PROPOSAL **ORIGINAL**

Parking Consultant Services

Solicitation No. RFP 1031-21-3

City of Riviera Beach

Office of the City Clerk
600 West Blue Heron Boulevard, Suite #140
Riviera Beach, FL 33404

RFP Opening: Thursday, June 3, 2021 at 3:00PM - EST

Submitted by:

DESMAN
Design Management

Point of Contact: Chris Luz, P.E.
100 SE 3rd Ave, 10th Floor,
Fort Lauderdale, FL 33394
954.860.8905 | cluz@desman.com | www.DESMAN.com

in association with:

SCALAR
Consulting Group Inc.

4152 W. Blue Heron Blvd, Suite 119
Riviera Beach, FL 33404
561.429.5065 | www.scalargroupinc.com

DESMAN
Design Management

A | TABLE OF CONTENTS

B

LETTER OF INTEREST

June 3, 2021

B | LETTER OF INTEREST

Ms. Glendora Williams, Buyer
Office of the City Clerk
City of Riviera Beach
600 West Blue Heron Boulevard, Suite 140
Riviera Beach, FL 33404

RE: RFP for Parking Consultant Services - Solicitation No. RFP 1031-21-3

Dear Ms. Willliams,

DESMAN is pleased to furnish you with our team's qualifications for the City of Riviera Beach Parking Consultant Services RFP. We were awarded the prior contract for Parking Consulting Services, but for those on your selection panel or committee who may not be familiar with us, DESMAN is a nationally recognized firm specializing in parking planning, parking facility design, and restoration engineering, traffic and transportation improvements; and parking operations consulting services. DESMAN has been involved with more than 5,000 parking projects in its 45 plus years in business, including many oceanfront seasonal communities in Florida including similar parking consulting and on-call assignments for the City of West Palm Beach, City of Pompano Beach, City of Naples, the City of Hollywood, Town of Lauderdale-By-The-Sea, City of Miami Beach, the Miami Parking Authority, the City of St. Augustine and the Miami-Dade County Department of Regulation and Economic Resources (RER).

DESMAN has over 100 personnel including a specially selected group of licensed and professional parking planners, management and operations specialists, architects, structural engineers, and other technical support staff. For this important project, DESMAN has assembled a group of professionals that are uniquely skilled to address the specific needs and requirements of this undertaking. This includes the addition of Scalar Consulting Group Inc. (Scalar), a minority firm (DBE, SBE) located in Riveria Beach, who will provide local coordination and technical support.

Our proposal provides background about our staff's knowledge and experience with providing comprehensive parking consulting services, parking system evaluations, planning, design, procurement, and implementation of leading-edge parking technology and equipment for both on-street and off-street systems, including curb management and mobility services. DESMAN has a Fort Lauderdale office headed by Christian Luz, who will serve as the project manager for this assignment.

On behalf of DESMAN's staff of professionals, we thank you for this opportunity to submit a proposal for this project. We have thoroughly enjoyed working for the City over the past five years and hope that you find our submission to be once again worthy of your confidence and selection.

Sincerely,
DESMAN, Inc.

Christian R. Luz
Project Manager

Timothy Tracy
Executive Vice President

C

QUALIFICATIONS OF FIRM

C | QUALIFICATIONS OF FIRM

45+ YEARS DELIVERING PARKING SOLUTIONS

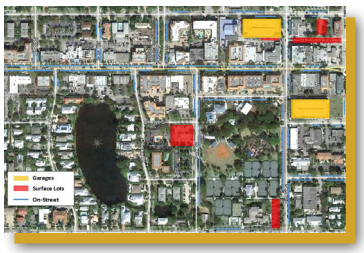
Over 5,000 COMPLETED PROJECTS

95% Repeat ACTIVE CLIENTS

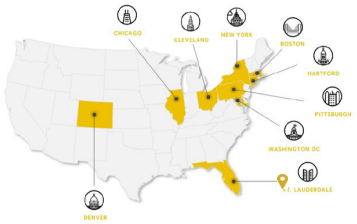
Over 100 Parking PROFESSIONALS

9 Offices NATIONWIDE

"At DESMAN, we love collaborating on great projects that make a difference in the communities in which we live and work."
-Steve Rebora, President



DESMAN is a leading firm specializing in the planning, design, and restoration of cost-efficient and aesthetically pleasing parking facilities within the United States and around the world. Our firm was founded in 1973 as an abbreviation for Design Management with the vision to combine creativity with innovation and sound design principles. Since the firm's inception, DESMAN has served public, private, and institutional clients and owners throughout the U.S. and abroad and has provided planning and design services for over 5,000 parking and transportation projects. DESMAN is an employee-owned corporation with strong financial stability that currently employs a staff of over 100 personnel in 9 offices nationwide including an office in Ft. Lauderdale, FL.



Team of 100+ professionals

Ft Lauderdale, FL

INDUSTRY EXPERIENCE

The principals of the firm have an average of over 25 years of experience and are active members of numerous parking and planning-related industry organizations such as the American Institute of Certified Planners (AICP), Institute of Transportation Engineers, National Parking Association (NPA), International Parking & Mobility Institute (IPMI) and the Florida Parking & Transportation Association (FPTA).

DESMAN's Studies and Operations Consulting Group has extensive experience in conducting a wide range of studies and investigations for municipalities, universities, hospitals and medical centers, airports, developers, etc. This group, which consists of architects transportation engineers, urban planners and parking experts specialize in the following types of parking and traffic studies:

PARKING SERVICES

- Parking Consulting
- Functional Design
- Best Practices / Peer Reviews
- Market Study
- Master Planning
- Conceptual Planning
- Adaptive Reuse
- Parking Technology Audit
- Parking Supply + Demand
- Operations Consulting
- Traffic /Transportation Eng.
- Mobility
- Parking Operations
- Shared Parking
- Revenue Control Consulting
- Site Evaluation
- Financial Feasibility Analysis
- Privatization
- Green Parking Consulting (Parksmart)

GOING GREEN

Sustainability is not just a checklist; it is fundamental to good design. Making wise choices with your resources and the earth's resources are responsibilities of the entire design, construction, and operations teams.

Parksmart

C | QUALIFICATIONS OF FIRM | ORGANIZATION CHART

4152 W. Blue Heron Boulevard
Suite 119
Riviera Beach, FL 33404
561.429.5065
scalargroupinc.com

Scalar Consulting Group Inc. (Scalar), is a minority business firm (DBE, SBE) founded in 2011, with its corporate office located in Riviera Beach, Florida. Offices also in Tampa, Maitland, and Pensacola. Scalar is a multi-disciplined professional engineering consulting firm and provides a wide range of civil engineering design, planning, and environmental services across the state of Florida.

Scalar's staff bring decades of experience to the transportation engineering industry. Our full transportation engineering services include project development and environment (PD&E) studies, NEPA evaluations, corridor planning, complex highway design for interstate, expressways, state roads, and local streets. Scalar staff has worked on projects both large and small scale (from freeway interchange modifications to sidewalk improvement projects).

We also provide: drainage design and permitting (state and local agencies), signing and pavement markings design, signalization design, lighting design, utility coordination, roadway construction cost estimating, public involvement, and structural services as well.

Scalar Consulting is always dedicated to providing our clients with innovative solutions, maximum cost savings, efficient communication, and coordination to ensure our clients achieve their goals on time and within budget.

While new firms have entered the market in the past years and others have left or been acquired by large corporations, Scalar Consulting Group has remained a private and independent company, beholden only to our customers' best interests. We deliberately seek out only those opportunities where we can deliver results and build strong professional relationships that will last for decades to come. We genuinely love what we do, and we appreciate our clients' consideration to work with Scalar Consulting Group Inc.
Nearly thirty years ago, Aniruddha Gotmare, PE, known as "Rudy", started his career as a civil engineer after graduating from the Nagpur University, in Nagpur, India.

Aniruddha (Rudy) Gotmare, PE - Founder

In 2011, through discussions with clients and prospects, Rudy began to recognize the need for more focused innovative solutions, maximum cost savings, efficient communication, and coordination to ensure clients achieved their goals on their projects. That's when he decided to start Scalar Consulting Group Inc. Today, Scalar Consulting Group Inc., provides design and project management in transportation engineering, particularly in the design of highways, interchanges, urban and rural roadways, traffic operation studies and design, and bridge planning and design.

D & G

EXPERIENCE AND QUALIFICATIONS OF KEY PERSONNEL

ORGANIZATION CHART

D | EXPERIENCE AND QUALIFICATIONS OF KEY PERSONNEL *and* G | ORGANIZATION CHART

In assembling a team to service the City of Riviera Beach, DESMAN will bring extensive experience to bear from leaders in the parking and transportation industry. We combine unparalleled first-hand operational experience with exceptional parking and transportation visioning and planning expertise to this important project. Below is an organizational chart followed by brief resumes of each of they key personnel listed below.

CITY OF RIVIERA BEACH and RIVIERA BEACH COMMUNITY REDEVELOPMENT AGENCY (CRA)

TIMOTHY TRACY

DESMAN

- Principal-in-Charge

CHRISTIAN LUZ, P.E., AICP

DESMAN

- Project Manager

GERALD SALZMAN

- Shared Parking
- Site Studies
- Financial Feasibility
- Zoning & Regulation
- Parking Studies

DESMAN

MARK SANTOS, P.E.

- Design Guidelines
- Arch/Engineering
- Construction Costs

DESMAN

CASEY JONES, CAPP, MPA, PARKSMART

- Mobility
- Curb Management
- Operations
- Enforcement
- Permits

DESMAN

CHRISTIAN LUZ, P.E., AICP

- Goals & Objectives
- Standards
- Program Assumptions
- Rate Study
- Financial Analysis
- Public Involvement & Coalitions

DESMAN

RUDY GOTMARE, P.E.

- Local Coordination
- Technical Support

SCALAR Consulting Group Inc.

D | EXPERIENCE AND QUALIFICATIONS OF KEY PERSONNEL

36 Years of Experience

10 Years at DESMAN

University of Wisconsin
B.S., Civil and Environmental Engineering
M.S., Civil Engineering

CHRISTIAN LUZ, P.E., AICP will serve as **Project Manager** and will be the main point of contact. He is a Principal with DESMAN and leads their South Florida office. He has a BS in Civil and Environmental Engineering and a MS in Civil Engineering. Christian is also a registered Professional Engineer, a Certified Planner and a Parksmart Advisor (Green Garage Assessor) through the GBCI and USGBC. He has extensive experience in the conduct of a wide variety of planning and design studies in urban conditions involving all types of parking studies, site studies and mixed-use projects for a variety of client types. His leadership, experience and continued involvement in professional societies and research keep Christian on top of current state-of-the-art traffic and parking practices. He was also awarded the Bernard Dutch Award for outstanding contributions to the parking industry. Some of his notable project experience includes:

- City of Riviera Beach Parking Consultant On-Call
- Lauderdale-By-The-Sea Strategic Parking Plan
- City of Hollywood Parking Master Plan
- St. Augustine Transportation and Parking Study
- Naples Downtown Mobility Study
- City of Pompano Beach On-Call Services
- City of Miami Beach Collins Park Garage Prime Design Criteria Professional
- City of Miami Beach 72nd St Community Complex Prime Design Criteria Prof.
- District of the Gardens Parking Garage in Palm Beach Gardens, FL

29 Years of Experience

19 Years at DESMAN

NJ Institute of Technology
B.S. Civil Engineering

TIMOTHY TRACY, Executive Vice President, will serve as **Principal-in-Charge** and will provide oversight and guidance to the rest of the DESMAN team throughout the engagement. He has worked on both public and private sector projects for the past 14 years and has designed and managed a diversified number of projects. Through this involvement, he has developed a wide range of planning studies that include feasibility, master planning, traffic impact, parking demand and municipal parking programs. Tim has worked closely with the key personnel on numerous parking and transportation studies including working with Chris Luz on the 8 projects listed below.

- City of Riviera Beach Parking Consultant On-Call
- Lauderdale-By-The-Sea Strategic Parking Plan
- City of Hollywood Parking Master Plan
- St. Augustine Transportation and Parking Study
- Naples Downtown Mobility Study
- Miami International Airport / MDAD Employee Garage
- Lake Nona HQ Garage in Orlando, FL
- District of the Gardens Parking Garage in Palm Beach Gardens, FL
- A1 and A2 Parking Structures at Downtown Disney in Orlando, FL
- Oak Ave Parking Garage, Coconut Grove, Miami, FL

D | EXPERIENCE AND QUALIFICATIONS OF KEY PERSONNEL

21 Years of Experience

2 Years at DESMAN

Pennsylvania State Univ.
B.S., Civil Engineering

MARK N. SANTOS, P.E. is a Practice Leader with DESMAN in their South Florida office. He has a B.S. in Civil Engineering, is a registered Professional Engineer in Florida and Pennsylvania, and is a Parksmart Advisor (Green Garage Assessor) through the GBCI and USGBC. He has more than 21 years of experience in the planning, functional design, operational consulting and rehabilitation of parking facilities. Mark specializes in both public and private-sector projects with an emphasis on complex mixed-use projects in the entertainment, transit, retail and healthcare markets. Mark has been the design leaders for award winning projects and served on the board of the Florida Parking & Transportation Association between 2010-2020, most recently serving as Past President. Some of his notable project experience includes:

- **District of the Gardens** - parking consulting and structural engineer of record, which is part of a redevelopment project to provide adequate parking for additional developments including a residential tower and hotel.
- **City of Miami Beach Collins Park Parking Garage** - retained by the City as the prime design criteria professional for the completed 7-level, 525-space garage.
- **City of Miami Beach 72nd Street Community Complex** - retained by the City as the prime design criteria professional for a new mixed-use complex including a 500 space garage, community center, library, fitness center, two swimming pools and 60,000 sf of active green space.

30 Years of Experience

19 Years at DESMAN

NJ Institute of Technology
Newark, NJ
B.S., Civil Engineering

GERALD SALZMAN, AICP is a Senior Parking Planner with DESMAN for almost 20 years. He has been conducting parking studies, shared parking, site studies, financial feasibility and zoning and regulation at consulting firms for 30 years and will bring that expertise to the City. Jerry is a recognized expert on financing parking projects and has assisted numerous parking authorities and cities on matters of municipal fiscal policy and financial feasibility. He brings vast experience in planning effective traffic and parking systems for cities, suburbs, industrial corridors, mixed-use developments, hospitals, colleges and universities across the country. He has successfully negotiated access, circulation, Travel Demand Management and parking plans for projects in large cities, small towns and major metropolitan suburbs, providing plans that meet the development's need for access and parking while protecting residential streets. Jerry has worked the following Florida parking projects with Christian Luz and Timothy Tracy:

- City of Riviera Beach Parking Consultant On-Call
- City of Hollywood Parking Master Plan
- Naples Downtown Mobility Study

D | EXPERIENCE AND QUALIFICATIONS OF KEY PERSONNEL

24 Years of Experience

1.5 Years at DESMAN

Eastern Washington University
Master of Public Administration

University of Baltimore
Bachelor of Political Science

CASEY JONES, CAPP, PARKSMART, MPA is a Senior Parking & Mobility with DESMAN and a recognized transportation and parking industry leader with over 24 years industry experience overseeing parking and transportation programs. He's spent the past ten years providing consulting and project management services to universities, cities and hospitals, focusing on improving customer satisfaction, operational effectiveness and financial performance. Jones is past chairman of the board for the International & Mobility Institute (IPMI), the world's largest trade association for parking professionals. He is also a Certified Planner and a Parksmart Advisor (Green Garage Assessor) through the GBCI and USGBC.

The following is a partial listing of Casey's municipal consulting projects:

- Chamblee, GA Downtown Parking Study
- City of Manitou Springs, CO Downtown Parking Program Implementation Plan and Paid Parking Study
- Philadelphia Parking Authority - RFP Development and Technical Consulting
- Pittston Parking Authority - PA Downtown Parking Study
- City of Fort Wayne, IN Downtown Parking Plan
- Downtown Parking Strategic Plan in Great Falls, MT
- City of Arvada, CO Mobility and Parking Framework Study

31 Years of Experience

10 Years at Scalar

Concordia University Montreal, Canada
MS Civil Engineering

Nagpur Univ Nagpur, India
BS Civil Engineering

ANIRUDDHA (RUDY) GOTMARE, P.E. is a Principal at **Scalar** located in Riviera Beach and will be providing **local coordination and technical support** on this assignment. He has over 31 years of design and project management experience in transportation engineering, particularly in the design of highways, interchanges, urban and rural roadways, traffic operations studies and design, and bridge planning and design. Rudy has been responsible for Project Development and Environment PD&E Studies, preliminary design and final design elements for new roadway systems and improvements of existing roadways. He is an active member in the Florida Engineering Society, FICE Transportation Committee, American Society of Civil Engineers and a Board Member of the American Society of Highway Engineers - Gold Coast Chapter. Some of Rudy's experience includes:

- Palm Beach County Roadway Production| Florida Mango Road
- Palm Beach County Roadway Production | Prosperity Farms Road Bridge Replacement
- FDOT District 4 | Sheridan Street SR822
- FDOT DIstrict 4 | SR 736 (Davie Boulevard

E

UNDERSTANDING AND APPROACH

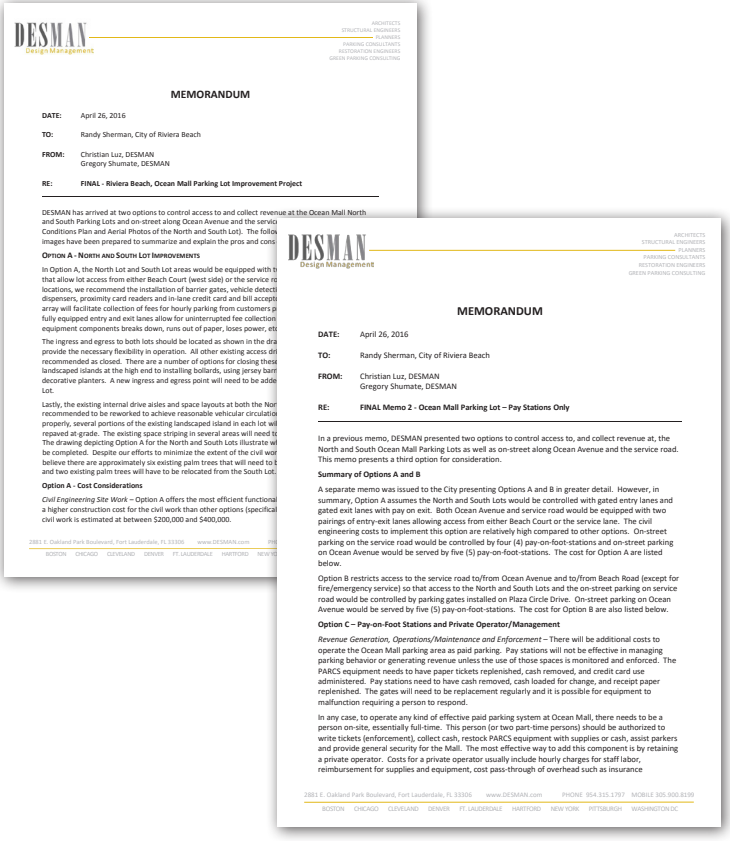
E | UNDERSTANDING AND APPROACH TO THE PROJECT

DESMAN was retained by the City of Riviera Beach (City) in April 2017 to provide miscellaneous parking consulting services identical to the list of tasks provided in the current RFP. However, since the assignment will be to provide "as-needed parking consulting services," the specific scope of the assignment has not been predetermined. Consequently, we are presenting our approach and qualifications for selection by discussing the services we have provided to the City over the past five years. In Section F, page 13, we have provided a table of Similar Project Experience listing the specific tasks in the City's RFP that we have provided to a select group of our clients. The first column of the table lists the specific parking consulting services and tasks DESMAN has provided to the City of Riviera Beach under the previous as-needed services contract.

The parking services provided by DESMAN were documented in a series of technical memoranda as the work was completed. Those memoranda are listed below chronologically, followed by a summary of the services provided. In addition, there are references to the Similar Project Experience table identifying the specific service that correlates with the tasks requested in the RFP.

- **Final Memo 1 – Ocean Mall Parking Lot Improvement Project; and**
- **Final Memo 2 – Ocean Mall Parking Lot Improvement Project – Pay Stations Only**

Following the execution of a contract between the City and DESMAN, there was some immediate pressure on the City to develop a paid parking solution for the Ocean Mall site. The City requested DESMAN conduct a new analysis to identify options and solutions. DESMAN reviewed several parking studies (prepared by others) for the site that required revisions and an update to the analysis and recommendations. As part of our task described in Final Memo 1, DESMAN was asked to develop options for paid parking including controlling the north and south parking areas as one lot with gate-controlled access or controlling the north and south lots separately. Both options would require gate-controlled access and a cashier or pay-in-lane option. In addition, the parking spaces located on the ocean side of the building would require pay-by-space control. DESMAN also prepared cost estimates for modifying landscaped areas, access modifications, and revenue control equipment. One of the ongoing costs that was a concern was enforcement and ensuring the equipment was always in working order. DESMAN recommended a third option for consideration which was controlling all of the parking through the use of either pay-by-space or pay stations combined with pay-by-phone integrated with a smartphone application. This option is described in Final Memo 2 and



DESMAN
Design Management

MEMORANDUM

DATE: April 26, 2016

TO: Randy Sherman, City of Riviera Beach

FROM: Christian Luz, DESMAN
Gregory Shumate, DESMAN

RE: **FINAL Memo 2 - Ocean Mall Parking Lot – Pay Stations Only**

In a previous memo, DESMAN presented two options to control access to, and collect revenue at, the North and South Ocean Mall Parking Lots as well as on-street along Ocean Avenue and the service road. This memo presents a third option for consideration.

Summary of Options A and B

A separate memo was issued to the City presenting Options A and B in greater detail. However, in summary, Option A assumes the North and South Lots would be controlled with gated entry lanes and gated exit lanes with pay on exit. Both Ocean Avenue and service road would be equipped with two pairings of entry-exit lanes allowing access from either Beach Court or the service lane. The civil engineering costs to implement this option are relatively high compared to other options. On-street parking on the service road would be controlled by four (4) pay-on-foot-stations and on-street parking on Ocean Avenue would be served by five (5) pay-on-foot-stations. The cost for Option A are listed below.

Option B restricts access to the service road to/from Ocean Avenue and to/from Beach Road (except for fire/emergency service) so that access to the North and South Lots and the on-street parking on service road would be controlled by parking gates installed on Plaza Circle Drive. On-street parking on Ocean Avenue would be served by five (5) pay-on-foot-stations. The cost for Option B are also listed below.

Option C – Pay-on-Foot Stations and Private Operator/Management

Revenue Generation, Operations/Maintenance and Enforcement – There will be additional costs to operate the Ocean Mall parking area as paid parking. Pay stations will not be effective in managing parking behavior or generating revenue unless the use of those spaces is monitored and enforced. The PARCS equipment needs to have paper tickets replenished, cash removed, and credit card use administered. Pay stations need to have cash removed, cash loaded for change, and receipt paper replenished. The gates will need to be replacement regularly and it is possible for equipment to malfunction requiring a person to respond.

In any case, to operate any kind of effective paid parking system at Ocean Mall, there needs to be a person on-site, essentially full-time. This person (or two part-time persons) should be authorized to write tickets (enforcement), collect cash, restock PARCS equipment with supplies or cash, assist parkers and provide general security for the Mall. The most effective way to add this component is by retaining a private operator. Costs for a private operator usually include hourly charges for staff labor, reimbursement for supplies and equipment, cost pass-through of overhead such as insurance

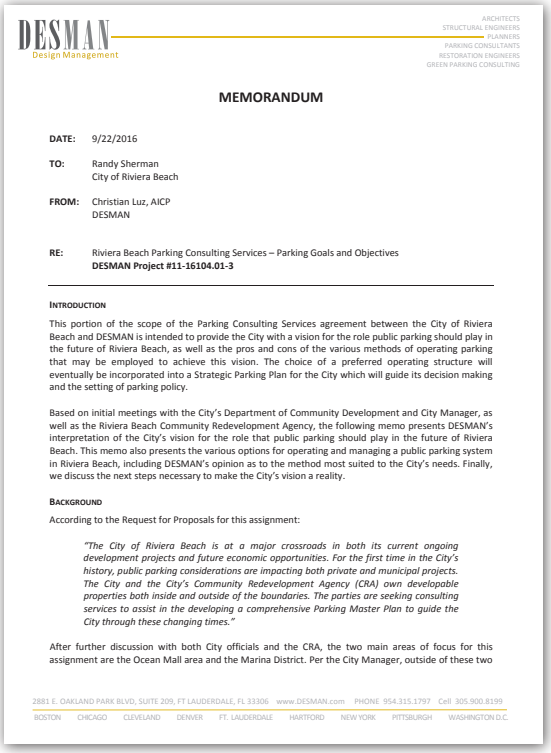
E | UNDERSTANDING AND APPROACH TO THE PROJECT

contrasts the low capital cost involved with the pay-by-phone feature compared to site work required to control the surface parking lots. There would still be an initial cost for pay stations although fewer stations would be needed. Enforcement remains an issue but can be minimized through a combination of technology and periodic site visits by enforcement personnel. Over the next year or so, DESMAN updated or revised the memo related to parking needs based on what the anticipated buildout might be for the Ocean Mall site.

Parking tasks 5, 7, 9, 10, 11, 13, 15, 16, 17, 18, 19, 20 and 21.

- **Parking Goals and Objectives**

In the fall of 2016, DESMAN was asked to prepare a City-wide Parking Master Plan that would establish the need for an organized public parking system. DESMAN recommended that before preparing a master plan, that goals and objectives for the parking system should be identified that would, in turn, result in defining the scope for the master plan. Consequently, DESMAN met with stakeholders and helped the City create a Vision Statement of purpose. The purpose for establishing a system of public parking in the City of Riviera Beach should be, at least initially, to help continue the existing momentum of economic development in the City, while also ensuring that residents of Riviera Beach are not overburdened financially and, ideally, that the parking system is supported by the users of the system. Creating a logical, organized, modern, and targeted public parking system will allow the City to realize a sustainable new revenue source that can then be leveraged to help finance, maintain and operate the additional parking infrastructure essential to the success of more large-scale development and redevelopment. In addition, the City should seek strategic partnerships with certain employers in the Marina District, as well as the Port of Palm Beach and, potentially, developers, to evaluate alternative means of financing parking infrastructure while the City's parking program reaches financial maturity.



DESMAN
Design Management

ARCHITECTS
STRUCTURAL ENGINEERS
PLANNERS
PARKING CONSULTANTS
RESTORATION ENGINEERS
GREEN PARKING CONSULTING

MEMORANDUM

DATE: 9/22/2016

TO: Randy Sherman
City of Riviera Beach

FROM: Christian Luz, AICP
DESMAN

RE: Riviera Beach Parking Consulting Services – Parking Goals and Objectives
DESMAN Project #11-16104.01-3

INTRODUCTION

This portion of the scope of the Parking Consulting Services agreement between the City of Riviera Beach and DESMAN is intended to provide the City with a vision for the role public parking should play in the future of Riviera Beach, as well as the pros and cons of the various methods of operating parking that may be employed to achieve this vision. The choice of a preferred operating structure will eventually be incorporated into a Strategic Parking Plan for the City which will guide its decision making and the setting of parking policy.

Based on initial meetings with the City's Department of Community Development and City Manager, as well as the Riviera Beach Community Redevelopment Agency, the following memo presents DESMAN's interpretation of the City's vision for the role that public parking should play in the future of Riviera Beach. This memo also presents the various options for operating and managing a public parking system in Riviera Beach, including DESMAN's opinion as to the method most suited to the City's needs. Finally, we discuss the next steps necessary to make the City's vision a reality.

BACKGROUND

According to the Request for Proposals for this assignment:

> *"The City of Riviera Beach is at a major crossroads in both its current ongoing development projects and future economic opportunities. For the first time in the City's history, public parking considerations are impacting both private and municipal projects. The City and the City's Community Redevelopment Agency (CRA) own developable properties both inside and outside of the boundaries. The parties are seeking consulting services to assist in the developing a comprehensive Parking Master Plan to guide the City through these changing times."*

After further discussion with both City officials and the CRA, the two main areas of focus for this assignment are the Ocean Mall area and the Marina District. Per the City Manager, outside of these two

2881 E. OAKLAND PARK BLVD, SUITE 209, FT LAUDERDALE, FL 33306 www.DESMAN.com PHONE 954.315.1797 Cell 305.900.8199

BOSTON CHICAGO CLEVELAND DENVER FT. LAUDERDALE HARTFORD NEW YORK PITTSBURGH WASHINGTON D.C.

A technical memorandum was prepared to identify operating strategies such as city-operated and a managed parking system (outside parking operator), the revenue and profit policies such as self-sustaining or subsidized, and discussed mechanism for funding parking improvements including general obligation bonds, parking revenue bonds, and Public/Private/Partnerships (P3).

Parking tasks 1, 2, 3, 4, 5, 6, 8, 9, 10, 13, 14 and 15.

E | UNDERSTANDING AND APPROACH TO THE PROJECT

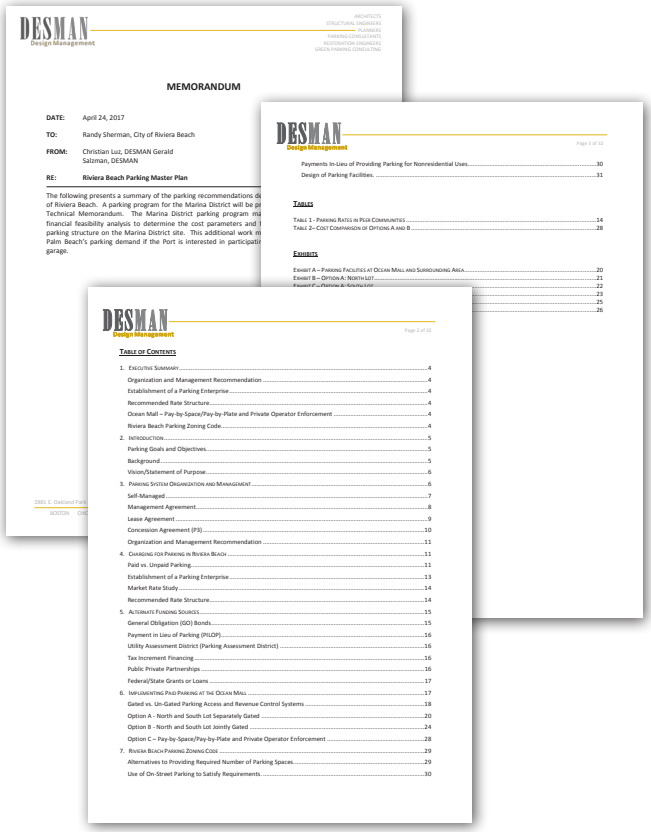
• City-wide Parking Master Plan

In April 2017 DESMAN submitted a comprehensive City-wide Parking Master Plan to the City that addressed the City's Goals and Objectives that included the following chapters:

- Parking System Organization and Management
- Charging for Parking in Riviera Beach
- Alternative Funding Sources
- Implementing Paid Parking at Ocean Mall
- Riviera Beach Zoning Code and Parking

The Master Plan document was comprehensive and provided a framework for implementing a paid parking system in the City of Riviera Beach. As part of the second chapter, the results of a market rate study were presented along with a rate recommendation for the City of Riviera Beach.

Parking tasks 1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 and 21.



• May 2018 Parking Ordinance Review

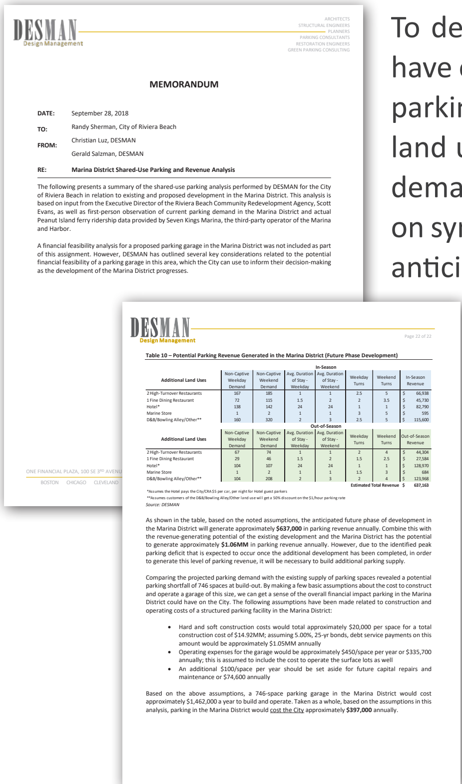
Although an initial code review was done by DESMAN previously, a more formalized review of the City's zoning code was conducted along with recommendations that cover every aspect of the code related to parking requirements.

Parking tasks 1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 and 21.

• September 2018 Marina District Shared Parking-Use Parking and Revenue Analysis

The City was actively pursuing the RFP process to select a developer for completion of the Marina District to compliment Newcomb Hall (the Event Center), revamped Bicentennial Park, expansion and reconstruction of the boat slips at the Marina, several surface parking lots were constructed, and a significant amount of meeting space, as well as space for several restaurants, had been constructed.

E | UNDERSTANDING AND APPROACH TO THE PROJECT



DESMAN Design Management

ARCHITECTS
STRUCTURAL ENGINEERS
PLANNERS
PARKING CONSULTANTS
RESTORATION ENGINEERS
GREEN PARKING CONSULTING

MEMORANDUM

DATE: September 28, 2018

TO: Randy Sherman, City of Riviera Beach

FROM: Christian Luz, DESMAN
Gerald Salzman, DESMAN

RE: **Marina District Shared-Use Parking and Revenue Analysis**

The following presents a summary of the shared-use parking analysis performed by DESMAN for the City of Riviera Beach in relation to existing and proposed development in the Marina District. This analysis is based on input from the Executive Director of the Riviera Beach Community Redevelopment Agency, Scott Evans, as well as first-person observation of current parking demand in the Marina District and actual Peanut Island ferry ridership data provided by Seven Kings Marina, the third-party operator of the Marina and Harbor.

A financial feasibility analysis for a proposed parking garage in the Marina District was not included as part of this assignment. However, DESMAN has outlined several key considerations related to the potential financial feasibility of a parking garage in this area, which the City can use to inform their decision-making as the development of the Marina District progresses.

DESMAN Design Management

Page 22 of 22

Table 10 – Potential Parking Revenue Generated in the Marina District (Future Phase Development)

Additional Land Uses	Non-Captive Weekday Demand	Non-Captive Weekend Demand	Avg. Duration of Stay - Weekday	Avg. Duration of Stay - Weekend	Weekday Turns	Weekend Turns	In-Season Revenue
In-Season							
2 High-Turnover Restaurants	167	185	1	1	2.5	5	$ 66,938
1 Fine Dining Restaurant	72	115	1.5	2	2	3.5	$ 45,730
Hotel*	138	142	24	24	1	1	$ 82,790
Marine Store	1	2	1	1	3	5	$ 595
D&B/Bowling Alley/Other**	160	320	2	3	2.5	5	$ 115,600

Additional Land Uses	Non-Captive Weekday Demand	Non-Captive Weekend Demand	Avg. Duration of Stay - Weekday	Avg. Duration of Stay - Weekend	Weekday Turns	Weekend Turns	Out-of-Season Revenue
Out-of-Season							
2 High-Turnover Restaurants	67	74	1	1	2	4	$ 44,304
1 Fine Dining Restaurant	29	46	1.5	2	1.5	2.5	$ 27,584
Hotel*	104	107	24	24	1	1	$ 128,970
Marine Store	1	2	1	1	1.5	3	$ 684
D&B/Bowling Alley/Other**	104	208	2	3	2	4	$ 123,968
						Estimated Total Revenue	$ 637,163

*Assumes the Hotel pays the City/CRA $5 per car, per night for Hotel guest parkers
**Assumes customers of the D&B/Bowling Alley/Other land use will get a 50% discount on the $1/hour parking rate
Source: DESMAN

As shown in the table, based on the noted assumptions, the anticipated future phase of development in the Marina District will generate approximately **$637,000** in parking revenue annually. Combine this with the revenue-generating potential of the existing development and the Marina District has the potential to generate approximately **$1.06MM** in parking revenue annually. However, due to the identified peak parking deficit that is expected to occur once the additional development has been completed, in order to generate this level of parking revenue, it will be necessary to build additional parking supply.

Comparing the projected parking demand with the existing supply of parking spaces revealed a potential parking shortfall of 746 spaces at build-out. By making a few basic assumptions about the cost to construct and operate a garage of this size, we can get a sense of the overall financial impact parking in the Marina District could have on the City. The following assumptions have been made related to construction and operating costs of a structured parking facility in the Marina District:

- Hard and soft construction costs would total approximately $20,000 per space for a total construction cost of $14.92MM; assuming 5.00%, 25-yr bonds, debt service payments on this amount would be approximately $1.05MM annually
- Operating expenses for the garage would be approximately $450/space per year or $335,700 annually; this is assumed to include the cost to operate the surface lots as well
- An additional $100/space per year should be set aside for future capital repairs and maintenance or $74,600 annually

Based on the above assumptions, a 746-space parking garage in the Marina District would cost approximately $1,462,000 a year to build and operate. Taken as a whole, based on the assumptions in this analysis, parking in the Marina District would cost the City approximately **$397,000** annually.

To determine the potential future impact that additional development will have on parking in the Marina District, it is necessary to develop a shared-use parking demand model. This type of analysis takes into account the various land uses that comprise a development, determines the anticipated parking demand generated by each land use, then adjusts the demand forecast based on synergies among the various uses. The result is a model which projects the anticipated parking demand generated by an entire development, adjusting for time of day and seasonal demand variations among the different land uses. Using this model, it is then possible to determine the level of peak parking demand expected to be generated by the development and at what time of year and time of day that peak is expected to occur. The number of parking spaces needed to accommodate the peak demand can then be determined, as well.

A strategy for implementing paid parking in the Marina District was also presented along with a recommended size of the garage and an analysis of potential revenue generation, capital (debt service), and operating costs.

Parking tasks 4, 5, 7, 12, 13, 16, 17, 19, 20 and 21.

- **October 2018 Presentation to City Commission**

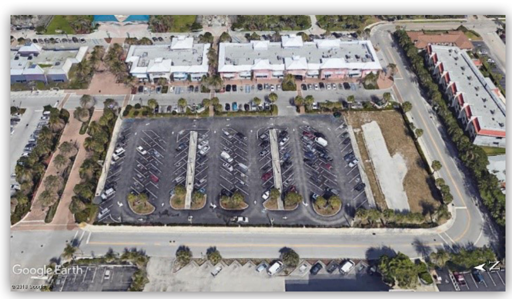
DESMAN was asked to present the findings and recommendations for the Ocean Mall and Marina Districts and the City-wide Parking Study.

Parking tasks 1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 and 21.

- **March 2019 Ocean Mall Redevelopment Public/Private Partnership**

The City of Riviera Beach issued an RFP for the Acquisition of CRA Property for the Purpose of Providing Public Parking and Redevelopment (RFP NO. 2019-01). The City requested DESMAN to participate on the selection committee to recommend a P3 developer to City Commission. An evaluation matrix was used by the selection committee to develop consensus and a recommendation.

Parking tasks 20 and 21.

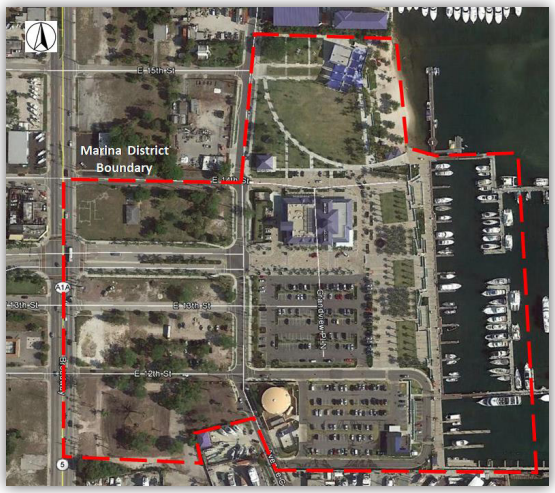


E | UNDERSTANDING AND APPROACH TO THE PROJECT

- **2021 Marina District Shared-Use Parking and Revenue Analysis**

DESMAN was asked to develop an update to the 2018 Marina District Shared-Use Parking and Revenue Analysis based on the development program proposed by the P3 developer selected by the City. DESMAN has been in conversations with the developer to determine the building program so that estimates of the shared-use parking demand can be updated. As of June 3rd, a draft memorandum has been submitted to the City for review and discussion.

Parking tasks 5, 7, 12, 13, 14, 16, 17, 19, 20 and 21.



Summary

The documents listed above represent select analyses and studies that have been conducted over the past five years. Many of the studies required iterative analyses to develop the most effective and efficient recommendations. We trust the examples listed above fully illustrate the quality, breadth, and scope of parking consulting that DESMAN provides the City.

We truly enjoy our working relationship with the City and feel confident we have provided value with every assignment. We also believe that both DESMAN and the City of Riviera Beach share a common understanding of the importance parking plays in supporting and igniting economic development and look forward to our future relationship.

F

FIVE SIMILAR PROJECTS + TWO MARKET RATE STUDIES

F | FIVE SIMILAR PROJECTS + TWO MARKET RATES STUDIES

Similar Project Experience The following table illustrates DESMAN's experience in the conduct of parking studies similar to Riviera Beach. The first column of the table lists the various tasks included in the City's RFP. The nine public agencies listed at the top of the table list select clients and studies where DESMAN has provided specific tasks, indicated by an X, to those listed in the RFP. Several of the projects included in the table are discussed below in detail followed by parking and market-rate study excerpts from the Naples Downtown Mobility Study and the St. Augustine Transportation and Mobility Study.

	The following are work task from the RFQ. The work tasks have been numbered by DESMAN for ease of reference. **It is our understanding that the City intends to enter into a contract with a parking consultant to assist the City with, but not limited to the following:**	City of Riviera Beach	Town of Lauderdale-By-The-Sea	City of Pompano Beach	City of West Palm Beach	City of Naples	City of St. Augustine	City of Hollywood	MiamiDade Expressway Authority	Miami-Dade County RER
1	Parking program goals and objectives	X	X	X	X	X	X	X		X
2	Parking program policies and procedures	X	X	X	X	X	X	X		X
3	Parking standards and performance criteria	X	X	X	X	X	X	X		X
4	Public parking opportunities throughout the City	X	X	X	X	X	X	X	X	X
5	Parking solutions for specific public uses (parks, public facilities, beach)	X	X	X	X	X	X	X	X	X
6	Identified zoning requirements	X	X	X	X	X	X	X	X	X
7	Review of existing studies where applicable	X	X	X	X	X	X	X	X	X
8	Regulations for commercial parking	X	X	X	X	X	X	X	X	X
9	Management and regulation of on-street parking	X	X	X	X	X	X	X		X
10	Enforcement of laws, regulations and codes concerning	X	X	X	X	X	X	X		X
11	Site specific plans for Ocean Mall property	X								
12	Site specific plans for the Marina District	X								
13	Program and operation assumptions	X	X	X	X	X	X	X	X	
14	Municipal parking facility fee study	X	X	X	X	X	X	X	X	
15	Parking permit program for City residents	X	X	X	X	X	X	X		
16	Occupancy study	X	X	X	X	X	X	X		
17	Parking demand and trip generation model, if applicable	X	X	X	X			X	X	
18	Design guidelines and scenario testing	X	X	X	X	X	X	X	X	X
19	Operations and financial modelling and recommendations	X	X	X	X	X	X	X	X	
20	Feasibility recommendations and alternatives	X	X	X	X	X	X	X	X	
21	Development of coalitions and partnerships with business community organizations and major stakeholders, specifically identifying opportunities for long-term parking leasing	X	X		X			X		

F | FIVE SIMILAR PROJECTS + TWO MARKET RATES STUDIES

LAUDERDALE-BY-THE-SEA PARKING STRATEGIC PLAN

The Town of Lauderdale-By-The-Sea is a coastal community of 6,135 year-round residents, and a winter seasonal population of twice that amount. All public parking facilities and the Town's commercial district are located in the southern portion of the Town, which is the residential and commercial district. The Town's economy is based on tourism and its seaside location. The prime demand for parking east of Seagrape Drive comes from day visitors who come to use the Town beach, patrons of the vibrant restaurant scene in Town, and people who enjoy the weekend outdoor entertainment that is offered by several restaurants. West of Seagrape Drive the parking demand is generated by employees of the businesses along the west Commercial Boulevard corridor, retail shops, and restaurant patrons, a variety of medical and service businesses located in that area.

DESMAN is currently in negotiations with the Town for Additional Services regarding automated parking guidance systems and smart phone applications.

CITY OF POMPANO BEACH COMMUNITY REDEVELOPMENT AGENCY
Parking Enterprise Fund / Financing Mixed-Use Parking Studies

DESMAN assisted the Pompano Beach CRA to plan and implement a new parking enterprise fund to finance a series of parking garages that support the CRA's Master Plan. The team, led by DESMAN, focused on completing the financial aspects of the enterprise funding and specific project funding as well as determining the functional design and mixed-use opportunities related to programming three of the proposed garages.

All three garages will include mixed-use elements similar to that of the completed Pier Garage. The team evaluated numerous sites, including the west CRA area, adjacent to City Hall across a street from the Public Library and Performing Arts Center, several sites along Highway A1A in the East CRA near the beach where the mixed-use Pier Garage was ultimately constructed. The 3rd site is still under consideration, but will likely include about 300 spaces and approximately 10,000 square feet of commercial use.

The City once again retained DESMAN in February 2021 to conduct a comprehensive assessment of the Pier Garage. The garage displayed signs of corrosion and deterioration based on its proximity to the ocean. DESMAN is in the process of submitting a final condition assessment report which includes prioritized repair recommendations and an opinion of probable costs.

F | FIVE SIMILAR PROJECTS + TWO MARKET RATES STUDIES

DOWNTOWN ST. AUGUSTINE MOBILITY STUDY

DESMAN was retained to develop a Parking Plan and financial analysis of recommendations for the City of St. Augustine parking system as part of the Downtown St. Augustine Mobility Plan. S&ME was responsible for the transportation planning element of the Plan.

Initially, a series of parking/management best practices were developed as part of Phase 1 of the Mobility Study. The Phase 1 analysis also included parking inventory and occupancy counts to capture the parking demand related to significant events like the 4th of July weekend. The study goal was to develop a Parking Plan that could be vetted by the community and stakeholders. One of the overarching goals of the Mobility Plan was to reduce vehicle trips and parking demand Downtown to create a more pedestrian-friendly, less congested, and safer community.

Parking management strategies were identified that support improved mobility and complement a coordinated system of transportation options for the City. Recommendations were developed for the Mobility Plan that reflects feedback from the community, financial needs, as well as economic development and transportation goals. Similar to Riviera Beach, St. Augustine is a beachside tourist community that hosts millions of visitors each year. Due to this influx of visitors during weekends and events there tends to be much greater demand for parking during these periods. The recommendations provided in the study report describe a parking strategy unique to each of the three main users: visitors, employees, and residents for weekdays and weekends.

General Obligation Bonds	Municipality issues bonds which are paid back through the general fund	Bonds issued to construct parking facilities for the public are typically tax-exempt, and have a lower interest rate	Since these bonds are funded by the general fund, it would come out of public taxes, including those who do not use the garage
Revenue Bonds	Municipality issues bonds which are paid back through a specific pool of money	In addition to being tax exempt and having a lower interest rate, theres is a guaranteed source of money designated to pay back the bond	The municipality needs to show there is stable demand; risk not being able to pay it off if the projected revenue is not generated
Tax Increment Financing (TIF)	TIF funds capture the increased property value generated by improvements made in a specified area. The increased property value is used to create a pool of money which can be used for local improvements, such as parking	Serves as a reliable source of revenue to support the cost of constructing and/or improving parking facilities	TIF is dependent on strong economic conditions-the city may not be able to pay off the expected debt issued if the property values do fail to increase
Parking Benefits Districts	The municipality returns all or some of its parking revenue raised from parking meters or taxes to the district, in the form of additional parking facilities or beautification projects	The users are paying for additional parking supply. By tying increased parking rates to visible improvements in the community, the general publics acceptance of increased rates is improved	Can be complex to set up. Require businesses, developers, land owners, residents, and city officials to work together to agree on appropriate projects
Business Improvement Districts (BID) / Special Service Areas (SSA)	Levy a tax on commercial properties and business within a defined area. Additional funds are used to construct or improve public parking facilities	Can serve as a means to more quickly receive funding for parking projects; does not charge one-time visitors or infrequent parkers	Requires "buy in" from businesses, which can be seen with resistance
Parking Authorities/Utilities	The municipality chooses to create a separate government entity to provide and operate the communities parking system.	Functions as a self-supporting entity that is responsible for all aspects of public parking, with the ability to issue their own debt, budget, and governing body. This independence from municipal government insulates them from political influences.	If not already included in city code, their creation requires enabling legislation at the state level.
Parking Enterprise Fund	This fund is self-sustaining and separate from the general fund. Revenue streams can include monthly leases, permit sales, violation revenues, etc. Administration is still within the local government.	Allows parking construction, improvements, and enhancements to be paid for outside of the general fund.	Does not have the capacity to issue bonds on its own
Public-Private Partnerships	When a government entity sells (or leases) a portion of its parking system to a private entity. Several different types (Long-term Leases, Concession Agreement, Design-Build, Design-Build-Operate-Manage, etc.)	Reduces the public sectors direct debt burden when constructing parking facilities while allowing them to complete a project more quickly and affordably	Public entity has to give up control, and a portion of its revenue stream. Contracts and negotiations can be complex and time consuming.

F | FIVE SIMILAR PROJECTS + TWO MARKET RATES STUDIES

CITY OF NAPLES DOWNTOWN MOBILITY STUDY

DESMAN was retained to develop a Parking Plan and financial analysis of recommendations for the City of Naples parking system as part of the Downtown Naples Mobility Study. VHB was responsible for the transportation planning and overall Mobility Plan.

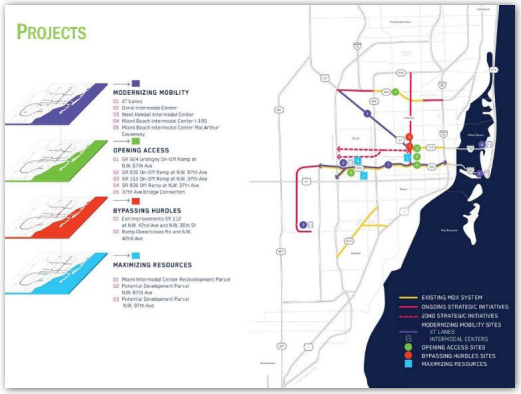
A benchmarking analysis of current parking rates and parking management practices was conducted of cities that were identified as comparable to Naples. The results of this analysis were intended to guide Naples in the development of a parking management strategy for its on- and off-street parking system. The results of the analysis revealed that, in general, the area contains adequate public parking inventory to satisfy the peak demand conditions during the offseason, but that there is a marked parking shortfall during the peak tourist season. Similar to Riviera Beach, during the peak season parking demand generated by the retail, restaurants, and nightlife consumes all or nearly all of the available public parking spaces downtown. This situation contributes to significant numbers of vehicles cruising the streets for available spaces, creating high levels of traffic congestion throughout the area and loss of potential customers and visitors.

An important aspect of the parking study was to evaluate the potential to convert from a “free” parking system to a paid parking system. DESMAN recommended that a system of on-street paid parking be introduced into this area of the City. Not only will paid parking create a source of revenue that can be leveraged to support future development, but it will also help ensure that the existing parking supply can be managed effectively to accommodate the varying needs of the many different parking user groups coming to downtown Naples. It was further recommended that free parking still be offered in the City’s parking garages and surface parking lots, to provide employees and visitors with a “free” parking option and to encourage longer-term parkers to park in spaces that are not on-street.

F | FIVE SIMILAR PROJECTS + TWO MARKET RATES STUDIES

MIAMI DADE EXPRESSWAY AUTHORITY INTERMODAL CENTERS

DESMAN was retained to prepare the parking element for the Miami Dade Expressway (MDX) Strategic Master Plan (SMP). The initial work program was comprised of preparing site and financial feasibility studies for five park & ride mixed-use intermodal centers located adjacent to MDX facilities. The preliminary design and evaluation of the park & ride intermodal facilities include analyses of direct off-ramps, and use of speed ramps to provide high capacity solutions. All five sites are physically constrained and solutions require creative approaches to handling parkers.

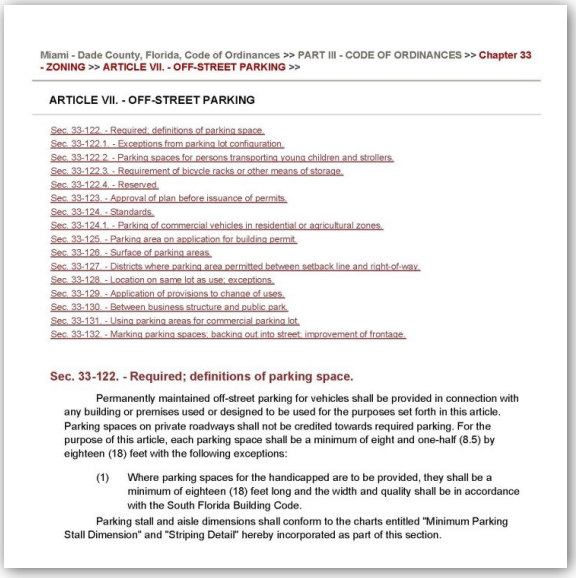


Based on MDX data, DESMAN developed parking demands for centers in each location. Revenue generation was based on a rate schedule proposed by DESMAN representing comparable rates in each area and service levels provided in each center.

MIAMI-DADE COUNTY DEPARTMENT OF REGULATION AND ENVIRONMENTAL RESOURCES

DESMAN was retained by the Miami Dade County Development Services Division, Department of Regulatory and Economic Resources to review and recommend updates to the current parking regulations concerning parking ratios, implementation and application of shared parking, and current administrative practices and procedures for review of development parking at the applicant permit stage.

As part of the study, DESMAN was charged with developing recommendations to update the County's somewhat outdated parking land use codes for all land use types throughout the County including highly urbanized areas as well as less intensely developed areas. DESMAN recommended some reorganization of the land use types including expansion and refinement to the current land use categories . The results of the study will have wide-ranging impacts on development in the county.



Miami - Dade County, Florida, Code of Ordinances >> PART III - CODE OF ORDINANCES >> Chapter 33 - ZONING >> ARTICLE VII. - OFF-STREET PARKING >>

ARTICLE VII. - OFF-STREET PARKING

Sec. 33-122. - Required; definitions of parking space.
Sec. 33-122.1. - Exceptions from parking lot configuration.
Sec. 33-122.2. - Parking spaces for persons transporting young children and strollers.
Sec. 33-122.3. - Requirement of bicycle racks or other means of storage.
Sec. 33-122.4. - Reserved.
Sec. 33-123. - Approval of plan before issuance of permits.
Sec. 33-124. - Standards.
Sec. 33-124.1. - Parking of commercial vehicles in residential or agricultural zones.
Sec. 33-125. - Parking area on application for building permit.
Sec. 33-126. - Surface of parking areas.
Sec. 33-127. - Districts where parking area permitted between setback line and right-of-way.
Sec. 33-128. - Location on same lot as use; exceptions.
Sec. 33-129. - Application of provisions to change of uses.
Sec. 33-130. - Between business structure and public park.
Sec. 33-131. - Using parking areas for commercial parking lot.
Sec. 33-132. - Marking parking spaces; backing out into street; improvement of frontage.

Sec. 33-122. - Required; definitions of parking space.

Permanently maintained off-street parking for vehicles shall be provided in connection with any building or premises used or designed to be used for the purposes set forth in this article. Parking spaces on private roadways shall not be credited towards required parking. For the purpose of this article, each parking space shall be a minimum of eight and one-half (8.5) by eighteen (18) feet with the following exceptions:

(1) Where parking spaces for the handicapped are to be provided, they shall be a minimum of eighteen (18) feet long and the width and quality shall be in accordance with the South Florida Building Code.

Parking stall and aisle dimensions shall conform to the charts entitled "Minimum Parking Stall Dimension" and "Striping Detail" hereby incorporated as part of this section.

F | FIVE SIMILAR PROJECTS + TWO MARKET RATES STUDIES

Market Rate Studies

DESMAN has conducted hundreds of parking studies nationally over the past decade, many of them incorporating market rate studies. Within the past seven years, the Fort Lauderdale office of DESMAN has conducted at least six market-rate studies including for the cities of Pompano Beach, Hollywood, Lauderdale-By-The-Sea, West Palm Beach, Naples, St. Augustine, and most notably, the City of Riviera Beach. The Lauderdale-By-The-Sea Parking Strategic Plan and the City of Hollywood Parking Master Plan reports were submitted as examples in our 2016 response to the City of Riviera Beach Parking Consultant RFP.

The appendix to this submittal includes the parking and market-rate study excerpts from the **Naples Downtown Mobility Study** and the **St. Augustine Transportation and Mobility Study**. DESMAN served as a specialty parking subconsultant to VHB and SM&E, respectively, on these two mobility studies.

H

REFERENCES

H | REFERENCES

DESMAN has built its reputation upon a foundation of successfully completed projects. More than 75% of our business is with repeat clients or referrals. We encourage you to contact our references listed below.

CITY OF MIAMI BEACH
Ariel Guitian
Senior Capital Improvement Coordinator
1701 Meridian Avenue, 3rd Floor
Miami Beach, FL 33139
305.673.7071
ArielGuitian@miamibeachfl.gov

LAUDERDALE-BY-THE-SEA
Neysa Herrera
Assistant to the City Manager
4501 North Ocean Drive
Lauderdale-By-The-Sea
954.640.4212
neysah@lbts-fl.gov
Project details summarized on page 14

CITY OF HOLLYWOOD
Hal King
Parking Administrator
2600 Hollywood Boulevard
West Side Annex Building
Hollywood, FL 33020
954.921.3535
HKING@hollywoodfl.org

S&ME (prime consultant for St. Augustine Transportation and Parking Study)
George M. Kramer
Director of Planning
1615 Edgewater Drive, Suite 200
Orlando, FL 32804
407.975.1273
gkramer@smeinc.com
Project details summarized on page 15

VHB (prime consultant for Downtown Naples Mobility Study)
Brent Lacy
Transportation Lead
501 East Kennedy Boulevard, Suite 1010
Tampa, FL 33602
941.256.7185
blacy@vhb.com
Project details summarized on page 16

CITY OF POMPANO BEACH
Horacio Danovich
City of Pompano Beach
GO Bond and Innovation District Director
100 West Atlantic Boulevard, Room 276
Pompano Beach, Florida 33060
954.786.7834
Horacio.Danovich@copbfl.com
Project details summarized on page 14

I

PRINCIPAL OFFICE LOCATION AND LOCAL PARTICIPATION

I | PRINCIPAL OFFICE LOCATION AND LOCAL PARTICIPATION

DESMAN's Fort Lauderdale office will be the primary office serving the City. Chris Luz will serve as Project Manager and the City's main point of contact.

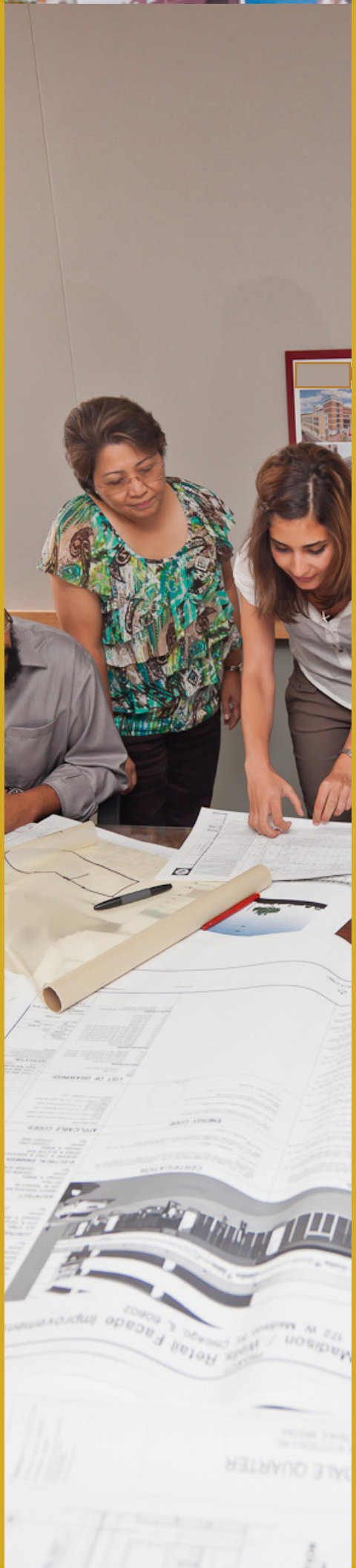
DESMAN
Design Management

DESMAN
100 SE Third Ave
10th Floor
Fort Lauderdale, FL 33394
Chris Luz - Project Manager
954.526.6464 | desman.com
cluz@desman.com

Scalar's Riviera Beach office will serve as Local Coordination and Technical Support. Scalar is also a minority business firm (DBE, SBE).

SCALAR
Consulting Group Inc.

Scalar
4152 W Blue Heron Blvd
Suite 119
Riviera Beach, FL 33404
Rudy Gotmare - Technical Support
561.429.5065 | scalargroupinc.com
agotmare@scalarinc.net



J

REQUIRED FORMS

J | REQUIRED FORMS

DESMAN is a certified as a Minority Business Enterprise (MBE) by many states, municipalities and other government and public agencies including the National Minority Supplier Development Council NMSDC (NY1922). DESMAN also actively solicits minority groups for employment as is evidenced by our Affirmative Action Program. In fact, 53% of our employees are minorities at the present time. DESMAN's NMSDC certificate is provided below.

THIS CERTIFIES THAT

DESMAN, INC.

dba DESMAN, INC.

NMSDC
National Minority Supplier Development Council

* Nationally certified by the: **NEW YORK & NEW JERSEY MINORITY SUPPLIER DEVELOPMENT COUNCIL**

*NAICS Code(s): 541990; 541330; 541310; 812930

* Description of their product/services as defined by the North American Industry Classification System (NAICS)

08/12/2020 — **Issued Date**

NY03157 — **Certificate Number**

Adrienne Trimble

09/30/2021 — **Expiration Date**

Terrence Clark, President & CEO

By using your password (NMSDC issued only), authorized users may log into NMSDC Central to view the entire profile: http://nmsdc.org

Certify, Develop, Connect, Advocate.

* MBEs certified by an Affiliate of the National Minority Supplier Development Council, Inc.®

Per the National Council's new policies, our certification from our Parent Council serves as evidence of National Reciprocal Certification. This includes the entire State of Florida.

Should you require further information or verification on the new policies, please contact:

Ms. Dora Reddick
NY/NJ Minority Supplier Development Council
65 West 36th Street, Suite 702
New York, NY 10018
212.502.5663 DReddick@nynjmsdc.org
www.nynjmsdc.org

DESMAN has teamed with Scalar Consulting Group Inc. (Scalar), a minority business firm (DBE, SBE) founded in 2011, with its corporate office located in Riviera Beach, Florida. Scalar is a multi-disciplined professional engineering consulting firm and provides a wide range of civil engineering design, planning, and environmental services across the state of Florida. **DESMAN is committed to providing in excess of 15 percent of the work awarded under this contract to Scalar.** Scalar's State of Florida Minority Business Certification is provided below.

State of Florida

Minority Business Certification

SCALAR CONSULTING GROUP INC.

Is certified under the provisions of
287 and 295.187, Florida Statutes, for a period from:

07/17/2019 to 07/17/2021

Jonathan R. Satter, Secretary
Florida Department of Management Services

Department of MANAGEMENT SERVICES
Office of Supplier Diversity

Office of Supplier Diversity
4050 Esplanade Way, Suite 380
Tallahassee, FL 32399
850-487-0915
www.dms.myflorida.com/osd

STANDARD FORMS ATTACHMENT A

In addition to the proposal, the forms listed below and attached are to be completed and submitted with your proposal.

1) Addendum Page
2) Proposer's Certification
3) Conflict of Interest Disclosure Form
4) Drug Free Workplace
5) Public Entity Crimes Statement

NOTE: Please ensure that all of these documents are completed and submitted with your proposal in accordance. Failure to do so may result in your proposal not being considered for award.

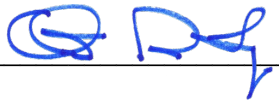
SIGNATURE of AUTHORIZED REPRESENTATIVE

This signature page must be completed and included with the submittal.

By signing below, the undersigned acknowledges they are an expressly authorized agent of the Company/firm listed below.

Date: June 1, 2021

Full Legal Name of Company: DESMAN, Inc.

Signature: 

Printed Name: Christian Luz

Title: Associate Vice President

ADDENDUM ACKNOWLEDGEMENT

INSTRUCTIONS: COMPLETE PART I OR PART II, WHICHEVER APPLIES

PART I:
List below the dates of issue for each addendum received in connection with this Solicitation:

Addendum #1, Dated _____

Addendum #2, Dated _____

Addendum #3, Dated _____

Addendum #4, Dated _____

PART II:

☒ NO ADDENDUM WAS RECEIVED IN CONNECTION WITH THIS QUALIFICATION

DESMAN, Inc.
Firm Name

Signature

Christian Luz, Associate Vice President
Name and Title (Print or Type)

June 1, 2021
Date

PROPOSER'S CERTIFICATION

I have carefully examined the Request for Proposal, Instructions to Proposers, General and/or Special Conditions, Specifications, Proposal and any other documents accompanying or made a part of this invitation.

I hereby propose to furnish the goods or services specified in the Request for Proposal at the prices or rates quoted in my proposal. I agree that my proposal will remain firm for a period of up to ninety (90) days in order to allow the City adequate time to evaluate the proposals. Furthermore, I agree to abide by all conditions of the proposal.

I certify that all information contained in this proposal is truthful to the best of my knowledge and belief. I further certify that I am duly authorized to submit this proposal on behalf of the vendor /contractor as its act and deed and that the vendor / contractor is ready, willing and able to perform if awarded the contract.

I further certify that this proposal is made without prior understanding, agreement, connection, discussion, or collusion with any person, firm or corporation submitting a proposal for the same product or service; no officer, employee or agent of the CITY OF RIVIERA BEACH or of any other proposer interested in said proposal; and that the undersigned executed this Proposer's Certification with full knowledge and understanding of the matters therein contained and was duly authorized to do so.

DESMAN, Inc.
NAME OF BUSINESS

srebora@desman.com
E-MAIL ADDRESS

BY: _____
SIGNATURE OF AUTHORIZED OFFICER

Sworn to and subscribed before me this 27th day of May, 2021.

Stephen J. Rebora, President and CEO
PRINTED NAME AND TITLE

100 SE 3rd Ave, 10th Floor
Ft Lauderdale, FL 33394
MAILING ADDRESS

_____
SIGNATURE OF NOTARY

OFFICIAL SEAL
SHANNON GRIBLIC
NOTARY PUBLIC, STATE OF ILLINOIS
My Commission Expires 9/30/24

MY COMMISSION EXPIRES: 9.30.24

Chicago IL 60602
CITY, STATE, ZIP CODE

PERSONALLY KNOWN ✓
OR PRODUCED

312-263-8400
TELEPHONE NUMBER

IDENTIFICATION _____

312-263 8406
FAX NUMBER

TYPE: _____

CONFLICT OF INTEREST DISCLOSURE FORM

The award of this contract is subject to the provisions of Chapter 112, *Florida Statutes*. All Proposer's must disclose within their proposals: the name of any officer, director, or agent who is also an employee of the City of Riviera Beach.

Furthermore, all Proposer's must disclose the name of any City employee who owns, directly, or indirectly, an interest of more than five percent (5%) in the Proposer's firm or any of its branches.

The purpose of this disclosure form is to give the City the information needed to identify potential conflicts of interest for evaluation team members and other key personnel involved in the award of this contract.

The term "conflict of interest" refers to situations in which financial or other personal considerations may adversely affect, or have the appearance of adversely affecting, an employee's professional judgment in exercising any City duty or responsibility in administration, management, instruction, research, or other professional activities.

Please check one of the following statements and attach additional documentation if necessary:

__X____ To the best of our knowledge, the undersigned firm has no potential conflict of interest due to any other Cities, Counties, contracts, or property interest for this Qualification.

_____ The undersigned firm, by attachment to this form, submits information, which may be a potential conflict of interest due to other Cities, Counties, contracts, or property interest for this Qualification.

Acknowledged by:

DESMAN, Inc.
Firm Name

Signature

Christian Luz, Associate Vice President
Name and Title (Print or Type)

June 1, 2021
Date

DRUG FREE WORKPLACE

Preference shall be given to businesses with drug-free workplace programs. Whenever two or more proposals, which are equal with respect to price, quality, and service, are received by the State or by any political subdivision for the procurement of commodities or contractual services, a proposal received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. Established procedures for processing tie bids will be followed if none of the tied vendors has a drug-free workplace program. In order to have a drug-free workplace program, a business shall:

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.

2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counselling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.

3. Give each employee engaged in providing the commodities or contractual services that are under contract a copy of the statement specified in subsection (1).

4. In the statement specified in subsection (1), notify the employees that, as a condition of working on the commodities or contractual services that are under contract, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contender to, any violation of chapter 893 or of any controlled substance law of the United States or any state for a violation occurring in the workplace no later than five (5) days after such conviction.

5. Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is so convicted.

6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

As the person authorized to sign the statement, I certify that this form complies fully with the above requirements.

THIS CERTIFICATION is submitted by Christian Luz (INDIVIDUAL'S NAME) the

Associate Vice President (TITLE/POSITION WITH COMPANY/VENDOR) Of DESMAN, Inc. (NAME OF COMPANY/VENDOR)

who does hereby certify that said Company/Vendor has implemented a drug free workplace program which meets the requirements of Section 287.087, Florida Statutes, which are identified in numbers (1) through (6) above.

SIGNATURE

June 1, 2021
DATE

CITY OF RIVIERA BEACH
NOTIFICATION OF PUBLIC ENTITY CRIMES LAW

Pursuant to Section 287.133, Florida Statutes (1995), you are hereby notified that a person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid on a contract to provide any goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids on leases or real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in s.287.017 [F.S.] for CATEGORY TWO [$35,000.00] for a period of 36 months from the date of being placed on the convicted vendor list.

Acknowledged by:

DESMAN, Inc.

Firm Name

Signature

Christian Luz, Associate Vice President

Name & Title (Print or Type)

June 1, 2021

Date

APPENDIX

TWO MARKET RATE STUDIES

- NAPLES DOWNTOWN MOBILITY STUDY

- ST AUGUSTINE TRANSPORTATION AND MOBILITY STUDY

SAMPLE
REPORT

Report and Executive Summary

City of Naples

Downtown Mobility Study

Submitted April 12, 2017 by

DESMAN
Design Management

Christian Luz, P.E.
100 S.E. Third Ave, 10th Floor
Fort Lauderdale, FL 33394
954.526.6464

EXECUTIVE SUMMARY

The following summary provides a synopsis of the main elements of the parking study including a number of recommendations. Additional detail is provided within the document.

A. Existing Conditions

In order to understand the utilization characteristics of public parking in the downtown Naples study area, our team not only reviewed prior studies provided by the City, but also conducted counts of the number of vehicles parked in each off-street parking facility and on each street where public parking is permitted. Prior to the conducting the counts, DESMAN discussed the goals and objectives of the data collection and subsequent analysis with the Project Team, including the City. Based on those discussions the decision was made to conduct the counts under conditions that represent a peak season weekend during the tourist season. This period was chosen because during nearly all other periods of the year, there is adequate parking in the downtown and there was a desire to better understand the parking characteristics during peak season. A higher level of understanding of the peak conditions will help determine the adequacy of the parking system under high usage and consequently, what parking management solutions might be most effective.

Counts were conducted every other hour from 10AM to 10PM on February 3rd and February 4th, 2017. This survey methodology allowed us to observe vehicle accumulation patterns across the study area and identify facilities or blocks that reached their practical capacity. Based on our observations, the Friday peak demand period occurred at 6PM, when 86% of the public parking spaces in the study area were occupied. On Saturday, the peak occurred at 8PM, when 87% of the public spaces were occupied.

B. Summary of Findings

Based on our in-person observations, review of the available historical data and conversations with the City, the public parking supply within the study area is more than adequate to handle the levels of parking demand generated from Easter through December, except for large events, such as 4th of July fireworks. The issues arise during the peak season from mid-January to Easter, when parking demand generated by the retail, restaurants and nightlife consume all or nearly all of the available public parking spaces in downtown.

1. *Maintaining the status Quo* - Should the City choose to maintain the status quo and not institute any additional active parking management measures to manage demand, the on- and off-street public parking spaces will continue to fill to near capacity on weekday and weekend nights during the busy season. Will this may not have an impact on the number of people who come to the 5th Avenue area, maintaining the status quo parking situation could lead to increased levels of frustration among drivers that prevent some people from coming to the area. The current peak season parking conditions could be further exacerbated should additional development occur within the study area without new parking.

2. *Parking Demand and Supply* - While a majority of the facilities, including the 8th Street South Garage, exceeded their practical capacity on Friday, there was a limited amount of available capacity in the 6th Avenue South Garage and the other off-street parking lots on the southeast

side of the study area. On Saturday, both parking garages and the parking lots more proximate to 5th Avenue all exceeded their practical capacity during the peak demand period. The data demonstrates that, during the busiest periods, parking in the study area is highly utilized and it is difficult for vehicles entering the area to find an available public parking space. At these times, there are a large number of vehicles cruising the street, as well as traffic queues that regularly block intersections. The high demand for parking and lack of sufficient capacity are key contributors to both of these situations.

3. *Parking Space Turnover and Duration of Stay Characteristics* - During the Friday observations, 14 of the 157 public parking spaces on 5th Avenue were occupied by the same vehicle for either 6 or 7 hours out of the 7-hour survey period. These spaces served only 17 parkers, when they could have served as many as 56 parkers, based on an average duration of stay of 1.6 hours. On Saturday, 9 of the 157 spaces experienced the same issue. In each instance where one vehicle remains parked in the same space for most or all of the day, this reduces the potential for other visitors and potential business patrons to utilize that space. These longer-term parkers should not be occupying the most desirable on-street spaces, but instead should be parking in off-street facilities. However, given the lack of on-street parking restrictions, it is currently not illegal for vehicles to remain parked in the same space for the entire day.

C. Recommendations

1. *Paid Parking Recommendation* - Based on the nature of the parking demand in the area around 5th Avenue, DESMAN recommends that a system of on-street paid parking be introduced into this area of the City. Not only will paid parking create a source of revenue that can be leveraged to support future development, it will also help ensure that the existing parking supply can be managed effectively to accommodate the varying needs of the many different parking user groups coming to downtown Naples.

2. *Free Parking in Garages* - It is further recommended that free parking still be offered in the City's parking garages and surface parking lots, in order to provide employees and visitors with a "free" parking option and to encourage longer-term parkers to park in spaces that are not on-street.

3. *Valet Parking* - If the goal is to provide an adequate number of parking spaces to serve the visitors and employees of the downtown, then valet parking is the most cost-effective solution possible. The following are some recommendations for improving the valet ordinance related how valet services are established in the City and what should be required of existing and future valet companies:

   - Operators should be required to carry proof of insurance which should explicitly exempt the City of Naples from any liability.
   - Require payment by the valet operator to the City for any loss of public spaces due to vehicle pick up/drop-off or vehicle storage in on- or off-street public parking spaces.
   - Valet parking plans submitted to City Council should be required to demonstrate that they do not create conflicts, backups, queuing, congestion, or other issues on 5th Avenue when in operation.

- Valet parking plans submitted to City Council should identify where the operator plans to park the vehicles they valet.
- The Business Tax paid annually by valet companies should be increased to account for the loss of use of spaces on the public way and for future maintenance of those spaces; valet operations are classified as a Service Establishment and should be required to pay their fair tax accordingly.

4. *Expanding the Parking System* - Based on the results of parking utilization surveys conducted during Naples' peak season, there is currently a shortage of available public parking within the study area. Even if active parking management practices are introduced in downtown Naples, peak parking demand will likely continue to exceed the available supply of parking in the evenings during the peak season. The obvious solution to this existing shortfall is to increase the supply of parking available to the public.

   - Due to the cost of acquiring land and constructing new parking facilities, it is recommended that the City first seek opportunities to lease existing private parking facilities as temporary public parking in the evenings and on weekends or encourage more valet parking operations.

   - The City could lease vacant land for use as temporary parking. It may be possible to provide/expand the existing the trolley system or introduce a low-cost trolley systems to serve the peak period weekends during the tourist season.

   - The City could also attempt to acquire one or more vacant parcels of land within the study area and build additional parking inventory.

   - As a longer-term solution, there may be the opportunity for the City to partner with a developer on the construction of additional public parking spaces. This has the potential to be a less expensive way for the City to gain additional public parking in a structured parking facility. The addition of 100 or 150 "public" parking spaces to a private parking facility serving a new development would likely meet most of the City's existing peak needs.

5. *D-Downtown District Analysis Preliminary Recommendations* - Preliminary recommendations have been made related to parking as part of the ongoing D-Downtown District Analysis project.

   - One recommendation is to require 1.5 parking spaces per efficiency housing unit, which seems reasonable.

   - The DESMAN team does not agree with the recommendation to use the 6th Avenue South Garage as a way to satisfy demand in the renamed Midtown Design District.

I. EXISTING CONDITIONS

A. Parking Inventory

The parking inventory in downtown is divided between public parking and private parking affiliated with individual businesses and residences. Public parking is available free-of-charge in the City of Naples (Naples) two parking garages, as well as in several surface parking lots and on-street. Private parking in downtown consists almost entirely of small surface parking lots located behind businesses and residences that front 5th Avenue South and other streets in the area. By and large, these parking lots are not gated, but signs posted in each of the facilities indicate who is permitted to park in what spaces.

Figure A shows the locations of the public off-street parking facilities in downtown, as well as the segments of street where on-street parking is generally permitted.

As shown in the figure, there are two public parking garages located in downtown and six surface parking lots, with the on-street parking concentrated primarily along 5th Avenue South, Park Street, 6th Street, and 8th Street. Per a previous analysis performed by the Business Improvement District (BID) with the help of the Police Department, and supplemented by recent on-site observations, the two parking garages are nearly identical in size, with one garage containing 339 spaces and the other containing 340 spaces. Additionally, in total, the surface parking lots contain 253 spaces and there are approximately 570 on-street spaces. The total number of public parking spaces in downtown exceeds 1,500 spaces.

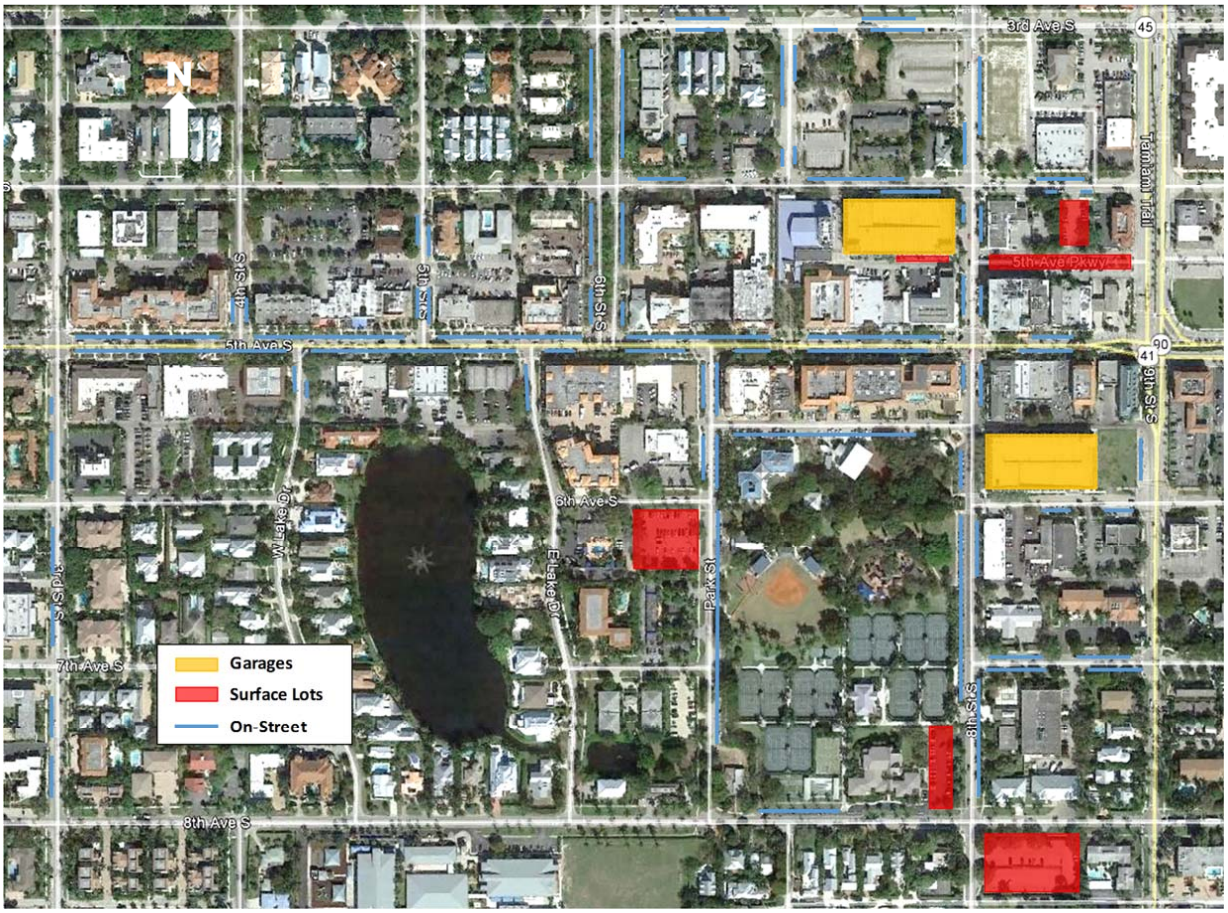
According to the same analysis performed by the BID, the downtown also contains more than 1,000 private parking spaces.

B. Existing Parking Policies

As stated previously, all public parking in downtown Naples is available free-of-charge. In addition to being free, while there are some on-street spaces and spaces on the ground floors of the parking garages that have posted time limits, a majority of the spaces allow for a vehicle to remain parked for an indefinite period of time.

The City of Naples Police Department is responsible for enforcement of traffic and parking-related violations. The Police Department issues citations for violation of the City's Code of Ordinances related to parking. Examples of the types of violations for which a citation can be issued include, but are not limited to: parking an unauthorized vehicle in a handicapped parking space, parking too close to a corner, parking in a crosswalk, parking a vehicle too far from the curb – among others. The fine for violation of the handicapped parking ordinance is $250.00, while all other violations carry a $100.00 fine. Aside from handicapped parking violations, if the fine for a parking violation is paid within 10 days of the date of the violation, the fine is reduced to $35.00 and, if the fine is paid after 10 days but prior to 60 days of the date of the violation, the fine is $45.00.

Figure A: Locations of Existing Public Parking in Downtown



In addition to public self-parking, the City's ordinances allow for valet parking. Based on on-site observations and information provided by the City, a number of the restaurants located along 5th Avenue South, as well as the Inn on 5th, offer valet parking. Valet pickup/drop-off locations were observed in the following locations:

- Directly in front of the Inn on 5th
- East side of 4th Street at 5th Avenue (after 4PM)
- East side of W. Lake Drive at 5th Avenue (after 4PM)
- West side of W. Lake Drive at 5th Avenue (after 4PM)
- Cambier Park Way
- 4th Avenue between 6th and 7th streets

Customers are charged $5 and up for this service, depending on the valet location and, presumably although not observed, the day of the week and time of the year.

The operators of the valet parking operations did not appear to use public parking spaces to store valet vehicles. Rather, arrangements are made between the valet companies and individual property owners for use of their parking spaces during, what are typically, off-peak periods for office land uses in the area.

C. Existing Parking Ordinances

In addition to the circumstances under which a citation can be issued related to parking and the conditions to which a valet parking operation must comply, the City's Code of Ordinances details other requirements related to parking, as well. Chapters 36, 40, 50, 56, and 58 of the Code of Ordinances all deal with parking in some fashion. Section 50-103 details both the minimum dimensions of parking spaces constructed in particular configurations, as well as the number of handicapped parking spaces that must be provided based on the size of a proposed parking facility. Section 50-104 describes the number of parking spaces required to be constructed for any given land use type. Additional sections of the Code of Ordinances deal with the operation of parking meters, the setting of parking rates, the establishment of the hours during which vehicles are permitted to park, and payment-in-lieu of parking requirements.

In general, Naples Code of Ordinances related to parking appears adequate and within the norms of what similar cities require and allow.

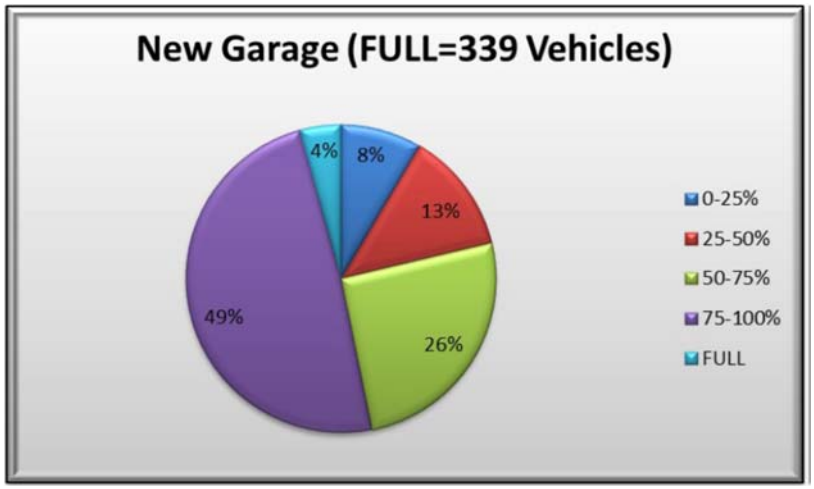
D. Historical Utilization of Public Parking

The peak activity in Naples typically runs from January through March. This is the time of year when the majority of part-time residents and visitors come to Naples and, as a result, the time of year when the demand for parking, both public and private, is at its peak. In addition, there are occasional occurrences of unusually-high parking demand associated with large events, such as 4th of July fireworks and the lighting of the Christmas lights. In order to develop the most effective solutions to any parking issues in Naples, it is necessary to understand the levels of parking activity experienced during these time periods.

In addition to observations made by DESMAN in early February 2017, which will be presented later in this report, historical utilization data for the City's two parking garages was gathered by

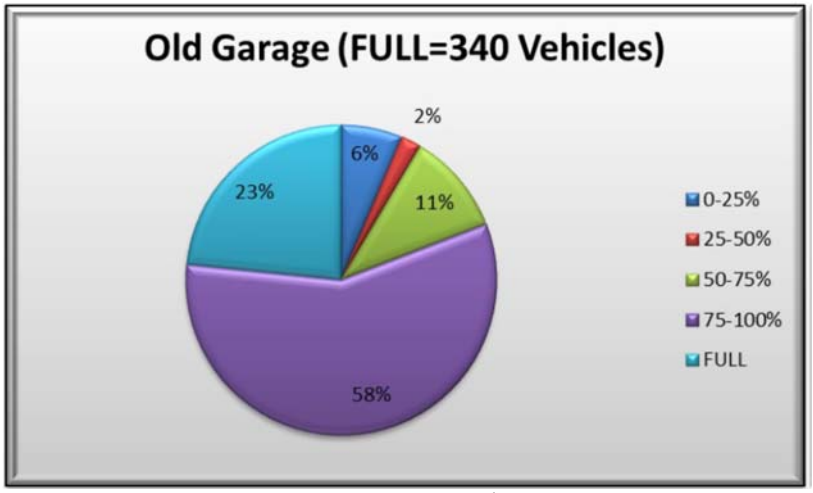
the Naples Police Department in March and April 2014. According to a document prepared by the Naples Police Department dated May 2014 and entitled *"City Garage/Parking Analysis,"* from March 5th – April 20th, 2014, the Police Department gathered utilization data at the City's two parking garages each day between the hours of 6PM and 10PM. **Figure B** and **C** (below) are excerpts taken from the report which illustrate the percentage of the survey days during which each garage reached the noted levels of utilization.

Figure B: Utilization of the 6th Avenue South Garage (New Garage)
March 5th – April 20th, 2014



Source: Naples Police Department Report, "City Garage/Parking Analysis" (May 2014)

Figure C: Utilization of the 8th Street South Garage (Old Garage)
March 5th – April 20th, 2014



Source: Naples Police Department Report, "City Garage/Parking Analysis" (May 2014)

As shown in the above graphics, the “New Garage” was fully utilized during 4% of the surveys, while the “Old Garage” was fully utilized 23% of the time. For the purposes of this analysis, “fully utilized” means that 100% of the spaces were full. In addition, the “New” and “Old” garages were 75% or more utilized 49% and 58% of the time, respectively.

According to the same report, the garages were fully utilized a total of 13 times during the survey period, 10 of which required that the 8th Street South (“Old”) Garage be closed to additional parkers. On these 10 occasions, according to the Police Department parking analysis, 585 vehicles had to be turned away from parking at the facility. It was further indicated that 6 of the 10 incidents when the “Old Garage” had to be closed occurred during special events or parades in the “3rd Street/5th Avenue districts.”

Despite the fact that the parking utilization data compiled by the Police Department was gathered two years ago, during a very limited time period and only at the City’s two parking garages, the results seem to indicate that there are instances when the demand for parking at the major public parking facilities in the City not only reaches, but exceeds their capacity. This fact has been confirmed by anecdotal evidence provided by City personnel.

II. PARKING DATA COLLECTION

Given the historical evidence of parking shortfalls in Naples, it was critical for our team to conduct additional observations of parking utilization in Naples during the 2017 peak season. This allowed our team to observe peak parking conditions throughout the busiest times of the day for the entire downtown (rather than limiting observations to the garages), which provided the proper context for developing appropriate and reasonable solutions to current and potential future parking issues in Naples.

The following presents a summary of the parking utilization observations made by our team in early February 2017.

A. Peak Season Parking Demand

In order to gain a clearer understanding of parking characteristics in the entire study area, our team performed on-site observations of all public parking from 10AM to 10PM on Friday, February 3rd and Saturday, February 4th, 2017. These dates were identified by the City as peak days during the peak season in Naples. Conducting observations on a Friday allowed us to document the interaction of office and business parkers on a normal business day, with tourists and retail and restaurant patrons. On Saturday, Cambier Park was the site of a craft fair, Art in the Park, which brought additional visitors to the study area in the late morning and early afternoon that had to compete for parking with expected tourist, retail and restaurant visitors. Both days also provided us the opportunity to observe the impact of restaurant and nightlife activity on parking.

While the following paragraphs provide a general description of the parking demand conditions we observed, Section II.B contains a detailed accounting of the utilization of all public parking spaces within the study area during the same period.

i. *On-Street Demand*

As might be expected, the demand for on-street parking is primarily focused along 5th Avenue, with demand spilling over onto the cross streets as occupancy increases for the on-street spaces on 5th Avenue. On both observation days, parking spaces on 5th Avenue began to fill first between 5th and 8th streets, then demand pushed east and west to the borders of the study area and north and south onto the streets intersecting 5th Avenue. Fifth Avenue and the spaces in close proximity to 5th Avenue on the intersecting streets remained in high demand over the course of the entire observation period on both Friday and Saturday.

In addition to the spaces along and in closest proximity to 5th Avenue, the demand for parking around Cambier Park and along 8th Street, opposite the Park, was very high over the course of both survey days. On both Friday and Saturday, the spaces on Cambier Park Way remained 100% occupied nearly all day. Park and 8th streets both experienced high demand for parking as well, from users of Cambier Park's recreational facilities during the day on Friday and visitors to Art in the Park on Saturday.

On both observation days, the demand for on-street parking increased over the course of the day, with daytime tourists and retail and restaurant patrons giving way to higher volumes of restaurant and nightlife patrons in the late afternoon and into early evening. On-street

parking spaces on the periphery of the study area to the north, south and east also filled to capacity later in the day, as the availability of parking closer to 5th Avenue was reduced.

ii. *Off-Street Demand*

Based on our observations, the demand for off-street parking was less intense than that for on-street parking. This is not unique to Naples, as parkers typically desire to park in on-street spaces within sight of their desired destination(s), rather than park in a surface lot or parking garage that may be around the corner. In Naples, just as in other cities across the country, drivers will cruise the street searching for an available space, resorting to parking in an off-street facility only after spending several minutes or more searching for an on-street space.

In general, during the days of our on-site observations, the majority of the off-street parking facilities had significant available capacity throughout the day. Notable exceptions to this were the 12 spaces next to the 8th Street South Garage and the spaces along 5th Avenue Parkway, all of which were in high demand throughout the course of both survey days. In addition, as was the case with the on-street spaces, during the evening hours around dinner time (6PM-9PM), nearly all of the off-street parking facilities experienced high levels of demand. Given their distance from the main activity centers near 5th Avenue, the surface lot serving the Community Center and the surface lot located at 8th Street and 8th Avenue had a significant number of available spaces during the evening peak demand periods.

B. Current Utilization of Public Parking

In the parking industry, parking facilities and systems are typically designed so that, even during peak demand periods, some percentage of the parking spaces remain empty. Parking facilities that serve infrequent visitors are ideally designed so that, during a typical peak demand period, 15% of the spaces remain available to accommodate new parkers entering the facility. For parking locations that serve frequent parkers, such as a garage dedicated to the employees in one particular office building, that number can be 10% or less. Maintaining an inventory of available spaces, even during the peak demand period, makes it easier for parkers to find a space, reduces the amount of time drivers spend searching for empty spaces and generally results in a more positive parking experience. This concept, referred to as “practical capacity”, refers to that point at which a parking facility or system has reached its functional limit and is unable to efficiently or safely accommodate additional parking demand.

In order to understand the utilization characteristics of public parking in the downtown Naples study area, our team conducted counts of the number of vehicles parked in each off-street parking facility and on each street where public parking is permitted. Counts were conducted every other hour from 10AM to 10PM on February 3rd and February 4th, 2017. This survey methodology allowed us to observe vehicle accumulation patterns across the study area and identify facilities or blocks that reached their practical capacity.

Based on our observations, the Friday peak demand period occurred at 6PM, when 86% of the public parking spaces in the study area were occupied. On Saturday, the peak occurred at 8PM, when 87% of the public spaces were occupied.

Figures D and **E**, below, present the peak demand characteristics observed in the study area on Friday and Saturday, respectively. Each street segment where public parking is permitted, as well as each off-street facility, is identified with a color that corresponds to a given level of utilization.

As shown in both figures, street segments and off-street parking facilities shaded in **RED** were greater than 85% utilized during peak demand period, those shaded in **ORANGE** were between 70% and 84% utilized and those shaded in **GREEN** were less than 70% utilized. These figures clearly demonstrate that, during the peak demand periods on both Friday and Saturday, nearly every on-street parking area exceeded its practical capacity. In fact, as shown in the full survey data presented in the **Appendix**, a majority of the street segments surveyed were 100% occupied during the peak demand period, meaning that no spaces were available for new parkers.

While a majority of the facilities, including the 8th Street South Garage, exceeded their practical capacity on Friday, there was a limited amount of available capacity in the 6th Avenue South Garage and the other off-street parking lots on the southeast side of the study area. On Saturday, both parking garages and the parking lots more proximate to 5th Avenue all exceeded their practical capacity during the peak demand period.

The data demonstrates that, during the busiest periods, parking in the study area is highly utilized and it is difficult for vehicles entering the area to find an available public parking space. At these times, there are a large number of vehicles cruising the street, as well as traffic queues that regularly block intersections. The high demand for parking and lack of sufficient capacity are key contributors to both of these situations.

C. Current Space Turnover and Duration of Stay Characteristics

The intended use of proximal, on-street parking is for short-term visitors, while off-street parking is intended to serve longer-term parkers. On-street parkers should have frequent turnover and durations of stay between 1 and 2 hours. This makes it more likely that retail and restaurant patrons are able to find an available space near their desired destinations, increasing retail and restaurant traffic. Low turnover of parking spaces can mean either the patrons of the various establishments remain parked for long periods of time or, more likely, that employees of area businesses are parking in spaces that should be available to customers. In areas with no time restrictions on parking duration, such as 5th Avenue, it is more likely for employees or others to park for extended durations, reducing the availability of these spaces for use by customers.

One way to determine how the on-street parking is being utilized is to measure the turnover and duration of stay characteristics of the vehicles parked in those spaces. In the Naples study area, this was accomplished by recording specific vehicles that were parked on- 5th Avenue from 10AM to 5PM during the data collection effort. By documenting this information on an hourly basis, it was possible to determine how long each vehicle remained parked, to calculate the average number of times each parking space was used by a parker (turn over) and to calculate the average duration of stay for vehicles parked on 5th Avenue.

Figure D: Peak Period Utilization (6PM), Friday, February 3rd, 2017

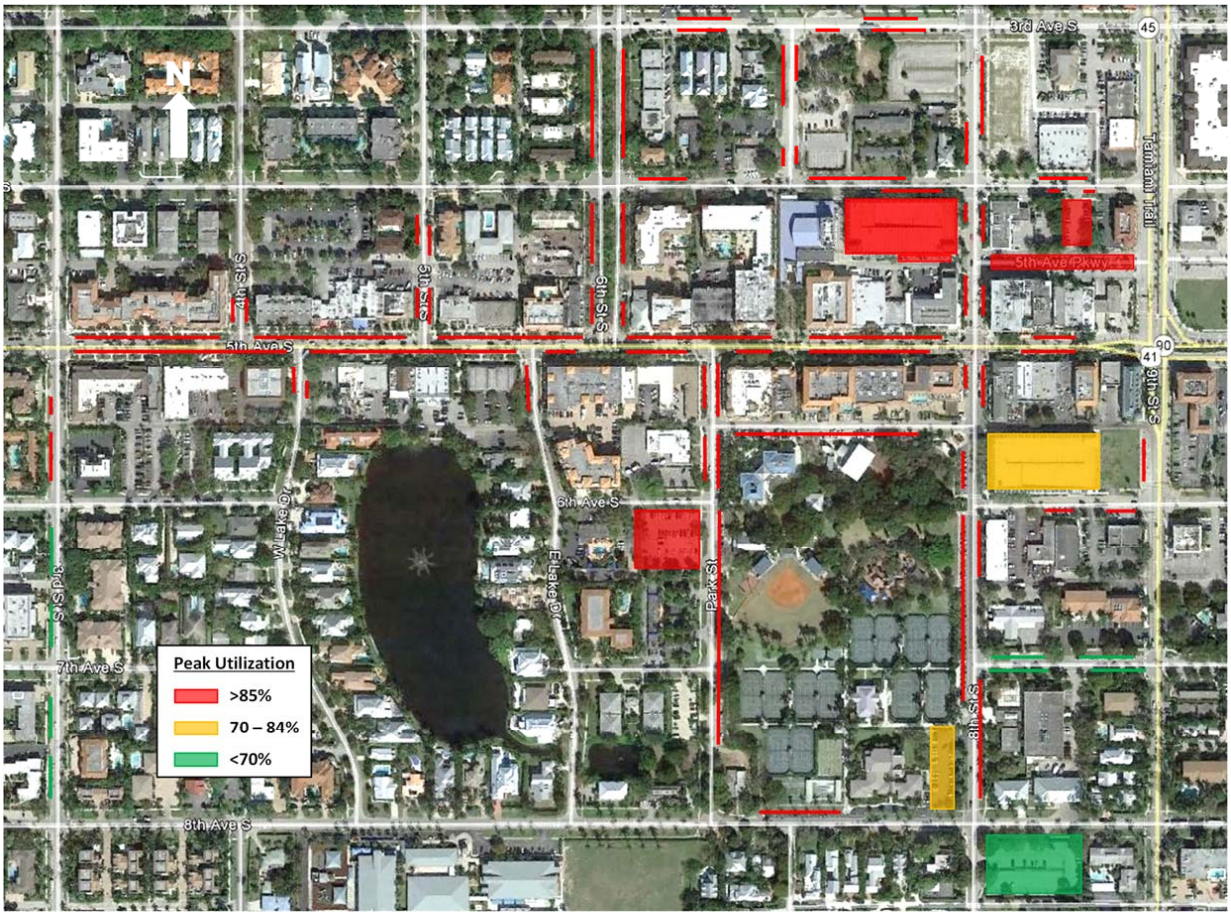
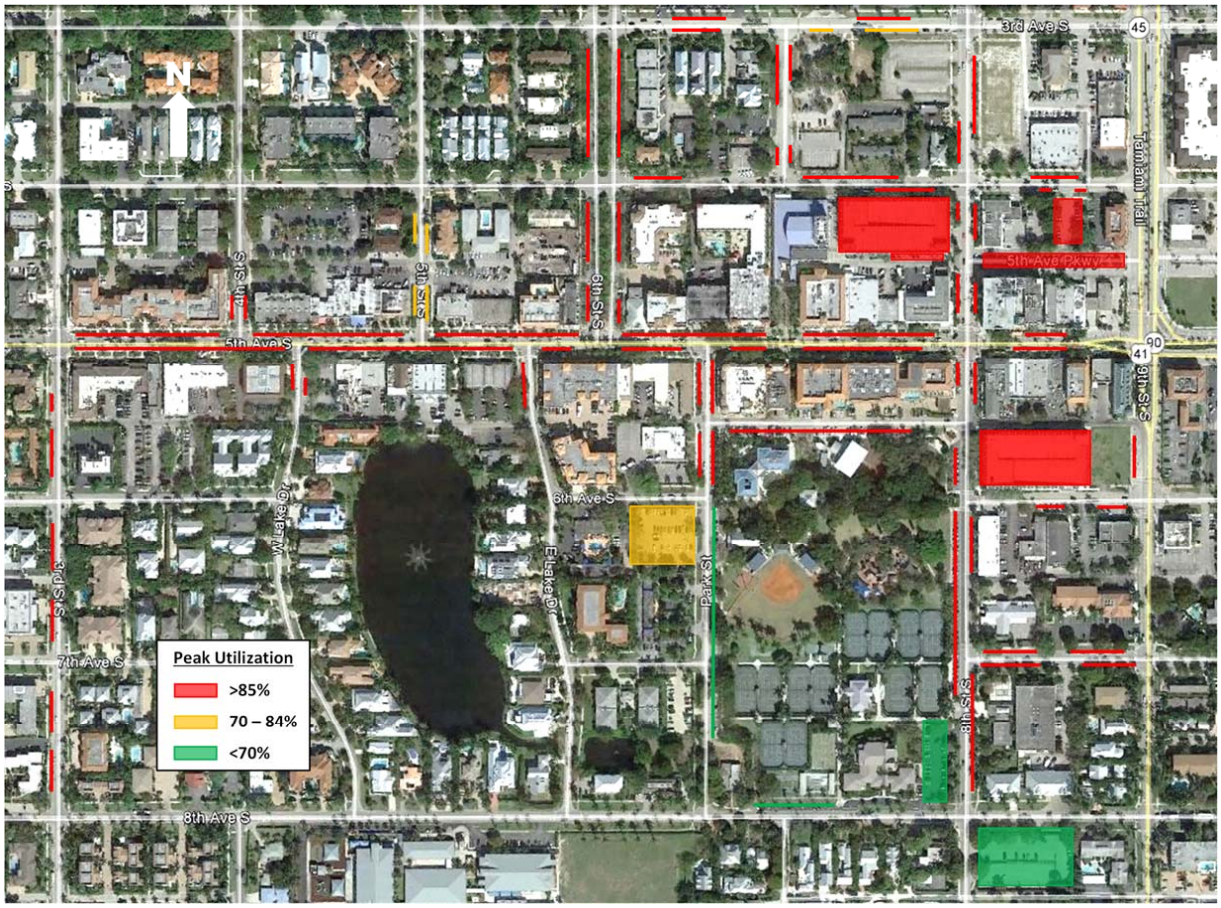


Figure E: Peak Period Utilization (8PM), Saturday, February 4th, 2017



On Friday, February 3rd, 2017, 575 different parked vehicles were observed in the 157 spaces along 5th Avenue (this does not include the ~5 spaces designated as valet pickup/drop-off for the Inn on 5th). This translates to an average turnover of **3.7 vehicles** per space during the 7-hour time period studied. On average, each of these vehicles remained parked for **1.6 hours**. On Saturday, 614 vehicles were observed parked along 5th Avenue, resulting in an average turnover of **3.9 vehicles** per space and average duration of **1.5 hours**, similar to the Friday figure.

While parking space turnover approaching four times per day and durations of stay less than two hours both indicate frequent movement of vehicles and a healthy parking environment for retail and restaurant land uses, our team did document some activity that is of concern. During the Friday observations, 14 of the 157 public parking spaces on 5th Avenue were occupied by the same vehicle for either 6 or 7 hours out of the 7-hour survey period. These spaces served only 17 parkers, when they could have served as many as 56 parkers, based on an average duration of stay of 1.6 hours. On Saturday, 9 of the 157 spaces experienced the same issue. In each instance where one vehicle remains parked in the same space for most or all of the day, this reduces the potential for other visitors and potential business patrons to utilize that space. These longer-term parkers should not be occupying the most desirable on-street spaces, but instead should be parking in off-street facilities. However, given the lack of on-street parking restrictions, it is currently not illegal for vehicles to remain parked in the same space for the entire day.

A complete summary of the turnover and duration of stay characteristics documented on 5th Avenue during the surveys can be found in the **Appendix** to this report.

D. Benchmarking

A benchmarking analysis of current parking rates and parking management practices was conducted of cities which were identified as comparable to Naples. The results of this analysis, presented in the below table, are intended to guide Naples in the development of a parking management strategy for its on- and off-street parking system.

Data Requested	City of West Palm Beach	City of Clearwater	City of Venice	City of Sarasota
Population[1]	102,436	109,703	21,253	53,326
Public Parking Spaces (on- and off-street)	3,100	3,900	Unknown	4,000
Metered Parking Rates (downtown)	$0.75 - $1.25/hour	$0.50/hour	No Meters	
On-Street Hours of Enforcement	Monday - Saturday, 7AM - 7PM or 7AM - Midnight	Monday - Friday, 8AM - 6PM	6AM - 12AM	Monday - Friday, 9AM - 6PM
On-Street Parking Time Limits	Up to 4 Hours	1 or 2 Hours	2 Hours	2 or 3 Hours
Surface Lot Rates	$1/first 2 hours, $1/hour thereafter, $5 Maximum	Free - $0.50/hour; free lots have no time limit; 3 - 10 hour max. at pay lots	Free of Charge	Free of Charge
Garage Rates	$1/first 2 hours, $1/hour thereafter; $10 Maximum	$0.50/hour, $5.00 max.; $48.15/month; free from 7PM Friday to 7AM Monday	N/A	$5.00 Flat Rate (only on certain days); free on most days
Mobile Payment at Meters	Yes	Yes	N/A	N/A
Fine for Metered Parking Violation[2]	$10.00	$15.00	$25.00[3]	$25.00[3]

1) Represents the 2013 population.

2) Fine amounts shown are for non-payment of parking meters.

3) Fine amount is for parking in excess of posted time limit.

III. FINDINGS & RECOMMENDATIONS

The results of the analysis of public parking within the downtown Naples study area reveals that, in general, the area contains adequate public parking inventory to satisfy the peak demand conditions during the offseason, but that there is a marked parking shortfall during the peak tourist season. During the peak season from mid-January to Easter, parking demand generated by the retail, restaurants and nightlife consume all or nearly all of the available public parking spaces in downtown. This situation contributes to significant numbers of vehicles cruising the streets for available spaces, creating high levels of traffic congestion throughout the area and loss of potential customers and visitors.

With the goal being to more efficiently accommodate the peak parking demand generated by 5th Avenue, the following recommendations were developed to improve the management, utilization and availability of public parking spaces within the study area.

A. Modal Considerations

Please refer to other sections of the larger study for information on modal considerations.

B. Parking Management Practices

One of the first steps is to determine if additional controls should be put in place to manage parking demand. Naples does not currently actively manage public parking within the study area, aside from signage located at the grade level of the 8th Street South Garage imposing a 2-hour time limit. Like Naples, many communities have struggled with the question of whether paid parking should be introduced, if parking should be offered free-of-charge with time limits imposed or if there should be any restrictions at all.

The following narrative describes the theory behind and benefits of establishing a system of paid public parking, as well as methods for managing parking without charging user fees. Should the City choose not to bring paid public parking to this area of Naples, information on alternate funding mechanisms is presented that could be used to support the development and maintenance of future parking infrastructure without relying on parking user fees.

i. *Paid vs. Unpaid Parking*

Within many municipalities there might be strong opinions on both sides of the topic of charging for parking. Many communities are reluctant to introduce pay parking believing that their customer base will shop and dine where parking is free. If the destination is desirable, like 5th Avenue, the introduction of pay parking will have little to no impact and may increase the customer base over time because the parking conditions may improve. However, in order for this type of system to be successful, the cost of parking and the ways in which certain user groups are accommodated must be carefully considered.

The following sections present the principles of managing parking through pricing, as well as management of free parking, along with the benefits and liabilities associated with each. Additionally, we offer our recommendation for how parking can be most effectively managed within the study area.

a. *Parking Management through Pricing*

Within the parking industry, demand-responsive pricing, which sets parking rates in order to achieve target rates of utilization in a facility, has been shown to be the most effective tool for incentivizing change. The goal is to incentivize frequent turnover of the most desirable parking spaces, while also providing a longer-term parking option at a reasonable price for those patrons planning longer stays. Charging for parking will not only generate revenue for the City, it will also help eliminate the situation where a vehicle remains parked in a space for the entire day.

Charging for parking on 5th Avenue and the adjoining streets, as well as, potentially, in the off-street facilities, may provide the City several benefits. First, pay parking will help create turnover at the parking spaces on and nearest to 5th Avenue. This will allow for multiple sets of patrons to use these spaces throughout the course of the day, boosting the potential population of customers for the area's businesses. In other words, employees of the businesses in this area, long-term hotel guests and people going to the beach will not be able to occupy spaces early in the day and remain parked indefinitely, without paying. With a proper rate schedule in place, these long-term parkers will be motivated to park at spaces that are farther from their destinations, but are also lower-cost or free (i.e. the City's parking garages and surface lots).

Second, the creation of a managed parking system in this area of Naples will come at a cost. In addition to paying the personnel who will enforce parking regulations and manage the system, there are costs associated with revenue collection equipment, lighting the existing facilities, landscaping, and repair of parking surfaces. The revenue generated by the new system can cover the costs associated with operating the system.

Lastly, revenue generated by the parking system can be used for future parking improvements. Any net revenue generated through parking fees can be pledged toward improving the parking infrastructure, the construction of new parking supply or be used to secure debt financing. Without this revenue source or a commitment by a private developer to build additional parking to support new development, the financial responsibility for this type of infrastructure investment would fall on the City's general fund. Furthermore, excess revenue that is generated can be redeployed into the downtown to provide and improve amenities or support other expenses.

b. *Management of Free Parking*

As described here, "free" parking refers to parking for which users do not pay based on the amount of time they park. This does not mean that there are no restrictions on parking, simply that users are not charged a fee on an hourly, daily or monthly basis to park. An example of unrestricted free parking would be what is currently offered within the study area, except for the few time-restricted spaces in the 8th Street South Garage. Other municipal parking systems employing free parking typically use time restrictions in order to ensure the turnover of parking spaces.

To further increase the turnover of spaces, time-limit restrictions could be imposed within the study area, specifically on 5th Avenue and the cross streets immediately adjacent to 5th Avenue, so that employees, beachgoers or other long-term parkers do not occupy

spaces for the entire day. Under this type of system, on-street spaces would be more readily-available for short-term retail and restaurant customers, while longer-term parkers would be influenced to park in the City's garages and surface parking lots.

While management of time-limited, free parking spaces would require enforcement of the posted parking regulations, there is the potential for the City to generate revenue from the issuance of parking tickets to vehicles that park in excess of the posted time limits. However, when compared to a paid parking system, the revenue-generating potential for this type of time-limited free parking is minimal. Additionally, there is the potential negative impact that issuing a ticket to an infrequent visitor can have on the City's image. These are just some of the considerations that need to be evaluated when determining which system of management the City prefers.

c. *Maintaining the Status Quo*

Based on our in-person observations, review of the available historical data and conversations with the City, the public parking supply within the study area is more than adequate to handle the levels of parking demand generated from Easter through December, except for large events, such as 4th of July fireworks. The issues arise during the peak season from mid-January to Easter, when parking demand generated by the retail, restaurants and nightlife consume all or nearly all of the available public parking spaces in downtown.

Should the City choose to maintain the status quo and not institute any additional active parking management measures to manage demand, the on- and off-street public parking spaces will continue to fill to near capacity on weekday and weekend nights during the busy season. Will this may not have an impact on the number of people who come to the 5th Avenue area, maintaining the status quo parking situation could lead to increased levels of frustration among drivers that prevent some people from coming to the area. The current peak season parking conditions could be further exacerbated should additional development occur within the study area without new parking.

d. *Paid vs. Unpaid Parking Recommendation*

Based on the nature of the parking demand in the area around 5th Avenue, DESMAN recommends that a system of on-street paid parking be introduced into this area of the City. Not only will paid parking create a source of revenue that can be leveraged to support future development, it will also help ensure that the existing parking supply can be managed effectively to accommodate the varying needs of the many different parking user groups coming to downtown Naples. It is further recommended that free parking still be offered in the City's parking garages and surface parking lots, in order to provide employees and visitors with a "free" parking option and to encourage longer-term parkers to park in spaces that are not on-street.

Paid parking should be introduced along the entirety of 5th Avenue, from 3rd Street to 9th Street, as well as one block north and one block south of 5th Avenue on all of the north/south cross streets. The City should choose an appropriate parking meter technology, whether that be single-space or multi-space meters, that allows for coin and credit card payments, as well as payment using a smartphone app. Parking time limits

should be set to a maximum of two or three hours, after which the vehicle must be moved to another parking space; this will prevent people from feeding the meters all day and limiting parking space turnover.

ii. *Alternate Funding options*

One of the major benefits of implementing a system of paid parking in downtown Naples is the ability to potentially pay for future parking infrastructure directly with those parking revenues or to issue revenue bonds based on that income. Revenues generated by the on-street meters and parking citation fines could be pledged to repay bonds issued to build a future parking facility or make other improvements to the City's parking infrastructure.

Should the City choose not to institute paid parking, there are several other funding options available that could be used to finance the construction of future parking facilities and infrastructure. The following section presents these potential options and describes the basics of each option.

a. General Obligation (GO) Bonds

The primary advantage of financing a parking facility through general obligation bonds is that, depending on the City's credit rating, a low interest rate can be obtained because the full faith and credit of the municipality will be pledged toward retirement of the bonds. Because the basis of a city's credit is its taxing powers, constitutional and statutory laws usually limit the amounts that local governments may borrow using general obligation bonds. The borrowing limits are usually expressed in terms of a specific percentage of the assessed value of the community's taxable property. A city's indebtedness, for example, would not be allowed to exceed 10 percent of the total average revenue for the previous three years.

A possible disadvantage in using general obligation bonds is that the potential available for non-parking purposes, such as parks and public buildings, would be reduced by the amount of the bond issue used for a parking facility. Advocates, however, stress that the tax base of a city is strengthened by the development of a needed parking facility. The potential for future growth is therefore increased by the parking facility because the necessary support to area businesses must be provided by an adequate parking supply.

The City of Naples could issue bonds backed by tax revenues or special assessments to finance parking facility construction. The bonds could be either tax-exempt or taxable. Tax-exempt bonds would cost less to repay (due to lower interest rates), but would limit how much of the parking could be reserved for specific land uses. Taxable bonds would be more expensive, but the City would have more flexibility in how the new parking is managed.

b. Payment in Lieu of Parking (PILOP)

Already provided for in Naples Code of Ordinances, this technique is not an inducement to development, but rather a method to provide parking in growth areas within cities. With this type of financing, the developer of a building, instead of providing all the on-site parking required, is allowed to make a payment in lieu of parking that is put into a

pool to fund nearby facilities that are available to customers and employees of the contributing businesses. However, a municipality in accepting a payment-in-lieu of providing parking is obligated to provide sufficient parking to meet those parking needs.

This type of financing has been most successful in communities where there is an active public construction program dedicated to the provision of needed public facilities, such as in the City of Toronto. Because of the nature of this financing method, it is most successful where there is a rapid rate of development proposed in a concentrated area.

c. *Utility Assessment District (Parking Assessment District)*

The City could choose to establish the area including 5th Avenue as a parking district, upon which special assessments could be instituted to generate additional funds to pay for parking operations, management and future construction. Any business within the boundaries of the district would be required to pay into a fund that could then be used to finance future parking facilities.

In practice, a zone of "benefit" is established for a particular parking facility or cluster of on-street spaces. Generally speaking, the primary criteria for establishing the boundaries of the district are based upon acceptable patron walking distance. From there, the city determines an equitable payment arrangement that requires those benefited by the parking within the district(s) to pay their ad valorem share of the costs incurred to build, operate and maintain the parking assets.

d. *Tax Increment Financing*

The City could explore opportunities to fund new parking construction using Tax Increment Financing (TIF). In the most simplistic terms, TIF can be described as created residual property tax. Once an area of influence can be identified (not necessarily the same as a parking assessment district), the current tax base and associated revenue stream for that area can be frozen at its present level, with the assumption that tax revenues are sufficient to meet the cost of publicly supported systems. Under the assumption that new development will take place (after the freeze), all new or incremental tax revenues are designated to a special TIF account. The proceeds of this process are then utilized to repay the capital expenditure of the municipality to provide needed infrastructure (parking supply) built to support or encourage new development.

e. *Public Private Partnerships*

The formation of a public/private partnership in the construction of a parking facility could allow the City to construct a structure while minimizing funds needed. This option could work in a number of ways:

- First, the City and a private developer could split the cost of the parking facility. This would allow Naples to construct needed spaces while saving on design, equipment and other consulting/environmental costs.
- Second, the City could offer land it owns for the construction of a private parking structure that would in turn provide some amount of public parking. In this instance, the City would have the parking spaces it needs without having to construct them.

- Finally, the City could incentivize private parking construction by providing a development with tax abatements or other development incentives. The developer would then be required to provide their own parking, with the municipality in effect subsidizing its construction.

In addition to the potential public/private partnership arrangements described above, the following are two more ways in which the City could work with private entities to encourage the development of needed parking spaces in the future.

Joint Ventures

In order to develop a parking facility, it is often necessary to assemble multiple parcels of land. Private developers are often unsuccessful in acquiring the parcels needed for larger and/or mixed-use facilities. The City has the ability to use its powers of eminent domain to acquire land for public use. The City could also explore land exchanges between the public and private sectors. Land owned by the City could also be sold to a private developer at a reduced cost in order to encourage development.

Various public, non-profit and private interests can participate in the financing of a structured parking facility. Capital contributions and in-kind contributions (such as land) can "write down" the cost of development. Joint ventures can effectively write down capital costs to the extent that conventional financing may be procured.

Certificates of Participation (COP)

This is one of only a few tax-exempt financing routes that lend itself to a public-private partnership. COP financing can be used to provide all funds for the construction of parking facilities. In the most basic terms, a development company (the lessor) would build a facility, financed through the distribution of COP by a bank trustee. The City would then lease the garage back from the developer. Payments, generated through user fees or other means, are made to the lessor by the lessee (City). In this type of arrangement, the City would typically assume all costs in connection with operations and maintenance of the garage.

To be eligible for tax-exempt status, the final owner of the facility must be the municipality and the garage must be for public use. The primary advantage of this program is that the government entity can raise funds in most cases outside the legal definition of debt. This can be achieved if the lease rental payment is subject to annual appropriation by the governing body. Because of this, this type of financing is used where governments are constrained by limitations regarding the issuance of debt or limitations on bonding capacity.

f. Federal/State Grants or Loans

If a new parking facility incorporates an alternative transportation component (e.g. bus transfer center) or is constructed to support an economic development initiative, federal or state funds may be available to support construction. Further investigation is needed to determine the types of funds that may be available to the City of Naples.

C. Valet Parking

At present, a number of valet parking companies operate within the study area during the busy season. In addition to the Inn on 5th, which operates a valet service for its guests on a 24/7 basis, our team was able to identify at least five additional valet pickup/drop-off locations within the study area. Given the fact that nearly all of the public parking spaces in the study area are occupied during peak demand periods, valet parking operators provide a valuable service to patrons and visitors coming to the 5th Avenue area who cannot find an available public parking space. If the goal is to provide an adequate number of parking spaces to serve the visitors and employees of the downtown, then valet parking is the most cost-effective solution possible.

Despite their contributions to the vitality of the area, there is the potential to improve the process by which valet operations are established and how they function in practice in relation to the public parking supply. The following are some recommendations for improving the valet ordinance related how valet services are established in the City and what should be required of existing and future valet companies:

- Operators should be required to carry proof of insurance which should explicitly exempt the City of Naples from any liability
- Require payment by the valet operator to the City for any loss of public spaces due to vehicle pick up/drop-off or vehicle storage in on- or off-street public parking spaces; this will help to offset the cost of maintaining the public way and the cost of enforcement
- Valet parking plans submitted to City Council should be required to demonstrate that they do not create conflicts, backups, queuing, congestion, or other issues on 5th Avenue when in operation
- Valet parking plans submitted to City Council should identify where the operator plans to park the vehicles they valet
- The Business Tax paid annually by valet companies should be increased to account for the loss of use of spaces on the public way and for future maintenance of those spaces; valet operations are classified as a Service Establishment, with the current annual Business Tax based on the number of employees: 1 to 15 employees - $57.89, 16 to 30 employees - $86.82; more than 30 employees - $115.76

D. Additional Facilities

Based on the results of parking utilization surveys conducted during Naples' peak season, there is currently a shortage of available public parking within the study area. Even if active parking management practices are introduced in downtown Naples, peak parking demand will likely continue to exceed the available supply of parking in the evenings during the peak season. The obvious solution to this existing shortfall is to increase the supply of parking available to the public.

Due to the cost of acquiring land and constructing new parking facilities, it is recommended that the City first seek opportunities to lease existing private parking facilities as temporary public parking in the evenings and on weekends or encourage more valet parking operations. Any business in the study area which controls parking inventory and whose operations occur during normal business hours may be a candidate for this type of arrangement. Instead of their parking sitting vacant after business hours, the City could arrange to compensate the property owner for

use of their parking after hours and on weekends, when the City's supply of public parking is most strained. The City would also need to take on the liability of such use as well.

Another option that would be less expensive than building new parking inventory would be for the City to lease vacant land for use as temporary parking. There are several vacant parcels north of 4th Avenue and east of 9th Street that are potential candidates. These locations could be used as temporary public parking, until additional development in the area makes the parcels unavailable. It may be possible to provide/expand the existing the trolley system or introduce a low-cost trolley systems to serve the peak period weekends during the tourist season.

The City could also attempt to acquire one or more vacant parcels of land within the study area and build additional parking inventory. If the land is available for sale, the City would need to purchase the parcel and then spend additional resources constructing surface parking.

As a longer-term solution, there may be the opportunity for the City to partner with a developer on the construction of additional public parking spaces. If a new development or redevelopment project is planned within the study area, the City could seek to leverage its influence, regulatory approval powers and/or bonding capacity to include a public parking component in the private development. This has the potential to be a less expensive way for the City to gain additional public parking in a structured parking facility, than if they were to build the facility themselves. The addition of 100 or 150 "public" parking spaces to a private parking facility serving a new development would likely meet most of the City's existing peak needs.

E. D-Downtown District Analysis Preliminary Recommendations

Preliminary recommendations have been made related to parking as part of the ongoing D-Downtown District Analysis project. One recommendation is to require 1.5 parking spaces per efficiency housing unit, which seems reasonable. However, the DESMAN team does not agree with the recommendation to use the 6th Avenue South Garage as a way to satisfy demand in the renamed Midtown Design District.

Based on the February utilization surveys, the 6th Avenue South Garage, as well as nearly all other public parking within the study area, becomes completely or nearly-completely occupied during the peak season. It would be detrimental to the 5th Avenue area for the City to allow new developments in the Midtown Design District to count spaces in this garage when trying to satisfy their zoning requirements.

Appendix: Utilization Survey Summary, Friday, February 3rd, 2017

												Peak Hour						
Facility/Street Segment	Side of Street	b/w	Inventory	10AM	%	12PM	%	2PM	%	4PM	%	6PM	%	8PM	%	10PM	%	Notes
8th Street South Garage			340	128	38%	200	59%	248	73%	285	84%	333	98%	291	86%	187	55%	
6th Avenue South Garage			339	75	22%	129	38%	175	52%	161	47%	237	70%	210	62%	165	49%	
Next to 8th Street South Garage			12	12	100%	11	92%	12	100%	11	92%	12	100%	12	100%	11	92%	
5th Avenue Parkway			43	37	86%	41	95%	37	86%	43	100%	43	100%	41	95%	36	84%	
5th Avenue Parkway Lot			20	17	85%	20	100%	19	95%	20	100%	20	100%	18	90%	14	70%	
6th Ave. & Park St. Lot			63	24	38%	55	87%	48	76%	48	76%	63	100%	57	90%	41	65%	
Community Center Lot			31	27	87%	17	55%	16	52%	20	65%	26	84%	19	61%	8	26%	
8th Ave. & 8th St. Lot			84	32	38%	37	44%	29	35%	26	31%	21	25%	15	18%	13	15%	
3rd Avenue	North	6th & 7th	4	0	0%	0	0%	0	0%	0	0%	4	100%	3	75%	1	25%	
3rd Avenue	South	6th & 7th	3	0	0%	1	33%	1	33%	1	33%	3	100%	3	100%	1	33%	
3rd Avenue	North	7th & 8th	6	0	0%	0	0%	0	0%	0	0%	6	100%	4	67%	1	17%	
3rd Avenue	South	7th & 8th	6	0	0%	1	17%	0	0%	3	50%	6	100%	5	83%	2	33%	
4th Avenue	North	6th & 7th	6	6	100%	6	100%	6	100%	6	100%	6	100%	6	100%	6	100%	
4th Avenue	North	7th & 8th	11	6	55%	8	73%	9	82%	8	73%	11	100%	11	100%	11	100%	
4th Avenue	South	7th & 8th	7	4	57%	7	100%	6	86%	7	100%	7	100%	7	100%	6	86%	
4th Avenue	North	8th & 9th	5	2	40%	5	100%	5	100%	4	80%	5	100%	5	100%	4	80%	
4th Avenue	South	8th & 9th	2	2	100%	3	150%	3	150%	2	100%	3	150%	2	100%	1	50%	
5th Avenue	North	3rd & 4th	16	7	44%	15	94%	14	88%	10	63%	15	94%	15	94%	15	94%	
5th Avenue	South	3rd & W. Lake Dr.	23	13	57%	20	87%	22	96%	21	91%	23	100%	22	96%	22	96%	
5th Avenue	North	4th & 5th	17	9	53%	15	88%	15	88%	12	71%	17	100%	17	100%	16	94%	
5th Avenue	North	5th & 6th	17	10	59%	15	88%	15	88%	16	94%	17	100%	17	100%	16	94%	
5th Avenue	South	W. Lake Dr. & E. Lake Dr.	23	9	39%	17	74%	21	91%	19	83%	23	100%	22	96%	22	96%	
5th Avenue	North	6th & 8th	24	22	92%	22	92%	24	100%	23	96%	24	100%	24	100%	24	100%	Does not include valet area in front of Inn on 5th (5 spaces)
5th Avenue	South	E. Lake Dr. & Park St.	10	9	90%	10	100%	10	100%	10	100%	10	100%	10	100%	10	100%	
5th Avenue	South	Park St. & 8th St.	16	15	94%	14	88%	16	100%	14	88%	16	100%	15	94%	15	94%	
5th Avenue	North	8th & 9th	4	2	50%	4	100%	4	100%	4	100%	4	100%	4	100%	4	100%	
5th Avenue	South	8th & 9th	7	5	71%	5	71%	6	86%	6	86%	7	100%	7	100%	6	86%	
Cambier Park Way	South	Park St. & 8th St.	32	32	100%	32	100%	32	100%	31	97%	32	100%	32	100%	32	100%	Spaces along the park
6th Avenue	South	8th & 9th	15	4	27%	12	80%	11	73%	12	80%	15	100%	13	87%	9	60%	
7th Avenue	North	8th & 9th	12	12	100%	12	100%	9	75%	11	92%	8	67%	8	67%	6	50%	
7th Avenue	South	8th & 9th	14	12	86%	12	86%	10	71%	9	64%	9	64%	9	64%	5	36%	
8th Avenue	North	Park St. & 8th St.	16	14	88%	14	88%	7	44%	9	56%	15	94%	8	50%	4	25%	Spaces along the tennis courts
3rd Street	West	5th & 6th	7	4	57%	7	100%	7	100%	5	71%	7	100%	7	100%	6	86%	
3rd Street	West	6th & 7th	8	3	38%	6	75%	6	75%	3	38%	5	63%	5	63%	4	50%	
3rd Street	West	7th & 8th	10	3	30%	3	30%	4	40%	0	0%	2	20%	2	20%	2	20%	
4th Street	East	4th & 5th	3	2	67%	3	100%	2	67%	0	0%	0	0%	0	0%	0	0%	Valet area after 4-5pm
4th Street	West	4th & 5th	3	1	33%	3	100%	3	100%	3	100%	3	100%	3	100%	3	100%	
W. Lake Drive	East	5th & 6th	2	0	0%	2	100%	2	100%	2	100%	2	100%	2	100%	2	100%	
W. Lake Drive	West	5th & 6th	3	2	67%	2	67%	2	67%	0	0%	0	0%	0	0%	0	0%	Valet area after 4-5pm
E. Lake Drive	West	5th & 6th	6	4	67%	6	100%	4	67%	6	100%	6	100%	6	100%	6	100%	
5th Street	East	4th & 5th	8	3	38%	2	25%	5	63%	4	50%	8	100%	8	100%	8	100%	
5th Street	West	4th & 5th	6	1	17%	4	67%	2	33%	4	67%	6	100%	6	100%	6	100%	Spaces removed due to construction fencing
6th Street	East	3rd & 4th	14	5	36%	10	71%	9	64%	8	57%	14	100%	14	100%	12	86%	
6th Street	West	3rd & 4th	11	4	36%	9	82%	7	64%	8	73%	11	100%	11	100%	11	100%	
6th Street	East	4th & 5th	10	9	90%	10	100%	10	100%	10	100%	10	100%	10	100%	10	100%	
6th Street	West	4th & 5th	10	9	90%	8	80%	9	90%	8	80%	9	90%	9	90%	9	90%	
7th Street	East	3rd & 4th	8	5	63%	6	75%	5	63%	8	100%	8	100%	8	100%	5	63%	
7th Street	West	3rd & 4th	11	4	36%	8	73%	8	73%	11	100%	11	100%	10	91%	7	64%	
8th Street	East	3rd & 4th	9	2	22%	8	89%	4	44%	7	78%	9	100%	8	89%	7	78%	
8th Street	West	3rd & 4th	6	0	0%	5	83%	4	67%	6	100%	6	100%	6	100%	5	83%	
8th Street	East	4th & 5th	7	5	71%	6	86%	5	71%	7	100%	7	100%	7	100%	6	86%	
8th Street	West	4th & 5th	6	4	67%	6	100%	6	100%	5	83%	6	100%	6	100%	5	83%	
8th Street	East	5th & 6th	5	5	100%	5	100%	5	100%	3	60%	5	100%	5	100%	5	100%	
8th Street	West	5th & 6th	3	3	100%	3	100%	3	100%	3	100%	3	100%	3	100%	3	100%	
8th Street	East	6th & 7th	6	5	83%	5	83%	5	83%	4	67%	6	100%	6	100%	6	100%	
8th Street	West	6th & 7th	39	36	92%	34	87%	37	95%	35	90%	39	100%	34	87%	28	72%	Spaces along the park
8th Street	East	7th & 8th	13	12	92%	10	77%	10	77%	5	38%	13	100%	12	92%	9	69%	
9th Street	West	5th & 6th	4	0	0%	4	100%	3	75%	3	75%	4	100%	3	75%	1	25%	
Park Street	East	5th & 6th	4	3	75%	4	100%	4	100%	4	100%	4	100%	4	100%	4	100%	
Park Street	West	5th & 6th	9	9	100%	8	89%	8	89%	9	100%	9	100%	9	100%	9	100%	
Park Street	East	6th & 8th	43	34	79%	34	79%	41	95%	22	51%	43	100%	32	74%	24	56%	Spaces along the park
		TOTAL SPACES	**1,502**	724	48%	981	65%	1,050	70%	1,045	70%	**1,297**	**86%**	1,168	78%	917	61%	

Appendix: Utilization Survey Summary, Saturday, February 4th, 2017

Facility/Street Segment	Side of Street	b/w	Inventory	10AM	%	12PM	%	2PM	%	4PM	%	6PM	%	Peak Hour 8PM	%	10PM	%	Notes
8th Street South Garage			340	90	26%	197	58%	227	67%	212	62%	329	97%	335	99%	256	75%	
6th Avenue South Garage			339	46	14%	199	59%	197	58%	151	45%	220	65%	314	93%	231	68%	
Next to 8th Street South Garage			12	7	58%	9	75%	11	92%	12	100%	12	100%	12	100%	11	92%	
5th Avenue Parkway			43	19	44%	22	51%	17	40%	37	86%	43	100%	42	98%	37	86%	
5th Avenue Parkway Lot			20	9	45%	17	85%	16	80%	15	75%	20	100%	20	100%	18	90%	
6th Ave. & Park St. Lot			63	-	-	-	-	-	-	-	-	-	-	48	76%	54	86%	"Women's Club Only" during the day
Community Center Lot			31	15	48%	31	100%	21	68%	8	26%	3	10%	3	10%	3	10%	
8th Ave. & 8th St. Lot			84	22	26%	52	62%	31	37%	26	31%	19	23%	17	20%	12	14%	
3rd Avenue	North	6th & 7th	4	3	75%	2	50%	0	0%	0	0%	1	25%	4	100%	2	50%	
3rd Avenue	South	6th & 7th	3	1	33%	2	67%	0	0%	0	0%	4	133%	3	100%	1	33%	
3rd Avenue	North	7th & 8th	6	3	50%	1	17%	0	0%	0	0%	5	83%	6	100%	3	50%	
3rd Avenue	South	7th & 8th	6	4	67%	0	0%	0	0%	3	50%	7	117%	5	83%	3	50%	
4th Avenue	North	6th & 7th	6	3	50%	5	83%	5	83%	6	100%	6	100%	6	100%	6	100%	
4th Avenue	North	7th & 8th	11	7	64%	7	64%	11	100%	11	100%	11	100%	11	100%	11	100%	
4th Avenue	South	7th & 8th	7	4	57%	7	100%	6	86%	7	100%	7	100%	7	100%	7	100%	
4th Avenue	North	8th & 9th	5	5	100%	4	80%	4	80%	0	0%	5	100%	5	100%	5	100%	
4th Avenue	South	8th & 9th	2	0	0%	0	0%	1	50%	0	0%	2	100%	2	100%	2	100%	
5th Avenue	North	3rd & 4th	16	3	19%	13	81%	11	69%	13	81%	15	94%	15	94%	15	94%	
5th Avenue	South	3rd & W. Lake Dr.	23	7	30%	22	96%	21	91%	21	91%	22	96%	22	96%	21	91%	
5th Avenue	North	4th & 5th	17	11	65%	15	88%	15	88%	14	82%	16	94%	16	94%	15	88%	
5th Avenue	North	5th & 6th	17	13	76%	15	88%	17	100%	15	88%	17	100%	17	100%	17	100%	
5th Avenue	South	W. Lake Dr. & E. Lake Dr.	23	9	39%	23	100%	20	87%	18	78%	22	96%	22	96%	22	96%	
5th Avenue	North	6th & 8th	24	22	92%	22	92%	23	96%	24	100%	24	100%	24	100%	24	100%	Does not include valet area in front of Inn on 5th (5 spaces)
5th Avenue	South	E. Lake Dr. & Park St.	10	10	100%	10	100%	9	90%	9	90%	10	100%	10	100%	10	100%	
5th Avenue	South	Park St. & 8th St.	16	16	100%	16	100%	15	94%	15	94%	16	100%	16	100%	16	100%	
5th Avenue	North	8th & 9th	4	3	75%	4	100%	4	100%	4	100%	4	100%	4	100%	4	100%	
5th Avenue	South	8th & 9th	7	2	29%	6	86%	7	100%	7	100%	7	100%	7	100%	7	100%	
Cambier Park Way	South	Park St. & 8th St.	32	32	100%	32	100%	32	100%	32	100%	32	100%	32	100%	32	100%	Spaces along the park
6th Avenue	South	8th & 9th	15	8	53%	11	73%	14	93%	5	33%	14	93%	13	87%	10	67%	
7th Avenue	North	8th & 9th	12	12	100%	11	92%	6	50%	5	42%	8	67%	11	92%	10	83%	
7th Avenue	South	8th & 9th	14	14	100%	11	79%	11	79%	3	21%	1	7%	13	93%	12	86%	
8th Avenue	North	Park St. & 8th St.	16	13	81%	16	100%	14	88%	7	44%	8	50%	7	44%	6	38%	Spaces along the tennis courts
3rd Street	West	5th & 6th	7	7	100%	7	100%	7	100%	7	100%	7	100%	7	100%	7	100%	
3rd Street	West	6th & 7th	8	5	63%	6	75%	6	75%	5	63%	8	100%	7	88%	7	88%	
3rd Street	West	7th & 8th	10	5	50%	4	40%	4	40%	6	60%	9	90%	9	90%	9	90%	
4th Street	East	4th & 5th	3	0	0%	3	100%	3	100%	1	33%	0	0%	0	0%	0	0%	Valet area after 4-5pm
4th Street	West	4th & 5th	3	0	0%	3	100%	3	100%	3	100%	3	100%	3	100%	3	100%	
W. Lake Drive	East	5th & 6th	2	0	0%	2	100%	1	50%	2	100%	2	100%	2	100%	2	100%	
W. Lake Drive	West	5th & 6th	3	0	0%	3	100%	1	33%	1	33%	0	0%	0	0%	0	0%	Valet area after 4-5pm
E. Lake Drive	West	5th & 6th	6	5	83%	5	83%	5	83%	4	67%	6	100%	6	100%	6	100%	
5th Street	East	4th & 5th	8	1	13%	6	75%	6	75%	3	38%	6	75%	6	75%	7	88%	
5th Street	West	4th & 5th	6	2	33%	3	50%	5	83%	4	67%	5	83%	5	83%	5	83%	Spaces removed due to construction fencing
6th Street	East	3rd & 4th	14	5	36%	11	79%	10	71%	5	36%	14	100%	14	100%	13	93%	
6th Street	West	3rd & 4th	11	9	82%	9	82%	7	64%	7	64%	11	100%	11	100%	11	100%	
6th Street	East	4th & 5th	10	8	80%	9	90%	10	100%	9	90%	10	100%	10	100%	10	100%	
6th Street	West	4th & 5th	10	9	90%	10	100%	10	100%	8	80%	10	100%	10	100%	10	100%	
7th Street	East	3rd & 4th	8	6	75%	6	75%	4	50%	7	88%	7	88%	7	88%	7	88%	
7th Street	West	3rd & 4th	11	7	64%	7	64%	9	82%	10	91%	10	91%	10	91%	9	82%	
8th Street	East	3rd & 4th	9	2	22%	5	56%	5	56%	2	22%	8	89%	8	89%	7	78%	
8th Street	West	3rd & 4th	6	1	17%	4	67%	6	100%	5	83%	6	100%	6	100%	6	100%	
8th Street	East	4th & 5th	7	6	86%	7	100%	6	86%	7	100%	7	100%	7	100%	7	100%	
8th Street	West	4th & 5th	6	5	83%	5	83%	5	83%	5	83%	5	83%	6	100%	6	100%	
8th Street	East	5th & 6th	5	4	80%	5	100%	5	100%	5	100%	5	100%	5	100%	5	100%	
8th Street	West	5th & 6th	3	2	67%	3	100%	2	67%	3	100%	3	100%	3	100%	3	100%	
8th Street	East	6th & 7th	6	5	83%	5	83%	6	100%	5	83%	7	117%	7	117%	6	100%	
8th Street	West	6th & 7th	39	38	97%	39	100%	38	97%	36	92%	37	95%	34	87%	27	69%	Spaces along the park
8th Street	East	7th & 8th	13	4	31%	12	92%	9	69%	0	0%	7	54%	11	85%	11	85%	
9th Street	West	5th & 6th	4	0	0%	3	75%	4	100%	4	100%	4	100%	4	100%	2	50%	
Park Street	East	5th & 6th	4	4	100%	4	100%	4	100%	4	100%	3	75%	4	100%	4	100%	
Park Street	West	5th & 6th	9	9	100%	9	100%	9	100%	9	100%	9	100%	9	100%	9	100%	
Park Street	East	6th & 8th	43	42	98%	43	100%	43	100%	35	81%	41	95%	25	58%	27	63%	Spaces along the park
		TOTAL SPACES	**1,502**	604	40%	1,020	68%	999	67%	882	59%	1,160	77%	**1,305**	**87%**	1,109	74%	

Appendix: 5th Avenue Turnover and Duration Survey Summary, Friday, February 3rd, 2017

	1 Hour	2 Hours	3 Hours	4 Hours	5 Hours	6 Hours	7 Hours	Total Cars	Parked Hours	Average Duration
9th to 8th	2	2	0	0	0	0	0	4	6	1.5
North	2	0	1	0	0	0	0	3	7	2.3
	2	1	1	0	0	0	0	4	7	1.8
	4	0	1	0	0	0	0	5	7	1.4
8th to 6th	5	1	0	0	0	0	0	6	7	1.2
North	2	2	0	0	0	0	0	4	6	1.5
	1	0	0	1	0	0	0	2	5	2.5
	0	0	0	0	0	1	0	1	6	6.0
	7	0	0	0	0	0	0	7	7	1.0
	5	1	0	0	0	0	0	6	7	1.2
	3	2	0	0	0	0	0	5	7	1.4
	0	0	1	1	0	0	0	2	7	3.5
	5	0	0	0	0	0	0	5	5	1.0
	2	2	0	0	0	0	0	4	6	1.5
	0	0	0	0	0	0	1	1	7	7.0
	0	0	0	0	0	0	1	1	7	7.0
	1	0	2	0	0	0	0	3	7	2.3
	1	0	0	0	0	1	0	2	7	3.5
	1	1	1	0	0	0	0	3	6	2.0
	5	1	0	0	0	0	0	6	7	1.2
	2	1	1	0	0	0	0	4	7	1.8
	1	0	0	0	0	1	0	2	7	3.5
	1	1	1	0	0	0	0	3	6	2.0
	3	0	0	0	0	0	0	3	3	1.0
	2	1	1	0	0	0	0	4	7	1.8
	2	0	0	1	0	0	0	3	6	2.0
	1	3	0	0	0	0	0	4	7	1.8
	5	1	0	0	0	0	0	6	7	1.2
6th to 5th	3	0	1	0	0	0	0	4	6	1.5
North	2	1	1	0	0	0	0	4	7	1.8
	4	0	1	0	0	0	0	5	7	1.4
	0	0	0	0	0	0	1	1	7	7.0
	2	1	1	0	0	0	0	4	7	1.8
	3	2	0	0	0	0	0	5	7	1.4
	2	0	0	0	0	0	0	2	2	1.0
	0	1	0	0	1	0	0	2	7	3.5
	1	3	0	0	0	0	0	4	7	1.8
	3	2	0	0	0	0	0	5	7	1.4
	3	0	0	0	0	0	0	3	3	1.0
	3	1	0	0	0	0	0	4	5	1.3
	1	0	1	0	0	0	0	2	4	2.0
	1	0	0	0	1	0	0	2	6	3.0
	2	0	1	0	0	0	0	3	5	1.7
	3	0	1	0	0	0	0	4	6	1.5
	4	1	0	0	0	0	0	5	6	1.2
5th to 4th	3	2	0	0	0	0	0	5	7	1.4
North	1	0	1	0	0	0	0	2	4	2.0
	2	0	0	1	0	0	0	3	6	2.0
	4	1	0	0	0	0	0	5	6	1.2
	4	0	0	0	0	0	0	4	4	1.0
	4	1	0	0	0	0	0	5	6	1.2
	3	1	0	0	0	0	0	4	5	1.3
	1	3	0	0	0	0	0	4	7	1.8
	1	1	0	0	0	0	0	2	3	1.5
	0	1	0	0	1	0	0	2	7	3.5
	2	0	1	0	0	0	0	3	5	1.7
	2	1	0	0	0	0	0	3	4	1.3
	1	2	0	0	0	0	0	3	5	1.7
	3	2	0	0	0	0	0	5	7	1.4
	2	0	0	1	0	0	0	3	6	2.0
	2	2	0	0	0	0	0	4	6	1.5
	4	1	0	0	0	0	0	5	6	1.2
4th to 3rd	1	1	1	0	0	0	0	3	6	2.0
North	2	0	0	1	0	0	0	3	6	2.0
	2	0	1	0	0	0	0	3	5	1.7
	3	2	0	0	0	0	0	5	7	1.4
	2	0	0	0	1	0	0	3	7	2.3
	2	2	0	0	0	0	0	4	6	1.5
	4	0	0	0	0	0	0	4	4	1.0
	3	1	0	0	0	0	0	4	5	1.3
	3	0	0	0	0	0	0	3	3	1.0
	5	0	0	0	0	0	0	5	5	1.0
	4	1	0	0	0	0	0	5	6	1.2
	1	1	1	0	0	0	0	3	6	2.0
	1	0	0	0	1	0	0	2	6	3.0
	5	0	0	0	0	0	0	5	5	1.0
	5	0	0	0	0	0	0	5	5	1.0
	5	0	0	0	0	0	0	5	5	1.0

Appendix: 5th Avenue Turnover and Duration Survey Summary, Friday, February 3rd, 2017 (cont.)

	1 Hour	2 Hours	3 Hours	4 Hours	5 Hours	6 Hours	7 Hours	Total Cars	Parked Hours	Average Duration
3rd to W. Lake Dr.	1	2	0	0	0	0	0	3	5	1.7
South	1	1	0	0	0	0	0	2	3	1.5
	2	2	0	0	0	0	0	4	6	1.5
	2	1	0	0	0	0	0	3	4	1.3
	0	1	1	0	0	0	0	2	5	2.5
	4	0	1	0	0	0	0	5	7	1.4
	1	1	1	0	0	0	0	3	6	2.0
	2	0	0	1	0	0	0	3	6	2.0
	5	0	0	0	0	0	0	5	5	1.0
	2	1	1	0	0	0	0	4	7	1.8
	0	0	1	0	0	0	0	1	3	3.0
	7	0	0	0	0	0	0	7	7	1.0
	1	3	0	0	0	0	0	4	7	1.8
	4	0	0	0	0	0	0	4	4	1.0
	2	2	0	0	0	0	0	4	6	1.5
	4	1	0	0	0	0	0	5	6	1.2
	4	1	0	0	0	0	0	5	6	1.2
	1	1	1	0	0	0	0	3	6	2.0
	3	0	0	1	0	0	0	4	7	1.8
	3	2	0	0	0	0	0	5	7	1.4
	3	2	0	0	0	0	0	5	7	1.4
	3	2	0	0	0	0	0	5	7	1.4
	1	0	0	0	0	1	0	2	7	3.5
W. Lake Dr. to E. Lake Dr.	0	0	0	0	0	1	0	1	6	6.0
South	4	1	0	0	0	0	0	5	6	1.2
	0	1	1	0	0	0	0	2	5	2.5
	3	2	0	0	0	0	0	5	7	1.4
	3	0	0	0	0	0	0	3	3	1.0
	2	2	0	0	0	0	0	4	6	1.5
	1	0	0	0	1	0	0	2	6	3.0
	3	0	0	0	0	0	0	3	3	1.0
	3	1	0	0	0	0	0	4	5	1.3
	2	1	0	0	0	0	0	3	4	1.3
	4	0	0	0	0	0	0	4	4	1.0
	5	1	0	0	0	0	0	6	7	1.2
	2	2	0	0	0	0	0	4	6	1.5
	7	0	0	0	0	0	0	7	7	1.0
	1	0	0	1	0	0	0	2	5	2.5
	0	0	0	0	0	0	1	1	7	7.0
	3	0	0	0	0	0	0	3	3	1.0
	2	1	0	0	0	0	0	3	4	1.3
	1	0	1	0	0	0	0	2	4	2.0
	0	1	1	0	0	0	0	2	5	2.5
	2	0	1	0	0	0	0	3	5	1.7
	5	1	0	0	0	0	0	6	7	1.2
	5	1	0	0	0	0	0	6	7	1.2
E. Lake Dr. to Park St.	4	0	1	0	0	0	0	5	7	1.4
South	4	0	1	0	0	0	0	5	7	1.4
	4	1	0	0	0	0	0	5	6	1.2
	2	1	1	0	0	0	0	4	7	1.8
	3	2	0	0	0	0	0	5	7	1.4
	0	0	0	0	0	1	0	1	6	6.0
	2	1	1	0	0	0	0	4	7	1.8
	7	0	0	0	0	0	0	7	7	1.0
	1	0	2	0	0	0	0	3	7	2.3
	0	0	0	0	0	0	1	1	7	7.0
Park St. to 8th	0	1	0	0	1	0	0	2	7	3.5
South	0	2	1	0	0	0	0	3	7	2.3
	0	0	0	0	0	0	1	1	7	7.0
	0	1	0	1	0	0	0	2	6	3.0
	0	0	1	1	0	0	0	2	7	3.5
	0	0	0	0	0	0	1	1	7	7.0
	1	1	1	0	0	0	0	3	6	2.0
	4	1	0	0	0	0	0	5	6	1.2
	2	2	0	0	0	0	0	4	6	1.5
	5	1	0	0	0	0	0	6	7	1.2
	5	1	0	0	0	0	0	6	7	1.2
	2	0	0	1	0	0	0	3	6	2.0
	3	0	1	0	0	0	0	4	6	1.5
	4	1	0	0	0	0	0	5	6	1.2
	1	1	1	0	0	0	0	3	6	2.0
	4	0	1	0	0	0	0	5	7	1.4
8th to 9th	4	1	0	0	0	0	0	5	6	1.2
South	1	1	0	0	0	0	0	2	3	1.5
	6	0	0	0	0	0	0	6	6	1.0
	2	1	0	0	0	0	0	3	4	1.3
	4	1	0	0	0	0	0	5	6	1.2
	2	0	1	0	0	0	0	3	5	1.7
	0	0	0	0	0	0	1	1	7	7.0
								575	926	1.6
								Turnover	3.7	

Appendix: 5th Avenue Turnover and Duration Survey Summary, Saturday, February 4th, 2017

	1 Hour	2 Hours	3 Hours	4 Hours	5 Hours	6 Hours	7 Hours	Total Cars	Parked Hours	Average Duration
9th to 8th	1	0	2	0	0	0	0	3	7	2.3
North	5	0	0	0	0	0	0	5	5	1.0
	4	1	0	0	0	0	0	5	6	1.2
	3	0	1	0	0	0	0	4	6	1.5
8th to 6th	3	0	1	0	0	0	0	4	6	1.5
North	1	2	0	0	0	0	0	3	5	1.7
	5	1	0	0	0	0	0	6	7	1.2
	5	1	0	0	0	0	0	6	7	1.2
	5	1	0	0	0	0	0	6	7	1.2
	1	0	0	0	0	0	0	1	1	1.0
	1	3	0	0	0	0	0	4	7	1.8
	2	0	1	0	0	0	0	3	5	1.7
	2	0	1	0	0	0	0	3	5	1.7
	1	0	0	0	0	1	0	2	7	3.5
	3	2	0	0	0	0	0	5	7	1.4
	3	2	0	0	0	0	0	5	7	1.4
	4	1	0	0	0	0	0	5	6	1.2
	4	1	0	0	0	0	0	5	6	1.2
	3		0	1	0	0	0	4	7	1.8
	2	1	1	0	0	0	0	4	7	1.8
	4	1	0	0	0	0	0	5	6	1.2
	5	1	0	0	0	0	0	6	7	1.2
	4	1	0	0	0	0	0	5	6	1.2
	2	1	1	0	0	0	0	4	7	1.8
	1	1	0	1	0	0	0	3	7	2.3
	3	2	0	0	0	0	0	5	7	1.4
	5	1	0	0	0	0	0	6	7	1.2
	1	0	0	0	0	1	0	2	7	3.5
6th to 5th	3	2	0	0	0	0	0	5	7	1.4
North	3	1	0	0	0	0	0	4	5	1.3
	5	1	0	0	0	0	0	6	7	1.2
	3	0	0	1	0	0	0	4	7	1.8
	2	0	0	0	1	0	0	3	7	2.3
	2	1	1	0	0	0	0	4	7	1.8
	3	2	0	0	0	0	0	5	7	1.4
	5	0	0	0	0	0	0	5	5	1.0
	1	3	0	0	0	0	0	4	7	1.8
	2	2	0	0	0	0	0	4	6	1.5
	5	1	0	0	0	0	0	6	7	1.2
	0	0	0	0	0	1	0	1	6	6.0
	2	1	1	0	0	0	0	4	7	1.8
	0	3	0	0	0	0	0	3	6	2.0
	3	2	0	0	0	0	0	5	7	1.4
	1	0	0	1	0	0	0	2	5	2.5
	1	1	1	0	0	0	0	3	6	2.0
5th to 4th	4	0	1	0	0	0	0	5	7	1.4
North	1	1	0	1	0	0	0	3	7	2.3
	3	0	1	0	0	0	0	4	6	1.5
	2	1	1	0	0	0	0	4	7	1.8
	2	0	1	0	0	0	0	3	5	1.7
	2	0	0	1	0	0	0	3	6	2.0
	4	0	0	0	0	0	0	4	4	1.0
	3	1	0	0	0	0	0	4	5	1.3
	2	0	0	1	0	0	0	3	6	2.0
	3	0	1	0	0	0	0	4	6	1.5
	3	1	0	0	0	0	0	4	5	1.3
	1	0	0	0	0	1	0	2	7	3.5
	0	0	0	0	0	1	0	1	6	6.0
	3	1	0	0	0	0	0	4	5	1.3
	4	0	1	0	0	0	0	5	7	1.4
	3	2	0	0	0	0	0	5	7	1.4
	4	1	0	0	0	0	0	5	6	1.2
4th to 3rd	1	1	0	0	0	0	0	2	3	1.5
North	4	1	0	0	0	0	0	5	6	1.2
	4	0	0	0	0	0	0	4	4	1.0
	0	0	0	1	0	0	0	1	4	4.0
	1	2	0	0	0	0	0	3	5	1.7
	4	1	0	0	0	0	0	5	6	1.2
	1	1	1	0	0	0	0	3	6	2.0
	2	0	0	0	0	0	0	2	2	1.0
	4	1	0	0	0	0	0	5	6	1.2
	4	0	0	0	0	0	0	4	4	1.0
	4	0	0	0	0	0	0	4	4	1.0
	2	2	0	0	0	0	0	4	6	1.5
	2	2	0	0	0	0	0	4	6	1.5
	3	1	0	0	0	0	0	4	5	1.3
	3	0	0	0	0	0	0	3	3	1.0
	3	1	0	0	0	0	0	4	5	1.3

Appendix: 5th Avenue Turnover and Duration Survey Summary, Saturday, February 4th, 2017 (cont.)

	1 Hour	2 Hours	3 Hours	4 Hours	5 Hours	6 Hours	7 Hours	Total Cars	Parked Hours	Average Duration
3rd to W. Lake Dr.	2	2	0	0	0	0	0	4	6	1.5
South	1	1	1	0	0	0	0	3	6	2.0
	2	1	0	0	0	0	0	3	4	1.3
	3	1	0	0	0	0	0	4	5	1.3
	2	2	0	0	0	0	0	4	6	1.5
	3	0	1	0	0	0	0	4	6	1.5
	4	0	1	0	0	0	0	5	7	1.4
	3	0	0	1	0	0	0	4	7	1.8
	6	0	0	0	0	0	0	6	6	1.0
	2	0	0	1	0	0	0	3	6	2.0
	2	0	0	1	0	0	0	3	6	2.0
	2	0	1	0	0	0	0	3	5	1.7
	3	1	0	0	0	0	0	4	5	1.3
	2	0	1	0	0	0	0	3	5	1.7
	4	1	0	0	0	0	0	5	6	1.2
	4	0	1	0	0	0	0	5	7	1.4
	2	1	0	0	0	0	0	3	4	1.3
	1	1	1	0	0	0	0	3	6	2.0
	1	1	1	0	0	0	0	3	6	2.0
	4	1	0	0	0	0	0	5	6	1.2
	2	0	1	0	0	0	0	3	5	1.7
	1	0	0	0	1	0	0	2	6	3.0
	6	0	0	0	0	0	0	6	6	1.0
W. Lake Dr. to E. Lake Dr.	1	0	0	0	1	0	0	2	6	3.0
South	1	0	0	0	0	0	0	1	1	1.0
	4	1	0	0	0	0	0	5	6	1.2
	3	0	1	0	0	0	0	4	6	1.5
	0	1	1	0	0	0	0	2	5	2.5
	3	0	1	0	0	0	0	4	6	1.5
	1	2	0	0	0	0	0	3	5	1.7
	1	1	0	0	0	0	0	2	3	1.5
	1	2	0	0	0	0	0	3	5	1.7
	1	1	1	0	0	0	0	3	6	2.0
	2	2	0	0	0	0	0	4	6	1.5
	2	2	0	0	0	0	0	4	6	1.5
	4	1	0	0	0	0	0	5	6	1.2
	4	1	0	0	0	0	0	5	6	1.2
	5	1	0	0	0	0	0	6	7	1.2
	2	1	1	0	0	0	0	4	7	1.8
	2	0	0	0	1	0	0	3	7	2.3
	2	2	0	0	0	0	0	4	6	1.5
	3	0	0	1	0	0	0	4	7	1.8
	6	0	0	0	0	0	0	6	6	1.0
	2	2	0	0	0	0	0	4	6	1.5
	4	1	0	0	0	0	0	5	6	1.2
	2	2	0	0	0	0	0	4	6	1.5
E. Lake Dr. to Park St.	2	1	1	0	0	0	0	4	7	1.8
South	3	2	0	0	0	0	0	5	7	1.4
	3	0	1	0	0	0	0	4	6	1.5
	6	0	0		0	0	0	6	6	1.0
	4	0	1	0	0	0	0	5	7	1.4
	5	1	0	0	0	0	0	6	7	1.2
	3	2	0	0	0	0	0	5	7	1.4
	5	1	0	0	0	0	0	6	7	1.2
	2	1	1	0	0	0	0	4	7	1.8
	0	0	0	0	0	0	1	1	7	7.0
Park St. to 8th	4	3	0	0	0	0	0	7	10	1.4
South	0	0	0	0	0	1	0	1	6	6.0
	2	1	1	0	0	0	0	4	7	1.8
	2	2	0	0	0	0	0	4	6	1.5
	1	1	0	1	0	0	0	3	7	2.3
	7	0	0	0	0	0	0	7	7	1.0
	5	1	0	0	0	0	0	6	7	1.2
	1	3	0	0	0	0	0	4	7	1.8
	1	1	0	1	0	0	0	3	7	2.3
	4	0	0	1	0	0	0	5	8	1.6
	2	2	0	0	0	0	0	4	6	1.5
	3	0	0	1	0	0	0	4	7	1.8
	2	0	0	0	0	0	0	2	2	1.0
	5	1	0	0	0	0	0	6	7	1.2
	5	1	0	0	0	0	0	6	7	1.2
	3	2	0	0	0	0	0	5	7	1.4
8th to 9th	1	2	0	0	0	0	0	3	5	1.7
South	2	0	0	1	0	0	0	3	6	2.0
	0	1	0	1	0	0	0	2	6	3.0
	1	1	0	1	0	0	0	3	7	2.3
	0	0	0	0	0	1	0	1	6	6.0
	1	0	0	0	1	0	0	2	6	3.0
	0	0	0	0	0	0	1	1	7	7.0
								614	943	1.5
								Turnover	3.9	

SAMPLE
REPORT

Technical Memorandum

St. Augustine Parking Plan

Mobility Plan Phase 2

Attn: George Kramer, AICP, LEED AP
S&ME

Submitted November 9, 2017 by

DESMAN
Design Management

Christian Luz, P.E.
David Taxman, P.E.

100 S.E. Third Ave, 10th Floor
Fort Lauderdale, FL 33394
954.526.6464

DESMAN
Design Management

TECHNICAL MEMORANDUM

TO: George M. Kramer, AICP, LEED AP
S&ME

FROM: Christian Luz, P.E., AICP

DATE: November 9, 2017

RE: St. Augustine Parking Plan – Mobility Plan Phase 2
St. Augustine, Florida

Introduction

DESMAN Inc. (DESMAN) has been retained to develop a Parking Plan and financial analysis of recommendations for the City of St. Augustine (St. Augustine) parking system as part of the Downtown St. Augustine Mobility Plan Phase 2. Initially, a series of parking/management best practices were developed as part of Phase 1 of the Mobility Study. The Phase 1 analysis also included parking inventory and occupancy counts which were conducted between Saturday, July 2nd and Monday, July 4th, 2016 to capture the parking demand related to significant events like the 4th of July weekend. It is understood that the occupancy counts do not reflect the typical peak weekday/weekend parking demand, which would be during the winter or spring months. Information gathered and learned from the Phase 1 portion of the Downtown St. Augustine Mobility Plan was applied as part of Phase 2.

The development of a Parking Plan as part of Phases 1 and 2 of the Mobility Plan is a starting point to forming a comprehensive Parking Plan for the City of St. Augustine that is effectively vetted by the community and stakeholders. It is suggested that additional community meetings are conducted to assess how these recommendations are received by the public. Once a finalized parking plan framework has been established an implementation strategy with next steps and parties responsible for championing each effort should be identified.

One of the major overarching goals of the Mobility Plan is to reduce vehicle trips and parking demand in the Downtown to create a more pedestrian-friendly, less congested and safe community. Parking management strategies are identified that will help to support the City's desire for improved mobility and complements a coordinated system of transportation options for the City of St. Augustine. Recommendations were developed in unison with Phase 2 of the Mobility Plan and reflect feedback from the community, financial needs, as well as economic development and transportation goals.

St. Augustine is a City of 13,000 residents, but hosts approximately six million visitors per year. Residents include people that live in St. John's County as they frequent the Downtown. Due to this influx of visitors during weekends and events there tends to be a much greater demand for parking during these periods. The other major user of Downtown parking are employees and residents. The recommendations provided herein describe a parking strategy unique to each of the three main users: visitors, employees and residents for weekdays and weekends. In order to achieve this goal, the following parking strategies

were identified for residents, visitors, and employees and include adaptations for peak periods (i.e. weekends and events).

1. **Residents**
   The City will seek to provide affordable and reliable parking to residents within the Downtown year-round. During peak periods residents will be encouraged to avoid the Historic Downtown Garage (prioritized for visitors), via access to Downtown surface lots exclusive to County residents. Neighborhood street parking should be reserved for residents in the City and their guests.

2. **Employees**
   The City will seek to provide affordable and reliable parking to employees, year-round. During peak periods, the Garage will be prioritized for visitors and exclusive parking arrangements for employees will be provided in convenient locations within the City. Employees should be discouraged from parking on neighborhood streets.

3. **Visitors**
   The City will seek to provide affordable and reliable parking to visitors, year-round. During peak periods, policies will encourage the use of the Garage and other parking options located on the periphery of the Downtown. Visitors should be discouraged from parking in neighborhoods.

Downtown Parking System

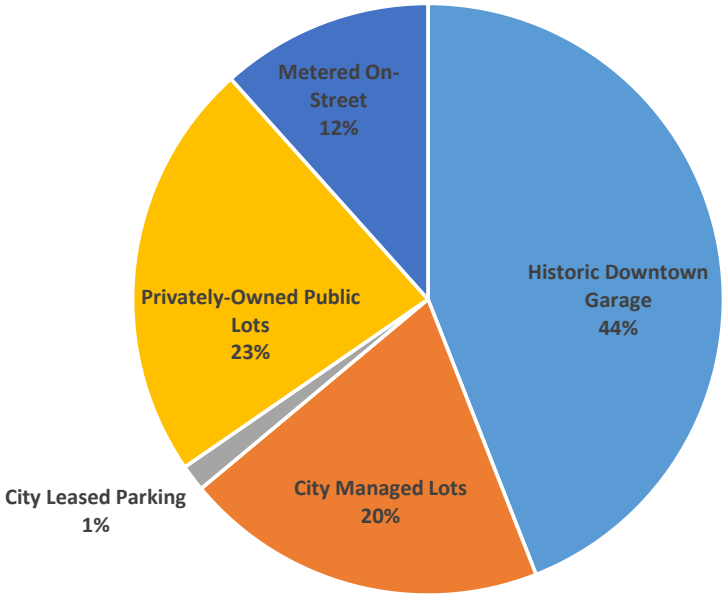
An analysis was conducted of the public parking inventory and utilization within the Downtown area of St. Augustine to understand how the parking system is used today and if parking management strategies or additional capacity is necessary to support demand. Counts were only performed during the summer months of the entire parking system. However, year-round counts of the Historic Downtown Garage (Garage) were provided.

Parking Inventory

There are approximately 2,600 on- and off-street spaces available to the public in Downtown St. Augustine. Of these 2,600 spaces, the City owns or leases 1,705 spaces in the Downtown, which includes both on- and off-street parking. This includes 149 spaces located in the Lightner and Granada lots which serve City employees during weekdays, but offer free weekend and weekday evening parking (after 6 PM). The majority of the City-owned public parking is located in the Garage, which has 1,148 spaces. There are another 310 on-street metered spaces in the Downtown area. The majority of public parking is located off-street in parking facilities.

There are almost 600 privately-owned spaces available to the public in the Downtown. Approximately, 100 of these privately-owned public spaces are only available to the public during weekday evenings and on weekends. **Figure 1** shows a breakdown of the parking inventory in St. Augustine. **Figure 2** shows a map of the Downtown parking system, which includes City managed off-street parking, reserved/private off-street parking, on-street residential parking permit areas, time restricted on-street parking, and unrestricted on-street parking.

Figure 1 – Breakdown of Downtown Parking



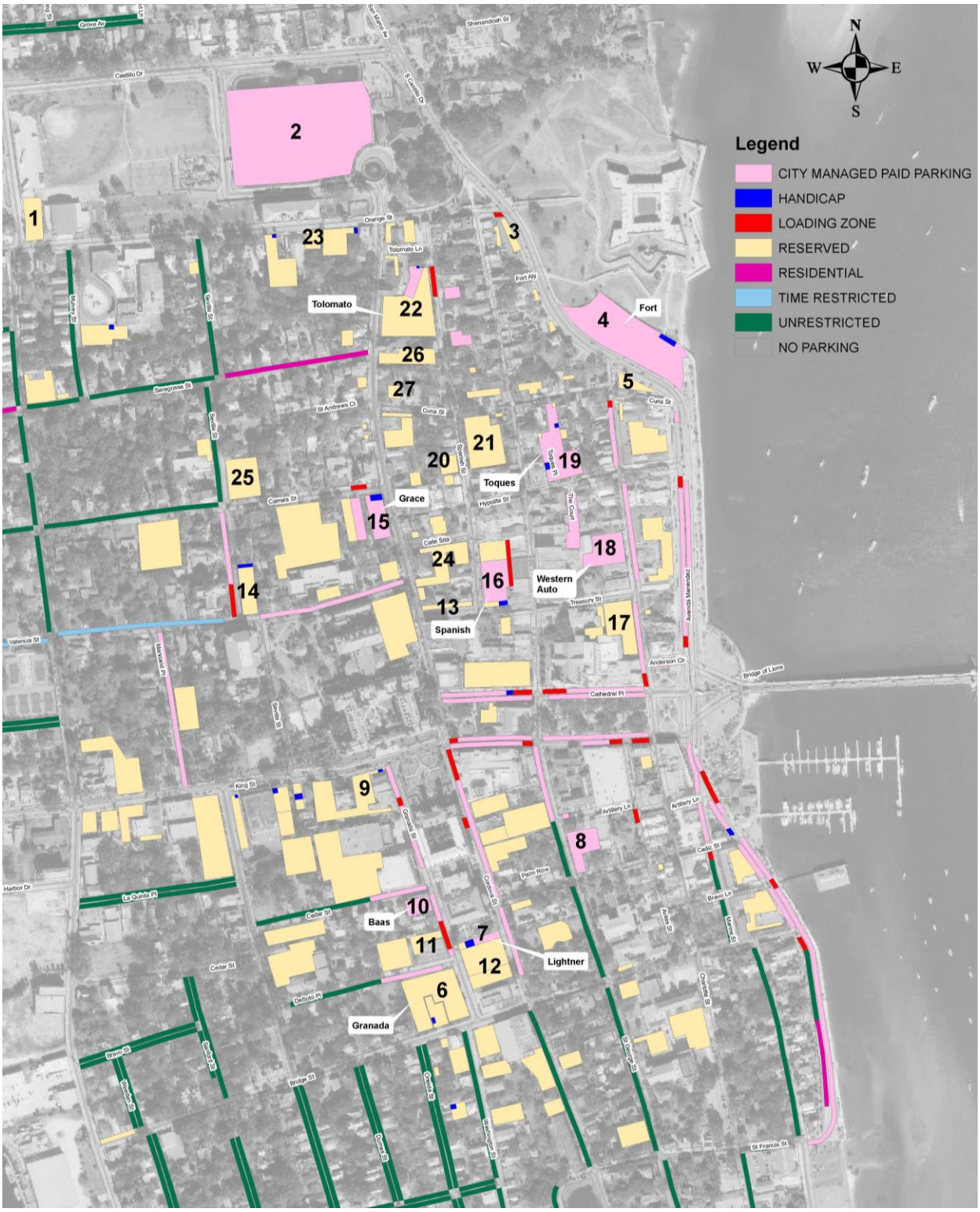
The City manages approximately 77% of the pay public parking available in the Downtown. The City owns and manages the majority of public parking in St. Augustine, which gives them a strong control over the market. The Garage makes up approximately 44% of all public parking Downtown. Approximately 23% of public parking is located in privately-owned public parking lots. Some of these privately-owned public lots are not open during typical weekdays and only provide public parking during peak periods (i.e. weekends and events). The on-street metered areas consists of 12% of public parking.

Parking Occupancy

Parking occupancy counts were performed by the Project Team over 4th of July weekend in 2016, between Saturday, July 2, 2016 and Monday, July 4, 2016 for both the on-street metered and off-street public parking areas in Downtown St. Augustine as part of Phase 1 of the Mobility Study. Another parking occupancy count of the off-street public parking areas was performed on Saturday, June 24, 2017 as part of Phase 2. These counts included an analysis of both City and privately-owned public parking facilities. The data was collected during a typical summer weekend, which experiences less visitors than the winter and spring months. The entire public off-street parking system was found to be 80% occupied and the City-owned facilities were 81% occupied.

A small sample of parking occupancy counts were conducted of the entire Downtown, as counts were performed only during the 4th of July weekend in 2016 and a Saturday in late June 2017. Additional counts of the entire parking system would be helpful in understanding the seasonality of parking demand. However, substantial Garage counts were conducted by the City, which includes peak counts every day between 2014 and May 2017. Also, turnover counts of the Garage were performed every hour between 8:00 AM and 10:00 PM during a weekend (July 15, 2017) and weekday (July 19, 2017) in July to understand the average length of stay of vehicles. Overall, this is adequate information to understand how the system is being utilized and make management/operation recommendations. However, additional counts should be conducted if a feasibility study is perform for a future parking facility.

Figure 2 – Downtown St. Augustine On-Street and Off-Street Parking Areas



Source: City of St. Augustine, Parking Division

Table 1 shows the summary of the peak on- and off-street parking occupancy during each day. The off-street parking inventory varies day-to-day as additional privately-owned public parking facilities are made available based on demand (i.e. weekday versus weekend).

Table 1 – Peak On-Street and Off-Street Parking Occupancy

	Off-Street		On-Street		Overall	
Date	Time	Peak Occ.	Time	Peak Occ.	Time	Peak Occ.
Saturday, 7/2/16	6:00 PM	71%	6:00 PM	96%	6:00 PM	74%
Sunday, 7/3/16	2:00 PM	83%	6:00 PM	91%	2:00 PM	84%
Monday, 7/4/16	6:00 PM	92%	6:00 PM	64%	6:00 PM	89%
Saturday, 6/24/17	3:00 PM	80%	NA		NA	

Note: On-street parking areas were blocked off on Monday, July 4, 2016 causing a lower on-street parking occupancy (i.e. 64%)

The on-street areas typically had a higher occupancy than the off-street parking areas. Note that the on-street peak parking occupancy was low on Monday, July 4th because a number of streets with on-street parking were closed to the public to support commercial vehicles related to the 4th of July festivities. As mentioned, the on-street areas typically had higher occupancies than the off-street areas, but the on-street inventory only accounts for approximately 12% of the total public parking areas Downtown. The peak occupancy of the City-owned off-street parking facilities closely matched the total occupancy of the public parking system. Overall, the peak parking occupancy ranged between 74% and 89%.

When a parking system reaches an occupancy of 85% it becomes difficult for a user to locate an available parking space, which can lead to extensive circulation, traffic congestion, and user frustration. Consequently, a target occupancy rate of 85% is typically adopted as it represents the "practical capacity" of a parking system. Based on an 85% target occupancy, the parking system exceeded its practical capacity during peak periods on the 4th of July weekend. As a result, patrons and visitors to the Downtown were parking at off-site park-and-ride facilities, on-street in residential neighborhoods and in private restricted parking lots.

In addition to parking occupancy counts performed by the Project Team, the City has been tracking daily utilization of the Garage, which has seen an increase in the number of times per year where it becomes full. Below is a summary of the times per year the Garage has reached capacity:

- 2014 – 23 days
- 2015 – 30 days
- 2016 – 40 days
- 2017 – 28 days between January and May (5 months)

The Garage typically reaches capacity during the weekends or a Downtown event but typically only for an hour or two. During these periods of Garage closure people are directed to use the St. John's County School District parking lot. This shows that specific parking supply solutions are needed during weekends and events Downtown for surge parking periods.

Below is a summary of the parking occupancy analysis:

- Parking demand has seasonal fluctuations (i.e. higher demand during winter and spring months) due to tourist activity;
- Parking demand is greater during the weekends in comparison to typical weekdays;
- On-street metered parking is operating over capacity during weekends and close to capacity on typical weekdays;
- The off-street parking system has substantial capacity during weekdays, especially in the Garage; but regularly reaches capacity during peak season weekends and on events, and
- The parking system is dependent on privately-owned parking facilities to support demand.

DESMAN recommends the City begin to consider strategies to reduce parking demand and additional parking options to support future demand during weekends and holidays/events Downtown. Further detail regarding this recommendation is discussed later in this report.

Stakeholder Meetings

As part of the process of understanding the parking issues in the City, stakeholder meetings were conducted with the leadership from each of the nine neighborhood associations, City staff, the Grace Church and Western Auto parking lot owners, the Historic St. Augustine Area Council, and Flagler College.

A summary of the primary issues discussed during these meetings is provided below:

Neighborhood Associations

- There is an overflow of employees, National Guard and visitors parking on residential streets;
- There is inadequate parking required for new (re)development projects as defined in the City's Zoning requirements;
- There is an approval of the process to establish a residential parking permit area;
- There is support of a shuttle/trolley circulator serving off-site/periphery parking;
- There is poor enforcement on neighborhood streets;
- There is concern regarding summer rental parkers in residential permit parking areas; and
- There is support for a designated shuttle lane along San Marco Avenue north of Downtown.

City Staff

- There is strong consideration for a demand-based pricing approach to parking;
- There is the feeling that the implementation of a space availability signage system in the Garage as well as dynamic wayfinding signage along the street network would improve parking/traffic conditions;
- There is the need to define a convenient, safe and affordable employee parking plan in the Downtown;
- There should be discounted or free Downtown parking for residents;

- There should be a marketing strategy to promote and advertise any changes to the parking system; and
- There should be a shuttle/trolley circulator serving off-site/periphery parking.

Owners of Grace Church and Western Auto Parking Lots

- The Grace Church and Western Auto Lots are currently leased by the City on a monthly basis;
- The revenue is split 50/50 between the owner and the City for parking revenue generated between Monday through Friday, 8 AM to 5 PM from pay-stations at the two lots;
- The City is responsible for maintaining the pay-stations and enforcement;
- The parking rate after 5 PM on weekdays and on weekends in the Grace Church lot is a flat rate of $10; and
- The City is concerned that these parking lots could be removed from public use and developed, which would eliminate a public parking resource.

Historic St. Augustine Area Council

- The St. Augustine Art Association located on the southern part of Downtown (22 Marine Street) has minimal parking options and relies on parking in the Trinity Episcopal Church lot at a discounted rate of $5;
- The Council is concerned that privately-owned parking lots that offer public parking could be developed;
- The Council is concerned that there is a lack of short-term parking options Downtown;
- The Council is in favor of the implementation of a Downtown shuttle that services hotels and periphery parking;
- The Council feels there is not adequate parking in the Downtown and would like more public parking options; and
- The Council is open to the creation of a Tax-Increment Finance (TIF) District to finance a parking facility.

Flagler College

- Flagler College has a total of approximately 800 surface spaces on campus and 551 spaces in a new garage;
- Flagler College students previously had the option to park in the City Downtown Garage with their student parking permit ($180 total for Fall and Spring semesters);
- Flagler College is planning on offering public parking during events in their new 551 space garage west of the Downtown on Malaga Street; and
- Flagler College is open to developing a shared parking agreement with the City where pay public parking would be offered in Flagler parking facilities during Flagler's off-peak periods.

Summary of Stakeholder Comments

There is no silver bullet that is going to solve all the parking issues and satisfy everyone in St. Augustine. However, the goal is for consensus building among the variety of constituents and improve parking

conditions for all users. It is important to identify where there is common ground among stakeholders. Based on feedback received, stakeholders agree on the following issues:

- Implementation of shuttle/trolley service Downtown that circulates the area and connects peripheral parking facilities,
- Need for additional parking,
- Development of an employee parking plan that reduces utilization of on-street metered and neighborhood parking,
- Providing discounted/free parking Downtown for residents to support economic development,
- Traffic and parking issues are primarily only during events and on weekends,
- Need to improve wayfinding signage,
- Flat fee rate in the Garage deters residents and short-term parkers, and

This report addresses the issues listed above and a number of other issues identified from conversations with City staff and the Mobility Study Project Team, including:

- Parking rate structure,
- On-street parking management,
- Parking technology,
- Employee parking solution,
- Resident parking, and
- Future parking needs.

Parking Rate Structure, Enforcement Hours and Time Restrictions

Due to the high tourist activity, there is a need to provide substantial parking for visitors. The City has taken on this challenge by constructing and managing the Garage, parking lots and on-street meters, which has placed a substantial management and capital expense on the City. The parking system is primarily financed through parking fees.

Parking rates, enforcement hours and time restrictions should be designed to effectively manage demand and change people's habits to match the City's transportation and economic development goals. Issues that can be improved with a well-designed rate structure, enforcement hours and time restrictions, include:

- Incentivize utilization of garage during off-peak periods;
- Distribute demand evenly across parking system,
- Encourage turnover on-street,
- Make on-street parking available to short-term parkers (i.e. less than 2 hours),
- Reduce traffic caused from vehicles circling Downtown in search of on-street parking,
- Promote a "Park Once" strategy that helps reduce vehicle trips, and
- Encourage the use of alternative modes of transportation.

Existing Rates, Enforcement Hours and Time Restrictions

Table 2 shows the existing parking rates, enforcement hours and time restrictions in the Downtown City and privately-owned public parking system. For visitors the Garage has a flat fee upon entry of $12 and parking on-street or in a City lot is $1.50 per hour. Based on the existing rate structure, it would require a visitor to park for 8 hours on-street or in a lot for it to be cost effective to park in the Garage.

St. John's County residents can purchase a ParkNow card. The ParkNow card is a prepaid debit card that allows discounted parking in all municipal parking facilities and on-street. This program was started in 2007 and has seen growth every year since. Overall, parking is discounted for County residents who choose to use a ParkNow card.

Employees can park in the Garage at a rate of $32 per month, which is substantially discounted compared to the regular or ParkNow card rates. The Garage is the most financially attractive monthly permit parking option compared to the City lots ($53 per month) or privately-owned lots ($100 to $125 per month).

On-street parking is enforced between 8:00 AM and 5:00 PM, but the Garage is enforced until 9:00 PM. A person would need to begin parking on-street at 9:00 AM to require paying for 8 hours of parking. Also, on-street parking and lots are enforced until 5:00 PM, and free on Sunday and Federal holidays. However, the Garage is enforced until 9:00 PM every day of the year. Both the parking rates and enforcement hours make the on-street parking more affordable and attractive for both short and long-term parkers compared to parking in the Garage.

Table 2 – Parking Rates, Enforcement Hours and Time Restrictions

Parking Type	Regular	ParkNow	Period	Permit/ Monthly	Enforcement Hours	Time Restriction
On-Street [1]	$1.50	$0.50	Hourly	-	Monday - Saturday, 8 AM - 5 PM	3 Hours
City Managed Lots	$1.50	$0.50	Hourly	$53.00	Monday - Saturday, 8 AM - 5 PM	4 Hours
Garage	$12.00	$3.00	Daily	$32.00	Monday - Sunday, 7 AM - 9 PM	NA
Privately-Owned Lots [2]	$5.00	-	2 Hours	-	24/7	NA
Privately-Owned Lots	$10 - $20	-	Daily	$100 - $125	Varies	NA

[1] *Free on federal holidays and 10 AM - 5 PM, Monday - Saturday around Plaza (i.e. King Street/Cathedral Place)*

[2] *Includes Spanish Lot and lot at Spanish/Hypolita.*

The existing rate structure and enforcement hours makes it advantageous to park on-street or in a City parking lot versus the Garage. This was verified based on the counts as the on-street parking was greater than 90% occupied during the July 2nd (Saturday) and 3rd (Sunday) counts, and the City lots were mostly full. However, the Garage was 70% occupied on July 2nd and 86% occupied on July 3rd.

Typically visitors use the Garage as this is where they are directed through signage, and residents and employees tend to look for more convenient parking on-street or in lots. On-street parking is considered the most convenient and attractive parking asset in a Downtown community and should serve high-priority, short-term parkers (i.e. business patrons, diners, etc.). Also, the Garage has a flat-fee ($12) which only encourages long-term parkers. However, there is substantial parking capacity in the Garage during typical weekdays, which could effectively serve short-term parkers.

Suggested Parking Rates, Enforcement Hours and Time Restrictions

The two main considerations in developing an effective rate structure are the time period (i.e. weekday or weekend) and user (i.e. visitor, resident, or employee). There is a substantial difference in parking demand between weekdays and weekends/events. Based on Garage occupancy counts, the Garage is substantially less utilized during a typical weekday compared to a typical weekend or event. Parking rates in the Garage should reflect this change in demand to help promote use of the Garage during typical weekdays.

In order to incentivize use of the Garage, reduce unnecessary traffic circulation by parkers looking for a space and to make on-street metered parking more available to short-term users the following rate and enforcement changes are suggested:

- Extend on-street metered and parking lot enforcement hours from 5:00 PM to 9:00 PM and charge on Sunday,
- Charge for on-street parking on Sunday from 12:00 PM to 9:00 PM,
- Increase the on-street hourly rate to be greater than off-street if parked for 4 hours or more,
- Offer discounted weekday parking in the Garage,
- Offer a discounted evening rate in the Garage on typical days (i.e. enter after 7:00 PM and leave before 7:00 AM),
- Vary the cost of parking in the lots based on demand,
- Charge visitors for parking in the Granada Lot and all of the Lightner Lot, and
- Maintain discounted and some free parking for residents.

Table 3 shows the suggested parking rate structure in the Garage, lots and on-street. It is suggested the Garage is enforced 24/7, which will require new parking access and control equipment to make it automated. This will be discussed later in the report. The on-street parking and lots should be enforced between 8:00 AM and 9:00 PM Monday thru Saturday, and between 12:00 PM to 9:00 PM on Sunday. The financial impact of the suggested rate changes are discussed later in the report.

A demand-based parking rate strategy was developed which models rates based on parking demand in order to help spread demand evenly across the system. The rate strategy addresses both residents/visitors/employees and weekday/weekends. Since the demand is greater on weekends a higher rate is suggested, including a flat rate in the Garage. However, an hourly rate of $2.00 up to five hours should be implemented.

Parking lots located in high pedestrian areas and that are well utilized (i.e. Fort Lot, Toques Lot, and Western Auto Lot) should be priced higher than other parking lots (i.e. Tolomato, Baas, Grace, and Lightner). To encourage residents to visit the Downtown discounted parking should continue to be

provided, including two-hour free parking in the Garage on weekdays and free parking in the Granada and Lightner lots. On-street parking should be priced higher than the Garage for long-term parkers (i.e. three hours or more).

Table 3 – Suggested Parking Rate Structure

	Weekday		Weekend/Event		Evening Rate	
Parking Area	**Regular**	**ParkNow**	**Regular**	**ParkNow**	**Regular**	**ParkNow**
Garage [1]	$2/hr, $15 max (4+ hrs)	2 hrs free, $3 max (2+ hrs)	$15 flat fee	$4 flat fee	$5.00	$3.00
On-Street Meters	$3.00/hr	$1.00/hr	$4.00/hr	$2.00/hr	NA	NA
Fort Lot	$3.00/hr	$1.00/hr	$4.00/hr	$2.00/hr	NA	NA
Toques	$3.00/hr	$1.00/hr	$4.00/hr	$2.00/hr	NA	NA
Western Auto	$3.00/hr	$1.00/hr	$4.00/hr	$2.00/hr	NA	NA
Tolomato	$3.00/hr	$1.00/hr	$4.00/hr	$2.00/hr	NA	NA
Bass	$2.00/hr	$0.50/hr	$3.00/hr	$1.00/hr	NA	NA
Grace	$2.00/hr	$0.50/hr	$3.00/hr	$1.00/hr	NA	NA
Lightner [2]	$2.00/hr	Free	$3.00/hr	Free	NA	Free
Granada [2]	$2.00/hr	Free	$3.00/hr	Free	NA	Free

[1] *Evening rate for entering after 7 PM and leaving before 7 AM*

[2] *Granada and Lightner lots are free to ParkNow card holders (i.e. residents)*

It is suggested that during typical weekdays the Garage should offer a graduated hourly rate scale to help incentivize utilization. However, during the weekends a flat rate should be implemented as the Garage is consistently reaching capacity. Due to the high utilization in the Garage a rate increase to a daily rate of $15.00 is suggested.

Sunday is considered a peak period of activity based on Stakeholder comments and the parking occupancy counts. It is suggested that the on- and off-street meters charge for parking on Sunday. The enforcement hours should start after 12:00 PM to allow relief for people going to religious services Sunday morning.

The indirect impact of these parking rate adjustments should attract people to use the Garage, which will help reduce traffic from vehicles circulating the Downtown looking for on-street parking and reduce vehicle/pedestrian conflicts. It should also reduce employees and long-term parkers from parking on-street and in City managed lots. As a result, on-street parking and City lots should be more available to short-term parkers (i.e. business patrons, diners and visitors).

Currently, the Granada and a portion of the Lightner City lots (total of approximately 150 spaces) offer free public parking after 6:00 PM on weekdays and all day on weekends. These spaces fill up fairly quickly and were being utilized for valet parking by the adjacent Casa Monica Hotel. It is suggested that these lots are continued to be made available for free public parking during weekday evenings and weekends, but only to St. Augustine residents registered in the discounted parking program. This will help incentivize residents to patronize the Downtown businesses. However, it is suggested that the City begin to charge for parking in the Granada lot and all areas of the Lightner lot during weekday evenings

(6:00 PM to 9:00 PM) and weekends (8:00 AM and 9:00 PM) for anyone not registered in the discounted parking program (i.e. ParkNow). This would require installing additional pay stations at these lots. Assuming a total of four pay-stations are needed, the cost would be approximately $40,000.

On-street parking should continue to offer a discounted rate for residents registered in the ParkNow card program to provide them incentive to continue to patronize the Downtown. However, the on-street rate should remain high enough to incentivize long-term resident parkers to use the Garage.

Parking Technology

The type of technology applied in a parking system can help achieve the defined goals for the system, including: management efficiency, customer convenience, and financial sustainability. Parking technology upgrades were considered for the Garage, lots, on-street meters, and enforcement.

Historic Downtown Garage

The Garage is currently selling parking at a flat fee with cashiers at the entrances and free flow exit. As discussed previously, it is suggested that the City implement a graduated hourly rate scale during weekdays. It is also suggested that the City implement an automated parking access and revenue control system (PARCS). Automated PARCS technology has the benefit of providing cost savings by eliminating staffing expenses, creating additional income by requiring paid parking 24/7, allowing easy changes to the rate structure, providing improved revenue control, and by increasing convenience to parkers. On-site staff in the Garage for customer service and security is still recommended, but it would not be as much staff and they could concentrate on more customer service issues instead of just collecting parking fees.

Currently, the Garage closes at 9:00 PM and there is no charge after hours, which reduces the revenue potential of the facility and allows abuse of multi-day parking. A parker could park for multiple days, but only pay one daily rate (i.e. $12), or park for free if they were to enter after 9:00 PM. With an automated, gated system pay parking could be easily enforced 24/7 and abuse from people storing their vehicles for multiple days without paying the appropriate rate could be eliminated.

The suggested PARC system would include pay-on-foot stations, pay-in-lane machines, ticket dispensers, license plate recognition (LPR) cameras and gates. The system would be capable of serving transient (daily), resident (ParkNow), and permit (monthly) parkers.

<u>Transient Parkers - Pay-on-Foot and Pay-in-Lane</u>

Pay-on-Foot (POF)
With a POF system, hourly and daily customers would obtain a parking ticket from a ticket dispenser as they enter the garage. They would take the parking ticket with them and insert it into a centrally located cashiering station that calculates the parking fee before returning to their vehicle to leave the garage. It is suggested that the POF machines accept cash, credit cards, debit cards, and validations, and can return change when appropriate. It is

suggested that a POF machine is located on each level next to the elevator bays and that two are located on the ground level.

The patron would pay the parking fee based on the length of stay and the machine issues a ticket to exit the parking facility. The patron inserts the issued ticket into a lag-time exit verifier and the parking barrier gate opens if the fee has been paid. This method of operation has a service rate of approximately 360 vehicles per hour (vph) at the vehicle exit when patrons pay in advance of exiting based on vendor specifications. However, the processing of exiting vehicles from a parking facility tends to be more dependent on exterior traffic conditions. During a large event where there is mass exiting traffic from the Garage, it is suggested that flat fee payment upon entry and free flow exit is implemented to help improve traffic conditions and reduce queuing/delays.

The key to the success of a POF system is to get the parking patron to take their ticket with them. This message can be conveyed with signage and audibly at the ticket dispenser. It is also important to locate pay stations in prominent locations that are preferably along pedestrian paths. A POF system should be coupled with Pay-in-Lane (PIL) stations.

Pay-in-Lane (PIL)
With a PIL system, a patron is issued a ticket from a ticket dispenser upon entry. When exiting, the ticket is fed by the patron into a machine at the exit lane that calculates the amount owed. It is suggested that the PIL system only accept credit card, debit card or validations. Once payment is received the exit gate opens and the patron can exit.

In order to effectively implement a PIL system staff may be needed at the exit points to assist with any issues regarding people not understanding how to use the system or addressing any issues with the technology. However, ideally a parker has prepaid for their parking at a POF station which requires proper placement of stations and appropriate signage throughout the facility.

The primary advantages of POF and PIL is the presence of parking barrier gates and no need for enforcement and no revenue leakage. The primary disadvantage is the cost of the equipment.

Validation

The Historic Downtown Garage used to offer validated coupons to businesses. Businesses could then offer validated parking to their visitors/clients. Validation coupons could be purchased from the City by local businesses at a discounted rate of $6.00 per day. The coupon book cost $150.00 and included 25 coupons. However, this program was discontinued.

It is suggested that the City offer a validation program for local businesses. The installed POF and PIL machines should support “chaser” validation tickets that would credit a portion or the entire cost of parking. The Parking Division should market these validation coupons to local businesses and post on the City’s website and in the Garage which businesses offer parking validation. This would allow businesses the opportunity to provide discounted parking for customers to help generate business. Businesses should have the ability to determine the amount of the validation coupon.

Permit and Resident Parking – License Plate Recognition Camera

It is suggested that license plate recognition (LPR) equipment is installed at one entrance and one exit lane of the Garage to allow access for permit (monthly) and resident (ParkNow) parkers. With an LPR camera system a permit parker and resident would register their vehicle with the City by their license plate number. The LPR camera would read the license plate automatically upon entry and exit. This has a fast processing time and high level of convenience. This system could replace the ParkNow card in the Garage. It is suggested that an LPR camera system is only implemented in one entry and one exit lane to help reduce costs. Adequate signage would be needed to inform permit parkers and registered residents where to enter and exit the facility in order to eliminate confusion. Since they are regular users of the Garage it shouldn't be an issue as long as they are informed in advance and directed with signage upon entering and exiting the Garage.

It is estimated that this type of automated PARC system with gates, PIL, POF and LPR for the Garage would cost approximately $270,000 to implement, which includes new barrier gates at each of the seven lanes. This would eliminate the need for cashiers at the three entrance lanes. However, it is suggested that there is still at least one employee is in the Garage at all times for customer service and that security is still present.

On-Street and Off-Street Lots

The on- and off-street system includes a mix of pay-and-display stations (Parkeon) and single space meters (MacKay). The pay-stations accept credit card, cash ($1 bills), coin and ParkNow card payment. The single space meters accept only coin and ParkNow card payment.

The existing system has limitations. The single-space meters only accept coin and ParkNow card payment, which is not user-friendly and requires a labor intensive collection process. The pay-and-display machines require enforcement personnel to check every vehicle windshield to identify a pay ticket.

It is suggested that pay-by-plate stations are implemented both on-street and in the City lots. A pay-by-plate pay-station requires the user to enter in their license plate number when purchasing parking. The license plate number is used by enforcement to verify payment. Pay-by-plate has a number of advantages including not requiring a user to return to their vehicle to put the parking ticket on their dash and it allows enforcement using LPR cameras. With this type of system enforcement personnel can simply drive through the streets and lots and automatically identify if a vehicle has paid. It can also identify if the vehicle has any unpaid parking tickets.

It is suggested that signage is posted on-street and in City lots informing patrons that they need to know their license plate number to pay for parking. Also, a marketing effort with flyers, postings on social

media, the City's website, and outreach to businesses should be implemented to effectively inform the public about changes to the meters.

It is estimated to upgrade the existing 39 pay-station machines to pay-by-plate and install an additional 30 machines to replace existing single space meters it would cost approximately $370,000.

Along with this new on- and off-street system it is suggested that a mobile payment option is offered. Parkeon offers a mobile payment platform called Woosh which is free to the City, but places a $0.35 surcharge on the user per transaction. This system provides an additional customer-friendly form of payment and allows people to extend their parking time remotely to help avoid parking fines.

Enforcement Technology

Currently, the City uses handheld computers for enforcement, which can be labor intensive since it requires walking the streets to identify a vehicle in violation. As stated previously, it is suggested that the City implement an enforcement system using LPR cameras. In addition to enforcing metered on- and off-street spaces, residential permit parking areas can also be enforced using LPR camera technology. A virtual parking permit system would allow residents to register their license plate number as part of the residential parking permit program. This can also apply to visitors/guests of residents who are purchasing daily or weekly passes.

There are a number of advantages associated with a virtual parking permit system with LPR enforcement, including:

- Enforcement efficiency,
- Every vehicle is easily checked for compliance,
- Cost savings from not needing parking permits,
- Eliminates need to issue physical permits,
- Automatic identification of scofflaws,
- Ability to analyze data to improve parking services and better manage enforcement routes, and
- Potential to implement system for both parking permits (monthly) and at meters (transient).

This type of enforcement system would require software and an online platform, two LPR enforcement vehicles, and approximately three enforcement handhelds. It is estimated that this type of system would cost approximately $130,000 to implement and ongoing annual costs of approximately $45,000. This cost estimate does not include purchasing a new enforcement vehicle, only the LPR cameras.

Space Availability and Wayfinding Signage

The Garage reached capacity for a few hours (i.e. peak periods) 40 days in 2016 and 28 days between January and May of 2017. The goal with signage is to effectively inform patrons that the

Garage has reached capacity and to direct them to another parking facility. To implement a simple space counting system in the Garage it would cost approximately $20,000. The implementation of four dynamic wayfinding signs along A1A (2 signs), San Marco Avenue (1 sign), and Cathedral Place would cost approximately $40,000.
Due to efforts by the City and the Historic Architecture Review Board to preserve the historic nature of the Downtown there may be some pushback with installing parking guidance signs in the Historic District. Thus, dynamic wayfinding signage may only be permitted along A1A.

Due to the design of the Garage, it can be difficult to locate a space and require drivers to circulate each level, which adds traffic, reduces user convenience, creates more vehicle/pedestrian conflicts, and causes increased greenhouse gas emissions. The implementation of an automated parking guidance system (APGS) would help direct drivers to the most conveniently available space in the facility. This type of system employs dynamic wayfinding signage, parking availability signage and lights over the spaces to show their availability and the type of space (i.e. ADA). This type of system ranges in price between $300 and $550 per space depending on if it's a non-camera based or camera based system. Thus, installing an APGS in the Garage could cost between approximately $350,000 and $630,000. In addition to wayfinding and space availability information, a camera based system can also provide the following amenities:

- Parking space finder,
- Enhanced security, and
- Premium space pricing.

Both a camera based and non-camera based APGS allows the utilization of a mobile application showing real-time space availability in the Garage. Since the majority of the visitors to the Downtown are tourists, a mobile application is not very effective in showing where available parking is located. Instead, dynamic signage posted along the street network directing drivers where to park is the best strategy to get people parked efficiently.

Enforcement Practices

All on-street parking and municipal parking lots are patrolled by enforcement staff Monday through Saturday from 8:00 AM to 5:00 PM. On-street parking is not enforced between 8:00 AM and 10:00 AM around the Plaza de la Constitution, Charlotte Street to Cordova Street, between King Street and Cathedral Place. Enforcement personnel are City employees and are managed by the City's Customer Service Supervisor. There a total of two full-time and two part-time enforcement personnel. Parking fines are $25.00 for an expired meter and increases by $10.00 if the recipient has not paid within 15 days. The City has recently started using updated Cardinal Tracking handheld parking enforcement equipment with wireless internet and picture capabilities.

The following changes to parking enforcement are suggested for the City of St. Augustine:

- It is suggested that the on-street meters and parking lots are enforced until 9:00 PM Monday through Sunday to prevent employees and long-term parkers from using on-street spaces.

- The Garage should be enforced 24/7 during typical weekdays and weekends and the gates should remain down.
- Only on large events (i.e. 4th of July) should parking be charged upon entry and the gates opened to allow vehicles to exit quickly to help prevent extensive delays.
- Fifteen minutes of free parking should be provided in the Garage for all users, at all times, to prevent issues with vehicles unable to locate a space and be forced to pay upon exiting.
- LPR enforcement technology should be applied for the metered areas with pay-by-plate pay-stations, which will improve the efficiency of enforcement.
- Virtual parking permits should be used for the residential parking permit program, which would also allow enforcement with LPR vehicles.
- Proper signage should be provided that inform/educate visitors of the local parking/traffic regulations.

Employee Parking Solution

Based on observations and parking occupancy counts, it is believed that employees are parking on neighborhood streets with no restrictions around the Downtown and at metered areas both on- and off-street during the evenings. This is causing congestion in residential areas and reducing the number of short-term parking areas available to visitors and residents. With the implementation of residential permit parking areas around the Downtown and extended meter enforcement hours (until 9:00 PM, 7 days a week), employees will lose some of their more attractive parking options due to convenience and price. It is suggested that a solution is developed to effectively support Downtown employees.

Employee parking should be provided in off-street parking areas on the periphery in order to prevent employees from using convenient, short-term parking areas intended for visitors and patrons to the Downtown. Currently, the Garage offers monthly parking permits at a rate of $32 per month or $300 for the year. This is a relatively low rate that equates to approximately $1.60 per day, assuming 20 work days per month and a rate of $32 per month. Approximately 260 permits are sold in the Garage today. It is suggested that permit parking continue to be offered in the Garage on weekdays, but that another parking option is offered on weekends and event days. This will free up space in the Garage on weekends and events to help prevent it from reaching capacity.

It is suggested that another parking option is offered to monthly parkers during weekends and events. The City currently is permitted to use the St. John's County School District lot when the school is out of session or there is an event on Francis Field. This parking lot is located adjacent to the Garage on Orange Street and has approximately 124 spaces. It is suggested that a shared parking agreement is established that would allow the City to manage the lot during the evenings and weekends year-round. The lot should be used to serve monthly, permit parkers during weekends and large events when the Garage tends to reach capacity. Parking restriction signs could be posted informing people their vehicle needs to be out by Monday morning or it will be towed to prevent any conflict with school parking needs.

Another option is to develop a shared parking agreement with Flagler College to allow the use of the Flagler Garage located on Malaga Street between Oviedo Street and Valencia Street. Shuttle service should be provided to and from the Flagler Garage and Downtown area (i.e. Plaza) to create a safe and

convenient employee parking option. Also, providing a circulator shuttle around the Downtown from the Garage will incentivize use of the Garage by employees.

The Flagler Garage is convenient for employees arriving from the west, north and south of the Downtown. However, for employees arriving from the east (Anastasia Island) this parking facility is not convenient as it requires traversing the Downtown. Also, there are substantial traffic and delays crossing the Bridge of Lions. An off-site parking option east of the Bridge of Lions should be offered on weekends with shuttle service. This parking facility could serve both visitors and employees. Additional discussion regarding the implementation of off-site parking with shuttle service is provided later in the report.

Resident Parking Downtown

Currently, St. Johns County residents are offered the option to purchase a ParkNow Card for a one-time fee of $2.50, which allows cardholders discounted parking in the Garage ($3.00 flat fee) and at metered areas both on- and off-street ($0.50 per hour). During Stakeholder meetings it was communicated that the ParkNow card is not widely used and is fairly inconvenient since it can only be recharged with value at the Financial Services Center or Visitor Information Center. However, residents and the business community feel providing discounted parking for residents is a great incentivize and helps spur economic development.

As discussed previously under the “Parking Rate Structure, Enforcement Hours, and Time Restrictions” section, it is suggested that discounted parking for residents continue with some rate adjustments to help incentivize residents to use the Garage and parking lots located on the periphery. Two hours of free parking should be provided in the Garage for residents registered in the discounted program. This would incentivize residents to use the Garage.

Free parking for residents registered in the discounted program should be offered in the Granada and Lightner lots. Also, if shared parking agreements can be developed with Flagler College, free parking should be offered in Flagler College parking facilities for residents registered in the discounted program. Providing free parking options will incentivize residents to come Downtown and patronize the local businesses.

Under the “Parking Technology” section it was recommended that a virtual parking permit system, pay-by-plate meters, and LPR cameras in the Garage be implemented. This technology could replace the current ParkNow card system, which is not well utilized and is found to be inconvenient. This technology would allow residents to go online and register their vehicles plate and add value to their account. At pay-stations residents would have to enter their license plate number to take advantage of the discounted rate. Enforcement staff could use LPR camera enabled vehicles which automatically identify if a vehicle paid for parking based on the license plate.

Residential Permit Parking Program

The Neighborhood Association indicated that employees and visitors to the Downtown are parking in residential areas. There was also a concern that it would be difficult to establish residential permit

parking in areas where owners are renting out their property (i.e. Airbnb, summer rentals, etc.). A resident needs to show that they reside within the City limits by providing either a voter registration or a utility bill. This documentation is required to vote for or against a residential permit program in their area, and to apply for a residential parking permit.

Five areas in St. Augustine are designated as residential permit parking (RPP). In order to park in these spaces a resident would have to obtain a residential parking permit at a cost of $30.00 per year. Residential permit parking is enforced from 7:00 AM to 7:00 PM, seven days a week. A driver's license, vehicle registration, and a proof of residency is required to obtain a permit. Residents can also purchase a weekly guest permit for $10.00 and an annual service permit for $30.00. A vehicle registration and the guests license is required to obtain a guest parking permit.

As stated in the St. Augustine Zoning Code, the creation of a residential permit parking area requires a majority (60%) of the residents of a residential area to submit a petition to the City Manager. The City would then have to perform surveys/observations to determine that the residential area is at least 70% utilized at peak periods and that at least 25% of the vehicles are non-residents. Also, if an undue number of commuter vehicles are parked in a residential area regularly between the hours of 7:00 PM and 6:00 AM for purposes unrelated to residential uses.

The five RPP areas in the City include:

- 23 spaces on the west side of Avenida Menendez between Bridge Street and Francis Street,
- 12 spaces on the north side of Saragossa Street between Cordova Street and Sevilla Street,
- 4 spaces on Water Street between Shenandoah Street and Joiner Street,
- 2 spaces on Joiner Street east of Water Street, and
- 19 spaces on the north side of Saragossa Street between Riberia Street and Ponce de Leon Blvd. (US 1).

The majority of non-resident vehicles parked in residential areas during a typical, non-event day are Downtown employees. Some of the employees use an alternative form of transportation (i.e. bike, skateboard, etc.) to travel between their vehicle and work. The majority of the residential streets outside the Downtown area are free, unrestricted parking, which incentivizes an employee or visitor to park in these areas.

The following are recommendations regarding the residential permit program:

- Implement a virtual residential parking permit system that would be based on a resident's license plate and allow them to register online.
- Increase enforcement in residential parking permit areas and implement LPR enforcement.
- Implement a virtual guest parking permit system that would allow residents to register their guest's vehicles online for a defined time period.
- Limit number of residential permits issued per household (i.e. 3 permits).
- Increase the cost of each additional residential permit issued per household (i.e. $30 1st permit, $50 2nd permit, $75 2nd permit, $100 4th permit).
- Charge for guest permit parking on a daily basis (i.e. 24-hours) at a rate of $2 per day or $10 for the week.

- Require home owners to provide proof of residency (i.e. utility bill or voter registration) prior to voting for the establishment of a residential parking permit program.
- Issue adequate marketing materials when voting on residential parking permit program and to inform residents of the policies and procedures once a RPP is established.
- Do not reserve spaces for specific residents, but make all spaces in a RPP area available to any resident with the proper RPP.
- Create a separate RPP area within a three-block radius of the Downtown to prevent residents from other RPP areas from driving and parking in these areas when traveling Downtown.
- Hours of enforcement for residential permit parking should be between 5 PM and 12 AM Monday thru Friday and from 10 AM to 12 AM Saturday, Sunday and holidays.

The reason for limiting non-residents from parking in residential areas during the evening (i.e. 5:00 PM to 12:00 AM) on weekdays is because the peak parking period for employees and the Downtown is during the day. Residential parking peaks during the evenings when people are home from work and daily activities. This allows the principles for shared parking to work. Also, it may become costly to find a solution to support all employee parkers during the afternoon when the Downtown parking system is operating at capacity. During the day on-street parking in residential areas can provide a solution for periphery parking for employees. During the evenings, there is excess parking capacity among the public parking facilities.

As discussed previously, it would cost approximately $130,000 to implement a virtual parking permit system with two LPR vehicles and an annual cost of $46,000. The residential parking permit program currently only generates $6,500 annually for 60 spaces, which equates to approximately $108 per space annually. The RPP is not a substantial revenue generator and is not financially sustainable, so must be supported by other revenues.

Future Parking Facilities

Based on the stakeholder meetings, we heard from both residents and business owners that there is a need for additional parking. However, there seemed to be differing opinions regarding the preferred location. Business owners would like to see a new parking facility Downtown and residents would like to have employees and visitors shuttled from an off-site/periphery parking location.

There are a number of parking lots in the Downtown located in areas that are difficult to access without traversing narrow, high-pedestrian streets, including: Toques, Western Auto, Tolomato and Spanish. This can create vehicle-pedestrian conflicts and reduce the attractiveness of the Downtown. Also, these lots are not serving their highest and best use as parking lots. These parking lot locations would be best served as a development (i.e. commercial, residential, etc.), which improves the economic viability, walkability, and attractiveness of the Downtown. The construction of additional parking could help incentivize the development of these interior Downtown parking lots.

A number of the public parking lots are leased by the City from private owners, including: Fort Lot, Baas Lot, Grace Lot and Western Auto Lot. There is always the risk that the lease on these facilities would not be renewed and either developed or used for private parking. This could substantially reduce the amount of public parking available in the Downtown.

As discussed previously, the need for additional parking Downtown is primarily during the weekend and on events so a solution may just be needed during these time periods.

Parking Structure

A feasibility assessment of constructing a parking structure on the Lightner Lot was performed in 2003. This parking structure would have served City employees and residents. However, due to an outcry from adjacent residents to the site this facility was never constructed based on a feeling that it would have a negative impact on traffic in the adjacent Historic District.

As part of the Downtown Parking Study conducted in 2013, a number of sites were identified for a future parking facility, including at the Grace Lot, Francis Field, Sebastian Island Harbor, Post Office (King Street), Malaga Street, Lightner Museum, and Mason's (King Street). It was determined that the Malaga Street and Francis Field locations were best suited for a future parking facility. As stated earlier, Flagler College already constructed a parking structure at the Malaga Street site. Francis Field is not a viable option for a parking structure as it serves as the site for a number of large events and the public wants it to remain as open space.

An assessment was conducted to determine the best option to construct a future parking facility. **Figure 3** shows the proposed locations for a future parking facility. There are a number of pros and cons associated with each location, which are identified in **Table 4**.

Figure 3 – Parking Facility Locations

Table 4 – Pros and Cons of Potential Parking Facility Locations

Location	Pros	Cons
Site A (Ketterlinus School)	• Convenient vehicular access • Overflow option • Shared parking with school	• Adjacent to existing Garage • High vehicle activity during events • Not under City control • Logistical issues with School
Site B (Fort Lot)	• Convenient location • High parking demand area • Charge premium for parking	• Adjacent to Fort, may be view shed issues • Added traffic to high activity area • Not best use of land • City does not own
Site C (Lightner Lot)	• City owns • Support development on southern end of City • Shared parking with City emp. • Convenient location	• Adjacent to residential area • Requires traversing Downtown to access • Temporary parking solution for City employees during construction
Site D (Granada Lot)	• City owns • Support development on southern end of City • Shared parking with City emp. • Convenient location	• Adjacent to residential area • Requires traversing Downtown to access • Temporary parking solution for City employees
Site E (West of Route 1)	• Decreases Downtown traffic • Helps make Downtown more pedestrian-friendly • Convenient for people from the west	• Requires shuttle service • Least attractive parking option • Requires discounted parking rates to incentivize utilization • Not City owned • Not convenient for people from Anastasia Island

It is suggested that the City invest in promoting alternative modes of transportation and identifying shared parking opportunities or off-site parking facilities prior to constructing a parking structure Downtown. Additional parking Downtown works against the overarching goals of the Mobility Study to reduce vehicle trips and parking demand in the Downtown to create a more pedestrian-friendly, less congested and safe community.

Alternative Parking Supply Solutions

Prior to constructing a garage Downtown the City should explore other options to support future demand. A parking structure is costly at approximately $15,000 to $20,000 per space and could place a large financial burden on the City. There are potentially other cost effective strategies, including shared parking with an existing parking facility and off-site parking with shuttle service.

First the City should identify any shared parking options with existing Downtown parking facilities, such as with Ketterlinus School and Flagler College. Currently the Ketterlinus School is used for event and

overflow parking. It is suggested that this practice continue. The Stakeholder Meeting with a Flagler College representative was promising as they showed interest in allowing public parking during Flagler College off-peak periods in some of their parking facilities. This may not be a long-term solution depending on how much parking is made available for public use by Flagler, but it should continue to be explored. Also, Flagler College plans on allowing event parking in the Flagler Garage.

Another potential option is to construct off-site parking with shuttle service. Some potential options for off-site parking include the following:

- West of U.S. Route 1 (i.e. Site E),
- Across the Bridge of Lions on Anastasia Island,
- North of the Downtown off State Road 16, and
- Flagler Garage on Malaga Street.

Each off-site parking location has unique benefits. The site west of U.S. Route 1 (Site E) could effectively attract drivers from the north, south and west. However, it would not effectively serve people from the east on Anastasia Island. Locating an off-site parking facility on Anastasia Island could intercept traffic to help relieve traffic delays on the Bridge of Lions into the Downtown. Currently, the St. Augustine Amphitheater on Anastasia Island is used for off-site parking during events. However, this location is not within walking distance to the Downtown. Ideally, the location should be adjacent to the Bridge of Lions to provide people with the option to walk across the bridge into the Downtown so they are not dependent on the shuttle.

During events there is also off-site parking located north of the Downtown. State Road 16 is the major thoroughfare from I-95 to St. Augustine. An off-site parking lot located along State Road 16 or either U.S. Route 1 or A1A south of State Road 16 would effectively intercept a substantial amount of traffic traveling Downtown. This location would be dependent exclusively on shuttle service to the Downtown.

The Flagler Garage is approximately the same walking distance as the Historic Downtown Garage from the Plaza. However, the walk is through a residential area and is not located adjacent to any major attraction, which makes it a much less attractive parking option compared to the Historic Downtown Garage. In order to attract visitors and employees to use the Flagler Garage a shuttle would need to be provided. Any shuttle service should have acceptable headway times. Free parking or a substantial discount would also have to be associated with this facility to incentivize people to take a shuttle into the Downtown. It would have a positive impact on traffic by reducing the amount of vehicles generated to the Downtown area.

As discussed previously, visitor activity and parking demand peaks during the weekends and on events. It is suggested that any off-site parking facilities and shuttle service only be implemented during weekends (i.e. Friday evenings, Saturday and Sunday) and events. Garage permit parkers should be directed to not park in the Garage and instead use off-site parking facilities or shared parking options (i.e. St. John's County School lot or Flagler College parking facilities) during weekends and events.

The following recommendations are suggested with the implementation of off-site parking:

- Provide free shuttle service with 10 to 20 minute headways on Fridays, weekends and events,

- Pick-up/drop-off from a central location Downtown (i.e. Plaza),
- Direct monthly permit parkers (i.e. employees) to use either the Flagler parking facilities or St. John's County School lot,
- Charge a discounted rate for daily parkers (i.e. $5 daily rate),
- Direct patrons to use off-site parking locations when Garage or Ketterlinus School lot reaches capacity,
- Use the shuttle(s) to also serve as a circulator service Downtown.

Assuming shuttle service is provided by the City it would cost approximately $50 per hour per shuttle. It is estimated that four shuttles are needed to service two off-site parking locations (i.e. west and east of Downtown), which would cost the City approximately $468,000 per year to provide shuttle service on Fridays and weekends for 15 hours each day (i.e. 11 AM to 2 AM) throughout the year. This does not include large events (i.e. 4th of July, etc.). There would also be an initial capital cost of approximately $250,000 to purchase the shuttles and ancillary items needed (i.e. outfits, etc.). It is suggested that a shuttle analysis is performed once off-site parking facilities are identified.

Garage Financing

The Historic Downtown Garage was financed with Special Revenue Bonds, in which case the debt is being serviced by parking revenue. There are a number of strategies/programs that can be applied to fund a parking structure, including a public-private partnership, a fee-in-lieu program, creating or use of Tax-Increment Financing (TIF), creation of a parking assessment district, using fees generated by implementing a Business Improvement District (BID) or issuing General Obligation (GO) bonds. A TIF district already exists for parking and traffic blight in the majority of the Downtown area. General Obligation bonds require the vote of citizens for approval. Each strategy has pros and cons that should be considered. **Table 5** provides a list of funding strategies and the advantages/disadvantages associated with each option.

A public-private partnership opportunity is strongly dependent on the parking facility location and the opportunity for economic development. There may not be an opportunity to implement a fee-in-lieu program in St. Augustine since there are no parking requirements for Downtown developments. The creation of a TIF district can be successful if the City has the business community support and the area meets State requirements. A TIF district seemed to have support from the Historic St. Augustine Area Council during the Stakeholder Meetings. Also, precedents has already been established for TIF districts in St. Augustine. The St. Johns County Community Redevelopment Agency (CRA) has created TIF districts in the following areas: Flagler Estates, Vilano Beach, and West Augustine.

A BID or a parking assessment district could both be used to generate funding towards financing a garage. Based on the current financial stability of the existing parking structure, there may be an opportunity to issue bonds supported by existing parking system revenue. A combination of strategies could be applied to help fund a future parking facility including GO bonds, private financing and a TIF district. The City needs to explore which options are viable. A financial feasibility study should be performed to assess the finances (capital costs, revenue, and operating expenses) for a future parking facility. The City should also consider establishing a Parking Enterprise Fund, which will be discussed later in the report.

Table 5 - Summary of Parking Financing Strategies

Strategy	Summary	Advantages	Disadvantages
General Obligation Bonds	Municipality issues bonds which are paid back through the general fund	Bonds issued to construct parking facilities for the public are typically tax-exempt, and have a lower interest rate	Since these bonds are funded by the general fund, it would come out of public taxes, including those who do not use the garage
Revenue Bonds	Municipality issues bonds which are paid back through a specific pool of money	In addition to being tax exempt and having a lower interest rate, theres is a guaranteed source of money designated to pay back the bond	The municipality needs to show there is stable demand; risk not being able to pay it off if the projected revenue is not generated
Tax Increment Financing (TIF)	TIF funds capture the increased property value generated by improvements made in a specified area. The increased property value is used to create a pool of money which can be used for local improvements, such as parking	Serves as a reliable source of revenue to support the cost of constructing and/or improving parking facilities	TIF is dependent on strong economic conditions-the city may not be able to pay off the expected debt issued if the property values do fail to increase
Parking Benefits Districts	The municipality returns all or some of its parking revenue raised from parking meters or taxes to the district, in the form of additional parking facilities or beautification projects	The users are paying for additional parking supply. By tying increased parking rates to visible improvements in the community, the general publics acceptance of increased rates is improved	Can be complex to set up. Require businesses, developers, land owners, residents, and city officials to work together to agree on appropriate projects
Business Improvement Districts (BID) / Special Service Areas (SSA)	Levy a tax on commercial properties and business within a defined area. Additional funds are used to construct or improve public parking facilities	Can serve as a means to more quickly receive funding for parking projects; does not charge one-time visitors or infrequent parkers	Require s "buy in" from businesses, which can be seen with resistance
Parking Authorities/Utilities	The municipality chooses to create a separate government entity to provide and operate the communities parking system.	Functions as a self-supporting entity that is responsible for all aspects of public parking, with the ability to issue their own debt, budget, and governing body. This independence from municipal government insulates them from political influences.	If not already included in city code, their creation requires enabling legislation at the state level.
Parking Enterprise Fund	This fund is self-sustaining and separate from the general fund. Revenue streams can include monthly leases, permit sales, violation revenues, etc. Administration is still within the local government.	Allows parking construction, improvements, and enhancements to be paid for outside of the general fund.	Does not have the capacity to issue bonds on its own
Public -Private Partnerships	When a government entity sells (or leases) a portion of its parking system to a private entity. Several different types (Long-term Leases, Concession Agreement, Design-Build, Design-Build-Operate-Manage, etc.)	Reduces the public sectors direct debt burden when constructing parking facilities while allowing them to complete a project more quickly and affordably	Public entity has to give up control, and a portion of its revenue stream. Contracts and negotiations can be complex and time consuming.

Prior to financing and constructing a future parking facility it is suggested that the City explore options to share parking with existing private parking facilities (i.e. Flagler College and Ketterlinus School) and explore the logistics/costs of off-site parking options.

Parking Organizational Structure

Existing Organizational Structure

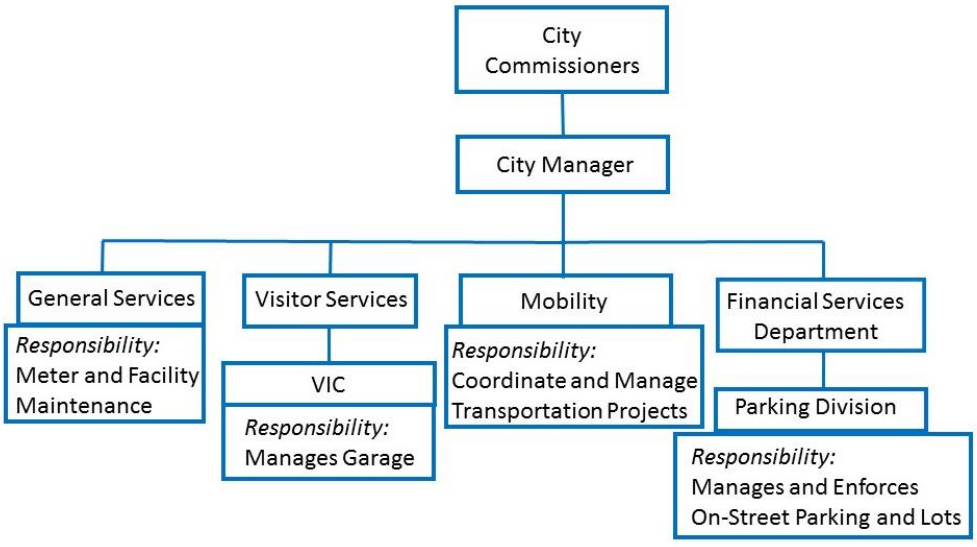
Management of the Downtown parking assets is currently split between the Visitor Services Department, Public Works Department and the Parking Division. The City's Visitor Services Manager is responsible for managing the Historic Downtown Parking Facility, as well as, the St. Augustine and St. John's County Visitor's Information Center. The Parking Division is under the Finance Department and is responsible for managing the on-street meters and off-street City parking lots, including collections, enforcement, and equipment (i.e. paystations and meters) maintenance.

The City's Parking Division is responsible for managing the following programs on a day-to-day basis:

- On-street meters and off-street parking lots,
- ParkNow card,
- Validated parking,
- Residential permit parking,
- Leased parking facilities,
- Accessible parking, and
- Enforcement/collections.

Figure 4 shows the existing organizational structure for any department responsible for parking operations, enforcement, collections, and maintenance for the City of St. Augustine.

Figure 4 – Existing Organization Chart for Parking Services at the City of St. Augustine



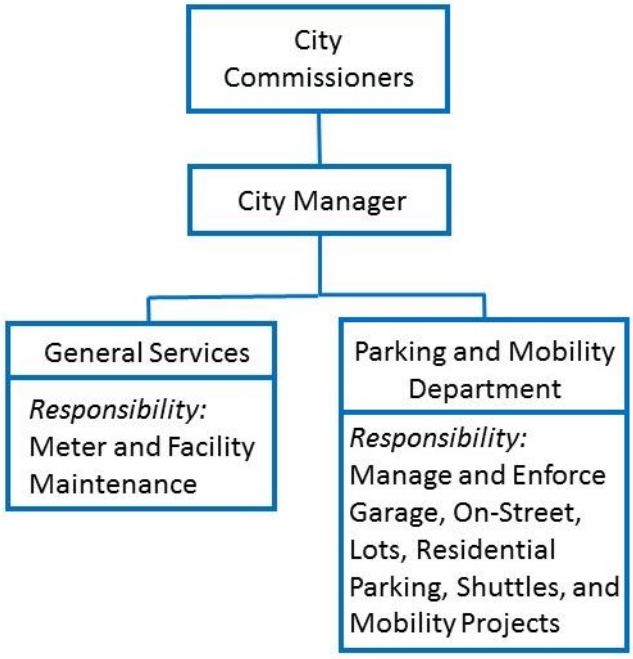
Suggested Organizational Structure

It is suggested that the management of the City's parking system (both on-street and off-street) should have a central point of contact and management. This allows one person or department to effectively concentrate on the management of the entire parking system without being distracted from other duties. It also provides a single source of information for developers, businesses, residents and others as to parking policies, rules, regulations, laws and enforcement. A single parking management/operations entity provides consistency and uniform management to prevent a piecemeal management system.

Currently, the City of St. Augustine has a Parking Division under the Finance Department. A Parking and Mobility Department is preferable to a Parking Division because it enjoys equal administrative standing with other departments, some of which have to be depended upon for support services. **Figure 5** provides a basic outline of the suggested organizational chart, which shows the Parking and Mobility Department would be directly under the oversight of the City Manager.

A Parking and Mobility Department has a greater ability to champion important operational and managerial initiatives and have far greater autonomy than a Parking Division. A Parking Division has similar, but diminished powers and abilities than are associated with Transportation and Parking Departments. Regardless of whether a Parking Division is situated within the Police Department, the Finance Department, the Treasurer's Department or the Public Works or Properties Departments, transportation/parking operations and management is never a primary and prominent responsibility of the Department. From a subordinated position within a Department, the Parking Division must compete with other Divisions to obtain permission to advance needed changes, to secure required funding and to receive adequate and sustained support services from other divisions and departments.

Figure 5 – Suggested Organizational Chart for Parking Services at the City of St. Augustine



The revenue and expenses associated with the parking system should be tracked separately from other municipal services, in order to effectively understand the costs to operate/maintain the system and the revenue generated from the system. The practice of operating a financially self-supporting parking system is becoming the standard in best practices. We believe that a municipality needs to understand the full cost of owning, operating and managing parking so that informed decisions can be made relative to setting rates, investment, zoning variances, and other policy decisions.

Some cities have chosen to make their Transportation and Parking Departments or Divisions an enterprise operation. An enterprise operation is a financial accounting term given to business-type activities of government, such as convention centers, airports, golf courses, water works and parking facilities. Such business–type activities generate revenue entirely through user fees and charges rather than being principally supported by taxes and intergovernmental revenue. The key distinction of an enterprise fund Parking Department or Division is that they are a self-supported entity.

Diverting funds from the general fund that are generated from parking revenue may place a strain on funding other services, but it is not considered a best practice to use parking revenue for these non-related municipal needs. Parking should be considered a utility and simply operate as a self-sustainable entity. Any excess revenue should be applied to support transportation and multi-modal goals. All revenue from the sale of transportation (i.e. shuttle) and parking services and goods are kept to fund the operation, thus it is operated like a business. The challenge and advantage of a Transportation and Parking Enterprise Fund is that sound management, effective marketing and promotion, quality service, and conscientious budgeting, can lead to annual net revenue reserves that can be used to pay debt, fund capital improvements, and/or finance new projects. In effect, Transportation and Parking Enterprise Fund entities are not a burden on the City's general fund account which is primarily composed of income and property tax revenue. Transportation and Parking Enterprise Fund Departments or Divisions are more often single centers of responsibility for all facets of the parking system.

Private Operator

The City is considering hiring a private operator to manage the Downtown parking system (Garage, on-street and lots). St. Augustine has large enough of a parking system that generates substantial revenue where almost any operator would be interested in managing the system. A private operator previously managed the Garage in the 1980's and 1990's, but there were some issues due to loss of control causing the City to buyout their contract. These historical issues have caused concern regarding the level of customer service and financial implications. However, a private operator can provide a number of benefits, including the following:

- Specialized service with large network,
- Breadth of knowledge from previous experience,
- Eliminates need for City to hire and manage employees,
- Allows City staff to concentrate on more pertinent issues, and
- Potential to increase net revenue from improved management efficiency.

There may be a greater upfront cost associated with hiring a private operator. It also requires annual auditing of parking operation and oversight. The City would lose some control over the day-to-day

management of the parking system, but still have control over the overarching policies (vision, outreach, planning, etc.).

The City would need to enter into a management contract with a private operator. The private operator would be paid a fixed fee, a percentage of gross parking revenue, or a combination of the two. The operator provides all labor and services, and is reimbursed for all costs incurred in the operation of the system. The City would have complete control over staffing levels, parking rates, and customer service policies. The operator should provide the City with a detailed monthly report package showing operating statistics, revenue summaries, expenditure summaries, and budget variance reports. The parking operator should handle all customer service issues and report these issues to the City.

Financial Analysis

A financial analysis was performed to assess the impact of the suggested rates and enforcement time changes. **Table 6** shows the projected annual increase/decrease of parking revenue for the Garage, parking lots and on-street meters. This analysis also includes charging for visitor parking, but not resident parking in the Granada lot and portion of the Lightner lot that is currently free during the evenings (after 6:00 PM) and on weekends. Currently, the City leases parking in the Fort, Western, Baas, and Grace lots where the City splits (50/50) the revenue with the owners. These lease agreements were considered in projecting the additional revenue generated to the City from the suggested rate and enforcement time changes.

A total increase of approximately $1.9 million per year of parking revenue is projected and the City would receive approximately $1.4 million additional revenue per year. In 2016 the parking system (i.e. Garage, on-street meters, off-street lots, residential permits, ParkNow card sales, and fines) generated approximately $5.6 million. With the suggested rate and enforcement hour changes the parking system would generate a total of approximately $7 million in gross revenue, which is a 25% increase.

Parking Lots and On-Street Parking

It was assumed that the parking lots would be enforced from 8:00 AM to 9:00 PM Monday thru Sunday, and that the on-street meters would be enforced from 8:00 AM to 9:00 PM Monday thru Saturday and from 12:00 PM to 9:00 PM on Sunday. It was assumed that parking in the Granada and Lightner lots that are free during the evening and weekends would charge for parking Monday thru Friday from 6:00 PM to 9:00 PM and from 8:00 AM to 9:00 PM on Saturday and Sunday to visitors and free for residents registered in the discounted program. The parking rates listed in **Table 3** were used for the analysis.

A 20% reduction factor was applied for the lots and on-street parking. This factor accounts for elasticity and reduced demand during the evenings compared to during the day. Elasticity assumes that some percent of the existing demand would use an alternative parking area (i.e. Garage) or an alternative mode of transportation (i.e. bike, walk, etc.) due to the increase in rates. Based on historical studies, parking demand is found to be fairly inelastic. Even a 5% shift in demand is considered substantial.

Table 6 – Projected Annual Parking Revenue Gain/(Loss)

Parking Area	Totals	City's Share *
Historic Garage	$ (238,030.00)	$ (238,030.00)
Fort	$ 879,311.06	$ 439,655.53
Toques	$ 201,102.49	$ 201,102.49
Western	$ 75,844.12	$ 37,922.06
Baas	$ 25,770.70	$ 12,885.35
Grace	$ 52,682.43	$ 26,341.22
Lightner	$ 52,903.88	$ 52,903.88
Granada/Lightner	$ 159,528.68	$ 159,528.68
On-Street Meters	$ 700,439.71	$ 700,439.71
Totals	**$ 1,909,553.07**	**$1,392,748.91**

Notes:
Based on revenue between October 2015 to September 2016 for lots and meters
Based on revenue from 2016 for Garage
Assumes changes to hours of enforcement and rates
No added time assumed for Sunday
Applied a 20% reduction factor for on-street and lots to account for elasticity and reduced demand during the evenings
On-street meters includes the Tolomato Lot
Granada/Lightner includes charging for parking at 149 spaces for visitors
Granada/Lightner includes free parking for residents in discounted parking program
Assumed 75% of parking demand in Granada/Lightner is residents
**City's Share considers revenue split as part of lease agreements for Fort, Western, Baas, and Grace lots*

Since revenue was generated on Sunday from the on-street meters and lots when parkers are not required to pay, no added revenue was calculated for Sunday between 12:00 PM and 5:00 PM. However, additional revenue for Sundays between 5:00 PM and 9:00 PM was assessed. The assumptions applied for parking elasticity and Sunday revenue are conservative, thus there is the potential for greater revenue increases.

It is estimated that the suggested rate changes on-street and in the lots would equate to an increase of approximately $1.6 million in annual revenue. Most of this additional revenue will be generated from the Fort Lot and on-street meters.

Historic Downtown Garage

As previously shown in **Table 3**, it was assumed that the Garage daily/max flat fee would be increased to $15, a graduated rate scale would be applied up to four hours on weekdays, and that 2-hour free parking would be provided to residents with a ParkNow card on weekdays. It is suggested that the Garage is enforced 24/7 to prevent vehicles from parking overnight for multiple days without paying (i.e. warehousing their vehicle). It is also suggested that an evening rate ($5) is implemented for vehicles that enter after 7:00 PM and leave before 7:00 AM. The financial analysis does not take into account the evening rate or charging for parking 24/7. However, all other rate changes were considered.

It is estimated that the suggested rate changes in the Garage will reduce the annual revenue by approximately $238,000. However, this analysis does not consider the added revenue from 24/7 enforcement or added demand from people incentivized to park in the Garage versus on-street or in the lots, which could offset any projected losses in revenue.

Capital Improvements

Throughout the report a number of improvements to the parking system are identified, which include:

- PARCS upgrades in Garage to make it automated 24/7,
- Implement virtual parking permit program to replace ParkNow card,
- Replace single-space meters with multi-space pay-by-plate pay-stations,
- Upgrade existing pay-stations with pay-by-plate technology,
- Implement virtual residential parking permit system with two LPR enforcement vehicles,
- Additional pay-stations (4) in the Granada and Lightner lots,
- Space availability system and dynamic signage for Garage, and
- Shuttle system from off-site parking facilities.

As displayed in **Table 7**, it is estimated that all the suggested technology upgrades would cost $555,000 with ongoing annual costs of approximately $47,000. The upgrade to an automated PARC system in the Garage is estimated to cost an additional $270,000 with an ongoing annual expense of $30,000. To install a per-space automated parking guidance system in the Garage would cost $630,000 with ongoing annual costs of approximately $10,000. To implement a shuttle system serving two off-site parking facilities on Friday, Saturday and Sunday would cost approximately $470,000 per year, which includes staff costs, and an initial capital cost of $250,000 for the shuttles and materials. This analysis does not account for the cost to purchase/lease and maintain an off-site parking facility. Overall, all these improvements could be funded with the added revenue from the suggested rate and hours of enforcement changes, as shown in **Table 6**.

Appropriation of Parking Revenue

A parking system is intended to be financially sustainable. If additional revenue is generated beyond operation expenses, capital expenses (i.e. capital reserves for maintenance and technology upgrades), and debt obligations, it is suggested that these funds are appropriated to support streetscape improvements and alternative modes of transportation. Such improvements could include:

- Shuttle service from off-site parking facility,
- Downtown circulator bus or transit service throughout region,
- Lighting improvements,
- Streetscape improvements (i.e. sidewalk repairs, landscaping, benches, art, etc.),
- Bicycle infrastructure (i.e. bike lanes, bike racks, etc.),
- Bike share service (i.e. Zagster), and
- Signage (i.e. informational and dynamic signage).

Table 7 – Estimated Parking Technology Upgrade Costs

Technology	Units	Unit Cost	Total Cost	Ongoing Costs
Pay-by-Plate Stations Upgrade	39	$ 2,500.00	$ 97,500.00	
New Pay-by-Plate Stations	30	$ 9,000.00	$ 270,000.00	
Software Platform	1	$ 40,000.00	$ 40,000.00	$ 40,000.00
LPR Enforcement Vehicles	2	$ 37,000.00	$ 74,000.00	$ 5,000.00
Enforcement Handhelds	3	$ 4,500.00	$ 13,500.00	$ 1,000.00
Space Availability Counter and Signage	1	$ 20,000.00	$ 20,000.00	$ 150.00
ITS Signage	4	$ 10,000.00	$ 40,000.00	$ 500.00
Total Cost of Technology Upgrades			**$ 555,000.00**	**$ 46,650.00**
Garage PARCS Upgrade				
Pay-Station (Cash and Credit)	5	$ 30,000.00	$ 150,000.00	
Ticket Dispenser with Intercom and Loop Detector	3	$ 8,000.00	$ 24,000.00	
Exit Verifier with Intercom, Loop Detector, Credit Card Reader	4	$ 8,500.00	$ 34,000.00	
LPR Cameras at 1 Entrance and 1 Exit Lane	2	$ 7,500.00	$ 15,000.00	
Barrier Gates	7	$ 3,000.00	$ 21,000.00	
Installation	1	5%	$ 12,200.00	
Server and Software	1	$ 15,000.00	$ 15,000.00	
Total Garage PARCS Cost			**$ 271,200.00**	**$ 30,000.00**
Parking Guidance System in Garage [1]	**1,148**	**$ 550.00**	**$ 631,400.00**	**$ 10,000.00**
Four Shuttles Serving Two Off-Site Parking Facilities [2]	**9360**	**$ 50.00**	**$ 250,000.00**	**$ 468,000.00**

[1] *Cost based on number of spaces in Garage*

[2] *Cost based on number of hours for four shuttles operating Friday - Sunday for 15 hours each day and cost for shuttles*

It is essential that parking is not viewed as just a revenue gain for the City, but a means to accomplish other City goals. Some of these goals may include beautification, pedestrian safety, and environmental goals (i.e. alternative modes of transportation).

Conclusion

A Parking Plan was developed for the City of St. Augustine parking system as part of Phase 2 of the Mobility Plan. **Table 8** shows a summary of a draft implementation plan, which lists the action, the goal of each recommendation, an indirect impact, responsible party to champion each action, planning level costs, and projected implementation year. The goal of this implementation plan is to develop a parking strategy that effectively serves each user (i.e. visitors, residents and employees) during the weekday and weekend, improves parking operations, and achieves community goals.

As discussed previously, this study is the beginning of the development of a comprehensive Parking Plan that is well vetted by the community, stakeholders and City officials. It is suggested that additional community meetings are conducted to assess how these recommendations are received by the public. Once a finalized parking plan framework has been established a finalized implementation strategy with next steps and parties responsible for championing each effort should be identified. It is essential that

the Parking Plan effectively represents the input from the community for it to be well received and successfully implemented through the political process.

To effectively support each of the main users (i.e. visitors, employees, and residents) the following recommendations are suggested:

Visitors

- Encourage parking in the Garage,
- Provide off-site parking options with shuttle service, and
- Offer validated parking options.

Residents

- Offer discounted parking program using virtual permit technology,
- Provide free parking in Granada, Lightner, and Flagler parking facilities,
- Provide 2 hour free parking in Garage during weekdays, and
- Implement a virtual residential parking permit system.

Employees

- Encourage parking in the Garage with affordable monthly parking permit,
- Direct employees to park in other parking facilities and not the Garage during weekends and events (i.e. St. John's County School lot and Flagler parking facilities), and
- Offer shuttle service to off-site parking facilities during weekends and events.

By modifying the parking rates and enforcement hours during the weekday and weekends the City can effectively achieve the following goals:

- Incentivize utilization of the Garage during off-peak periods,
- Incentivize residents to visit Downtown,
- Fund future parking improvements,
- Reduce traffic from vehicles circulating in search of on-street parking, and
- Promote alternative modes of transportation.

It was determined that the Downtown parking system is primarily strained during weekends and events. Additional parking options are primarily only needed on weekends during the peak months and events. To invest in a Downtown parking structure to is costly and works against the overarching goals of the Mobility Study to reduce vehicle trips and parking demand in the Downtown to create a more pedestrian-friendly, less congested and safe community. It is instead suggested that the City invest in promoting alternative modes of transportation and identifying shared parking opportunities or off-site parking facilities prior to constructing a parking structure Downtown.

The City should continue to support economic development and growth in the Downtown by helping to eliminate the reliance on public parking lots located in high-pedestrian areas. These parking lots are prime real estate for future development and are not currently serving as the highest and best use of the land. By promoting alternative modes of transportation, identifying shared parking opportunities,

and offering off-site parking facilities businesses may feel less dependent on existing public parking lots and seek development options.

The financing of a parking facility can be achieved through a number of strategies, including: Special Service bonds, General Obligation bonds, TIF district, and public-private partnership. First the City should restructure the management of parking under an exclusive Parking and Mobility Department and establish a Transportation and Parking Enterprise Fund. These organizational changes will help improve the management, oversight, and appropriation of funds to support the transportation and parking system.

Based on the financial analysis, the suggested changes to parking rates and enforcement hours for the on-street meters, parking lots and Garage would equate to an increase of $1.4 million in gross revenue, which is a 25% increase from all parking related revenue in 2016. This additional revenue could effectively finance suggested parking technology upgrades to the pay-stations, Garage PARCS equipment, enforcement equipment, residential parking program, space availability system for the Garage, and dynamic way-finding signage. It could also be applied to finance a new off-site parking facility with shuttle service.

Any excess revenue generated by the parking system should be appropriated to achieve City goals, which may include beautification, pedestrian safety, and environmental goals (i.e. alternative modes of transportation).

Table 8 – Implementation Plan

Strategy Type	Action	Goal	Indirect Impact	Responsible Party(s)	Cost	Approximate Year
Enforcement Hours	Extend enforcement hours on-street and in lots to 9 PM	Make available to short-term users and increase turnover	Push long-term parkers into Garage	Parking Division	$	2018
	Charge for on-street parking on Sunday from 12 PM to 9 PM	Make available to short-term users and increase turnover	Push long-term parkers into Garage	Parking Division	$	2018
	Charge for parking 24/7 in Garage	Eliminate abuse (i.e. warehousing)	Free up parking for visitors	Parking Division	$$$$	2019
Rate Structure	Offer discounted evening rate in Garage of $5 after 7 PM	Incentivize use of Garage during evenings	Distribute demand evenly across system	Parking Division	$$$$	2019
	Continue to offer discounted resident parking rates	Encourage residents to patronize Downtown	Economic development initiative	Parking Division	$	2017
	Offer graduated rate structure in Garage on weekdays	Incentivize short-term parkers in Garage	Distribute demand evenly across system	Parking Division	$$$$	2019
	Increase flat rate in Garage to $15	Incentivize other modes of transportation	Additional revenue generated	Parking Division	$	2018
	Offer 2 hour free parking in Garage on weekdays for residents with ParkNow card	Promote utilization of Garage during off-peak periods	Promote residents to patronize Downtown	Parking Division	$	2018
	Change rate structure of parking lots	Promote utilization of lots on periphery and Garage	Reduce vehicle/pedestrian conflicts	Parking Division	$	2018
	Change rate structure of on-street meters	Promote utilization of off-street parking	Reduce vehicle/pedestrian conflicts and traffic	Parking Division	$	2018
	Offer free parking in the Granada, Lightner and Flagler parking facilities to residents	Incentivize residents to patronize Downtown	Free up other parking areas for visitors	Parking Division	$$	2018
Parking Technology Upgrades	Install automated PARCS equipment in Garage	Reduce cost of operation and allow graduated rate scale	24/7 enforcement to eliminate abuse	Parking Division	$$$$	2019
	Replace ParkNow card with virtual parking system based on license plate	Improve customer convenience	Improve enforcement efficiency	Parking Division	$$$$	2019
	Implement virtual resident parking permit system based on license plate	Improve customer service with payment and registration online	Improve enforcement efficiency	Parking Division	$$$	2018
	Install pay-by-plate pay-station in lots and on-street	Improve customer service	Improve enforcement efficiency	Parking Division	$$$$	2018
	Upgrade existing pay-stations with pay-by-plate technology	Improve customer service	Improve enforcement efficiency	Parking Division	$$$	2018
	Acquire LPR camera based vehicles for enforcement	Improve enforcement efficiency	Improve compliance with parking policies	Parking Division	$$$	2019
	Install parking counting system in Garage with external dynamic signage	Help direct patrons to available parking	Reduce traffic	Parking Division	$$$	2019
Garage Management	Offer validated parking in Garage	Promote success of Downtown businesses	Promote utilization of Garage	Parking Division	$	2019
	Charge flat fee in Garage upon entry and allow free-flow exit during large events	Reduce traffic issues and delays in Garage upon exiting	Reduce user frustration	Parking Division	$	2018
	Offer 15 minutes of free parking in Garage for all users	Prevent issues when vehicle can't find a space	Reduce user frustration	Parking Division	$	2019
Employee Parking	Continue to offer discounted monthly parking permit in Garage	Provide affordable parking option for employees	Free up short-term parking areas for visitors	Parking Division	$	2017
	Direct monthly Garage permit parkers to use another facility on weekends/events	Free up parking for visitors on weekends	Reduce user frustration for visitors	Parking Division	$$$$	2018
Residential Parking Permit Program	Increase enforcement in residential parking permit areas with LPR enforcement	Improve compliance with parking policies	Force visitors to Downtown into public parking	Parking Division	$$$	2018
	Implement virtual guest parking permit system based on guests license plate	Improve user convenience	Improve compliance with parking policies	Parking Division	$$$	2018
	Limit number of residential permits per household (i.e. 4 permits)	Reduce residential parking issues	Prevent warehousing of resident vehicles on-street	Parking Division	$	2018
	Limit number of residential permits per household with off-street parking (i.e. 2 permits)	Reduce residential parking issues	Prevent warehousing of resident vehicles on-street	Parking Division	$	2018
	Increase the cost of each additional residential permit per household	Reduce residential parking issues	Prevent warehousing of resident vehicles on-street	Parking Division	$	2018
	Charge for guest parking permits on a daily ($2) and weekly ($10) basis	Reduce residential parking issues	Prevent abuse of guest parking permit program	Parking Division	$	2018
	Do not reserve on-street parking on residential streets	Maximize parking capacity of curb space	Reduce residential parking issues	Parking Division	$	2018
	Create a separate RPP area within a 3 block radius of Downtown	Prevent abuse of RPP program when visiting Downtown	Promote alternative modes of transportation	Parking Division	$	2018
	Hours of enforcement of RPP areas between 5 PM and 12 AM on weekdays and from 10 AM to 12 AM Saturday, Sunday and holidays	Allow shared parking strategy during weekdays	Maximize parking capacity of curb space	Parking Division	$	2018
Future Parking Options	Provide remote parking options with shuttle service west and east of Downtown	Reduce traffic to Downtown	Free up parking for visitors	Parking Division	$$$$	2019
	Conduct a parking feasibility and traffic study prior to constructing garage	Assess need and traffic impact	Address issues from community	Public Works	$$	2020
	Analyze funding strategies for garage (i.e. TIF)	Determine most feasible strategy	Prevent defaulting on financing	Finance Department	$$	2020
Parking Operations	Manage parking system under one department (i.e. Parking Department)	Improve quality control	Improve understanding of operating expenses	City Council	$	2018
	Market changes to the parking system with signage, internet postings and outreach	Reduce user frustration with changes	Improve compliance with parking policies	Parking Division		
	Appropriate excess parking revenue to support streetscape improvements and alternative modes of transportation	Improve standard of living	Achieve City goals (i.e. safety, environmental, etc.)	Finance Department	$	2018
	Establish a Parking Enterprise Fund	Ensure parking system is financially self-sustaining	Effectively appropriate funds for debt and improvements	Finance Department	$	2018
	Explore hiring a private parking operator to manage system	Improve management efficiency and reduce City effort	Potential increase in revenue	City Council	$	2018

Notes:

$ - $0 to $10,000

$$ - $10,001 to $50,000

$$$ - $50,001 to $100,000

$$$$ - $100,001 +