	On-Street Striped On-Street Unstriped Off-Street Public/City Subtotal City Owned Parking	94 162	57	49 (150)	40 (212)
On-Street Striped On-Street Unstriped Off-Street Public/City Subtotal City Owned Parking Other Parking	94 162 <b>334</b>	66 71 <b>170</b>	59 (91) <b>(8)</b>	53 (141) <b>(76)</b>	On-Street Striped On-Street Unstriped Off-Street Public/City Subtotal City Owned Parking Other Parking	94 162 <b>334</b>	57 7 <b>60</b>	49 (150) <b>(124)</b>	40 (212) <b>(214)</b>
On-Street Striped On-Street Unstriped Off-Street Public/City Subtotal City Owned Parking Other Parking Off-Street Public/County	94 162 <b>334</b> 602	66 71 <b>170</b> (43)	59 (91) <b>(8)</b> (189)	53 (141) (76) (346)	On-Street Striped On-Street Unstriped Off-Street Public/City Subtotal City Owned Parking Other Parking Off-Street Public/County	94 162 <b>334</b> 602	57 7 <b>60</b> 499	49 (150) (124) 476	40 (212) (214) 451
On-Street Unstriped Off-Street Public/City Subtotal City Owned Parking Other Parking Off-Street Public/County Off-Street Private	94 162 <b>334</b> 602 979	66 71 <b>170</b> (43) 519	59 (91) (8) (189) 400	53 (141) (76) (346) 147	On-Street Striped On-Street Unstriped Off-Street Public/City Subtotal City Owned Parking Other Parking Off-Street Public/County Off-Street Private	94 162 <b>334</b> 602 979	57 7 <b>60</b> 499 673	49 (150) (124) 476 596	40 (212) (214) 451 382
On-Street Striped On-Street Unstriped Off-Street Public/City Subtotal City Owned Parking Other Parking Off-Street Public/County Off-Street Private Subtotal Other Parking Total Study Area Parking	94 162 334 602 979 1,581 1,915	66 71 170 (43) 519 476 646	(189) 400 212 203	53 (141) (76) (346) 147 (198)	On-Street Striped On-Street Unstriped Off-Street Public/City Subtotal City Owned Parking Other Parking Off-Street Public/County Off-Street Private Subtotal Other Parking Total Study Area Parking	94 162 334 602 979 1,581 1,915	57 7 <b>60</b> 499 673 <b>1,172</b> <b>1,232</b>	49 (150) (124) 476 596 1,072 948	40 (212) (214) 451 382 833
On-Street Striped On-Street Unstriped Off-Street Public/City Subtotal City Owned Parking Other Parking Off-Street Public/County Off-Street Private Subtotal Other Parking Total Study Area Parking	94 162 334 602 979 1,581 1,915	66 71 170 (43) 519 476 646	(189) 400 212 203	53 (141) (76) (346) 147 (198) (275)	On-Street Striped On-Street Unstriped Off-Street Public/City Subtotal City Owned Parking Other Parking Off-Street Public/County Off-Street Private Subtotal Other Parking Total Study Area Parking Core Sub Area City Owned Parkin	94 162 334 602 979 1,581 1,915	57 7 <b>60</b> 499 673 <b>1,172</b> <b>1,232</b> wned Parki	49 (150) (124) 476 596 1,072 948	40 (212) (214) 451 382 833 618
On-Street Striped On-Street Unstriped Off-Street Public/City Subtotal City Owned Parking Off-Street Public/County Off-Street Public/County Off-Street Private Subtotal Other Parking Total Study Area Parking Core Sub Area City Owned Parkin	94 162 334 602 979 1,581 1,915	66 71 170 (43) 519 476 646 vned Parki	(189) 400 212 203	53 (141) (76) (346) 147 (198) (275)	On-Street Striped On-Street Unstriped Off-Street Public/City Subtotal City Owned Parking Other Parking Off-Street Public/County Off-Street Private Subtotal Other Parking Total Study Area Parking Core Sub Area City Owned Parkin On-Street Striped	94 162 <b>334</b> 602 979 <b>1,581</b> <b>1,915</b> <b>g - City Ow</b>	57 7 <b>60</b> 499 673 <b>1,172</b> <b>1,232</b> wned Parki	49 (150) (124) 476 596 1,072 948 ng (29)	40 (212) (214) 451 382 833 618
On-Street Striped On-Street Unstriped Off-Street Public/City Subtotal City Owned Parking Other Parking Off-Street Public/County Off-Street Private Subtotal Other Parking Total Study Area Parking Core Sub Area City Owned Parkin	94 162 334 602 979 1,581 1,915 og - City Ov	66 71 170 (43) 519 476 646 wned Parki	59 (91) (8) (189) 400 212 203	53 (141) (76) (346) 147 (198) (275)	On-Street Striped On-Street Unstriped Off-Street Public/City Subtotal City Owned Parking Other Parking Off-Street Public/County Off-Street Private Subtotal Other Parking Total Study Area Parking Core Sub Area City Owned Parkin	94 162 334 602 979 1,581 1,915 g - City Ow	57 7 <b>60</b> 499 673 <b>1,172</b> <b>1,232</b> wned Parki	49 (150) (124) 476 596 1,072 948	40 (212) (214) 451 382 833 618

Source: THA Consulting, Inc. 2022

The impact of the two development projects results in a projected 2026 <u>weekday shortage of 8 spaces and a 2026</u> <u>weekend shortage of 124 spaces in all City-owned parking areas within the Overall Study Area.</u> Events are already creating a parking shortage in all public and private parking facilities in the vicinity of Spring Park. Therefore, parking

conditions in this area will be even more congested with the addition of these two projects and their users competing for the same parking spaces as the event attendees. Larger shortages are anticipated within the Core Sub-Area.

At this time, parking within the study area is provided through a combination of private parking lots serving private businesses employees and their customers and City lots serving the general public, Spring Park users, and the businesses along Walnut Street between Palmetto and Orange. As previously shown, normal growth will increase demand over the upcoming years and the frequency and severity of parking shortages will increase.

The only businesses within the study area that do not have, own, and control their parking facilities are those businesses located along Walnut Street between Palmetto and Orange Avenue. Based on our site visits in November and December, those businesses are all rather low intensity and the existing on- and off-street parking areas are capable of meeting their parking needs. Even as we calibrated up our survey day demand, we anticipate the existing public parking in this area is sufficient to meet the existing demand of the land uses in place at this time. We understand future growth is anticipated in this area, however no development information has been included as part of the study. Furthermore, this area is in close proximity to Spring Park and would also likely be impacted during the mid- to large scale events.

# **Parking Turnover and Duration Statistics**

To determine the turnover (number of vehicles using each parking space) and duration (length of visit) for parkers in Green Cove Springs, our team performed hourly license plate surveys during the weekday, daytime hours from 9am until 3pm in two City lots and along 11 blocks with on-street parking. The following table outlines the turnover and length of stay (in minutes) by location.

Table 10: Turnover and Length of Stay Statistics

Block ID	ID	Street	Cross	Streets	Spaces	Turnover	Length of Stay (min.)
40	OS-N	Walnut St	Magnolia Ave	River	16	3.25	33
34	OS-S	Walnut St	Magnolia Ave	St Johns Ave	5	1.4	14
33	OS-S	Walnut St	Orange Ave	Magnolia Ave	7	0.9	10
32	OS-S	Walnut St	Palmetto Ave	Orange Ave	10	1.4	27
38	OS-N	Walnut St	Palmetto Ave	Orange Ave	10	1.4	17
38	Α	NE	Palmetto Ave	Spring St.	21	1.19	35
31	OS-E	Palmetto Ave	Palmer St	Walnut St	8	1.50	26
32	OS-W	Palmetto Ave	Palmer St	Walnut St	8	1.38	38
32	Α	SE	Palmetto Ave	Palmer St.	22	2.09	14
26	OS-S	Palmer St	Palmetto Ave	Orange Ave	3	3.33	29
32	OS-N	Palmer St	Palmetto Ave	Orange Ave	5	1.40	19
33	OS-E	Magnolia Ave	Palmer St	Walnut St	6	2.17	24
34	OS-W	Magnolia Ave	Palmer St	Walnut St	6	2.33	26

 Average
 1.82
 24

 Range
 0.9
 10

 3.33
 38

Source: THA Consulting, Inc.

Overall, the parking spaces are turning over at a very acceptable average of two (2) vehicles per space. In addition, the average length of stay during the weekday, daytime hours are just under 25 minutes which is indicative of short-term parkers such as customers or visitors.

# **Special Events**

THA reviewed the 2021 event calendar and noted the following events, dates, and times.

Table 11: 2021 Calendar of Events

2021 Events	Date	Time	Venue	Days
Major Events				
Memorial Day RiverFest	5/31/2021	10AM - 9PM	Spring Park	1
CalaVida Music and Arts Festival	10/11/2021 - 10/16/2021	9:45AM - 7PM	Spring Park	6
Christmas on Walnut Street	12/4/2021	3PM - 9PM	Walnut Street	1
Carols in the Park	12/16/2021	7PM - 8:30PM	Spring Park	1
Food Truck Friday	2nd Friday from March to November	5PM - 9:30PM	Spring Park	9
Saturday Market in the Park	3rd Saturday from September to June	10AM - 2PM	Spring Park	10
Total Major Event Days				28
Other Events				
Parade of Trees	Month of December	Sunset -10PM	Spring Park	31
Total Other Event Days				31
City Pool Open	6/1/2021 - 9/6/2021 (Tuesday - Sunday)	11AM - 7PM	City Pool	84
City Foot Open	9/7/2021 - 10/31/2021 (Friday - Sunday)	11AM - 7PM	City Pool	24
Total Days with Pool Activities				108
Total Event Days with Pool Activ	vities			167

Source: City of Green Cove Springs and THA Consulting, Inc.., 2022

In 2021, there were 6 major events over 28 days, which included the Memorial Day RiverFest, CalaVida Music and Arts Festival, Christmas on Walnut Street, Carols in the Park, Food Truck Friday, and Saturday Market in the Park. The Parade of Trees occurred over 31 days in December and brings in hundreds of visitors nightly to view over 150 decorated Christmas Trees located around Spring Park. The spring-fed City Pool, is also a big attraction and was open for 108 days in 2021. There was a total of 167 event days with pool activities in 2021. Each of these events has a different schedule and attendance, but more than half of the events that took place occurred into the evening hours. At this time, only three businesses are located within close proximity to Spring Park and are open past 8pm: Ronnie's, La Casita, and The Corner Pocket. All of these businesses have their own private parking areas and are not significantly impacted during special events occurring at Spring Park.

Using pool attendance data provided by Planet Swim and assuming an average of 3 persons per vehicle, we anticipate as many as 37 daily vehicles may be generated as a result of the City Pool.

Table 12: Green Cove Springs City Pool Average Attendance Data in 2021

Month / Year	Daily Avera	age Patrons	Estimated Vehicles		
Month / Year	Low	High	Low	High	
May 2021	30	40	10	13	
June 2021	100	110	33	37	
July 2021	100	110	33	37	
August 2021	100	110	33	37	
September 2021	40	50	13	17	
October 2021	40	50	13	17	

Source: Planet Swim and THA Consulting. Inc, 2022

#### **PUBLIC ENGAGEMENT SUMMARY**

The Green Cove Springs Parking Study community engagement consisted of two (2) virtual public stakeholder meetings. In addition, THA created a dedicated project e-mail account (GCSParkingStudy@gmail.com) to allow community members to obtain information and provide feedback to the project team.

# **Stakeholder Meetings**

Two public Study Area Stakeholder Meetings were conducted on December 6<sup>th</sup> and December 9<sup>th</sup>, 2021 in order to gather feedback and comments from various stakeholders. Summary comments are included below.

- People from all over the County come to Spring Park.
- On-street parking slows traffic down.
- The municipality has a hometown feel, since a lot of buildings have been historically preserved and oak trees are a staple to community household front yards.
- Street landscape also exists, however there is limited sidewalks on US Route 17 for pedestrians to enjoy it.
- On-street parking is too congested and narrow in Green Cove Springs.
- The area needs higher parking standards; needs to be more walkable and locate parking within the vicinity of desired destinations.
- By optimizing the existing parking area, the municipality can alleviate parking stress and strategize better parking lot locations that are within a reasonable walking distance from points of interest.
- The City can also provide shuttle buses during special events as a temporary alleviation while the parking deck is constructed. Providing a trolly for the municipality as well could help with roadway congestion. This could be free or a small fee.
- Encouraging overall travel by foot while within the City can also create for a maintained characteristic of the street and increase pedestrian traffic at storefront locations.
- Wayfinding can help increase the opportunity to share parking and handle the expected growth of the City.
- Public outreach efforts to residents and business owners about planned future improvements within the City.
- The US Route 17 corridor is a key artery for the City and studying ways to improve this road through a pedestrianfocused approach can help create better connectivity within the City. Adding more crosswalks and widening the sidewalk would improve pedestrian safety and adding more signage for drives can help prohibit unnecessary accidents from occurring.
- Most City lots are not fully used unless there is a special event. The Dollar Tree Site, for example, never had parking issues and was lightly used.
- There needs to be a strategic plan to handle growth. Exploring nontraditional incentives such as public-private agreements would help with community redevelopment.
- Better communication can help distinguish between event and daily parking and to improve flow of traffic to these destinations.
- The types of parking spaces can also be improved. This includes increasing spots for compact cars, motorcycles, EV charging spots, and reducing excess sizes of individual spaces.
- The Walnut Street Corridor Study and redesign can increase quality of the walking environment and make crossing the street safer and better.
- Senior citizens are the most vulnerable constituents and must be considered and included in any surveying.

# **Online Survey Summary**

An Online Survey was provided to gather data on parking trends, satisfaction, and general feedback from Green Cove Springs residents, employees, customers, and frequent visitors regarding parking conditions. The survey was available was available from November 29, 2021, to December 23, 2021. A total of 44 surveys were completed. Below is a summary of each question. The full survey results can be found in Appendix B.

- 1. What is the ZIP code of your residence?
  - Over 80% of respondents said they lived in the 32043 ZIP code. This is the primary ZIP code of Green Cove Springs. Other ZIP codes that were represented were 32003 at 6.8%, and 32065, 32656, and 32068 all under 5%. Figure 9 below indicates the location of each ZIP code.

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Figure 9: Zip Code Map of Green Cove Springs and the Surrounding Area

Source: Clay County, Florida., 2022

- 2. The primary reason I visit Green Cove Springs is/are (select all that apply):
  - Three-quarters of respondents said to live in Green Cove Springs. Within the total number of people
    questioned, just under 41% also said they owned a business within the municipality. Recreational
    reasons to visit Green Cove Springs such as to dine and shop or enjoy other recreational activities had
    about 29.5% of respondents select those choices as well.
- 3. I visit Green Cove springs:
  - 84.1% of people said they visit the municipality daily, which can align with the number of residents being surveyed and those who might have businesses here. About 13.6% of people visit a few times a week, and only one person (2.3%) claimed to visit a few times a month.
- 4. I find parking in Green Cove Springs to be:
  - A little less than half of respondents (47.7%) said that they find parking in Green Cove Springs is convenient and easy to find. A larger portion of other respondents noted that there are other more convenient areas, but nothing too bad for their opinion to suffice otherwise (31.8%). Approximately 20% of the respondents believed parking to be inconvenient and difficult or even a deterrent from visiting.
- 5. When going to Green Cove Springs, I most often park:
  - Almost 90% of individuals who were surveyed park within a 1-2 block distance from their final destination, with 47.7% finding on-street parking, and 40.9% finding parking in a lot. Very few people park further away (3-4 blocks at 4.5%) or need to find spaces with a handicap spot (4.5%). Note: 1 respondent walks or bikes to the destination and does not use a car at all.
- 6. When going to Green Cove Springs, I usually stay for:
  - 43.2% of people said that they are there all the time because they live there, but this is different from the number of people who responded in question 2 regarding their reason for visiting, implying that the way people perceived this question was different. About 34.1% of respondents visit for up to three hours, while some of the respondents (9.1%) said they visit all day, and some of the respondents (9.1%) said they visit less than one hour. About 2.3% said they visit for about a half a day (five to ten hours) or between three and five hours.
- 7. I can usually find a parking space:
  - Over half of the respondents at 63.6% said they can find a space in close proximity to their destination.
    Along with that, 27.3% of people were within an acceptable walking distance from the spot to the
    destination. Very few people had an issue finding a spot (6.8%) and one person had the exception of a
    dedicated spot.
- 8. It usually takes you how long to find that parking space?
  - A little over half of the respondents, at 52.3% tend to find their parking spot right away. 38.6% of people also find a spot within less than five minutes if it is not immediate. Minimal respondents (4.5%) have difficulty finding a spot and drive around for an excess of ten minutes.
- 9. During special events, I find parking in Green Cove Springs to be:
  - A majority of people noted it is more of a challenge to find parking when the municipality is having a special event, with 43.2% of respondents expressing that concern. On the other hand, 34.1% of people questioned found it to be less convenient, but not too bad. 11.4% of people found it to be a deterrent to coming when there's a special event while only 9.1% found it to still be convenient.

- 10. When going to Green Cove Springs during special events, I most often park:
  - This question had a bigger split of answers, with a small majority (34.1%) noting they had to park a little further from their destination (3-4 blocks) and 25% parked in a lot 1-2 blocks away from where they had to go. Over 18% of respondents had to park in a lot further away and 11.4% were able to find onstreet parking closer by. Special events also caused an increase in walkers or bikers, at 6.8%.
- 11. During special events, I can usually find a parking space:
  - When worded without variability of distance, over half of respondents believed that they could park within an acceptable walking distance from their destination, at 54.5% or a close proximity at 13.6%. Only a quarter of respondents claimed that the distance is unacceptable.
- 12. It usually takes you how long to find that parking space?
  - When a special event occurs in Green Cove Springs, the result is longer amounts of time to find parking. 47.7% of people questioned found it takes a little bit of time (less than 5 minutes), and 25% said it takes a long time (more than 10 minutes). The other quarter of respondents found that they can find parking right away, and it still doesn't take them a long time to find parking.
- 13. How do you feel about the enforcement of parking and the issuance of parking citations/tickets?
  - Over 61.4% of respondents had no opinion on this question since they had no prior experience with parking enforcement in the municipality. Of the 16 people with experience, 29.5% believed it to be fair and consistent and only 6.8% believed it to be inconsistent.
- 14. What do you think is the biggest issue that should be addressed? (select all that apply):
  - The biggest concern (52.3%) among the questioned respondents was that there was not enough parking around the City Hall and Spring Park region of the municipality. A sizable number of people also claimed that a lack of signage for parking is a pressing issue with 34.1% flagging it, and 18.2% think there was not enough parking around the Clay County Buildings. Also, 15.9% believe the parking is poorly maintained. The issue of parking distance from destinations was overall minimal throughout the questionnaire, with 13.6% of people finding this a big issue, and 6.8% of respondents found parking is not well regulated or enforced.

#### **RECOMMENDATIONS**

- 1. Stripe all the existing 110 unstriped on-street (94 effective) parking spaces within the Overall Study Area and 16 spaces within the Core Sub-Area. (Photo 1)
- 2. Replace faded and aged/weathered signs throughout the City. (Photo 2&3)
- 3. Install signage on Magnolia Avenue and Walnut Street (across from Ronnie's) to indicate no parking allowed. Illegal parking in this area creates opportunities for additional vehicular/pedestrian conflicts and may impede public safety vehicles. Based on THA's site observations, vehicles were illegally parked along the East side of Magnolia Avenue (between Walnut and Spring Streets) and the South side of Walnut Street (just north of the Spring Park Pool Pavilion) during the Saturday Market event on December 18th, 2021. (Photos 4, 5, and 6)



Photo 1: Existing Unstriped On-Street Parking Spaces on Walnut St between Orange Ave and



Photo 3: Faded Sign on Walnut Street



Photo 5: Illegally Parked Cars on East side of Magnolia Avenue, between Walnut Street and Spring Street



Photo 2: Faded Sign in City Owned Parking Lot on Walnut Street (34B)



Photo 4: No Stopping and No Parking signs on the East side of Magnolia Avenue



Photo 6: Parked Cars on South side of Walnut Street, between Magnolia Avenue and Spring Park Pool Pavilion

- 4. If development is approved in or around the Core Sub-Area:
  - Expand Lot 34B (parking lot between Walnut Street and Palmer Street) to the west to address the anticipated parking shortage from normal and development growth. Approximately 40-50 new spaces could be added depending on the layout, and 10, 30-degree angled on-street parking spaces could be added on Walnut Street, between Magnolia Ave and St Johns Ave. (Photos 7 and 8) Consider adding onstreet parking along the East side of Magnolia Avenue between Ferris Street and Oak Street. Based on the curbside length and the width of Magnolia Avenue, the East side Magnolia Avenue between Bay Street and Oak Street and Bay Street between Magnolia Ave and St Johns River can accommodate approximately 40 parking spaces with parallel layout and 55 spaces with 30-degree angle parking layout. Photo diagram shown to the right. (Photo 9)
  - Consider implementing time restrictions at the on-street spaces along Walnut Street (between Magnolia Avenue and the St. Johns River) to restrict overnight parking as there was a public comment about boat owner's using that high demand area for their vehicle storage.
  - Add permanent signage and aesthetic improvements along the pedestrian alleyway between Walnut Street and the City-owned parking lot to encourage the use of the City parking lot and promote walkability. (Photo 10)
- 5. Add sidewalks on the north side of Ferris Street, between Orange Ave and Spring St. Photo below indicates the proposed location. We also recommend a comprehensive review of all existing sidewalks in downtown. (Photo 11)
- 6. Consider the implementation of a trolley or circulator type transit service during medium to large events. We estimate the hourly rate of \$125.00 per hour per shuttle/trolley in service. The number of vehicles should provide wait times no greater than 5 minutes (with a maximum wait of 3 minutes recommended).
- 7. Consider approaching the Vallencourt Construction Company regarding use of their parking lot for events. Their lot has 49 spaces (47 regular spaces and 2 ADA spaces). During the weekday survey day, approximately 18 spaces were occupied, leaving 29 spaces that could be potentially shared with the general public on a weekday event. Figure 10 outlines the parking lots that are providing public parking during event days and the newly recommended event parking lot. Capacity was estimated based on square footage for lots without space markings.







Photo 8: Proposed New Parking Area (Lot 34B)



Photo 9: Proposed Parallel On-Street Parking (40 added spaces) Proposed 30-Degree On-Street Parking (55 added spaces)



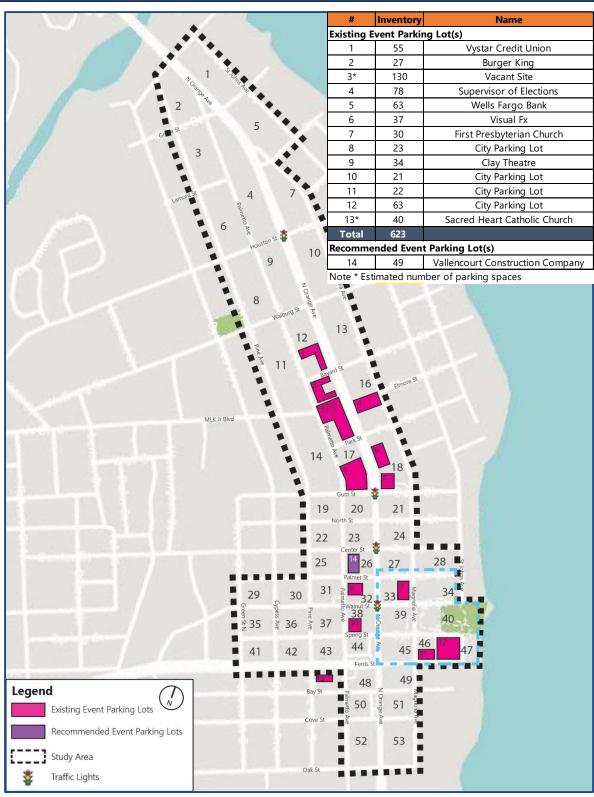


Photo 10: Walnut Street Alleyway without and with Christmas Lighting



Photo 11: Recommended Sidewalk Locations on Ferris Street between Orange Ave and Spring St

Figure 10: Existing and Recommended Event Parking Inventory and Locations



Source: City of Green Cove Springs and THA Consulting, Inc. 2022

- 8. Add enhanced flashing lights at pedestrian crosswalks at the following intersections: (Photo 12 and 13)
  - Houston St and Orange Ave;
  - Gum St and Orange Ave;
  - Center St and Orange Ave;
  - Walnut St and Orange Ave.





Photo 12: Existing Pedestrian Traffic Lights, countdown timer and Push Buttons



Photo 13: Pedestrian Crosswalk Flashing Lights Example

9. The following three (3) sites have been identified by the City for future parking consideration. Given the anticipated growth and development, we recommend acquiring and land banking some or all of the sites to utilize as surface parking lots, a future parking garage, or if deemed unnecessary, future development. Please note the order of magnitude cost estimates do not include soft costs which are typically an additional 15-20% of the total project cost.

- **Site One**: 425 Orange Ave (Parcel No.: 017531-000-00): Site one is approximately 1.62 acres and located at the northwest corner of Orange Ave and Gum St. This site can fit a 200 ft by 225 ft garage and would provide approximately **350 spaces** with 3 levels of parking. (Photo 14)
  - 200' x 225' = 45,000 SF = ~115 spaces/level
  - Main stair/elevator tower, with secondary stair tower
  - Hard/Direct Construction Cost = \$75/SF x 45,000 SF x 3 Levels = \$10.2 MM
  - Average cost per space = \$29,000
- **Site Two:** 515 Walnut St (Parcel No.: 017287-000-00 & 017288-000-00): Site two is approximately 0.68 acres and located at the southeast corner of Walnut St and Pine Ave. This site can fit a 130 ft by 215 ft and garage and would provide approximately **210 spaces** with 3 levels of parking. (Photo 15)
  - $130' \times 215' = 27,950 \text{ SF} = ~70 \text{ spaces/level}$
  - Main and secondary stair/elevator tower
  - Hard/Direct Construction Cost = \$75/SF x 27,950 SF x 3 Levels = \$6.3 MM
  - Average cost per space = \$30,000
- **Site Three:** 501 South Orange Ave and 502 S Palmetto Ave (Parcel No. 017495-000-00 & 017495-001-00): Site three is approximately 0.72 acres and located at the southwest corner of Orange Ave and Oak St. This site can fit a 175 ft by 250 ft garage and would provide approximately **330 spaces** with 3 levels of parking. (Photo 16)
  - 175' x 250' = 43,750 SF = ~110 spaces/level
  - Main and secondary stair/elevator tower
  - Hard/Direct Construction Cost = \$75/SF x 43,750 SF x 3 Levels = \$9.9 MM
  - Average cost per space = \$30,000



Photo 14: Site One Preliminary Concept



Photo 15: Site Two Preliminary Concept



Photo 16: Site Three Preliminary Concept

10. Estimated order of magnitude cost estimates to build new on-street parking is approximately \$3,500 per space, \$5,000 per space for off-street surface parking, and \$25,000 to \$30,000 per space for off-street structured parking. The amounts stated do not include any cost associated with land acquisition nor does it reflect the value of land should the City build on their own property.

The table below shows the total number of new and effective parking spaces (reflecting a 10% cushion) that can be added based on the sites identified and provided by the City.

Table 13: Proposed Future Parking Expansion Areas

Location	New Spaces	<b>Effective Spaces</b>
Lot 34B Expansion	40	36
Walnut On-Street	10	9
Magnolia On-Street	33	30
Bay On-Street	22	20
Sub-Total	105	95
Site 1 Garage (425 Orange)	350	315
Site 2 Garage (515 Walnut)	210	189
Site 3 Garage (501 S. Orange)	330	297

Source: THA Consulting, Inc. 2022

The parking expansions and the addition of a 210-space parking garage would mitigate the projected 2031 weekday parking shortage from normal growth and development for City Owned Parking Facilities. It would also eliminate the projected 2026 and 2031 weekend parking shortage for the City Owned Parking Facilities. Parking conditions through 2026 in the Core Sub-Area would be improved but are projected to experience parking shortages.

Pedestrian improvements and the addition of a trolley/circulator (either temporary or permanent) would allow for better utilization of all existing and new City-owned parking facilities. In doing so, Core Sub-Area users would be more inclined to parking on the west side of Orange or at a more distant parking facility.

Table 14: Future Parking Adequacy with Parking Expansions and 210-space Garage

Toma	Effective	Weekday Adequacy			
Туре	Supply	2021	2026	2031	
City Owned Parking					
On-Street Striped	78	33	23	12	
On-Street Unstriped	94	66	59	53	
Off-Street Public/City	162	52	193	142	
Subtotal City Owned Parking	334	151	275	207	
Other Parking					
Off-Street Public/County	602	(43)	(189)	(346)	
Off-Street Private	979	518	400	147	
Subtotal Other Parking	1,581	476	211	(199)	
Total Study Area Parking	1,915	627	486	8	
Core Sub Area City Owned Parkin	ıg - City Ov	vned Parki	ng		
On-Street Striped	38	9	3	(4)	
On-Street Unstriped	14	2	(1)	(4)	
Off-Street Public/City	122	46	5	(37)	
Total Sub Core Area	174	57	7	(45)	
Source: THA Consulting Inc. 20	22				

T	Effective	Wee	kend Adeq	uacy
Туре	Supply	2021	2026	2031
City Owned Parking				
On-Street Striped	78	(4)	(23)	(43)
On-Street Unstriped	94	57	49	40
Off-Street Public/City	162	7	134	72
Subtotal City Owned Parking	334	60	160	69
Other Parking				
Off-Street Public/County	602	499	476	451
Off-Street Private	979	672	595	381
Subtotal Other Parking	1,581	1,171	1,071	832
Total Study Area Parking	1,915	1,232	1,231	901
Core Sub Area City Owned Parkin	ıg - City Ov	vned Parki	ng	
On-Street Striped	38	(16)	(29)	(42)
On-Street Unstriped	14	(7)	(12)	(17)
Off-Street Public/City	122	(18)	(77)	(136)
Total Sub Core Area	174	(41)	(117)	(194)

Source: THA Consulting, Inc. 2022

# **Parking Management Options**

As Green Cove Springs continues to develop and grow, the competition for on-street and public parking will increase. As parking demand increases, the City may want to consider the implementation of paid parking (or at a minimum, implementing time limits). Both of those parking management tools deter long term parkers and downtown employees from monopolizing the most convenient spaces. These parking management initiatives free up convenient parking spaces for customers, patrons, and other short-term users. Implementing paid parking and time limits can provide the following benefits:

- Increasing turnover in the most convenient areas allows for a greater number of users (ideally short-term customers/visitors). This also reduces the number of vehicles cruising around an area searching for an available parking space.
- Charging users directly for parking tends to be an effective and equitable parking management tool that also generates revenue that can help offset the cost associated with operating a public parking system including financing new facilities or services.
- Encouraging longer-term parkers, such as employees or merchants, to use parking areas that are farther from the core area (such as off-street lots or on-street parking on the fringe).

In order for paid or time restricted parking to be an effective parking management tool, it must include a well-organized enforcement component. Parking Enforcement encourages compliance of time restrictions and paid parking and without enforcement, both of those parking management tools will often fail or cause user frustration. Many municipalities are utilizing license plate recognition (LPR) technology to streamline the enforcement process. This technology allows for a parking enforcement officer (PEO) to digitally record how long vehicles are parked and automatically notify the PEO if a vehicle is parked beyond the posted time limit so that a citation can be issued. Likewise, the LPR enforcement systems can also cross-reference parked vehicle license plate information against the list of paid vehicles (either through a mobile payment provider or paystation) and if payment has not been made, inform the PEO of the violation so that a citation may be issued.

# **Parking Technology**

The City's current on-street parking is free and to consider implementing paid parking in the future, the following parking technologies can be considered.

**Mobile Payment Solutions** are being implemented in a growing number of towns and cities in the US. These systems allow patrons to pay for their parking through various cell phone-based commands (call, text, scanning a QR code). By using cell phones, patrons can also purchase or extend their time from a remote location. Text or voice message notifications can be sent to patrons as their parking time is about to expire.

The convenience of paying for parking by cell phone and the ability to remotely activate and reactivate the parking session is a significant benefit to downtown users, including retail or restaurant parkers, and City and County employees. Pay-by-cell systems can also be a financially appealing option as they require minimal investment on the City's part and avoid the cost associated with purchasing and installing physical equipment. Typically, the City incurs little cost to implement the pay-by-cell system because the service provider sets up the operating program, markets the service, provides service-related brochures and negotiates with the City an appropriate customer service fee to be added to individual parking transactions paid by the user (usually \$0.25 - \$0.40 per transaction). However, because pay-by-cell systems are dependent on debit/credit card payment,

there are processing and transaction fees associated with this service that are typically borne by the City. For that reason, best practice is to set a minimum transaction threshold of \$1.00 when accepting debit/credit card payments. This is usually achieved in the beginning with an hourly rate of \$0.50 per hour with a 2-hour minimum.

**Debit/credit card-enabled meters** allow users to choose from multiple payment options including debit/credit cards, coins and 'smart' cards. Debit/credit card-enabled parking meters are compatible with pay-by-cell parking systems. With an integrated cell and debit/credit card meter system, initial parking payments can be made at the meter and parking time can be refilled via cell phone. Debit/credit card-enabled parking meters cost approximately \$650 per single-head meter and \$800 per double-head meter. Transaction fees associated with debit/credit card payments made by parkers are typically between \$0.20 to \$0.35 per transaction and are paid by the municipality. Communications and software maintenance costs are approximately \$7 per meter per month for single-head meters and \$13 per meter per month for double-head meters. Meter mechanism maintenance contracts are optional and typically cost \$30-\$50 per meter per year. Due to the meter costs on

top of the debit/credit card transaction fees, the minimum transaction amount for areas equipped with these meters should be at least \$1.00, and there should be a high utilization and turnover of the parking spaces to offset the fixed costs associated with the equipment.

**Multi-space meter pay stations** are well received by the public and can provide the convenience of multiple payment options including coin, bills, and debit/credit cards. They can also be programmed to offer various parking rates and time limits, according to time of day. They are very cost-effective when regulating multiple (30-50) off-street parking spaces in a lot or are in a facility that has a single pedestrian point of entry and exit. When installed for on-street parking, the pay stations are typically used to regulate up to 8-10 spaces on the same side of the street. Again, due to the pay station cost on top of the debit/credit card transaction fees, the minimum transaction amount for areas equipped with these pay stations should be at least \$1.00, and there should be a high utilization and turnover of the parking spaces to offset the fixed costs associated with the equipment. The cost of multi-space meters is approximately \$6,000-\$8,000 to purchase with solar panels and credit card, coin and dollar bill acceptors. Installation a single



multi-space meter pay station will cost about \$500 - \$1,000 each. In addition to the purchase and installation costs for multi-space pay stations, they require monthly communications and software maintenance contracts of approximately \$20 per month, hardware maintenance of \$40 per month, receipt roll paper at \$35 per roll, which handle approximately 1,500 transactions, and credit card processing fees around \$0.25 to \$0.35 per transaction.

**Surface mounted parking sensors** detect the presence of parked vehicles and report overstays to the parking operator via smartphone or handheld devices. All sensors allowing the operator to monitor these spaces efficiently with real time, individual space information. When the sensor detects that a vehicle has occupied a space beyond the posted time limit, it sends a signal to the parking operator's smartphone via internet. Once notified, the operator can take a variety of actions to address the matter including issuing a warning, coordinating with local police to issue a parking ticket, or if the violator is a registered permit parker, the operator can communicate to the parker and, if need be, terminate their parking privileges. The surface mounted parking sensors are typically installed at parking spaces with a high demand and high turnover rate. The intent of these systems is to increase parking turnover in the customer parking areas, promote compliance with time limit restrictions and increase enforcement efficiency. The sensors accuracy is approximately 95%. In-ground sensors can provide real-time data and monitoring of space availability. The sensors can also collect parking space utilization data and send violation notifications to Parking Enforcement Officers (PEO). The cost of each surface mounted parking sensors is approximately \$150, and a one-time set up fee ranging from \$6,000 to \$8,000. The monthly software fee ranges from \$2 to \$5 per sensor, depending on the number of installed sensors.





In-Ground Sensors





ID	Snaca	Owner	Inventor		EMAND 12/15,		WEEKEND D 9a-11a	EMAND 12/1	
1A	<b>Space</b> REG	Private	Inventory 30	<b>9a-11a</b> 15	<b>1p-3p</b> 14	<b>4p-6p</b> 7	<b>9a-11a</b> 3	<b>1p-3p</b>	<b>4p-6p</b>
IA	ADA	Private	1	0	0	0	0	0	0
1B	REG	Private	10	4	3	1	0	1	6
2A	REG	Private	45	7	17	5	10	7	10
_, ,	ADA	Private	2	0	1	0	1	0	0
	OTHER	Private	3	1	1	0	1	1	1
2B	REG	Public/County	38	40	41	9	6	5	5
	OTHER	Public/County	2	0	1	0	0	0	0
3A	REG	Public/County	44	44	44	12	6	4	5
	OTHER	Public/County	10	9	9	1	1	1	1
3B	OTHER	Public/County	24	14	13	2	1	1	1
4A	REG	Private	14	2	1	0	0	0	0
,,,	ADA	Private	1	0	0	0	0	0	0
4B	ADA	Public/County	2	0	0	0	0	0	0
15	OTHER	Public/County	6	1	2	0	1	3	2
4C	REG	Public/County	56	46	55	17	0	0	2
10	ADA	Public/County	7	4	3	0	0	0	0
	OTHER	Public/County	6	4	6	1	0	0	0
4D	REG	Public/County	1	0	1	0	0	0	3
	ADA	Public/County	2	2	2	1	0	0	0
	OTHER	Public/County	4	3	2	0	4	4	0
4E	OTHER	Public/County	7	2	2	0	1	1	1
6A	REG	Public/County	, 97	97	97	26	24	23	25
071	ADA	Public/County	7	2	2	0	0	0	0
	OTHER	Public/County	28	27	21	6	3	2	2
7A	REG	Private	31	7	15	14	11	11	8
,,,	ADA	Private	2	1	0	0	0	0	6
7B	REG	Private	47	7	8	10	3	9	6
70	ADA	Private	2	0	0	0	0	0	0
8A	REG	Public/County	157	113	106	56	40	39	37
0.4	ADA	Public/County	7	0	0	0	0	0	0
	OTHER	Public/County	3	0	0	0	0	0	0
9A	REG	Public/County	61	48	41	10	0	0	1
<i>3</i> A	ADA	Public/County	4	0	2	2	0	0	0
	OTHER	Public/County	48	40	44	4	0	0	0
9B	REG	Public/County	20	17	18	5	0	0	0
9C	OTHER	Public/County	27	20	20	4	4	2	2
<i>J</i> C	ADA	Public/County	1	1	1	0	0	0	0
10A	REG	Private	12	8	7	4	0	0	0
10/4	ADA	Private	2	0	0	0	0	0	0
10B	REG	Private	20	18	17	2	1	0	1
105	ADA	Private	1	0	0	0	0	0	0
10C	REG	Private	16	3	2	2	1	6	4
100	ADA	Private	1	0	0	0	0	0	0
12A	REG	Private	52	15	14	5	20	5	1
	ADA	Private	3	2	1	0	0	1	0
13A	REG	Private	28	19	9	0	27	5	1
	ADA	Private	2	1	0	0	1	0	0
13B	REG	Private	16	11	9	4	11	4	2
	ADA	Private	1	0	0	0	0	0	0
15A	REG	Private	25	3	4	4	2	5	2
	ADA	Private	2	0	0	0	0	0	0
16A	REG	Private	9	1	1	2	0	1	1
	ADA	Private	1	1	0	0	0	0	0
16B	REG	Private	75	22	15	15	7	7	7
	ADA	Private	3	0	0	0	0	0	0
16D	REG	Private	13	0	0	1	0	0	2
	ADA	Private	1	0	0	0	0	0	0
17A	REG	Private	60	9	8	2	2	1	1
	ADA	Private	3	2	1	0	0	0	0
18A	REG	Private	35	11	10	17	4	4	4
	ADA	Private	2	1	0	0	0	0	0
18B	REG	Private	25	0	0	6	1	0	1
	ADA	Private	2	2	0	0	0	0	0
	OTHER	Private	3	0	0	0	0	0	0
21A	REG	Private	25	0	1	7	1	3	2
23A	REG	Private	21	7	7	7	0	0	0

ID	Space	Owner	Inventory	WEEKDAY D 9a-11a	EMAND 12/15 1p-3p	/2021 (Wed) 4p-6p	WEEKEND D 9a-11a	EMAND 12/18 1p-3p	3/2021 (Sat) 4p-6p
24B	REG	Private	6	2	1 <b>p-sp</b>	<b>4p-6p</b>	<b>3a-11a</b>	1 <b>p-sp</b>	<b>4р-ор</b> 1
24B 25B	REG	Private	9	8	7	0	8	6	2
25C	REG		12	7	5	0	7	3	0
25C		Private							
264	ADA	Private	1	0	1	0	0	0	0
26A	REG	Private	47	29	26	18	2	4	3
274	ADA	Private	2	0	0	0	0	0	0
27A	REG	Private	6	3	4	0	1	1	2
27C	REG	Private	12	4	8	6	3	6	8
	ADA	Private	2	0	0	0	0	0	0
28A	REG	Private	10	1	2	5	1	1	1
28B	REG	Private	5	1	2	2	0	4	4
	ADA	Private	2	0	0	0	0	0	0
30A	REG	Private	20	8	8	2	3	5	4
	ADA	Private	4	2	2	0	0	0	0
	OTHER	Private	4	4	4	4	1	2	1
31A	REG	Private	6	3	2	2	7	13	3
32A	REG	Public/City	21	13	17	3	4	9	8
JZA	ADA	Public/City	2	0	0	0	0	0	0
220		•							
32B	REG	Private	13	2	12	0	2	10	3
22.	ADA	Private	1	0	0	0	0	0	0
33A	REG	Private	14	7	8	6	1	9	10
33B	REG	Private	34	2	6	6	11	29	49
34A	REG	Private	22	3	12	8	11	22	19
	ADA	Private	2	0	0	0	0	1	0
34B	REG	Public/City	20	0	6	9	12	20	10
	ADA	Public/City	2	0	0	0	0	2	0
38A	REG	Public/City	19	9	11	9	3	6	4
	ADA	Public/City	2	0	0	0	0	0	0
38B	REG	Private	13	1	1	2	3	2	5
39A	REG	Public/City	23	19	20	16	23	23	23
33A	ADA		3		0	0	3	3	3
		Public/City		1					
	OTHER	Public/City	3	0	0	0	3	3	3
44A	REG	Private	49	20	27	24	13	11	23
	ADA	Private	2	0	0	2	0	0	0
	OTHER	Private	1	0	0	0	0	0	0
45A	REG	Private	16	16	15	6	14	14	10
	ADA	Private	1	1	1	0	0	0	0
46A	REG	Public/City	20	2	10	2	15	19	6
	ADA	Public/City	2	0	0	0	0	0	0
47A	REG	Public/City	60	24	27	19	41	43	50
	ADA	Public/City	3	0	0	0	1	0	2
48A	REG	Private	6	0	0	0	1	0	1
	ADA	Private	1	0	0	0	0	0	0
48B	REG	Private	17	4	4	2	3	6	4
400									
40.4	ADA	Private	1	0	0	0	0	0	0
49A	REG	Private	52	16	42	27	24	25	18
	ADA	Private	3	0	1	0	0	0	0
51A	REG	Public/City	20	1	1	0	0	0	0
	ADA	Public/City	1	0	0	0	0	0	0
52A	REG	Private	10	2	7	5	1	1	8
	ADA	Private	4	0	0	2	0	1	2
	OTHER	Private	1	0	0	0	0	0	0
53B	REG	Private	19	7	6	3	3	5	4
<del>-</del>	ADA	Private	1	0	0	0	0	0	0
ON-STE	REET								
85	OS	Unstriped	10	0	0	0	0	0	0
11N	OS	Unstriped	10	0	0	0	0	0	0
10S	OS	Unstriped	9	0	0	0	2	0	0
13N	OS	Unstriped	7	0	0	0	1	0	0
115	OS	Unstriped	11	0	0	0	0	0	0
16S	OS	Unstriped	6	0	0	0	0	0	0
18N	OS	Unstriped	6	0	0	0	0	0	0
18S	OS	Unstriped	7	0	0	0	0	0	0
19S	OS	Unstriped	21	0	0	0	0	0	0
205	OS	Unstriped	3	0	0	1	0	0	0
21N	OS	Unstriped	7	0	0	2	0	0	0
215	OS	Unstriped	7	0	1	1	0	0	0
22N	OS		21		0	0		0	0
ZZIN	US	Unstriped	۷1	0	U	U	0	U	U

				WEEKDAY DEMAND 12/15/2021 (Wed)			WEEKEND DEMAND 12/18/2021 (Sat)		
ID	Space	Owner	Inventory	9a-11a	1p-3p	4p-6p	9a-11a	1p-3p	4р-6р
23N	OS	Unstriped	5	0	0	0	0	0	0
24N	OS	Unstriped	3	0	0	0	0	0	0
24S	OS	Unstriped	5	0	4	2	0	0	0
25E	OS	Striped	3	2	2	0	0	0	2
.5S	OS	Unstriped	5	0	0	0	0	1	0
26N	OS	Striped	3	0	0	0	0	0	0
26W	OS	Striped	6	1	1	0	0	0	0
.6S	OS	Striped	3	1	1	0	0	3	0
.6S	OS	Unstriped	3	0	0	0	0	0	0
27N	OS	Unstriped	5	0	1	1	0	0	0
.7S	OS	Striped	3	1	1	1	1	4	2
.8S	OS	Unstriped	4	0	0	0	0	0	0
9N*	OS	Unstriped	10	1	0	0	0	0	0
80N*	OS	Unstriped	8	0	0	0	0	0	0
80S	OS	Unstriped	7	0	0	0	0	0	0
1E	OS	Striped	8	3	1	2	3	3	3
15	OS	Striped	8	1	1	1	3	7	4
2N	OS	Striped	2	1	0	0	2	1	0
2W	OS	Striped	8	4	3	3	1	2	3
2S	OS	Unstriped	10	3	4	2	4	4	0
3N	OS	Unstriped	6	1	4	2	4	7	4
3E	OS	Unstriped	6	0	4	2	5	6	5
3S	OS	Striped	7	1	1	0	2	8	7
4N	OS	Unstriped	6	0	0	0	0	2	0
4W	OS	Striped	2	0	2	1	2	2	3
4W	OS	Unstriped	4	0	2	0	1	4	5
45	OS	Striped	5	0	1	1	1	5	2
45	OS	Striped	1	0	0	0	0	1	0
5S	OS	Unstriped	6	0	0	0	0	0	0
16S	OS	Unstriped	6	0	0	0	0	0	0
7N	OS	•	4	3	3		0		5
		Striped				3		4	
37S	OS	Unstriped	10	0	1	0	0	0	0
8N	OS	Unstriped	10	2	5 1	3	2 1	6	4
8W	OS	Striped	1	0		1		2	1
9S	OS	Striped	7	6	7	7	7	7	1
0N	OS	Striped	15	0	11	8	14	14	14
0N	OS	Striped	1	0	1	0	0	1	0
1N	OS	Unstriped	6	0	1	1	2	12	1
1W	OS	Unstriped	20	0	0	0	0	0	0
2N	OS	Unstriped	7	0	0	0	0	0	0
3N	OS	Unstriped	8	0	0	0	0	0	0
5N	OS	Unstriped	6	0	0	0	0	0	1
5S	OS	Striped	4	0	0	0	4	4	4
5S	OS	Striped	1	0	0	0	1	0	0
9N	OS	Unstriped	7	3	4	1	0	2	0
·9S	OS	Unstriped	20	0	0	1	0	0	0
0S	OS	Unstriped	9	0	0	0	0	0	0
15	OS	Unstriped	8	0	0	0	2	0	0
2N	OS	Unstriped	9	0	1	2	0	0	0
OTAL			2,394	1,906	2,079	975	489	578	520



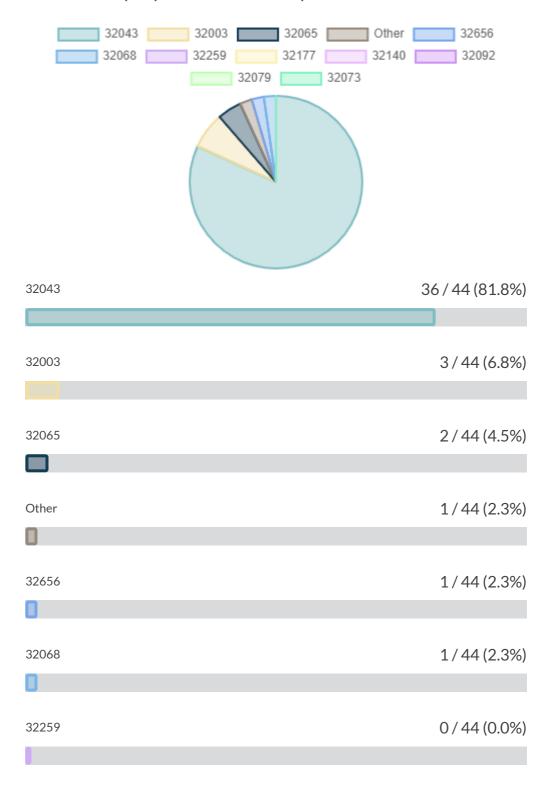


## Report for "GCS Parking Survey"

December 23rd 2021, 9:26:20 am

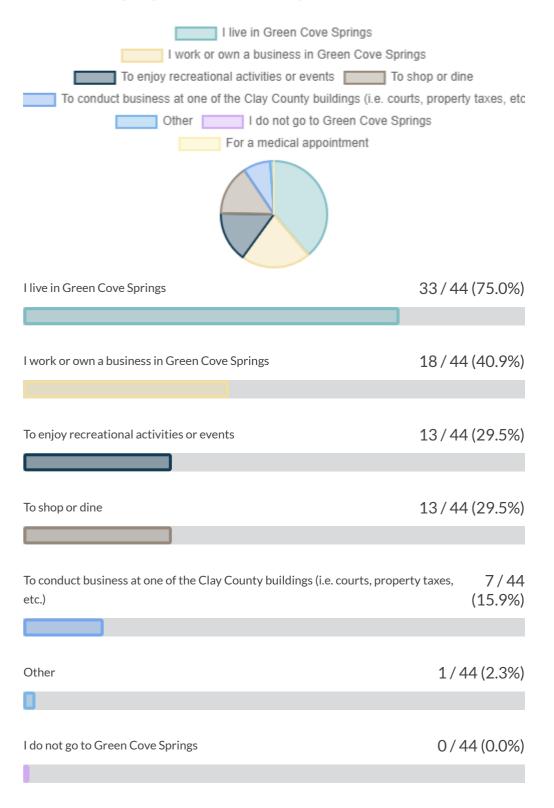
This form has been submitted a total of 44 times.

### What is the zip code of your residence?

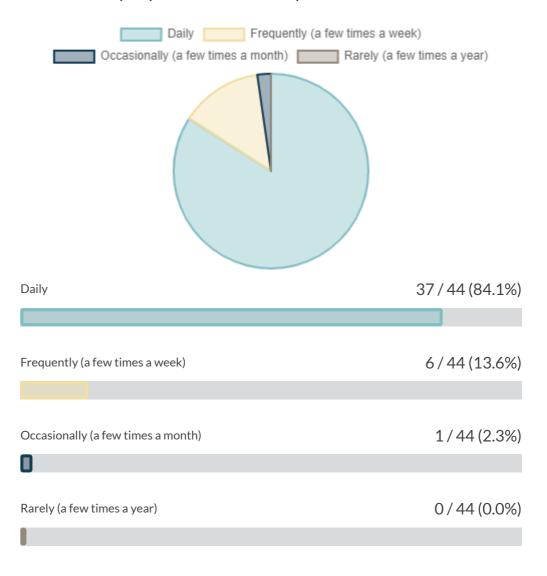


32177	0 / 44 (0.0%)
32140	0 / 44 (0.0%)
32092	0 / 44 (0.0%)
32079	0 / 44 (0.0%)
32073	0 / 44 (0.0%)

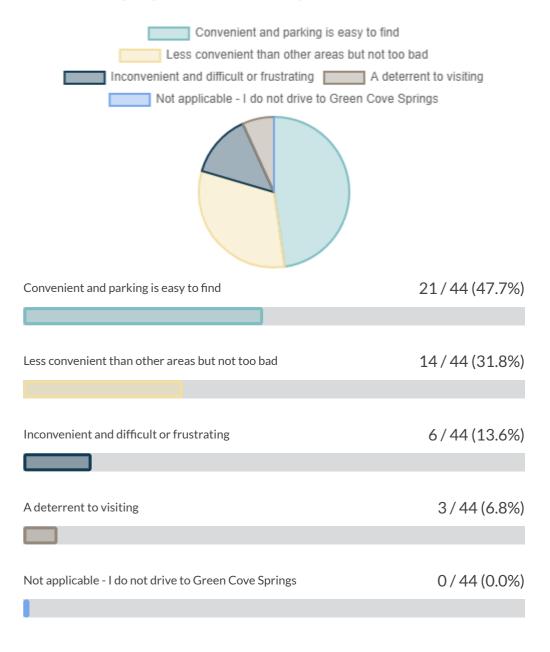
#### The primary reason I visit Green Cove Springs is/are:



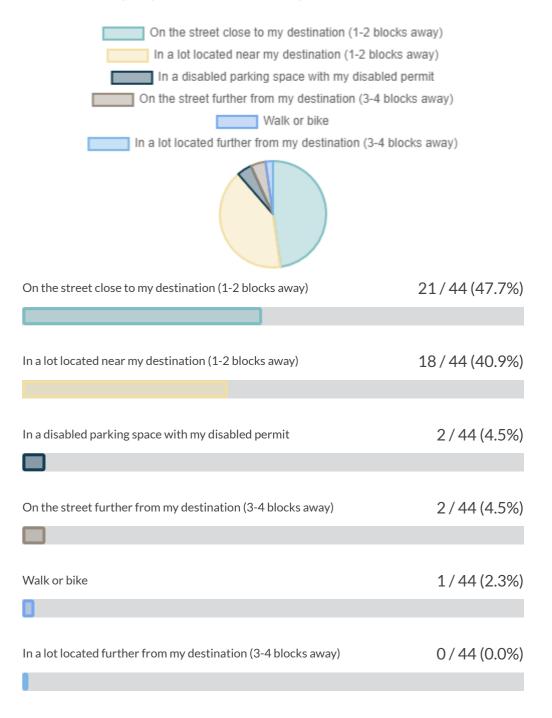
## I visit Green Cove Springs:



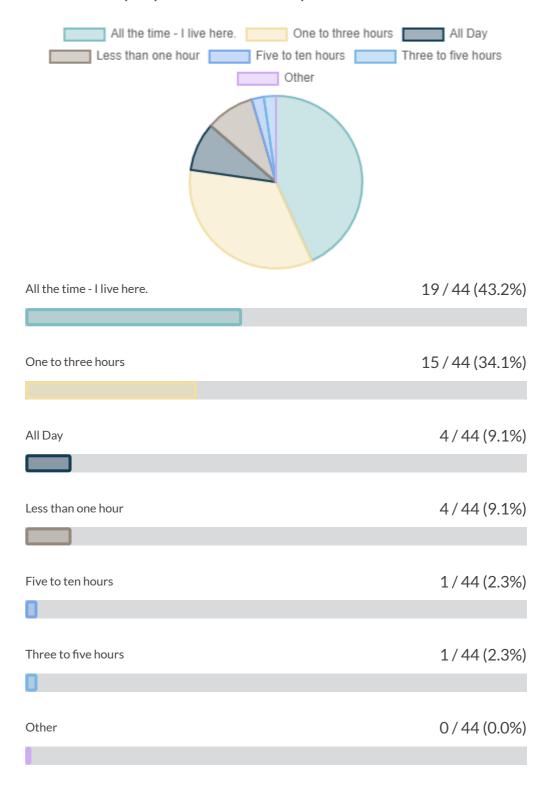
#### I find parking in Green Cove Springs to be:



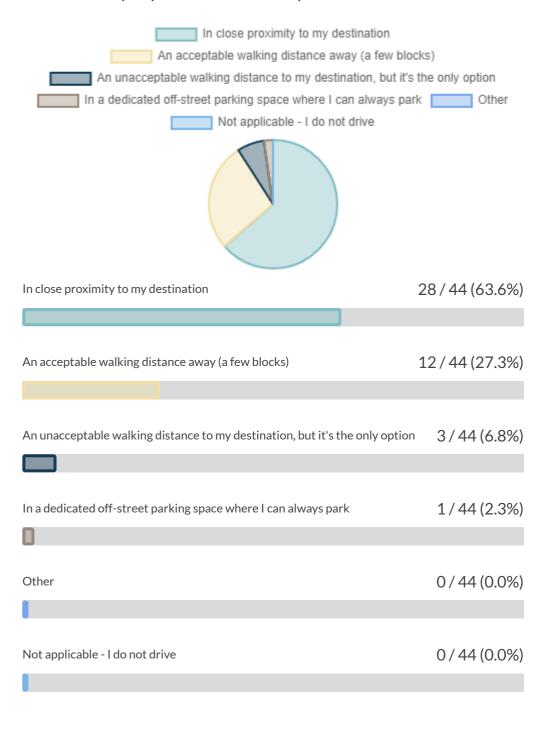
#### When going to Green Cove Springs, I most often Park:



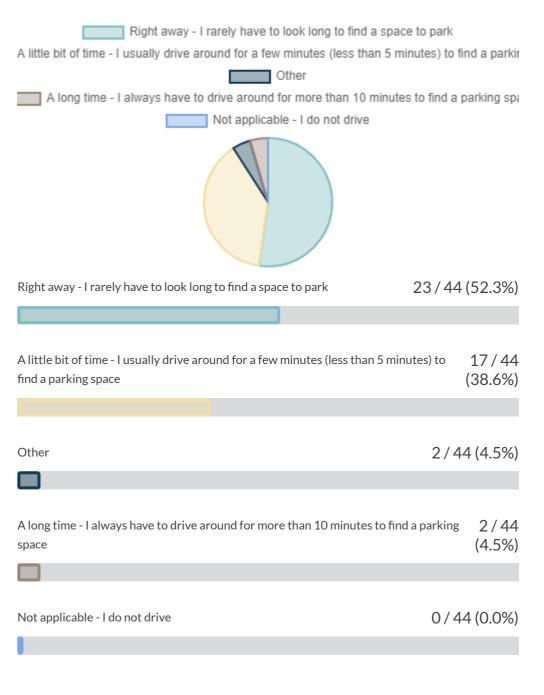
## When going to Green Cove Springs, I usually stay there for:



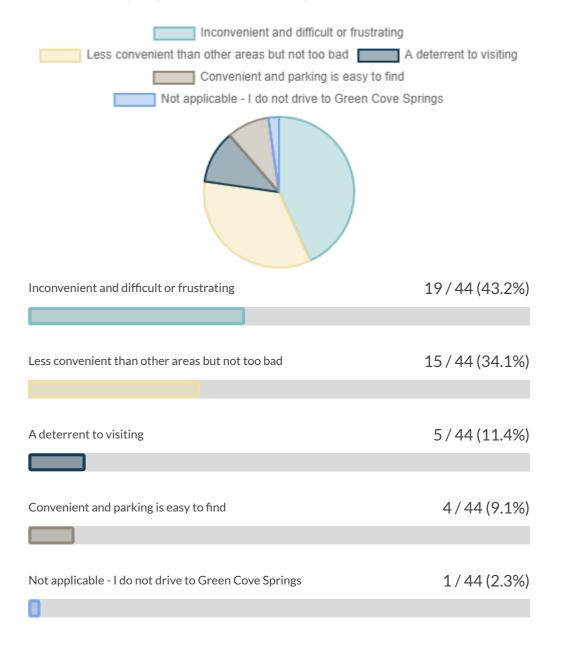
#### I can usually find a parking space:



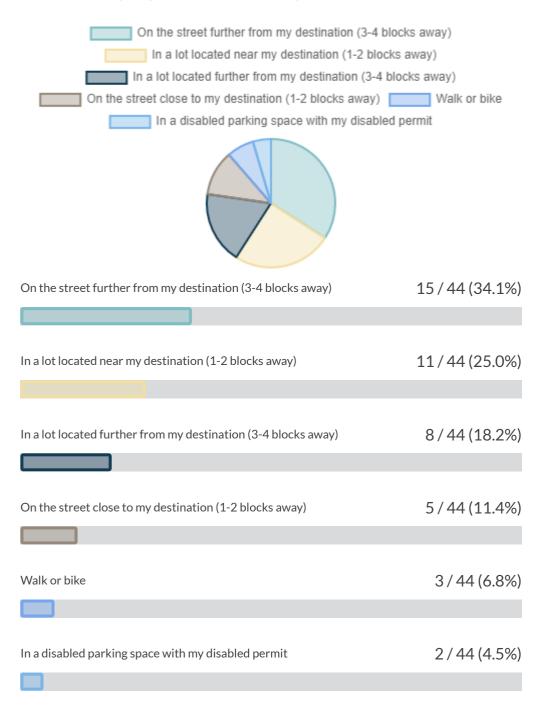
#### ...AND it usually takes you how long to find that parking space?



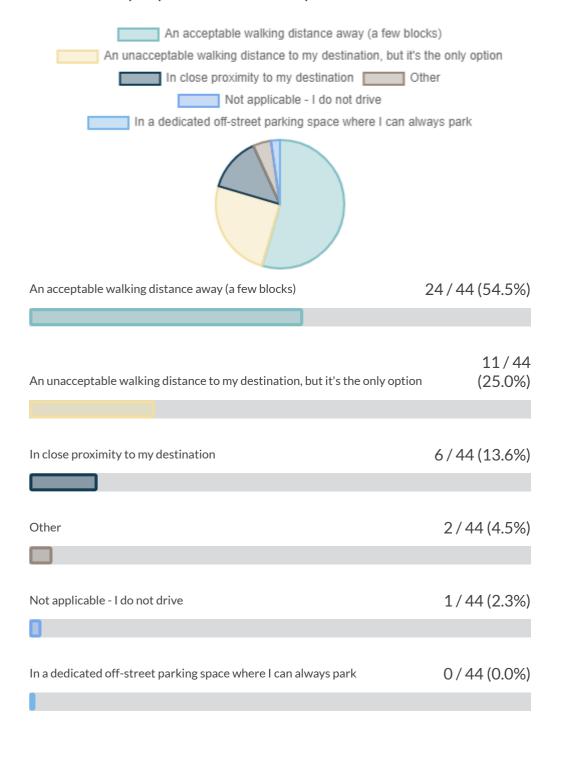
## During special events, I find parking in Green Cove Springs to be:



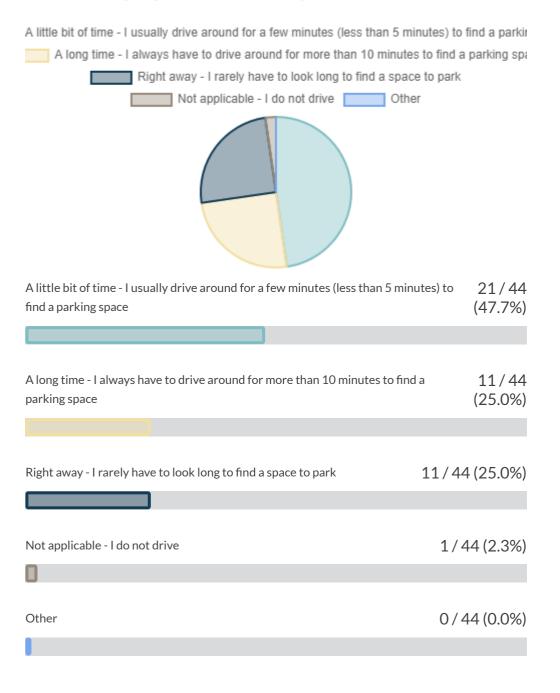
## When going to Green Cove Springs during special events, I most often Park:



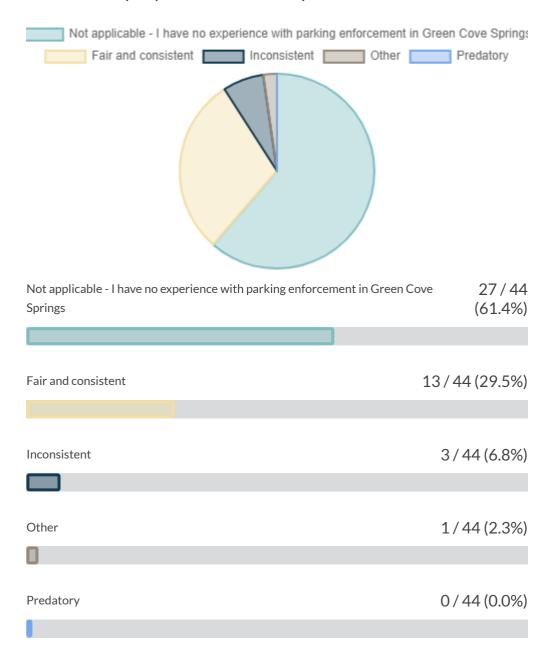
#### During special events, I can usually find a parking space:



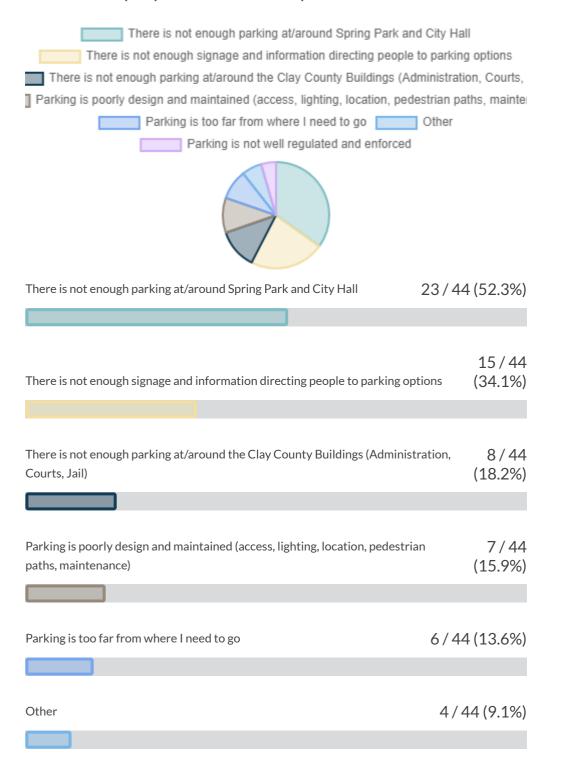
#### ...AND it usually takes you how long to find that parking space?



# How do you feel about the enforcement of parking and the issuance of parking citations/tickets?



# What do you feel is the biggest parking issue that should be addressed? (select all that apply)

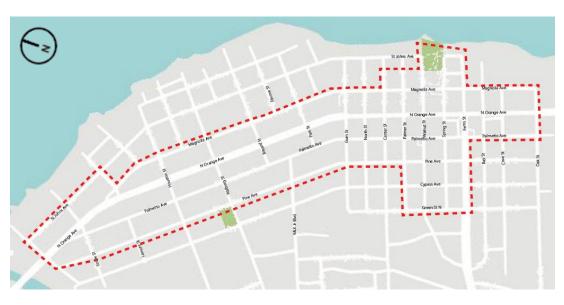






## STAKEHOLDER MEETING

**DOWNTOWN & US 17 CORRIDOR PARKING STUDY** 



The City of Green Cove Springs is examining the downtown and US 17 corridor parking concerns and opportunities within the study area.

The Study will identify strategies to address parking needs as well as related improvement opportunities.

#### We'd love to hear from you.

#### **HOW TO PARTICIPATE**



#### **WORKSHOP MEETING**

December 6<sup>th</sup> (Monday), 5:30 – 6:30 PM (EST)

ZOOM LINK: https://us06web.zoom.us/meeting/register/tZMoc-yrrzliH9f94izD-EBXqxf26r7TjETS



#### WORKSHOP MEETING

December 8th (Wednesday), 5:30 - 6:30 PM (EST)

ZOOM LINK: https://us06web.zoom.us/meeting/register/tZArd-qqqDovGtDm8Uo-8zxG5cyo49uT49CF



#### **ONLINE SURVEY**

SURVEY LINK: https://siil0jy8.paperform.co/

