



DELRAY BEACH PARKING & CURBSIDE MANAGEMENT

MASTER PLAN
DOWNTOWN DEVELOPMENT AUTHORITY
SEPTEMBER 6, 2022



ABOUT THE STUDY

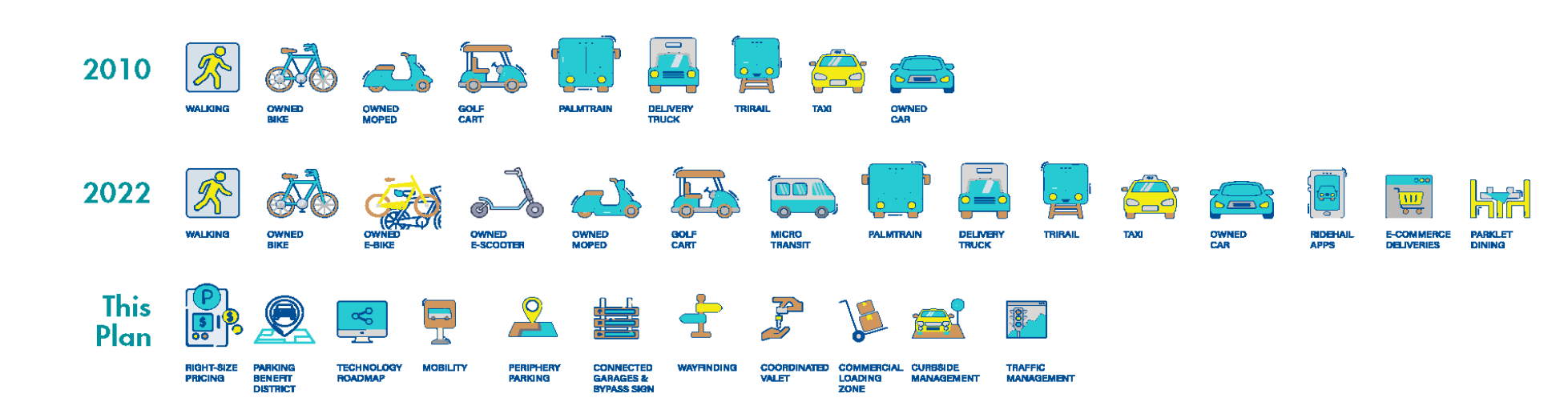
Purpose: Optimize use of existing parking assets

	Downtown Master Plan (2002)	Parking Mgmt. Plan (2010)	Gibbs Report (2017)	Always Delray (2021)	Parking & Curbside Mgmt. (2022)	Implementation Status
Right-pricing for premium on-street parking		X	X		X	Partial
First 20 minutes free		X	X			Yes
Parking Benefit District (or similar concept)		X	X		X	No
Shared Parking	X	X	X	X	X	Yes
Retain functionality of alleys	X			X	X	Yes
Citywide Valet System	X	X	X		X	No
Adjust extended time limits (> 2 hours)			X		X	Partial
Improve bicycle/pedestrian infrastructure	X (ped)	X	X	X	X	Partial
Use Library & Courthouse lots			X		X	No
Transportation Demand Management		X		X	X	Partial
Unified branding & wayfinding for parking			X	X	X	Planned
Reduce sidewalk clutter/maintain standards			X	X	X	Partial
Hire ambassadors		X			X	No
Employee permit parking			X		X	No (in codes, but no permit)
Downtown shuttle		X		X	X (expanded microtransit)	No
Fee In-lieu of improvements	X	X	X		X	Yes
Active management or similar concept			X*	X*	X*	No
Factor in emerging technologies				X	X	Partial
Commercial loading zone regulations					X	Partial
Digital infrastructure plan					X	No
Performance-based decision framework					X	No



ABOUT THE STUDY

What's changed since 2010?



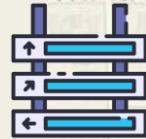
GOAL: TRAVELER INFORMATION IS SEAMLESS

Travelers can determine downtown conditions before leaving home

- Employees
- Employers
- Visitors
 - Local
 - Seasonal



Drivers can see location/availability of spaces before reaching downtown via bypass signage



Drivers can use shuttles to travel to/from periphery parking



Garages show availability by floor



Valet services are coordinated within a single app



Information systems include up-to-date information on parking rates



Predictive software provides estimates for parking lot availability



MAIN PARKING CHALLENGES

Real & perceived parking shortages during peak hours

Congested curbsides

Low turnover in prime spaces

Excess traffic from drivers circling for open spaces

Cost of building new garage

Poor pedestrian linkages & wayfinding to periphery parking

Inefficiencies

- Pricing
- Valet system
- Permits
- Use of technology to optimize parking assets



KEY OBSERVATIONS – EXISTING CONDITIONS

CAPACITY

Capacity exists in garages & periphery parking. A new garage would not yield substantial new supply

LATE NIGHT EMPLOYEES

Employees need safe, long term parking spots, now supplied in the North Railroad lot.

PRICING

Based on pricing in private lots, public parking is underpriced

PERMITS

Permits are lightly used, but could be better leveraged for public & private employee parking

TECHNOLOGY

Delray Beach has invested in key technologies: LPR, garage guidance, occupancy signage, ParkMobile

COMPETITION FOR SPACE

A growing number of uses are all vying for the same space in roadways, on sidewalks, & in alleys

ENFORCEMENT

Enforcement does not match periods of high demand (a.m.).



STUDY: A NEW APPROACH

Performance-based planning for managing multi-use infrastructure

OLD WAY - STATIC



NEW WAY - PERFORMANCE BASED

PHASE 01

STRATEGY OR
MEASURE



MONITOR



ACTION
METRIC
OR EVENT



PHASE 02

STRATEGY OR
MEASURE



CONTINUOUS
MONITORING &
ADJUSTMENT



For parking – common action metric is
> 85-90% occupancy



OVERALL STRATEGIES

System Goals: Actively manage a performance-based & demand-responsive system

OPTIMIZE EXISTING PARKING

- Right-price parking
 - Spread demand
 - Reduce parking demand
- Fine-tune turnover
- Improve circulation
- Look for “highest & best use”
 - Programmable space



OVERALL STRATEGIES

System Goals: Actively manage a performance-based & demand-responsive system

OPTIMIZE EXISTING PARKING

- Right-price parking
 - Spread demand
 - Reduce parking demand
- Fine-tune turnover
- Improve circulation
- Look for “highest & best use”
 - Programmable space

PARKING SYSTEM SOLUTIONS

- Employee parking
- Coordinate valet services
- Curbside management
 - Deliveries
 - Parking
 - Activation
- Technology



OVERALL STRATEGIES

System Goals: Actively manage a performance-based & demand-responsive system

OPTIMIZE EXISTING PARKING

- Right-price parking
 - Spread demand
 - Reduce parking demand
- Fine-tune turnover
- Improve circulation
- Look for “highest & best use”
 - Programmable space

PARKING SYSTEM SOLUTIONS

- Employee parking
- Coordinate valet services
- Curbside management
 - Deliveries
 - Parking
 - Activation
- Technology

ACTIVE MANAGEMENT

- Parking staff evolves to parking performance team
- Scheduled data analysis
- Establish action metrics
- Fine tune policy/pricing/time limits as needed



STUDY TOPICS & RECOMMENDATIONS

Study structure

Analysis & Recommendations



On-Street Parking



Infrastructure
and Curbside
Management



Off-Street Parking



Digitization and
Technology



Mobility



Traffic
Management



Valet Parking



Programming
Atlantic Avenue



Implementation & Phasing

Systems

- Formalize a Parking Benefit District
 - *Optional: Within the Parking Benefit District, Establish an Entertainment District*
- Right Pricing Parking
- Digitization and Technology Roadmap
- Mobility

Elements

- Periphery & Shared Parking
- Connected Garages & Atlantic Avenue By-Pass
- Infrastructure & Curbside Management
- Wayfinding

Operations

- Coordinated Valet Operations
- Employee Parking Programs
- Commercial Loading Zones
- Traffic Management & Enforcement
- Funding Strategy

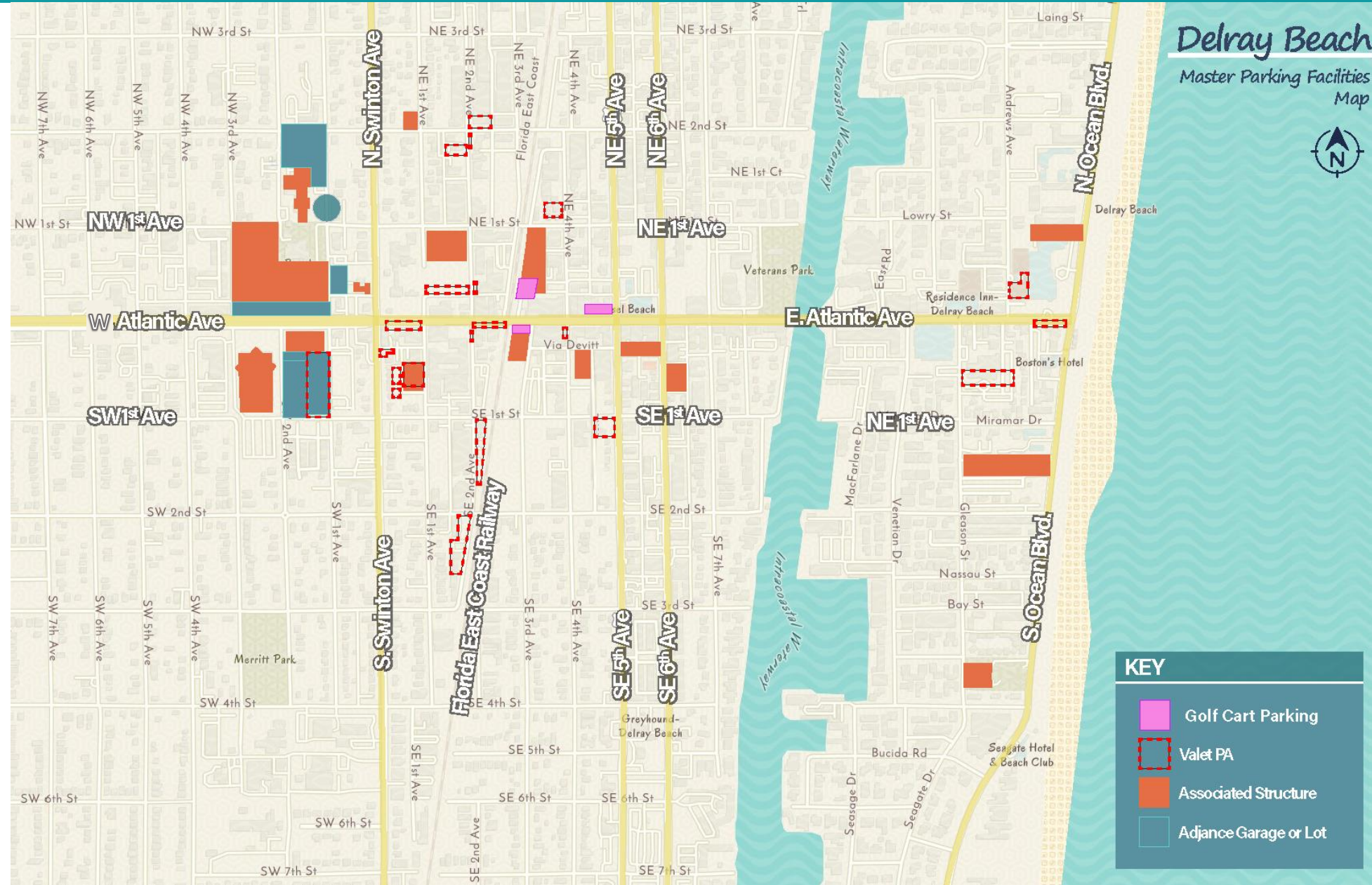


STUDY AREAS - Parking Management and Operations

Approach: Lay the groundwork for a district-wide, technology enabled system that is actively managed

Develop a **Parking Benefit District** to reinvest some/partial revenues in downtown parking

Fund public outreach & education on new system



STUDY AREA - On & Off-Street Parking

Approach: Link periphery parking while phasing in demand-responsive price/time limits based on 85-90% occupancy

1. Free Periphery Parking:

*Secure agreements

2. On-Street Parking:

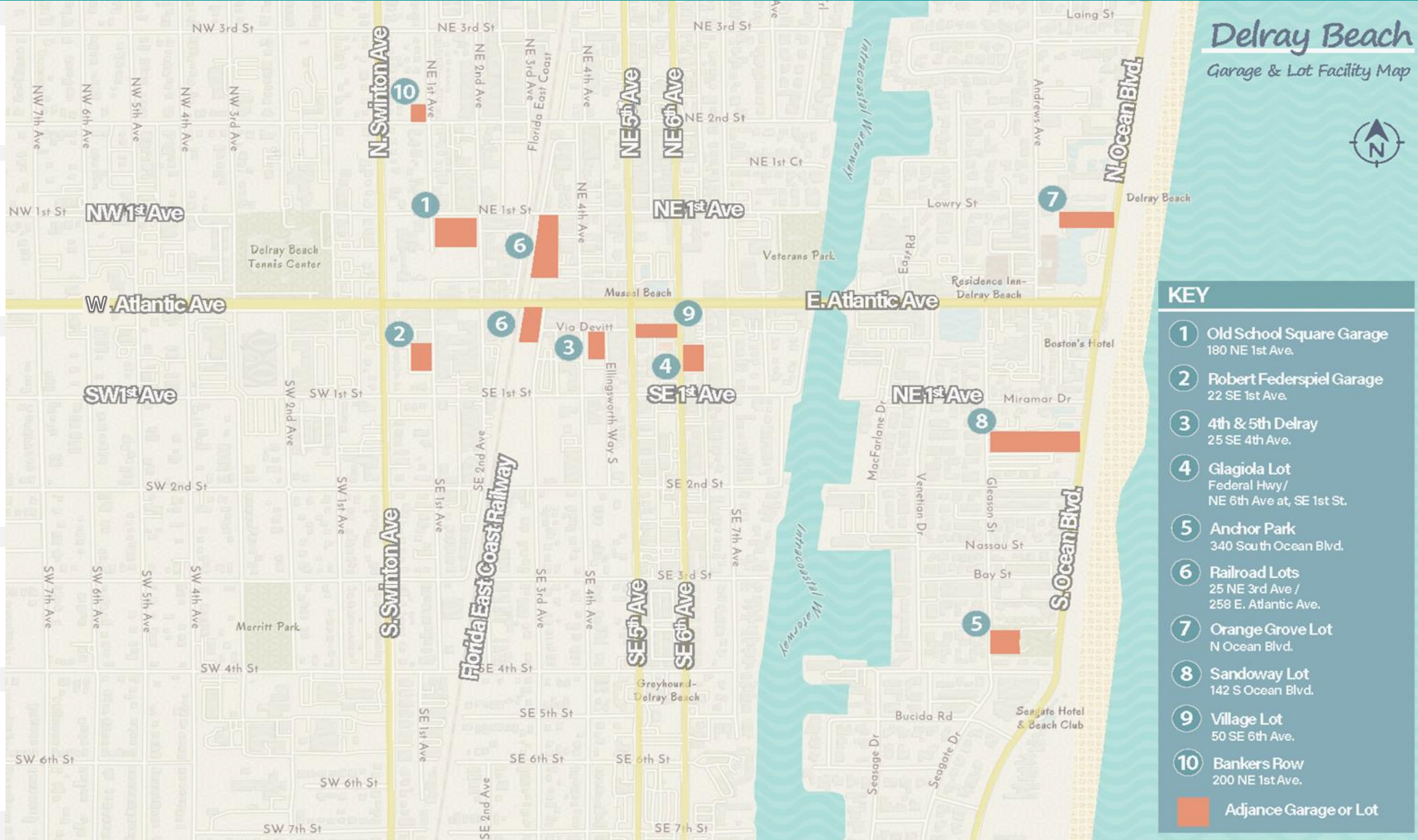
Raise prime parking rates to \$3/hr

3. **Garages:** Institute \$1.50/hr (Phase 2)

Eliminate or modify
free 20-minute parking

4. **Lots:** Institute modest rates and recalibrate time limits

5. Lots: Adjust rates seasonally to match demand



Delray Beach

Garage & Lot Facility Map

STUDY AREAS – Employee Parking

Approach: Shift preferred employee parking from prime areas to long term spaces; improve infrastructure

1. TOP ISSUE

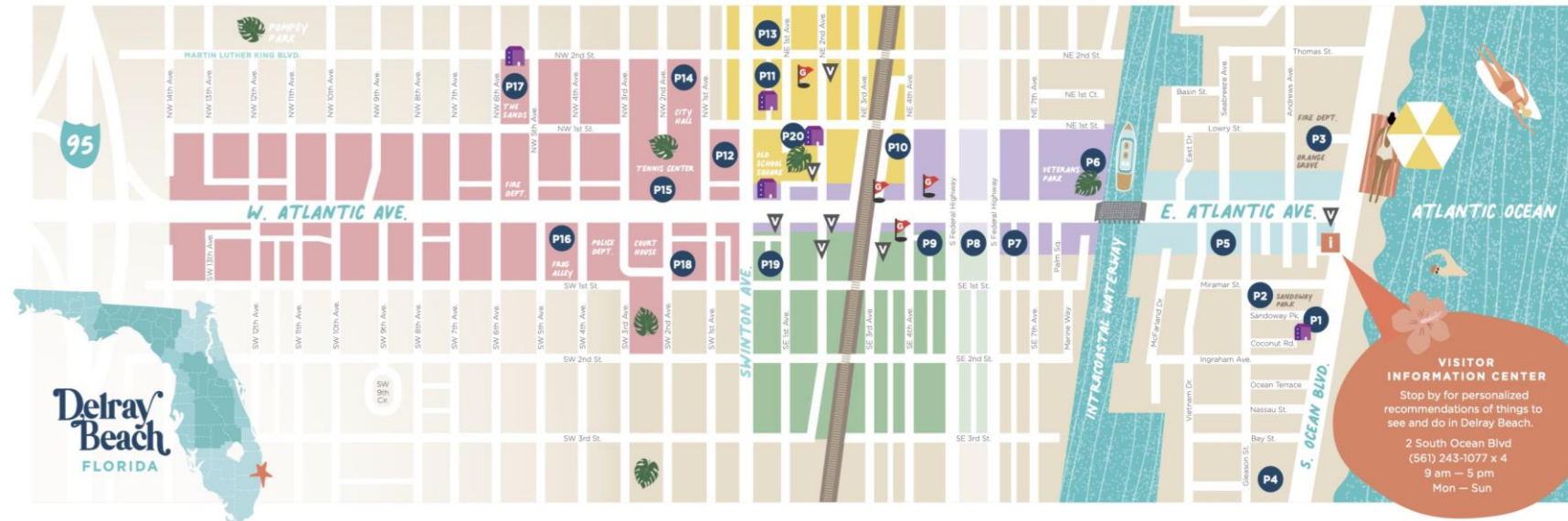
Convene parking stakeholders to discuss development of an employee parking permit & program

2. Improve access to periphery lots (Library lot lighting, infrastructure, shuttles)

3. Develop a downtown Transportation Demand Management (TDM) for employee

4. Establish a pilot employee parking permit

- free garage parking through a permit system
- “employee permit only” spaces



STUDY AREA - Valet Operations

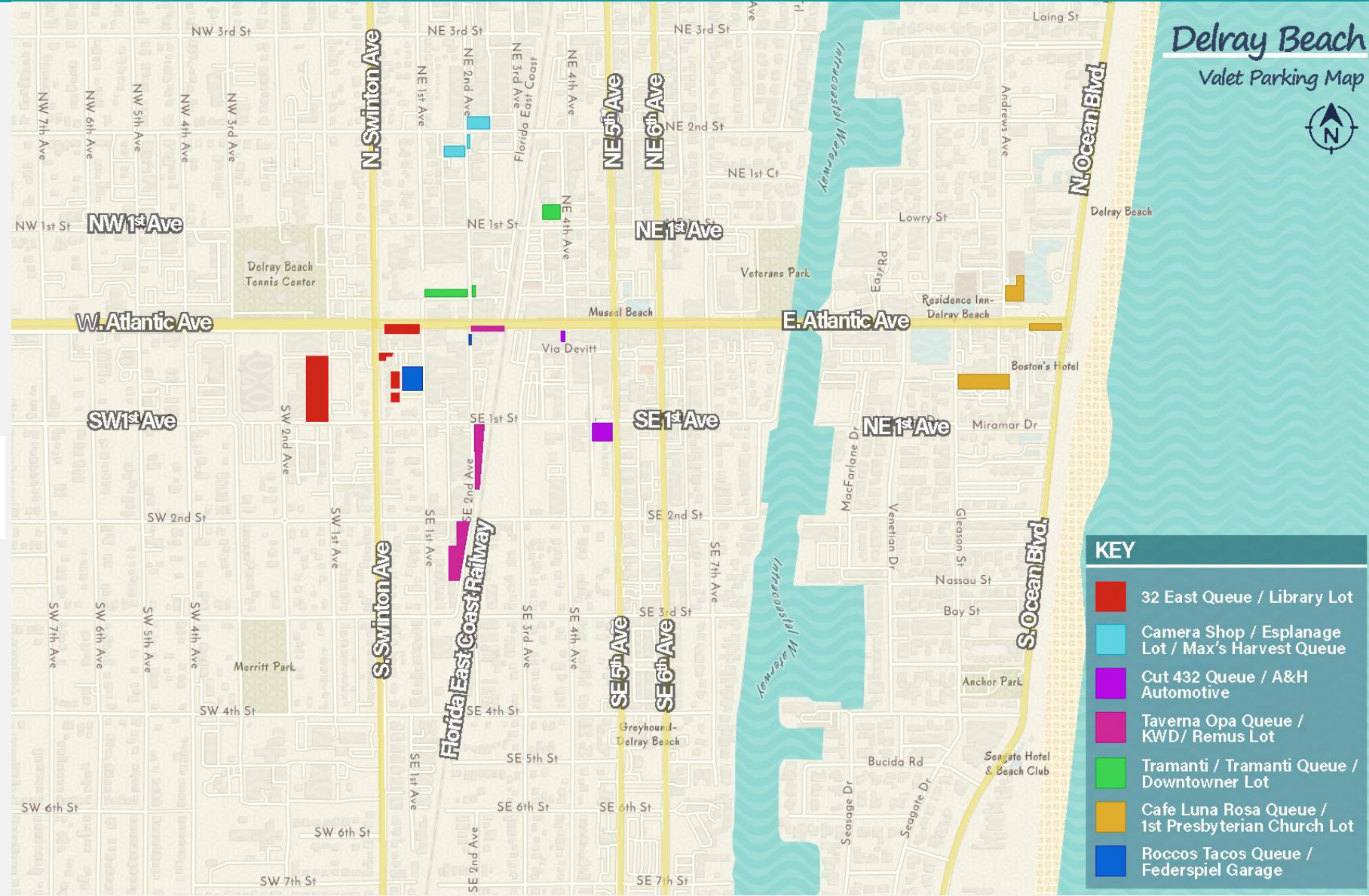
Approach: Pilot valet software to coordinate & improve valet services; revise policies

1. Convene valets to discuss challenges & opportunities

2. Assess congestion & queuing space

3. Revise valet policies & pricing

Future: Pilot a valet interchange software

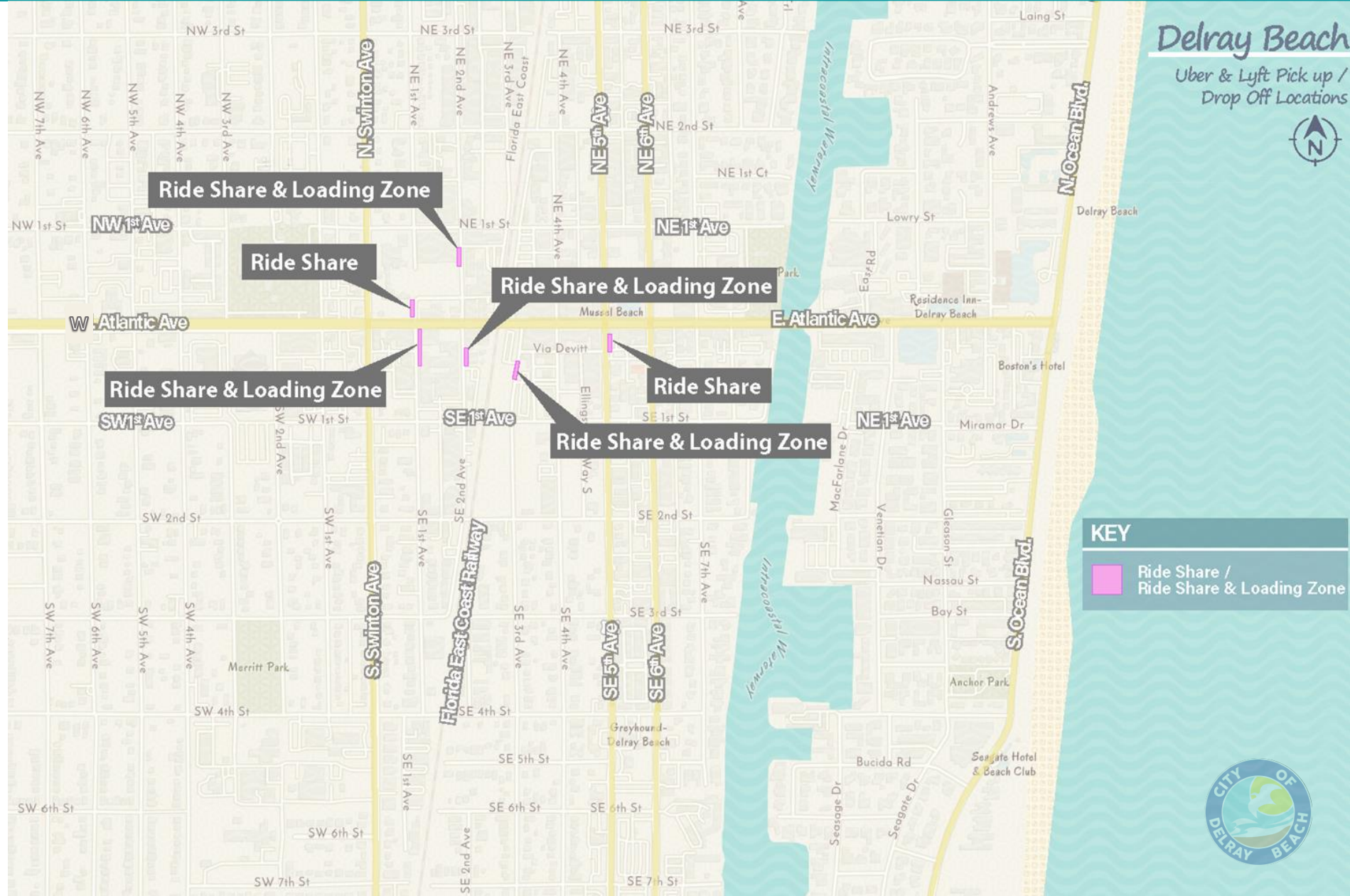


STUDY AREAS - Mobility System

Approach: Expand microtransit + active transportation for downtown circulation

1. Microtransit: Implement and track the new contract for microtransit services

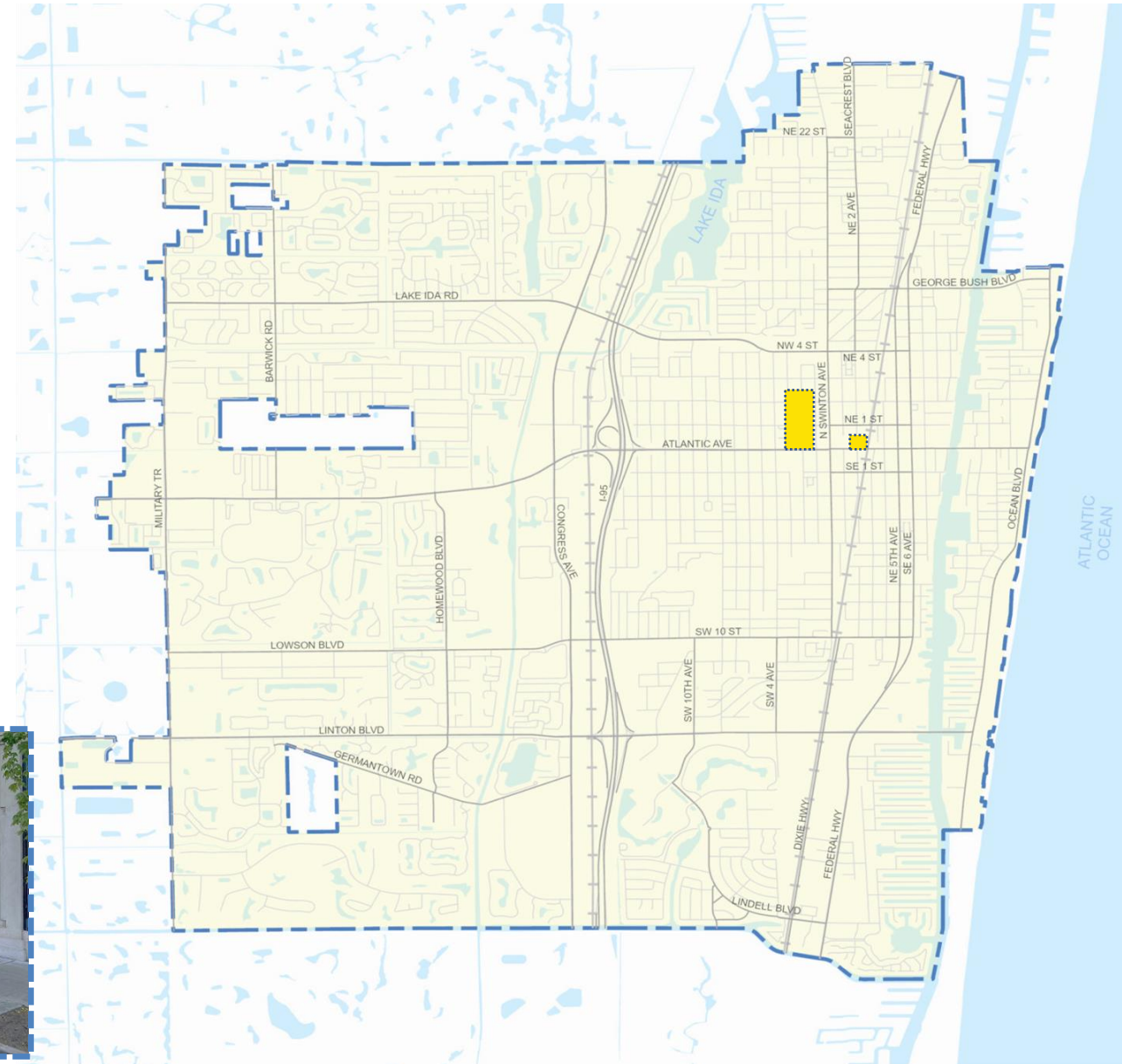
2. Microtransit: Create a pilot for extending FreeBee service until 3 am



STUDY AREAS – Mobility Infrastructure

Approach: Enhance the comfort & safety of non-auto travel to reduce parking demand

1. Conduct a walk & sign audit with focus on this Parking/Curbside Management Plan
2. Coordinate parking study recommendations with the Delray Beach Bicycle & Pedestrian Master Plan recommendations and CIP.
3. **Multi-Use Space:** Convert additional on-street parking to multi-use space
4. Install a pedlet between 2nd SE Ave (north side) & the Railroad tracks



STUDY AREAS – Legibility, Signage, and Wayfinding

Approach: Improve wayfinding connecting periphery parking and downtown; leverage digital wayfinding

TOP ISSUE

Integrate parking recommendations into wayfinding

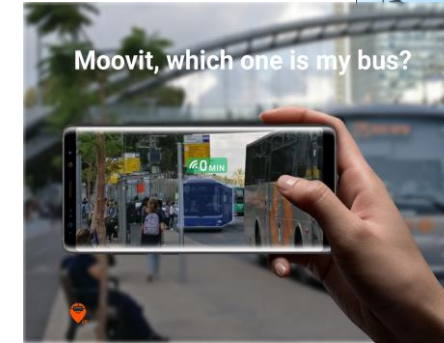
Web: Consolidate City & DDA parking information onto one website

Wayfinding: Rebrand the City's parking assets to add clarity & visibility

Digital: Lay the groundwork for digital signage (new ordinance)



Differentiating public parking



Dynamic signs & augmented reality



STUDY AREA – Curbside Management & Loading

Approach: Manage the growing competition for curb & sidewalk space

1. Continue to use alleys and on-street short term parking spaces to facilitate food deliveries
2. Expand existing commercial vehicle restrictions. 8:00 AM to 4:00 PM.

3. Launch a Pilot to digitally map and document current conditions in the study area

4. If delivery-related congestion continues, adopt additional policies

Future: Investigate a truck delivery reservation system (ParkMobile developing)

Future: Install variable message signs for curbside use assignment



STUDY AREAS – CONNECTED GARAGES & BY-PASS

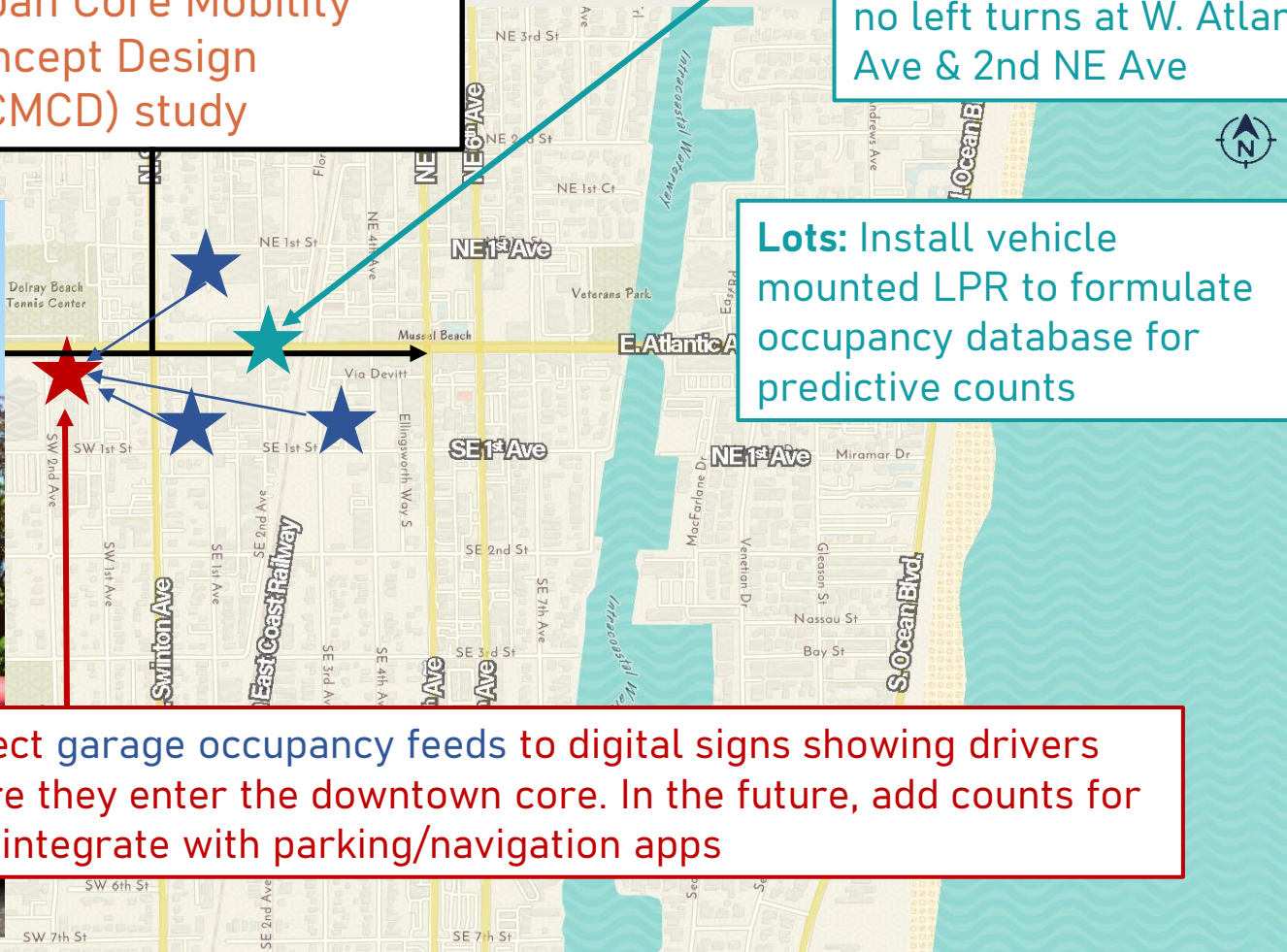
Approach: Bring technology & communications together to direct visitors to transit and periphery parking

Coordinate with the Urban Core Mobility Concept Design (UCMCD) study

Traffic: Conduct a traffic/feasibility study for new signage or signal for no left turns at W. Atlantic Ave & 2nd NE Ave

Lots: Install vehicle mounted LPR to formulate occupancy database for predictive counts

By-Pass – Connect garage occupancy feeds to digital signs showing drivers availability before they enter the downtown core. In the future, add counts for surface lots and integrate with parking/navigation apps



STUDY AREAS – Technology

Approach: A digitized system where collected data feeds into digital signs, pricing, policies, & navigation apps

TOP ISSUE: Create a Digital Roadmap

Convene tech & parking stakeholders

Investigate additional capabilities of LPR system (estimate \$15K for software)

Initiate a valet interchange software pilot to align all vendors into one system (estimate \$300-\$400/month)

Add LPR to all garages. Install monument signs outside each garage & variable message signs where needed (estimated \$100K - \$125K per sign)

Add LPR to enforcement vehicles (\$25-\$50K/vehicle)

Costs of expanded enforcement/data collection



Occupancy for all spaces

Garages (expand LPR and/or Park Assist)
Lots – LPR via enforcement
Curbs – LPR via enforcement



Pricing

- Periodic occupancy counts (85%)
- Seasonal pricing



Signage



Aggregate and feed occupancy information to digital signs and apps

By-pass sign – direction/counts
Garages – space counts
Lots – predictive
Shuttles – real time



Valet

- Valet Interchange app



CRITICAL PATH

Second Phase

Valet: Review & update valet policies & pricing

Traffic: Conduct a traffic/feasibility study for new signage or signal for no left turns at Atlantic Ave & 2nd NE Ave

***Program:** Develop a downtown Transportation Demand Management (TDM)

Multi-Use Space: Convert additional on-street parking to multi-use space. Install a pedlet between 2nd SE Ave (north side) & the Railroad tracks

Wayfinding: Rebrand the City's parking assets to add clarity & visibility. Consolidate City & DDA parking information onto one website. Lay the groundwork for digital signage.

Loading: If delivery-related congestion continues, adopt additional policies

Employee Permits: Establish a pilot employee parking permit program and if needed, institute "employee permit only" spaces

Periphery Lots: Free or discounted parking
On-Street: Raise premium spaces to \$3/hr

***Lots:** Institute modest rates & replace 9 hr limit w/ 4 hr

***Garages:** Eliminate \$5 flat rate & free before 4:00 PM. Institute \$1.50/hr

Technology: Initiate pilots or services to:

- Digitally map Atlantic Ave., side streets & alleys.
- Extend microtransit to 2 A.M.
- Expand LPR to all garages
- Install variable message signs for curbside use assignment
- Investigate a truck delivery reservation system similar to Washington D.C.
- Variable message signage

Infrastructure: Conduct walk & wayfinding audits. Install improvements downtown & to periphery lots. Continue to use alleys and on-street short term parking spaces to facilitate deliveries.

***Valet:** Convene valets to discuss challenges & opportunities related to operations, technology, & coordination. Pilot a valet interchange software system. Assess congestion & queuing space

Microtransit: Implement and track new contract for fixed & flexible microtransit services; Create a pilot for extending FreeBee service until 2 am

Deliveries: Expand existing commercial vehicle restrictions. 8:00 AM to 4:00 PM

The PMAB 6 items to fast track are (* also important for DDA):

- Employee program*
- Wayfinding 2.0*
- Rates & time limits for lots/garages*
- Periphery parking*
- Better programming (TDM)
- Staff requesting time to do public outreach and education*

The DDA items to fast track are:

- Parking District to reinvest funds to parking program
- Seasonal pricing reflecting lower demand
- Library lighting
- Digital roadmap to inform technology purchases

Planning & Zoning Commission

- Microtransit – extend to 3 am for workers
- Employee parking and wayfinding most important – start before rate adjustments
 - Employee parking permits
 - Work towards seasonal rates
- Align with CIP
- Enact ordinance on digital signs

Initial Action

Overall: Use strategies in this Parking and Curbside Master Plan to maximize existing parking assets & initiate public outreach early.

Program: Establish a Parking Benefit District

Coordination: Coordinate with the Urban Core Mobility Concept Design (UCMCD), wayfinding efforts, & Bicycle & Pedestrian Master Plan

Technology: Convene technology stakeholders and create a Digital Roadmap (include LPR)

Negotiations: Secure all necessary agreements for use of periphery lots & garages.

Employee Permits: Convene parking stakeholders to discuss development of an employee parking permit & program.

Wayfinding: Rebrand the City's parking assets to add clarity & visibility



INPUT

	Parking Management Advisory Board	DDA	Planning & Zoning Commission
Employee parking program	Top priority	Top priority	Top priority
Wayfinding	Top priority	Top priority	Top priority
Periphery parking	Priority	Top Priority	Priority
Rates & time limits for lots/garages	*	*	Enact after employee program launched
Parking District to reinvest funds to parking program	Neutral (note: staff has concerns)	Priority	Top priority
Public outreach and education	Top priority	Top priority	Top priority
Pricing to reflect lower demand (seasonal/location)		Priority	*
Digital roadmap		*	
Better programming (TDM)		* note this is priority with staff	
Library lighting		Priority	
Microtransit – extend to 3 am for workers			*
Align with CIP/Bike & Ped plan	*	*	Priority
Enact ordinance on digital signs			*

