January 2021 | UPWP Task 5.25

Atlantic and Neptune Beach
Smart Parking Plan

North Florida TPO
Transportation Planning Organization
PLAN · FUND · MOBILIZE

This project's purpose is to provide a roadmap for parking and mobility in the Beaches Town Center. The Beaches Town Center is located in Atlantic Beach and Neptune Beach at the eastern terminus of Atlantic Boulevard. The Beaches Town Center is highly valued by residents and visitors alike. It is a popular daytime and night time destination. This popularity results in parking congestion problems. The two cities instituted a paid parking pilot program and an on-demand shuttle system.

Atlantic Beach and Neptune Beach partnered to install a pay-by-plate parking system in 2019. Users pay at designated kiosk stations or use a proprietary mobile app called Flowbird®.

Parking is free in public parking spaces from midnight to 11 a.m. All spaces have a three-hour parking limit. No parking is allowed in Atlantic Beach between 3 a.m. and 5 a.m.

Paid parking is enforced from 11 a.m. to 12 midnight, seven days a week. The first 1/2 hour is free. Thereafter, the fees are $1 per 1/2 hour. The maximum charge is $6 if parked before 1:30 p.m. until 5 p.m. At 5 p.m. the timing resets and the maximum charge from 5 p.m. to midnight is another $6. If you park before 1:30 p.m. you can be charged up to $12. All spaces in Atlantic Beach have a three-hour time limit.

EXECUTIVE SUMMARY

There are 229 on-street parking spaces, 165 in Neptune Beach and 64 in Atlantic Beach. Neptune Beach residents can park free in 35 spaces with a permit. Atlantic Beach residents can park in all 64 designated spaces free with a permit for three hours.

Parking data collected in November and December 2019 and January 2020 was analyzed. If the vacant properties in proximity to the Beaches Town Center are developed 200 additional parking spaces are needed.

Neptune Beach completed two related studies on mobility and parking in the last two years. In 2018, the Urban Land Institute conducted a Technical Assistance Panel. A draft Vision Plan was presented to Neptune Beach's City Council October 19, 2020. This study summarizes the recommendations of these related studies and proposes additional strategies to consider meeting the parking and mobility needs in the Beaches Town Center.

The following alternatives were evaluated. They are not mutually exclusive and can be implemented as short-term strategies.

1. Construct additional wayfinding through street monuments to direct drivers to public parking areas.
2. Reconfigure on-street parking on First Street to create 24 additional spaces. Maintenance crews can easily re-stripe these spaces following coordination with adjacent property owners.
3. Implement curbside management strategies for trucks, micromobility and Transportation Network Company (TNC) loading zones. The following steps are necessary to implement these strategies:
    a. Update the parking ordinance for trucks and TNC loading zones.
    b. Coordinate with the City of Jacksonville on the micromobility vendor selected to determine if this service can or should be allowed at the Beaches Town Center.
    c. Coordinate with Beach Buggy and other TNCs to select a preferred loading area. Once selected the loading zones can be implemented using pavement markings and street signs. City parking ordinances may need updating.
4. Create a Transportation Management Organization (TMO) to coordinate funding and load balancing of parking on private properties. An economic study is needed to determine viability and coordination with property owners. If feasible and property owners agree, changes to the cities' ordinances are necessary. Private operating vendors can then be selected.
5. Address policy recommendations for changes in the minimum parking ratios for development within cities' ordinances. Although implementing maximum parking ratios may seem counterintuitive to addressing the need for more parking, intensifying the land uses will make demand management and the feasibility of constructing a new garage more attractive.
6. Continue to operate the Flowbird® smart parking system. Given the success of the pilot project, the Cities should advertise or enter into a longer-term agreement with the vendor.

7. Partner with regional agencies to develop an integrated parking app and management system. The North Florida Transportation Planning Organization and the City of St. Augustine are developing a integrated regional parking management app using Flowbird® meter data.
8. Create a flexible, open street by installing hydraulic bollards to close Atlantic Boulevard to vehicular traffic during peak periods or special events. Law enforcement personnel and temporary barriers are used to close streets. Bollards allow the Beaches Town Center to close vehicular traffic more frequently and reduce the resources needed. This alternative does not provide more parking but will help create a safer pedestrian environment. The next step in advancing this alternative should include public outreach and preliminary engineering to determine the costs to construct.

The following alternatives require significant investment and additional planning, engineering and coordination.

9. Construct a new parking garage. An economic study and property owner coordination are needed to determine the feasibility. Following this study, an invitation to negotiate can be issued for a public-private partnership to finance, construct and operate the parking garage. The cost estimate assumes the project will be constructed by the public sector and right-of-way obtained through eminent domain. A public-private partnership can likely construct the garage more efficiently.
10. Extend Lemon Street to divert traffic from Third Street and Atlantic Boulevard. This will allow road diets to be constructed on Third Street north of Lemon Street and Atlantic Boulevard east of the intersection created from the new connector. This option has the potential to create 35-50 additional spaces. Third Street and Atlantic Boulevard are both state roads and coordination with the Florida Department of Transportation and property owners is needed to determine its feasibility.
11. Construct a pedestrian mall by removing on-street parking and widening sidewalks along Atlantic Boulevard. Constructing a parking garage or the road diet along Third Street and Atlantic Boulevard is needed to off-set the loss in parking. A smaller project under development in the City of St. Augustine proposes to lease additional sidewalk space to adjacent businesses for project funding. After determining feasibility and coordinating with stakeholders, funding for the design and construction is needed.

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Purpose

This project's purpose is to provide a roadmap for parking and mobility in the Beaches Town Center. The Beaches Town Center is located in Atlantic Beach and Neptune Beach at the eastern terminus of Atlantic Boulevard. The Beaches Town Center is highly valued by residents and visitors alike. It is a popular daytime and night time destination. This popularity results in parking congestion problems. The two cities instituted a paid parking pilot program and an on-demand shuttle system.

The Cities of Atlantic Beach and Neptune Beach collaborated in 2019 to launch a 2-year pilot parking program. Neptune Beach oversees the program to better manage parking in the shared Beaches Town Center located at the terminus of Atlantic Boulevard and Third Street. The pilot utilizes a pay-by-plate parking system with license-plate recognition (LPR) technology. Users pay at meter stations or use a proprietary mobile app called Flowbird®.

Figure 1. Study Area

Source: Base Map from esri World Navigation Map

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2 CURRENT SITUATION

Current Situation

LAND USE

The Beaches Town Center is an outgrowth of the historic small downtowns of Neptune Beach and Atlantic Beach which clustered around the terminus of Atlantic Boulevard. The Beaches Town Center has grown into a walkable area comprising approximately 13 acres in Neptune Beach and 8 acres in Atlantic Beach. The area fell into disrepair in the 1980s but began revitalizing when the cities of Neptune and Atlantic Beaches joined forces in the early 1990s to form the Beaches Town Center Agency. It is now a successful entertainment center with a core group of restaurants, bars and boutiques. Public and private sources funded improvements such as refurbished brick streets, decorative lighting, landscaping and public parking.

Highly valued by residents and visitors alike, The Beaches Town Center functions as the heart of Neptune Beach and Atlantic Beach. The Beaches Town Center benefits from the advantage of thousands of resident patrons living within easy walking and bicycling distance. Solutions such as constructing a parking garage and expanding the Beaches Town Center across Third Street to allow for growth and additional parking were proposed in prior studies.

The Beaches Town Center seems almost entirely built out due to parking limitations and height restrictions. Vacant parcels and surface parking lots can be redeveloped for future businesses and new public gathering spaces. The Beaches Town Center can be extended west across Third Street if a safe pedestrian crossing can be designed and constructed.[1]

Major land uses are shown on **Figure 2**.

1 This section was extracted from Neptune Beach Community Vision Plan. https://www.neptunebeachvisionplan.com/

Figure 2. Major Land Uses

Source: https://beachestowncenter.com/about-advertise/map-directory

PUBLIC PARKING

Atlantic Beach and Neptune Beach partnered to install a pay-by-plate parking system in 2019. Users pay at designated kiosk stations or use a proprietary mobile app called Flowbird®.

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Spaces

There are 229 on-street parking spaces, 165 in Neptune Beach and 64 in Atlantic Beach. The locations of spaces are shown on **Figure 3**.

The pilot program utilizes a pay-by-plate parking system with license plate recognition technology. Over time, this system should reduce the operating cost. Users pay at a designated meter station or use a proprietary mobile app called Flowbird®. The user enters the vehicle's license plate number in the app to pay. Parking can be extended via the app.

Residents

Neptune Beach and Atlantic Beach residents can park free with a permit when registering at https://www.northbeachesparking.com.

Neptune Beach designated 35 of their 165 parking spaces for resident parking with a permit. Neptune Beach residents can access these spaces free for up to 3 hours after first registering their vehicles. Neptune Beach residents can park on Cherry, Walnut and Second Streets.

Atlantic Beach residents can park in all 64 spaces free for a maximum of three hours with a permit.

Payment Methods

At the kiosk, 57% of users paid with a credit card, 22% paid with a credit card using the app and 10% paid with cash. The remaining 11% did not pay to park. (As reported by Flowbird® - the total does not add up to 100%)

Figure 3. Metered Parking Locations

Source: Base Map from esri World Navigation Map

Existing Parking Usage

The data in this section was provided by Flowbird® for transactions from November 2019 through March 2020.

Data Limitations

Flowbird® did not provide raw data to assess parking demand and capacity. The data cannot be cross-tabulated by kiosk or time of day.

Total Transactions

COVID-19 epidemic restrictions began the week of March 13, 2020 and significantly impacted parking use. Data from November 2019 through January 2020 are used in this analysis.

Table 1 summarizes the transaction data provided by the parking management software.

Table 1. Summary of Transactions

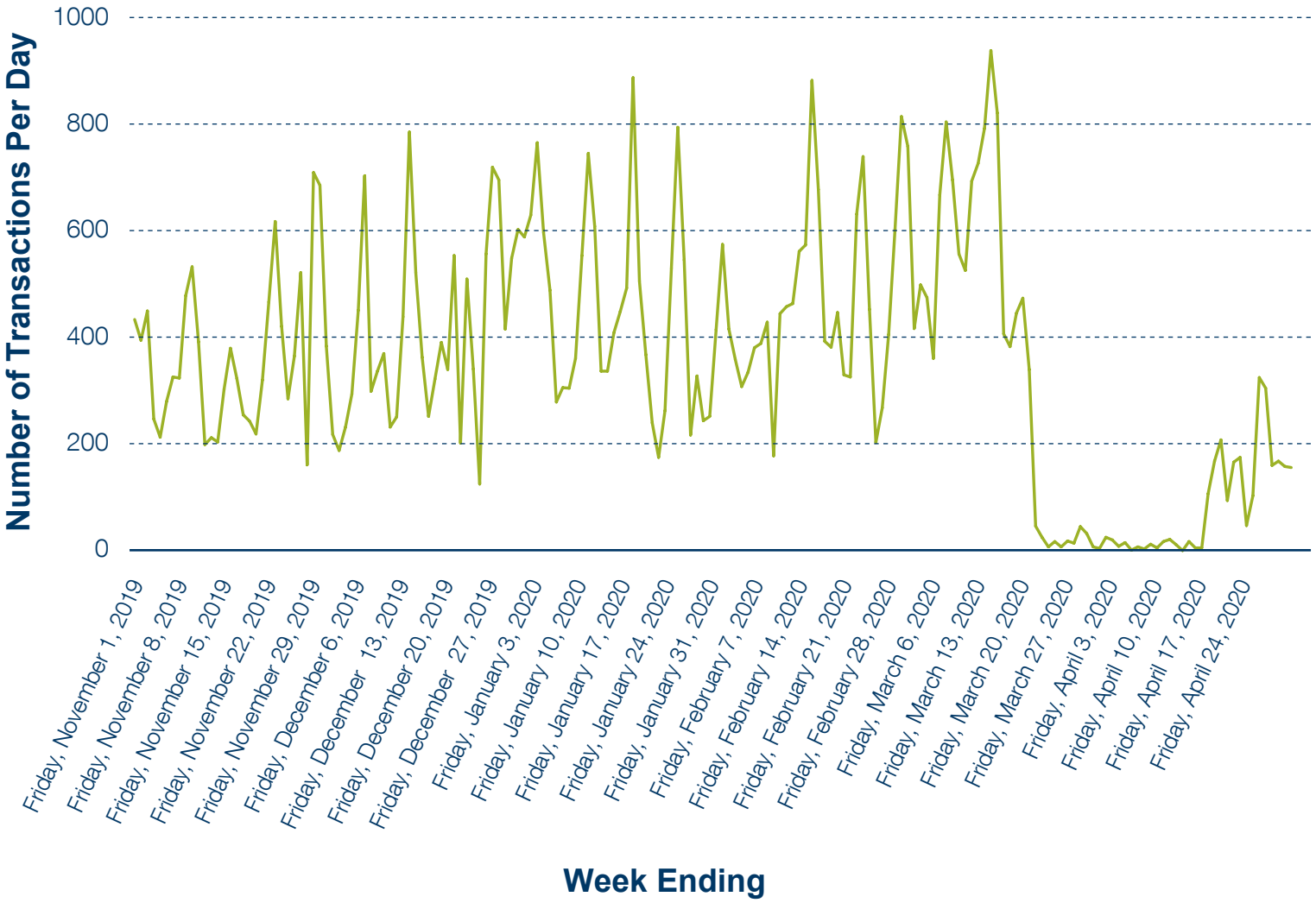
Month	Transaction		Average Cost		Average Occupancy (hr.)	
	Overall*	Paid*	Overall*	Paid	Overall*	Paid
November	11,086	10,079	$2.43	$2.67	1.71	1.84
December	12,772	11,589	$2.39	$2.64	1.70	1.82
January	14,147	12,864	$2.49	$2.74	1.75	1.87

**Includes free transactions*

Source: FlowBird®

Transactions per week are summarized on **Figure 4**.

Figure 4. Summary of Transactions by Week

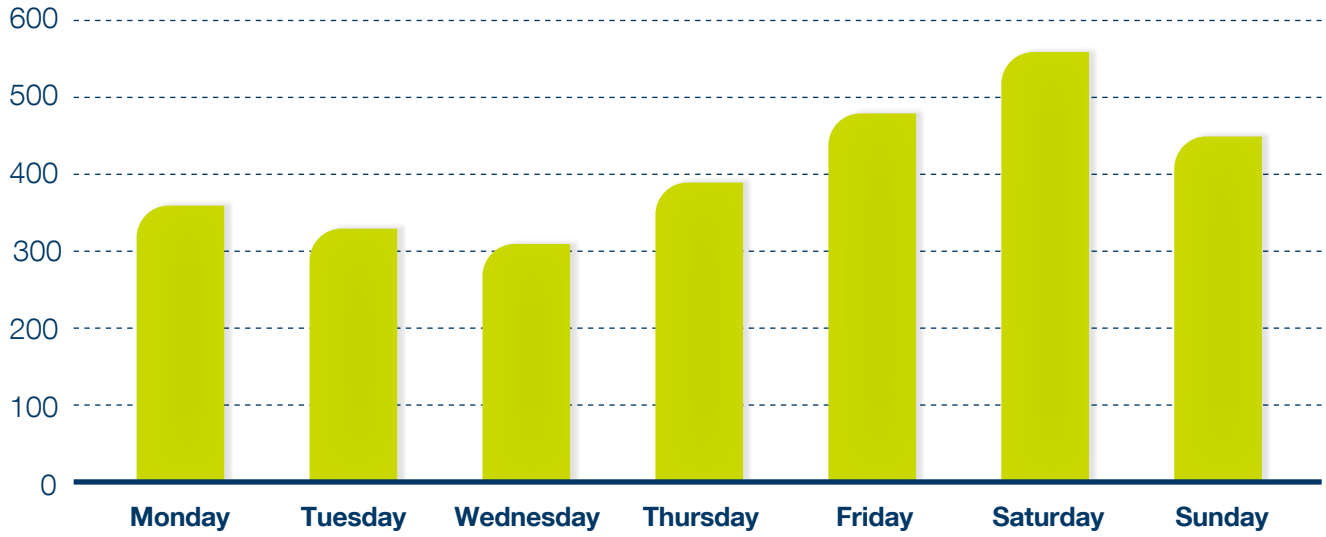


Source: FlowBird®

Demand by Day of Week

January represents a peak month for visitors to the Beaches Town Center with New Year's Gator Bowl. November represents an average or typical month. March through August are peak seasons associated with beach visitors. This analysis uses the average conditions during these months. The greatest demand by day of week occurs on the weekends. **Figure 5** summarizes the transactions by day of week.

Figure 5. Demand by Day of Week



Source: FlowBird®

Demand by Time of Day

Parking demand varies by time of day. Since the payment cycle resets after 5 p.m., the maximum duration is not cumulative for vehicles parked before 5 p.m. and remain after 5 p.m. Rates are reset (start over) at 5:00 p.m. **Table 2** summarizes the parking duration reported by Flowbird®.

Table 2. Parking Duration

Duration	Percent of Transactions
30 min or less	14%
30 minutes to 1 hour	23%
1 to 2 hours	38%
2 to 3 hours	17%
3-4 hours	5%
4-5 hours	2%
5 or more hours	1%

Source: FlowBird®

Demand by Location

The most popular locations to park include Atlantic Boulevard near First Street in the Beaches Town Center, followed by First Street near Lemon Street and Atlantic Boulevard near One Ocean. **Table 3** summarizes the number of transactions at each kiosk. The locations are shown on **Figure 3**.

Table 3. Transactions per Kiosk

Kiosk		November	December	January	Average
1	Atlantic Boulevard at 1st Street	1,337	2,073	1,595	1,668
2	Ocean Street at Ahern Street	976	1,189	1,195	1,120
3	Atlantic Boulevard at M Shack	534	1,517	751	934
4	Atlantic Boulevard at 2nd Street	1,060	1,576	1,472	1,369
5	Atlantic Boulevard at One Ocean	1,351	1,555	1,560	1,489
6	2nd Street at Orange Street	516	995	697	736
7	1st Street at Lemon Street	1,417	1,890	1,693	1,667
8	1st Street at Orange Street	981	999	1,143	1,041
9	2nd Street at Lemon Street	373	538	481	464
10	Lemon Street at Midway Street	2,541	440	430	1,137

Source: FlowBird®

Revenues

The Cities of Neptune Beach and Atlantic Beach split parking revenue. **Table 4** shows a summary per month of the total revenue in 2019/2020.

Table 4. Monthly Parking Revenue Income

	November 2019		December 2019		January 2020	
	Revenue	Net Income	Revenue	Net Income	Revenue	Net Income
Atlantic Beach	$3,923.55	$2,746.49	$6,493.25	$4,545.28	$8,846.00	$6,192.20
Neptune Beach	$23,008.50	$23,008.50	$24,082.85	$24,082.85	$26,390.50	$26,390.50

Source: FlowBird®

VALET PARKING

The valet service provided between Hawkers and Flying Igauna restaurants is the most popular parking method for visitors. The service is operated by A1A Valet.

Valet service becomes available every night starting at 4:30 p.m. Saturday and Sundays. The service is located between First Street and Second Street. The valet stand is accessed from Lemon Street. The cost for valet parking for area visitors is $15. Parking is complimentary for customers of the following businesses (ticket validation is required):

- Flying Iguana
- North Beach Fish Camp
- Ragtime
- Mezza Luna
- M Shack
- Island Girl
- Doro
- Hawkers
- Jaffi's

The spaces used for valet parking are metered during other periods.

PRIVATE PARKING

Business owners prohibit public parking during non-business hours. Based on an inventory from aerial photography, 346 off-street private parking spaces exist.

MULTIMODAL

Public Transit

The Jacksonville Transportation Authority provides bus transportation in Neptune Beach and Atlantic Beach along Route 10 which traverses Third Street and Atlantic Beach. Stops in the study area are:

Third Street

- Walnut Street north and southbound
- Orange Street northbound
- Lemon Street southbound

Atlantic Boulevard

- East of Sylvan Drive

The Red Line/East Bus Rapid Transit (BRT) corridor provides access between the beaches at downtown via Third Street and Atlantic Boulevard.

Based on data provided by the North Florida Transportation Planning Organization's Congestion Management Dashboard, 12-18 persons are located within 0.25 miles of a transit stop.[2]

Beachside Buggies

Beachside Buggies provide free rides and recommendations to the residents and visitors of the beaches' community. They operate environmentally friendly, zero-emission, long-range, eight to 10 passenger electric cars and 14-passenger vans. Rides can be hailed through a mobile application. The service hours are:

- Monday-Wednesday 3 p.m. to midnight
- Thursday-Friday 3 p.m. to 2 a.m.
- Saturday 11 a.m. to 2 a.m.
- Sunday 11a.m. to midnight

See additional information at www.beachsidebuggies.com.

Pedestrian and Bicycle Facilities

Sidewalks exist along Third Street, Atlantic Boulevard and most of the local roads.

Bicycle facilities are located along Third Street. No bike lanes are present on Atlantic Boulevard. Traffic calming measures discourage through traffic along Second Street in Neptune Beach south of the Beaches Town Center ending at Orange Street. First Street is a popular bicycle route to access the Beaches Town Center from the south. First Street south of Beaches Town Center and Oceanfront north of Beaches Town Center are also popular bike routes. The posted speed limit is 30 mph on local streets in the area to promote safe bicycle and pedestrian use.

2 https://cmp.northfloridatpo.com/livability/transit-accessibility

SAFETY ANALYSIS

This study uses data from Signal4Analystics® to analyze vehicle crashes within the study area. Crashes with parked cars represented a significantly large percentage of the total vehicle crashes in the study area between 2014 and 2019. About one-half of the crashes, or 49%, involved a parked car. The parking crash locations are shown on **Figure 6**.

Eight pedestrian crashes and four bicycle crashes occurred during the same period. The crash locations are shown on **Figure 7**.

There were no fatalities during this period.

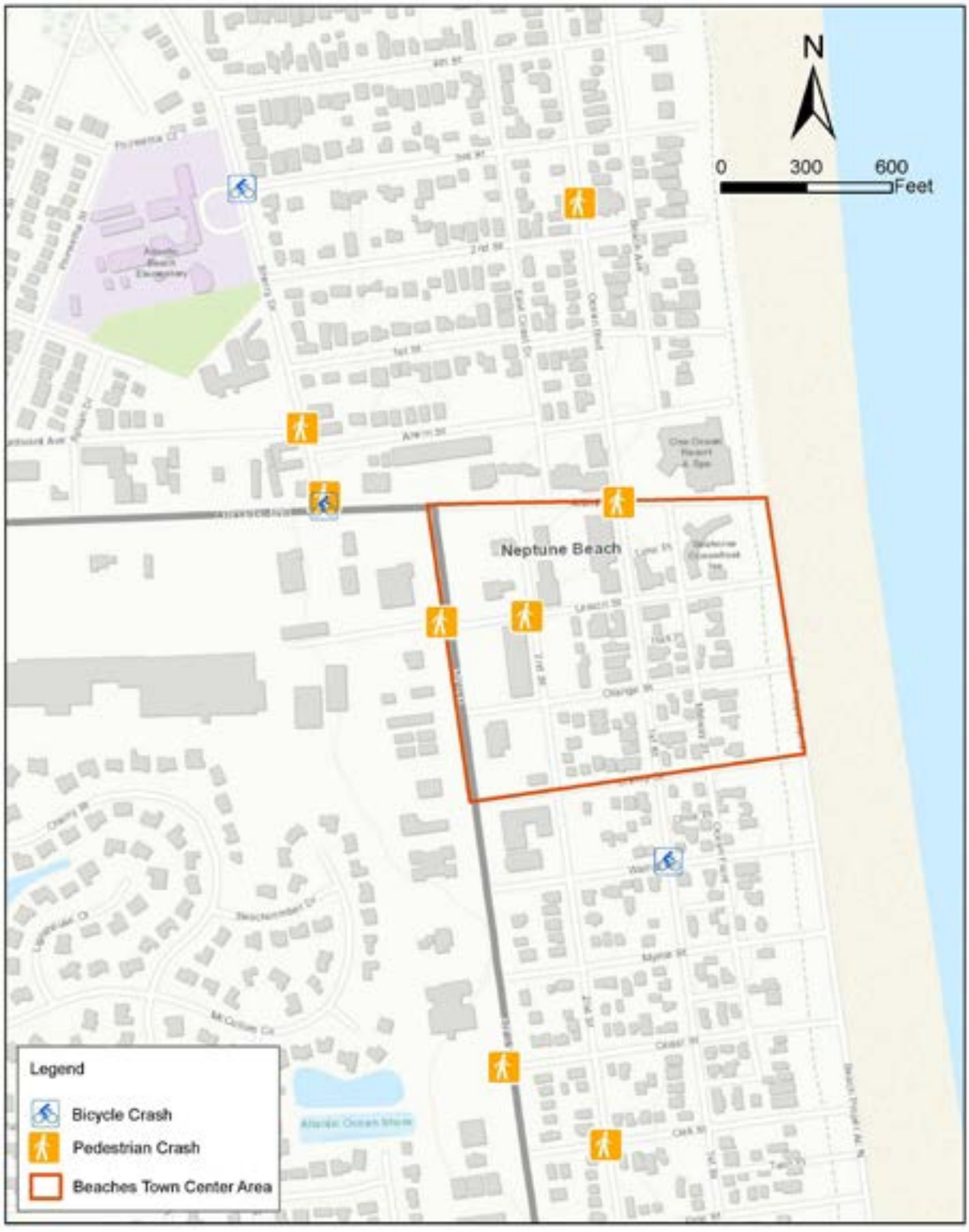
Prior strategies implemented to improve safety in the study area included:

- Implementation of back-plate pedestrian signals
- Public safety campaign

Figure 6. Vehicle Parking-Related Crashes (2014-2019)

Source: Base Map from esri World Navigation Map

Figure 7. Bicycle and Pedestrian Crashes (2014-2019)



Source: Base Map from esri World Navigation Map


3
RELATED STUDIES

Related Studies

URBAN LAND INSTITUTE TECHNICAL ASSISTANCE PANEL

The Urban Land Institute (ULI) conducted a Technical Assistance Panel in June 2018 for the City of Neptune Beach. The panel intended to assess Chapter 27 of the city's ordinances, land development code and the city's Comprehensive Plan.

1. Overlay Districts

The panel recommended the following actions:

- Create an overlay district in lieu of rewriting the land code. The overlay district should consist of three sub-districts. Residential Beach, Third Street Corridor and Beaches Town Center with each district having its own design criteria.
- Develop a unified signage, lighting and wayfinding plan for Beaches Town Center, Third Street and Florida Boulevard.
- Staff the Development Review Board with design professionals who advise to the City Council regarding final approval of residential and commercial development projects.
- Appointees do not need to be residents.

Residential Beach District

- Develop a form-based code for new and reconstruction purposes that provides for a variety of housing types consistent with coastal living and reinforces the area's eclectic character.
- Include styles for single-family, two-family, duplex and multifamily housing with specific site and building requirements. Build in variety by including several styles and colors for roofs, porches, balconies, patios, roof-top decks, dormers, shutters, etc.
- Ensure structures are in scale with lot size and neighboring houses.
- Ensure the total height shall not exceed 35 feet.
- Decrease the front yard setback to discourage parking and require parking in the back for structures with no garages; limit driveway width.
- Enable current multifamily units to rebuild as single-, two- or multifamily homes provided they conform to the form-based code and new requirements of the overlay district; e.g. parking in the back.
- Accommodate granny flats and in-law suites by enlarging the square footage and height for accessory units and allowing apartments to be built over garages limiting the height of the latter to that of the main house. Stipulate that either the main house or accessory house must be owner-occupied.

- Require nonconforming properties damaged by hurricanes or other disaster to rebuild to the current code.
- Require trash cans to be hidden behind a building, within an enclosed garage or at the side of a building behind a wing wall, landscaping and/or fencing except on pick-up day.

Third Street Corridor

- Create a form-based Civic District to include City Hall, the police department and other city services in the Third Street corridor between the library and Jarboe Park: an area more centrally located than Beaches Town Center.

Beaches Town Center

- Develop a form-based code for the central business district.
- Replace the relocated municipal buildings with commercial entities to spur economic growth and generate additional tax dollars.
- Hold a design charrette as part of the redevelopment of the parking area between Atlantic Boulevard and Lemon Street into a multi-use event space. Work with a buyer for the City Hall and police property or hire an experienced urban design firm to create a unique place-making solution.

Figure 8. Overlay Districts

Source: https://ulidigitalmarketing.blob.core.windows.net/ulidcnc/2019/07/ULI-Neptune-Beach-TAP_FINAL-copy.pdf

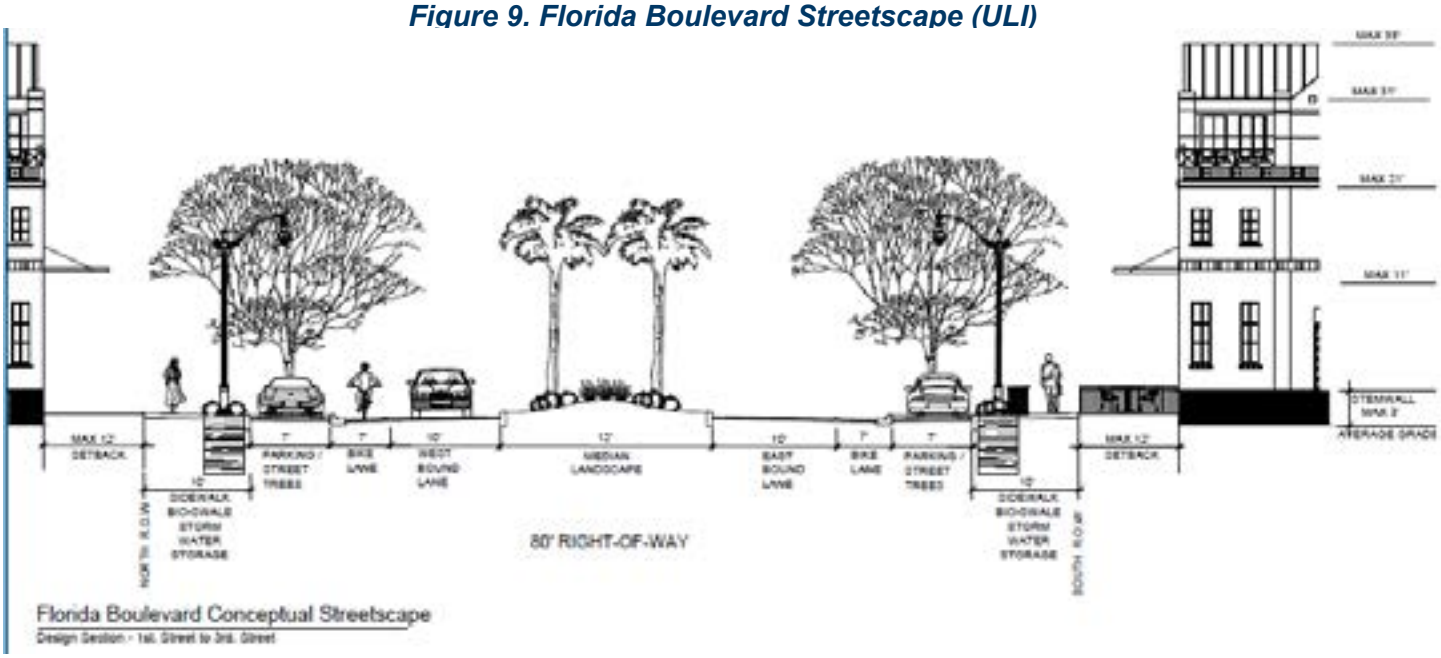
2. Parking

- Institute paid parking in Beaches Town Center to Orange Street. Set parking rates based on traffic and demand.
- Use smart meters to implement demand-responsive pricing to fluctuate requiring drivers to pay more during peak hours and days.
- Provide all Neptune Beach residents with a sticker for each registered vehicle and restrict parking in the study area south of Orange to residents only.
- Relocate parking on First Street from the west side to the east side of the street, which has fewer driveways due to the orientation of homes to the side streets. This no-cost solution adds 24 parking spaces from 131 to 155.
- Encourage use of neighborhood electric vehicles (NEVs) or street-legal golf carts for local resident traffic.
- Prohibit drive-thru facilities to be constructed or remain once closed.

3. Florida Boulevard

- Draw attention to Neptune Beach's great recreational assets by making Florida Boulevard the visual gateway to the beach and the East Coast Greenway. Florida Boulevard is an important connector between Penman Road, Jarboe Park (the largest beach access in Neptune Beach) and the proposed greenway to Atlantic Boulevard.
- Enhance Florida Boulevard with a median, landscape improvements like shade trees, signage and bike lanes, adding a sidewalk on the north side of Florida Boulevard and sidewalk bioswales for stormwater storage as shown in **Figure 9**.

Figure 9. Florida Boulevard Streetscape (ULI)



Source: https://ulidigitalmarketing.blob.core.windows.net/ulidcnc/2019/07/ULI-Neptune-Beach-TAP_FINAL-copy.pdf

NEPTUNE BEACH VISION PLAN

The following are recommendations from the City of Neptune Beach's Vision Plan published October 19, 2020[3].

- Construct dedicated places for people to walk and bike supplementing these improvements with off-street trails to make it safe and easy for people of all ages and abilities.
- Prioritize the safety of people walking, biking and driving by implementing key intersection, crossing and traffic calming improvements.
- Upgrade the city's stormwater management infrastructure and improve overall resilience.
- Invest in new or improved parks and open spaces, adding street trees and landscaping to improve the overall beauty, comfort and vibrancy of Neptune Beach.
- Manage parking demand and supply while preserving community character.
- Update the city's Comprehensive Plan and Land Development Regulations to ensure high quality, predictable and feasible redevelopment.

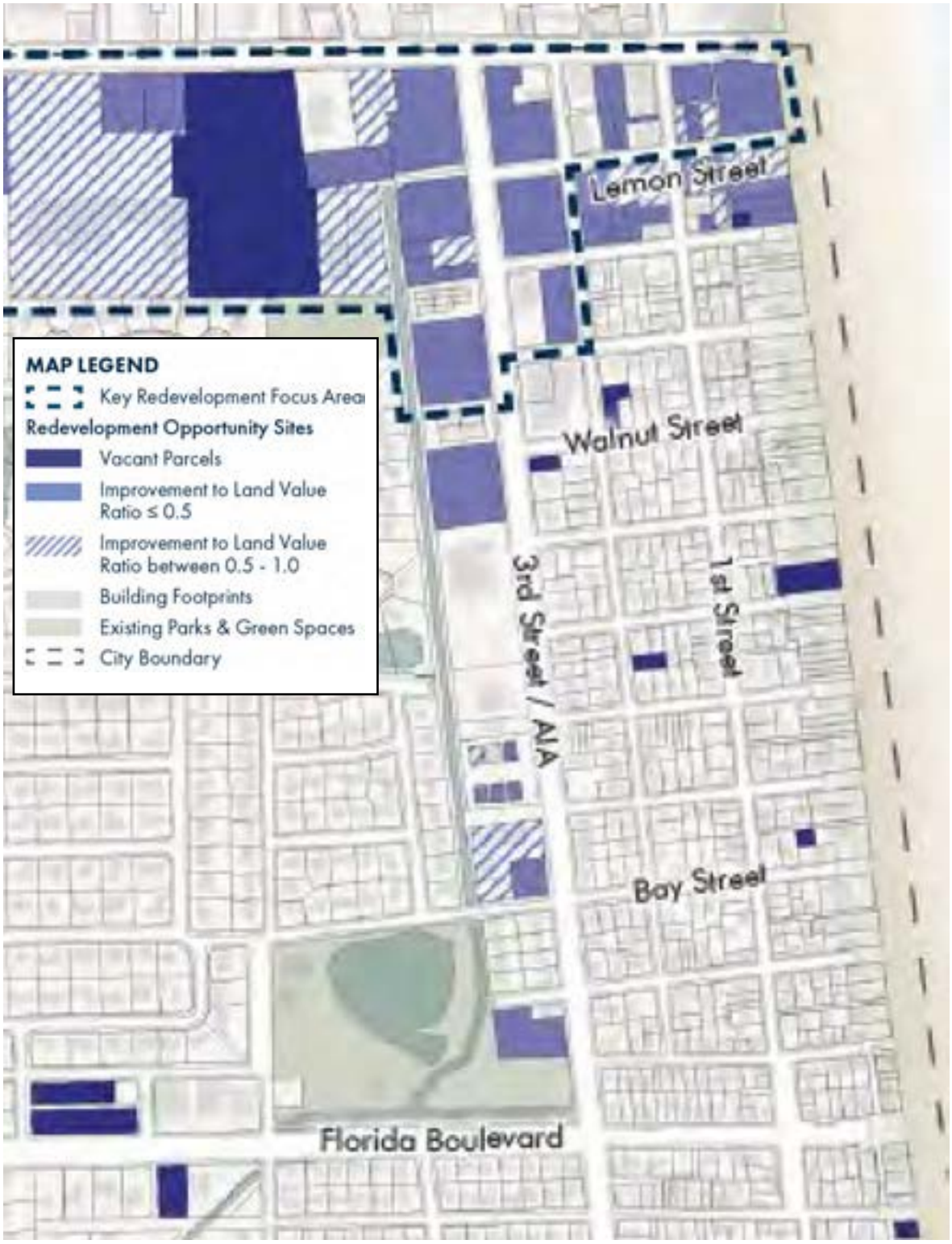
The key issues and proposals from this study are:

- Redevelop vacant properties near the Beaches Town Center shown on **Figure 10**.
- Reconstruct Atlantic Boulevard from Third Street to 572 Atlantic; reconstruct Third Street between Lemon Street and Atlantic Boulevard to reduce the number of lanes; and construct a roundabout at the intersection of Atlantic Boulevard and Third Street.

Figure 11 shows the existing intersection of Atlantic Boulevard and Third Street. **Figure 12** shows the proposed reconfiguration of the intersection from Atlantic Boulevard and Third Street recommended in the Vision plan.

3 https://www.neptunebeachvisionplan.com

Figure 10. Vacant Parcels



Source: https://www.neptunebeachvisionplan.com/

Figure 11. Atlantic Boulevard and Third Street

Figure 12. Proposed Reconfiguration of Atlantic Boulevard and Third Street

Source: https://www.neptunebeachvisionplan.com/

PEER REVIEWS

Areas similar to the Beaches Town Center were evaluated to propose strategies and tactics that could be applied. **Table 5** summarizes the analysis.

Table 5. Summary of Peer Review

Area	Cash Accepted	Smart Parking Management System	Variable Rates	Free or Discounted Resident Parking	Curbside Management for TNCs	Curbside Management for Truck Parking	Local Shuttles or Transit	Public Garage Available
Atlantic and Neptune Beach, FL	No	Flowbird®	Two period rates (before after 5:00, reset)	Yes	No	No	Beachside Buggies and access to JTA bus and BRT services	No
Downtown Delray Beach, FL	Yes	ParkMobile®	No	Yes	No	Yes	Downtown trolley service	Yes
Jacksonville Beach, FL	No	No	No	Yes	No	No	JTA Trolley Beach Buggies	No
Miami Beach, FL	Yes	ParkMe® INRIX® Parking (provides directions to available parking)	By zone	Yes	No	Yes	Yes	Yes
New Smyrna Beach, FL	No	FlashCoLabs® (reservations)	No	Yes	No	Yes	Yes	Yes
Savannah, GA	Yes	ParkSavannah® by Passport Labs®	No. Daily parking only	Yes	No	Decals required for truck parking and permit for meter bagging	Free shuttles and access to bus routes	Yes
St. Augustine, FL	Yes	Smarking® license plate readers and app	Yes	Yes	Under evaluation	Yes	Yes	Yes

Source: Kimley-Horn

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4 DEMAND ANALYSIS

Demand Analysis

The City of Atlantic Beach and City of Neptune Beach Future Land Use Maps and Comprehensive Plans were reviewed to estimate future parking demand.[4] Both cities plan to allow land uses along Atlantic Boulevard to intensify and protect the residential areas on the outlying areas consistent with their current character.

Figure 13 and **Figure 14** show the Future Land Use Maps.

The Third Edition of Shared Parking published by the Urban Land Institute was used to estimate parking generation rates.[5] **Figure 15** highlights the parcels analyzed. The following was assumed:

- The analysis used the most conservative (highest peak) parking generation rates.
- Vacant parcels were converted to family restaurants for parking generation analysis using the highest parking generation rate.
- A rough order of magnitude of 0.25 spaces per residence was used to estimate metered parking. demand.

Table 6 summarizes the analysis of the existing parking demand and an inventory of the off-street parking based on a review of aerial photography.

Scenario 1 shown in **Table 7** estimates future parking demand if the vacant parcels are redeveloped as family restaurants.

Scenario 2 shown in **Table 8** estimates future parking demand if the vacant parcels are redeveloped as shopping.

4 Atlantic Beach: https://coab.us/DocumentCenter/View/10657/DRAFT-Future-Land-Use-Map-Updated and https://www.coab.us/494/Comprehensive-Planning
Neptune Beach: https://www.ci.neptune-beach.fl.us/sites/g/files/vyhlif3516/f/uploads/comprehensive_plan_2012-2022.pdf and https://www.ci.neptune-beach.fl.us/sites/g/files/vyhlif3516/f/uploads/future_land_use_map.pdf

5 Mary S. Smith, Mary S., “Shared Parking,” Third ed. (Washington, DC: Urban Land Institute, ICSC, and National Parking Association, 2020).

Figure 13. Atlantic Beach Future Land Use Map

Source: https://coab.us/DocumentCenter/View/10657/DRAFT-Future-Land-Use-Map-Updated

Figure 14. Neptune Beach Future Land Use Map

Source: https://www.neptunebeachvisionplan.com/

Figure 15. Parking Generation Analysis Map

Source: Base Map from http://maps.coj.net/DuvalProperty/

Table 6. Non-residential Parking Generation Analysis

Parcel	Name	Address	Acres	Amount	Unit	Existing Use	Weekday Rate	Weekday Demand	Weekend Rate	Weekend Demand	On Site Private Parking
172639 0000	214 Orange Street LLC	214 Orange St, Neptune Beach, 32266	0.14	6,240	SF	Office	0.30	2	0.30	-	0
172766 0000	217 First Street LLC	217 1st St, Neptune Beach, 32266	0.14	5,910	SF	Office	0.30	2	0.30	-	1
172638 0000	218 First Street LLC	218 1st St N, Neptune Beach, 32266	0.28	12,200	SF	Restaurant	15.25	186	15.25	186	0
172795 0000	220 First Street LLC	220 1st St S, Neptune Beach, 32266	0.11	5,000	SF	Shopping	2.90	15	2.90	16	16
170227 0000	60 Ocean Boulevard LLC	60 Ocean Blvd, Atlantic Beach, 32233	0.30	13,700	SF	Shopping	2.90	40	2.90	44	0
170229 0000	Ashford Atlantic Beach LLP	1 Ocean Blvd, Atlantic Beach, 32233	2.33	193	Rooms	One Ocean (193)	1.00	193	1.00	193	244
172791 0000	City of Neptune Beach	116 1st St, Neptune Beach, 32266	0.23	9,744	SF	Municipal	0.30	3	0.30	-	
172788 0010	City of Neptune Beach	200 Lemon St, Neptune Beach, 32266	0.36	15,246	SF	Municipal	0.30	5	0.30	-	
169733 0010	Downey A Morris Jr	372 Ahern St, Atlantic Beach, 32233	0.07	2,999	SF	Office	0.30	1	0.30	-	2
172769 0000	Driver Douglas L	108 Orange St, Neptune Beach, 32266	0.06	2,750	SF	Vacant Commercial	-	-	15.25	-	0
172782 0000	Etienne Lagniappe Inc	117 1st St, Neptune Beach, 32266	0.10	6,150	SF	Store/Retail	2.90	18	2.90	20	12
169728 0000	GPS Holding Group LLC	42 East Coast Dr, Atlantic Beach, 32233	0.37	15,750	SF	Vacant Commercial	-	-	15.25	-	6
172982 0000	Huron Sophia LLC	301 Atlantic Blvd, Neptune Beach, 32266	0.30	13,068	SF	Restaurant	15.25	199	15.25	199	0
172793 0000	Jones Edward Skinner Trust	200 1st St, Neptune Beach, 32266	0.63	27,400	SF	Shopping	0.30	8	0.30	1	0
169729 0000	Junk Property LLC	303 Atlantic Blvd, Atlantic Beach, 32233	0.42	18,750	SF	Restaurant	15.25	286	15.25	286	20
172766 0200	Lubeck Jay A	219 1st St N, Neptune Beach, 32266	0.07	3,075	SF	Mixed Use	5.00	15	5.00	15	3
172981 0000	Neptune Plaza LLC	327 Atlantic Blvd, Neptune Beach, 32266	0.40	17,511	SF	Restaurant	15.25	267	15.25	267	10
169730 0005	Nshore LLC	363 Atlantic Blvd, Atlantic Beach, 32233	1.40	60,984	SF	Shopping	2.90	177	0.30	195	49
172978 0000	Ocean State Bank	301 Third St, Neptune Beach, 32266	0.63	27,392	SF	Bank	3.50	96	0.30	82	35
172979 0000	Ocean State Bank	301 Third St, Neptune Beach, 32266	0.65	27,648	SF	Bank	3.50	97	0.30	83	0
169735 0000	Petway Real Estate LLC	375 Atlantic Blvd, Atlantic Beach, 32233	0.31	13,504	SF	Office	0.30	4	0.30	-	0
169730 0025	Poes Tavern AB Holding Co LLC	363 Atlantic Blvd, Atlantic Beach, 32233	0.25	10,890	SF	Restaurant	15.25	166	15.25	166	35
172779 0000	Rasco Investment LLC	201 1st St N, Neptune Beach, 32266	0.13	6,212	SF	Office Medical	0.30	2	0.30	-	0
172983 0000	Retail Strategies LLC	115 Third St, Neptune Beach, 32266	0.92	38,525	SF	Bank	3.50	135	0.30	116	24
172980 0000	Retail Strategies LLC	211 Third St, Neptune Beach, 32266	1.27	55,000	SF	Shopping	2.90	160	2.90	176	0
172785 0000	Seahorse NB LLC	120 Atlantic Blvd, Neptune Beach, 32266	1.22	40	Rooms	Motel (40 Rooms)	1.00	40	1.00	40	40
172787 0020	Southcoast Beaches II LLC	241 Atlantic Blvd, Neptune Beach, 32266	0.43	18,700	SF	Mixed Use	5.00	94	5.00	94	78
172790 0010	Southcoast Capital Partnership LTD	100 1st St, Neptune Beach, 32266	0.43	18,774	SF	Shopping	2.90	54	2.90	60	0
172531 0000	Southcoast Capital Partnership LTD	299 Atlantic Blvd, Atlantic Beach, 32233	0.35	15,246	SF	Shopping	2.90	44	2.90	49	0
172778 0000	Waters Michael F	123 Lemon St, Neptune Beach, 32266	0.04	2,030	SF	Vacant Commercial	-	-	15.25	-	
								Total	2,309	2,288	575
								Turnover (vehicles/space)	4.00	2.25	
								Total Demand	577	1,017	575

Source: Kimley-Horn

Table 7. Non-residential Parking Generation Analysis - Scenario 1 (Vacant Properties converted to Family Restaurant)

Parcel	Name	Address	Acres	Amount	Unit	Existing Use	Weekday Rate	Weekday Demand	Weekend Rate	Weekend Demand	On Site Private Parking
172639 0000	214 Orange Street LLC	214 Orange St, Neptune Beach, 32266	0.14	6,240	SF	Office	0.30	2	0.03	-	0
172766 0000	217 First Street LLC	217 1st St, Neptune Beach, 32266	0.14	5,910	SF	Office	0.30	2	0.03	-	1
172638 0000	218 First Street LLC	218 1st St N, Neptune Beach, 32266	0.28	12,200	SF	Restaurant	15.25	186	15.25	186	0
172795 0000	220 First Street LLC	220 1st St S, Neptune Beach, 32266	0.11	5,000	SF	Shopping	2.90	15	3.20	16	16
170227 0000	60 Ocean Boulevard LLC	60 Ocean Blvd, Atlantic Beach, 32233	0.30	13,700	SF	Shopping	2.90	40	3.20	44	0
170229 0000	Ashford Atlantic Beach LLC	1 Ocean Blvd, Atlantic Beach, 32233	2.33	193	Rooms	One Ocean (193)	1.00	193	1.00	193	244
172791 0000	City Of Neptune Beach	116 1st St, Neptune Beach, 32266	0.23	9,744	SF	Municipal	0.30	3	0.03	-	
172788 0010	City Of Neptune Beach	200 Lemon St, Neptune Beach, 32266	0.36	15,246	SF	Municipal	0.30	5	0.03	-	
169733 0010	Downey A Morris Jr	372 Ahern St, Atlantic Beach, 32233	0.07	2,999	SF	Office	0.30	1	0.03	-	2
172769 0000	Driver Douglas L	108 Orange St, Neptune Beach, 32266	0.06	2,750	SF	Vacant Commercial	15.25	42	15.25	42	0
172782 0000	Etienne Lagniappe Inc	117 1st St, Neptune Beach, 32266	0.10	6,150	SF	Store/Retail	2.90	18	3.20	20	12
169728 0000	Gps Holding Group LLC	42 East Coast Dr, Atlantic Beach, 32233	0.37	15,750	SF	Vacant Commercial	15.25	240	15.25	240	6
172982 0000	Huron Sophia LLC	301 Atlantic Blvd, Neptune Beach, 32266	0.30	13,068	SF	Restaurant	15.25	199	15.25	199	0
172793 0000	Jones Edward Skinner Trust	200 1st St, Neptune Beach, 32266	0.63	27,400	SF	Shopping	0.30	8	0.03	1	0
169729 0000	Junk Property LLC	303 Atlantic Blvd, Atlantic Beach, 32233	0.42	18,750	SF	Restaurant	15.25	286	15.25	286	20
172766 0200	Lubeck Jay A	219 1st St N, Neptune Beach, 32266	0.07	3,075	SF	Mixed Use	5.00	15	5.00	15	3
172981 0000	Neptune Plaza LLC	327 Atlantic Blvd, Neptune Beach, 32266	0.40	17,511	SF	Restaurant	15.25	267	15.25	267	10
169730 0005	Nshore LLC	363 Atlantic Blvd, Atlantic Beach, 32233	1.40	60,984	SF	Shopping	2.90	177	3.20	195	49
172978 0000	Ocean State Bank	301 3rd St, Neptune Beach, 32266	0.63	27,392	SF	Bank	3.50	96	3.00	82	35
172979 0000	Ocean State Bank	301 3rd St, Neptune Beach, 32266	0.65	27,648	SF	Bank	3.50	97	3.00	83	0
169735 0000	Petway Real Estate LLC	375 Atlantic Blvd, Atlantic Beach, 32233	0.31	13,504	SF	Office	0.30	4	0.03	-	0
169730 0025	Poes Tavern Ab Holding Co LLC	363 Atlantic Blvd, Atlantic Beach, 32233	0.25	10,890	SF	Restaurant	15.25	166	15.25	166	35
172779 0000	Rasco Investment LLC	201 1st St N, Neptune Beach, 32266	0.13	6,212	SF	Office Medical	0.30	2	0.03	-	0
172983 0000	Retail Strategies LLC	115 3rd St, Neptune Beach, 32266	0.92	38,525	SF	Bank	3.50	135	3.00	116	24
172980 0000	Retail Strategies LLC	211 3rd St, Neptune Beach, 32266	1.27	55,000	SF	Shopping	2.90	160	3.20	176	0
172785 0000	Seahorse Nb LLC	120 Atlantic Blvd, Neptune Beach, 32266	1.22	40	Rooms	Motel (40 Rooms)	1.00	40	1.00	40	40
172787 0020	Southcoast Beaches II LLC	241 Atlantic Blvd, Neptune Beach, 32266	0.43	18,700	SF	Mixed Use	5.00	94	5.00	94	78
172790 0010	Southcoast Capital Partnership Ltd	100 1st St, Neptune Beach, 32266	0.43	18,774	SF	Shopping	2.90	54	3.20	60	0
172531 0000	Southcoast Capital Partnership Ltd	299 Atlantic Blvd, Atlantic Beach, 32233	0.35	15,246	SF	Shopping	2.90	44	3.20	49	0
172778 0000	Waters Michael F	123 Lemon St, Neptune Beach, 32266	0.04	2,030	SF	Vacant Commercial	15.25	31	15.25	31	
						Total		2,309		2,601	575
						Turnover (vehicles/space)		4.00		2.25	
						Total Demand		577		1,156	575

Source: Kimley-Horn

Table 8. Non-residential Parking Generation Analysis - Scenario 2 (Vacant Properties converted to Shopping)

Parcel	Name	Address	Acres	Amount	Unit	Existing Use	Weekday Rate	Weekday Demand	Weekend Rate	Weekend Demand	On Site Private Parking
172639 0000	214 Orange Street LLC	214 Orange St, Neptune Beach, 32266	0.14	6,240	SF	Office	0.30	2	0.03	-	0
172766 0000	217 First Street LLC	217 1st St, Neptune Beach, 32266	0.14	5,910	SF	Office	0.30	2	0.03	-	1
172638 0000	218 First Street LLC	218 1st St N, Neptune Beach, 32266	0.28	12,200	SF	Restaurant	15.25	186	15.25	186	0
172795 0000	220 First Street LLC	220 1st St S, Neptune Beach, 32266	0.11	5,000	SF	Shopping	2.90	15	3.20	16	16
170227 0000	60 Ocean Boulevard LLC	60 Ocean Blvd, Atlantic Beach, 32233	0.30	13,700	SF	Shopping	2.90	40	3.20	44	0
170229 0000	Ashford Atlantic Beach LLC	1 Ocean Blvd, Atlantic Beach, 32233	2.33	193	Rooms	One Ocean (193)	1.00	193	1.00	193	244
172791 0000	City Of Neptune Beach	116 1st St, Neptune Beach, 32266	0.23	9,744	SF	Municipal	0.30	3	0.03	-	
172788 0010	City Of Neptune Beach	200 Lemon St, Neptune Beach, 32266	0.36	15,246	SF	Municipal	0.30	5	0.03	-	
169733 0010	Downey A Morris Jr	372 Ahern St, Atlantic Beach, 32233	0.07	2,999	SF	Office	0.30	1	0.03	-	2
172769 0000	Driver Douglas L	108 Orange St, Neptune Beach, 32266	0.06	2,750	SF	Vacant Commercial	2.90	8	3.20	9	0
172782 0000	Etienne Lagniappe Inc	117 1st St, Neptune Beach, 32266	0.10	6,150	SF	Store/Retail	2.90	18	3.20	20	12
169728 0000	Gps Holding Group LLC	42 East Coast Dr, Atlantic Beach, 32233	0.37	15,750	SF	Vacant Commercial	2.90	46	3.20	50	6
172982 0000	Huron Sophia LLC	301 Atlantic Blvd, Neptune Beach, 32266	0.30	13,068	SF	Restaurant	15.25	199	15.25	199	0
172793 0000	Jones Edward Skinner Trust	200 1st St, Neptune Beach, 32266	0.63	27,400	SF	Shopping	0.30	8	0.03	1	0
169729 0000	Junk Property LLC	303 Atlantic Blvd, Atlantic Beach, 32233	0.42	18,750	SF	Restaurant	15.25	286	15.25	286	20
172766 0200	Lubeck Jay A	219 1st St N, Neptune Beach, 32266	0.07	3,075	SF	Mixed Use	5.00	15	5.00	15	3
172981 0000	Neptune Plaza LLC	327 Atlantic Blvd, Neptune Beach, 32266	0.40	17,511	SF	Restaurant	15.25	267	15.25	267	10
169730 0005	Nshore LLC	363 Atlantic Blvd, Atlantic Beach, 32233	1.40	60,984	SF	Shopping	2.90	177	3.20	195	49
172978 0000	Ocean State Bank	301 3rd St, Neptune Beach, 32266	0.63	27,392	SF	Bank	3.50	96	3.00	82	35
172979 0000	Ocean State Bank	301 3rd St, Neptune Beach, 32266	0.65	27,648	SF	Bank	3.50	97	3.00	83	0
169735 0000	Petway Real Estate LLC	375 Atlantic Blvd, Atlantic Beach, 32233	0.31	13,504	SF	Office	0.30	4	0.03	-	0
169730 0025	Poes Tavern Ab Holding Co LLC	363 Atlantic Blvd, Atlantic Beach, 32233	0.25	10,890	SF	Restaurant	15.25	166	15.25	166	35
172779 0000	Rasco Investment LLC	201 1st St N, Neptune Beach, 32266	0.13	6,212	SF	Office Medical	0.30	2	0.03	-	0
172983 0000	Retail Strategies LLC	115 3rd St, Neptune Beach, 32266	0.92	38,525	SF	Bank	3.50	135	3.00	116	24
172980 0000	Retail Strategies LLC	211 3rd St, Neptune Beach, 32266	1.27	55,000	SF	Shopping	2.90	160	3.20	176	0
172785 0000	Seahorse Nb LLC	120 Atlantic Blvd, Neptune Beach, 32266	1.22	40	Rooms	Motel (40 Rooms)	1.00	40	1.00	40	40
172787 0020	Southcoast Beaches II LLC	241 Atlantic Blvd, Neptune Beach, 32266	0.43	18,700	SF	Mixed Use	5.00	94	5.00	94	78
172790 0010	Southcoast Capital Partnership Ltd	100 1st St, Neptune Beach, 32266	0.43	18,774	SF	Shopping	2.90	54	3.20	60	0
172531 0000	Southcoast Capital Partnership Ltd	299 Atlantic Blvd, Atlantic Beach, 32233	0.35	15,246	SF	Shopping	2.90	44	3.20	49	0
172778 0000	Waters Michael F	123 Lemon St, Neptune Beach, 32266	0.04	2,030	SF	Vacant Commercial	2.90	6	3.20	6	
						Total		2,369		2,353	575
						Turnover (vehicles/space)		4.00		2.25	
						Total Demand		592		1,046	575

Source: Kimley-Horn

Table 9. Estimated Residential Parking Demand

Residential Land Use	Estimated Households	Demand
Residential 20-60 Units per Acre	14	4
Residential 3-7 Units per Acre	31	8
Residential 8-19 Units per Acre	1	0
Residential Condo	27	7
Residential Medium Density	62	16
SPACES NEEDED	135	35

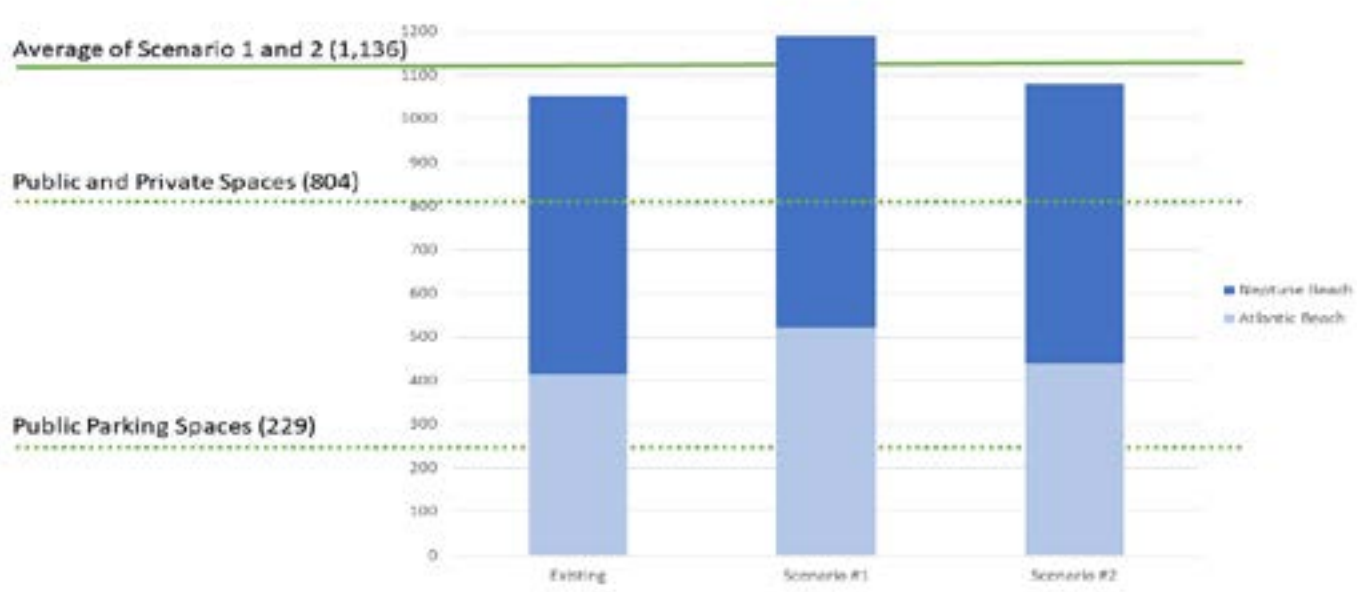
Source: Kimley-Horn

Figure 16 summarizes the total demand and existing capacity for parking. Using the average demand in Scenario 1 and Scenario 2 an additional 332 spaces are needed.

In the future, parking demand is anticipated to decline as Transportation Network Companies (TNC), such as Uber, Lyft, grow and provide trips otherwise met by drivers. Encouraging multimodal travel will also reduce the demand for parking spaces in the future.

As a result, 200 additional spaces was used to analyze alternatives to meet future parking needs.

Figure 16. Demand and Capacity Scenarios



5 ALTERNATIVES ANALYSIS

Alternatives Analysis

WAYFINDING

Wayfinding can significantly reduce the need for drivers to circulate the area looking for parking. Two wayfinding types include examples shown on **Figure 17.**

A static monument shown in the first example directs travelers to available public parking areas, reducing the need for unfamiliar drivers to circulate looking for parking.

Combined with a smart parking management system, real-time parking availability data can be provided. The signs should be eye-catching, easily serviceable and easily editable as building occupants and uses change.

Figure 17. Wayfinding Examples

Source: Kimley-Horn

Funding is needed to design, construct and operate wayfinding strategies.

CAPACITY

On-Street Parking

Only one option for reallocating on-street parking was identified. The recommendation is consistent with the ULI Technical Assistance Panel report.

> ***Relocate parking on First Street from the west side to the east side of the street. The east side has fewer driveways due to the orientation of homes to the side streets. This low-cost solution adds 24 parking spaces.***

No other options identified could safely or efficiently reallocate on-street parking.

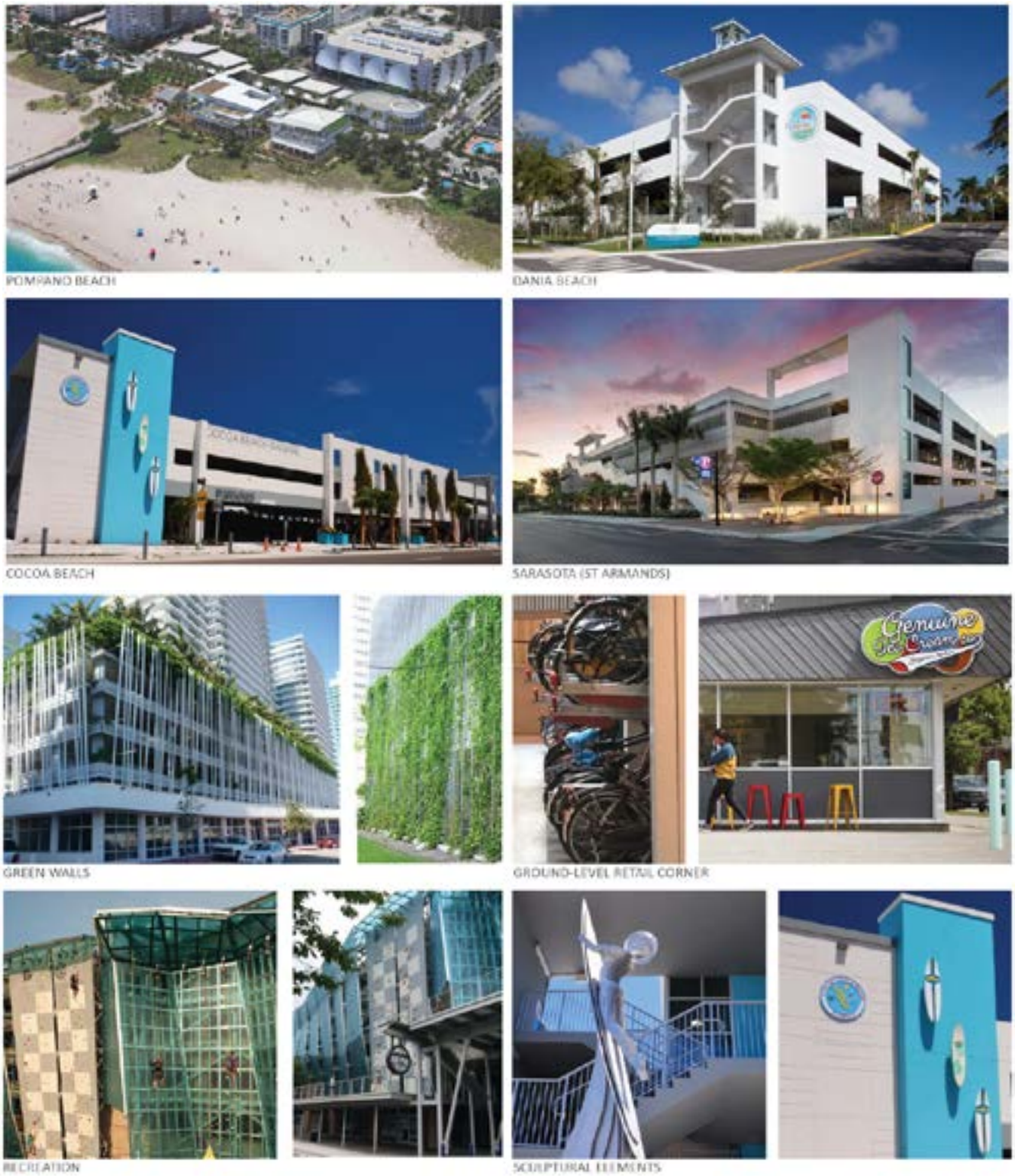
Maintenance crews can easily stripe these changes following coordination with the adjacent property owners.

New Parking Garage

Constructing a new garage could provide the additional 200 parking spaces needed to support the future needs within the study area. A parking garage can serve as a landmark structure with an aesthetic design to enhance the branding of the Beaches Town Center. Examples of garages in peer communities are shown on **Figure 18.**

Renderings of the proposed garage are provided on **Figures 19** and **20**.

Figure 18. Examples of Aesthetic Designs in Peer Communities



Source: Kimley-Horn

Table 10. Summary of Garage Costs

Item	Amount
Total Floors	3
Commercial Use Floor	1
Length x Width (ft.)	125 x 280
Area (sq. ft.)	35,000
Spaces per Floor	100
TOTAL SPACES	200
Construction	$5,000,000
Design and Permitting @ 20%	$1,000,000
SUBTOTAL CONSTRUCTION	$6,000,000
Property Acquisition	$8,500,000
Support Costs @ 50%	$1,700,000
SUBTOTAL ACQUISITION	$22,200,000
Contingencies and Unknowns @ 20%	$660,000
TOTAL CAPITAL COSTS	$22,860,000
Bonding/finance @ 15%	$3,429,000
GRAND TOTAL	$26,289,000

Source: Kimley-Horn

Figure 19. Rendering of Parking Garage

Figure 20. Rendering of Parking Garage

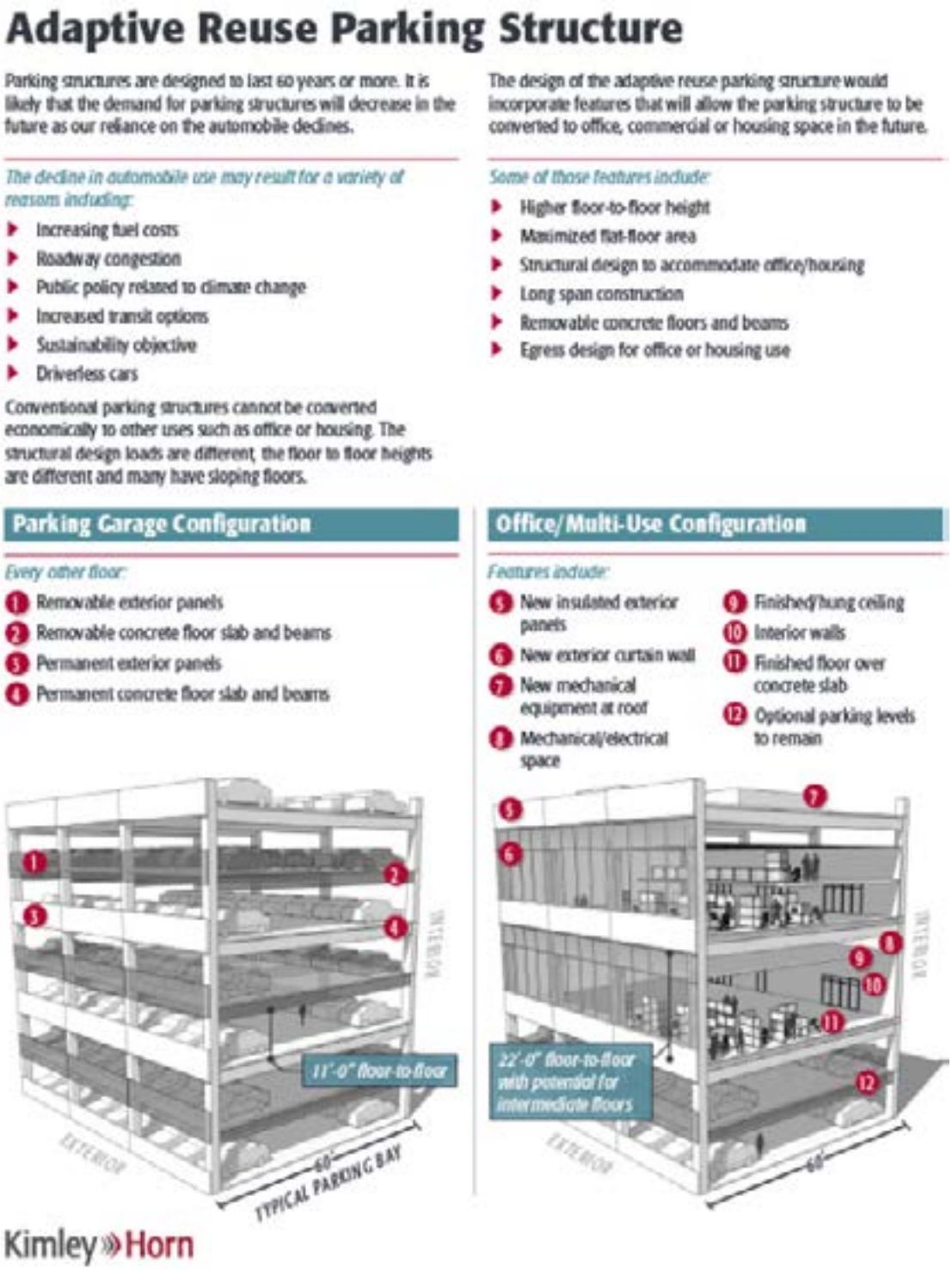
Access to Beaches Town Center and the beach can be enhanced by hiring a mobility service provider such as Beach Buggies. Alternate 1 can access Beaches Town Center using Second Street and the beach via Orange Street. Alternative 2 can access the Beaches Town Center via Lemon Street. A new pedestrian signal is proposed at Third and Lemon Street to facilitate a safer crossing with increased pedestrian foot traffic. Access to the Beaches Town Center from Lemon Street is available from Second Street with beach access from Lemon Street.

Economic studies and property owner coordination are needed to determine the feasibility of either option selected. An invitation to negotiate can be issued for a public-private partnership to finance, construct and operate the parking garage. The cost estimates presented assume the project will be constructed by the public sector and right-of-way obtained through eminent domain. A public-private partnership can likely construct the garage more efficiently.

Parking professionals, architects, planners and designers are considering the impact of connected, autonomous and shared vehicles on parking and parking structures in the future. Early projections estimate a potential reduction in parking demand could reach 30 to 50% within 20–30 years if these technologies are aggressively adopted.

Many parking structures are designed with a service life of 50-75 years. Structures built today will continue to be fixtures of our urban landscape. Consideration should be given to designing new structures adapted to other uses. **Figure 21** illustrates some potential features that could facilitate this change.

Figure 21. Adaptive Reuse Parking Structures



Source: Kimley-Horn

CURBSIDE MANAGEMENT

Truck Parking

The study included conducting on-the-street interviews with businesses and several delivery drivers to better understand the needs for truck parking management. No stakeholders questioned had major concerns about deliveries because of the availability of rear access to most common delivery points. Truck deliveries also occur in the mornings and mid-day avoiding peak parking demand.

The parking ordinance for trucks and TNC loading zones should be updated. Signing and pavement markings need to be installed.

Micromobility

The City of Jacksonville is currently evaluating proposals for the micromobility scooter services in downtown. The Beaches Town Center is also an attractive market for these providers who may seek licenses to operate in the study area. Additional analysis is needed on the impact of the rental sites and potential to abandon the scooters within the street environment. Dock-less services should also be evaluated. The cities' ordinances may need to be modified to allow these vehicles to operate.

Many residents use bicycles to access Beaches Town Center during special events. Providing additional bicycle racks or a bike station will provide secured storage and encourage residents and visitors to use bicycles during peak periods.

Bike racks have become a favorite medium for creating practical and engaging community public art. Examples are shown **Figure 22**.

Figure 22. Bike Racks as Public Art

Source: https://cyclesafe.com

Bike stations provide covered lockers and racks to protect bicycles from theft and the elements. Examples are shown in **Figure 23**.

Figure 23. Bike Stations

Source: Torsodog - Own work, CC BY-SA 3.0, https://commons.wikimedia.org/w/index.php?curid=4208980

Source: https://cyclesafe.com

TNC PICK-UP AND DROP-OFF LOCATIONS

TNC pick-up and drop-off services are common within the Beaches Town Center. These vehicles block traffic and double park on Atlantic Boulevard causing delays. Establishing designated pick-up and drop-off areas will reduce this congestion. The following sites were evaluated:

1. Parking lot on the Lemon Square, LLC parcel between Orange Street and Lemon Street. The lot is metered during the day and used by valet services during the evenings Thursday through Sunday. It is one block from Atlantic Boulevard and will provide the least traffic interruptions.
2. Midway Street in the southwest quadrant of the intersection with Atlantic Boulevard. It is perpendicular, on-street parking for the Seahorse Inn. A property agreement will be required.
3. Third Street south of Atlantic Boulevard. This alternative will convert parallel on-street parking to a loading area. This location will require passengers to cross the intersection of Third Street and Atlantic Boulevard to reach the loading area.
4. Atlantic Boulevard east of Ocean Street. Four on-street parallel parking locations can be converted to a loading zone at this site. It is located adjacent to the Beaches Town Center and will allow the TNC vehicles to use Midway Street to access the loading area.
5. Ocean Street North of Atlantic Boulevard. This site currently has a truck loading zone that can be designated for truck parking during the day and TNC pick-up and drop-off loading at night. No parking spaces are lost with this site. It is located adjacent to the Beaches Town Center. TNCs can access the site via Ahern Street and exit via First Street without using Atlantic Boulevard.

These locations are shown on **Figure 24**.

The cities will need to coordinate with Beach Buggies and other TNCs to select a preferred loading area. Once selected the loading zones can be implemented using pavement markings and street signs. City parking ordinances may need to be updated to address enforcement considerations.

Figure 24. TNC Loading Area Alternatives

1. Lemon Street Parking Lot
2. Midway Street at Atlantic Boulevard
3. Third Street Parking
4. Atlantic Boulevard Parking
5. Ocean Street North of Atlantic Boulevard

Source: All images are from Google Maps

TRANSPORTATION MANAGEMENT ASSOCIATION

A Transportation Management Association (TMA) is a partnership between public and private sector employers and stakeholders with a mandate to address transportation concerns within the community it serves. A TMA generally provides programs and services to encourage and support commuters to choose more sustainable commute modes such as carpooling, transit, walking, cycling and telework.

The goals established for the Beaches Town Center TMA may include:

1. Governance: Create a sustainable organization to deliver a consolidated parking management system.
2. Infrastructure/Programming: Encourage a seamless and demand-balancing approach to parking in the Beaches Town Center area.
3. Communications: Create awareness of transportation options and the TMA.
4. Recruitment: Encourage TMA participation from all property owners in the Beaches Town Center.
5. Share Revenues: Share parking revenues based on metered parking in all lots and on-street parking to support infrastructure improvements.

An economic feasibility study and coordination with property owners is needed to determine feasibility of instituting a public-private partnership.

POLICY RECOMMENDATIONS

Each city should consider the following policies to promote infill development:

- No parking required in Beaches Town Center
- Additional 10% reduction for shared parking with alternate peaking land uses
- No additional parking with change in land use
- No additional parking when gross leasable area is increased by 10% or less

TECHNOLOGY

Emerging technologies in connected, autonomous and shared vehicles may have a significant impact future travel demand management policies in the future. Providing information to these vehicles on available parking could reduce congestion. Collision avoidance systems can also help avoid collisions with parked vehicles.

Automated pedestrian detection can be used at crash hot spots with mid-block signals and at intersections.

Integrated parking and event management applications can share data throughout the region assisting travelers with efficient modal and time-of-day decisions to access the Beaches Town Center.

Given the success of the pilot program the cities should advertise or enter into a longer-term agreement with the vendor.

The smart parking system will result in additional data to estimate future demand and consider next steps for implementation.

LEMON STREET EXTENSION

The Neptune Beach Vision Plan proposed to extend Lemon Street to create a jug-handle left or to realign SR A1A as a four-lane roadway as shown on **Figure 25**. A connection can be made to the existing driveway of the vacant commercial shopping center at 572 Atlantic Boulevard (Alternative A) or 500 Atlantic Boulevard (Alternative B) as shown on **Figure 26**. Extending Lemon Street must be coordinated with proposed development of these parcels as shown on **Figure 26**. Policies are needed to reserve the right of way for a future extension of Lemon Street as part of any development order.

The typical section and the proposed extension will be determined in more detailed studies. Additional on-street angle parking may be created through the road diet implemented along Atlantic Boulevard between Third Street and the new intersection created or along Third Street from the new intersection to Atlantic Boulevard. Constructing road diets along Third Street and Atlantic Boulevard with angle parking will create 35-50 additional spaces.

The next step is to coordinate with the Florida Department of Transportation and property owners to determine the feasibility of this alternative.

Figure 25. Extension of Lemon Street (Neptune Beach Vision Plan)

LONG-TERM IMPROVEMENTS: PHASE 3 OPTIONS

After the extension of Lemon Street and the Town Center street grid, Neptune Beach can explore funding options with FDOT for a long-term reimagining of this key intersection. The following two options would greatly reduce the likelihood of vehicle speed and crashes, improving pedestrian and bicycle safety, while also creating a much more beautiful entry into the Beaches Town Center that provide opportunities for new public spaces and public artwork.

Option A: Single-Lane Roundabout*

1. Single-lane roundabout
2. Curb extension with shade trees & wider sidewalk
3. Wider medians with shade trees
4. Shorter crosswalk & pedestrian refuge
5. Separated two-way cycle track
6. On-street parking

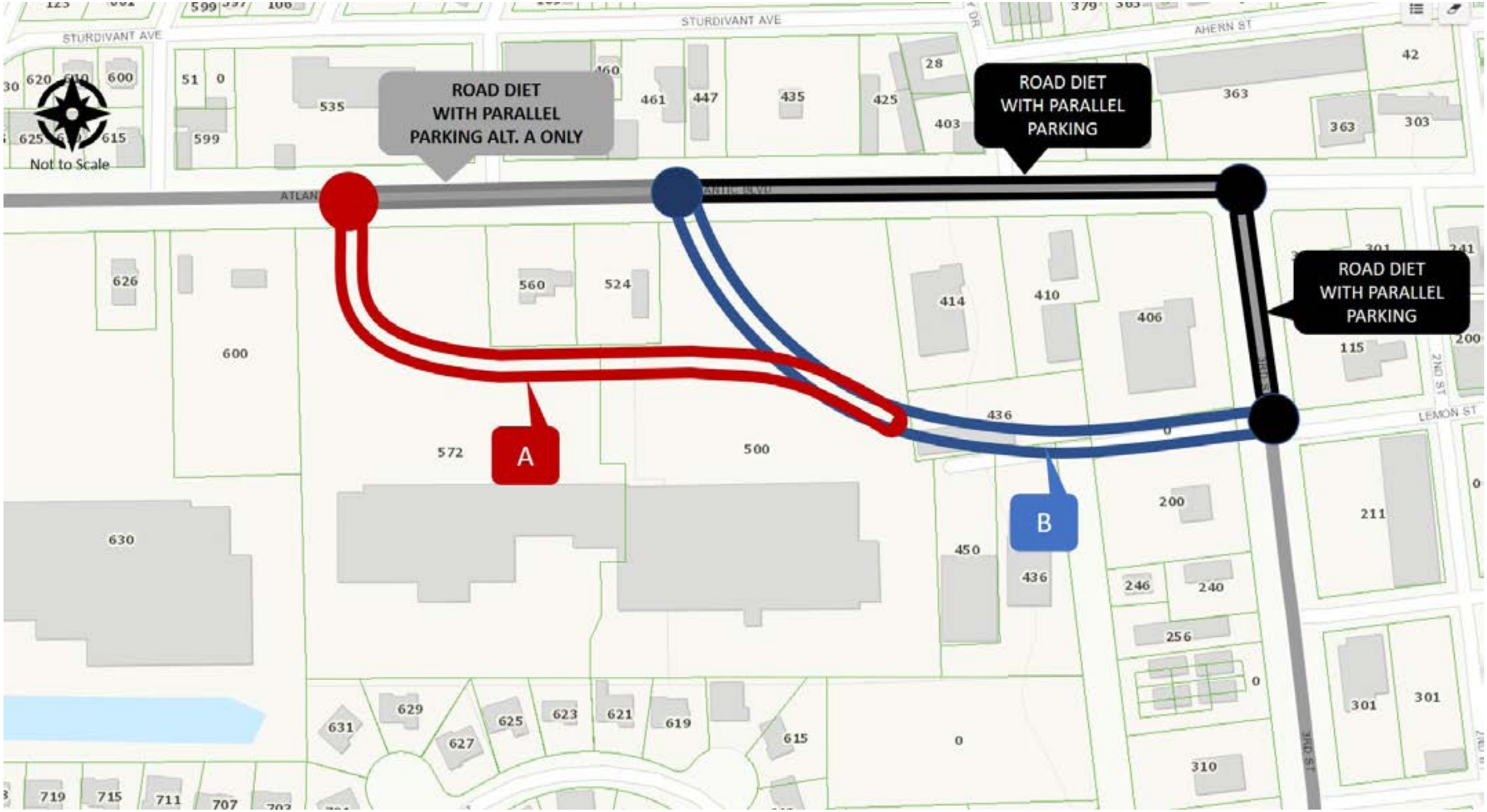
Option B: Public Plaza

1. New public plaza
2. Wider medians with shade trees
3. Shorter crosswalk & pedestrian refuge
4. Purchasing of public easement in the Walgreen's property
5. Infill development

*FDOT has already studied a single-lane roundabout design for this intersection, which was deemed feasible so long as Lemon Street is extended and connected back to Atlantic.

Source: https://www.neptunebeachvisionplan.com/

Figure 26. Lemon Street Extension Alternatives



Source: Base Map http://maps.coj.net/DuvalProperty/

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6

BIG IDEAS

Big Ideas

Two big ideas for the Beaches Town Center area to improve mobility and manage traffic.

FLEXIBLE OPEN STREET

Vehicles entering Atlantic Boulevard to search for parking spaces create pedestrian, bicycle and vehicle conflicts. Installing hydraulic, electric bollards can protect pedestrians and provide a greater level of security to the street environment while allowing pedestrians and cyclists to safely enter the roadway. Providing additional parking or demand management will promote a street festival environment during peak periods or special events. During other periods the hydraulic bollards are lowered below the street level allowing traffic to move freely. **Figure 27** shows examples of hydraulic bollards. The Flex Street project under construction in St. Augustine is shown on **Figure 28**.

Figure 27. Hydraulic Bollards

Source: http://www.hydro-tek.com.my/product/retractable-hydraulic-bollards-retractable-hydraulic-bollards

Figure 28. Proposed Flex Street - St. Augustine

Source: City of St. Augustine

Using bollards will allow the Beaches Town Center to be closed to vehicular traffic more frequently and reduce the resources needed. Special event closures use law enforcement personnel and temporary barriers which are more costly if performed frequently. This alternative will create a safer pedestrian environment.

PEDESTRIAN MALL

By adding new parking or parking demand management strategies, Atlantic Boulevard could also be converted to an open street where vehicles are prohibited. This project will remove on-street parking and construct wider sidewalks within the public right of way. These wider sidewalks can be leased to business owners for additional outdoor seating or other services. Hydraulic bollards will be lowered to allow truck deliveries during the day. This will create a permanent pedestrian mall. **Figure 29** shows an example of a similar project. Pavement markings (stripes and green pavement) can be placed to designate a bike facility. Renderings of this option are provided in **Figures 30 - 32**.

Figure 29. Third Street Santa Monica, CA

Source: https://zoningthegardenstate.wordpress.com/2018/12/06/the-success-of-pedestrian-malls-in-city-development/

Figure 30. Rendering of Atlantic Boulevard Sidewalk Extension

Figure 31. Perspective View – Vehicular Traffic

Figure 32. Perspective View – Proposed Bollards

7

SUMMARY

Summary

This project's purpose is to provide a roadmap for parking and mobility in the Beaches Town Center. The Beaches Town Center is located in Atlantic Beach and Neptune Beach at the eastern terminus of Atlantic Boulevard. The Beaches Town Center is highly valued by residents and visitors alike. It is a popular daytime and night time destination. This popularity results in parking congestion problems. The two cities instituted a paid parking pilot program and an on-demand shuttle system.

Atlantic Beach and Neptune Beach partnered to install a pay-by-plate parking system in 2019. Users pay at designated kiosk stations or use a proprietary mobile app called Flowbird®.

Parking is free in public parking spaces from midnight to 11 a.m. All spaces have a three-hour parking limit. No parking is allowed in Atlantic Beach between 3 a.m. and 5 a.m.

Paid parking is enforced from 11 a.m. to 12 midnight, seven days a week. The first 1/2 hour is free. Thereafter, the fees are $1 per 1/2 hour. The maximum charge is $6 if parked before 1:30 p.m. until 5 p.m. At 5 p.m. the timing resets and the maximum charge from 5 p.m. to midnight is another $6. If you park before 1:30 p.m. you can be charged up to $12. All spaces in Atlantic Beach have a three-hour time limit.

There are 229 on-street parking spaces, 165 in Neptune Beach and 64 in Atlantic Beach. Neptune Beach residents can park free in 35 spaces with a permit. Atlantic Beach residents can park in all 64 designated spaces free with a permit for three hours.

Parking data collected in November and December 2019 and January 2020 was analyzed. If the vacant properties in proximity to the Beaches Town Center are developed 200 additional parking spaces are needed.

Neptune Beach completed two related studies on mobility and parking in the last two years. In 2018, the Urban Land Institute conducted a Technical Assistance Panel. A draft Vision Plan was presented to Neptune Beach's City Council October 19, 2020. This study summarizes the recommendations of these related studies and proposes additional strategies to consider meeting the parking and mobility needs in the Beaches Town Center.

The following alternatives were evaluated. They are not mutually exclusive and can be implemented as short-term strategies.

1. Construct additional wayfinding through street monuments to direct drivers to public parking areas.
2. Reconfigure on-street parking on First Street to create 24 additional spaces. Maintenance crews can easily re-stripe these spaces following coordination with adjacent property owners.
3. Implement curbside management strategies for trucks, micromobility and Transportation Network Company (TNC) loading zones. The following steps are necessary to implement these strategies:
    a. Update the parking ordinance for trucks and TNC loading zones.
    b. Coordinate with the City of Jacksonville on the micromobility vendor selected to determine if this service can or should be allowed at the Beaches Town Center.
    c. Coordinate with Beach Buggy and other TNCs to select a preferred loading area. Once selected the loading zones can be implemented using pavement markings and street signs. City parking ordinances may need updating.

4. Create a Transportation Management Organization (TMO) to coordinate funding and load balancing of parking on private properties. An economic study is needed to determine viability and coordination with property owners. If feasible and property owners agree, changes to the cities' ordinances are necessary. Private operating vendors can then be selected.
5. Address policy recommendations for changes in the minimum parking ratios for development within cities' ordinances. Although implementing maximum parking ratios may seem counterintuitive to addressing the need for more parking, intensifying the land uses will make demand management and the feasibility of constructing a new garage more attractive.
6. Continue to operate the Flowbird® smart parking system. Given the success of the pilot project, the Cities should advertise or enter into a longer-term agreement with the vendor.
7. Partner with regional agencies to develop an integrated parking app and management system. The North Florida Transportation Planning Organization and the City of St. Augustine are developing a integrated regional parking management app using Flowbird® meter data.
8. Create a flexible, open street by installing hydraulic bollards to close Atlantic Boulevard to vehicular traffic during peak periods or special events. Law enforcement personnel and temporary barriers are used to close streets. Bollards allow the Beaches Town Center to close vehicular traffic more frequently and reduce the resources needed. This alternative does not provide more parking but will help create a safer pedestrian environment. The next step in advancing this alternative should include public outreach and preliminary engineering to determine the costs to construct.

The following alternatives require significant investment and additional planning, engineering and coordination.

9. Construct a new parking garage. An economic study and property owner coordination are needed to determine the feasibility. Following this study, an invitation to negotiate can be issued for a public-private partnership to finance, construct and operate the parking garage. The cost estimate assumes the project will be constructed by the public sector and right-of-way obtained through eminent domain. A public-private partnership can likely construct the garage more efficiently.
10. Extend Lemon Street to divert traffic from Third Street and Atlantic Boulevard. This will allow road diets to be constructed on Third Street north of Lemon Street and Atlantic Boulevard east of the intersection created from the new connector. This option has the potential to create 35-50 additional spaces. Third Street and Atlantic Boulevard are both state roads and coordination with the Florida Department of Transportation and property owners is needed to determine its feasibility.
11. Construct a pedestrian mall by removing on-street parking and widening sidewalks along Atlantic Boulevard. Constructing a parking garage or the road diet along Third Street and Atlantic Boulevard is needed to off-set the loss in parking. A smaller project under development in the City of St. Augustine proposes to lease additional sidewalk space to adjacent businesses for project funding. After determining feasibility and coordinating with stakeholders, funding for the design and construction is needed.

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