

Downtown Boca Raton Multimodal Mobility Study

E Palmetto Park Road Conceptual Options



CITY OF
Boca Raton



DOWNTOWN
BOCA



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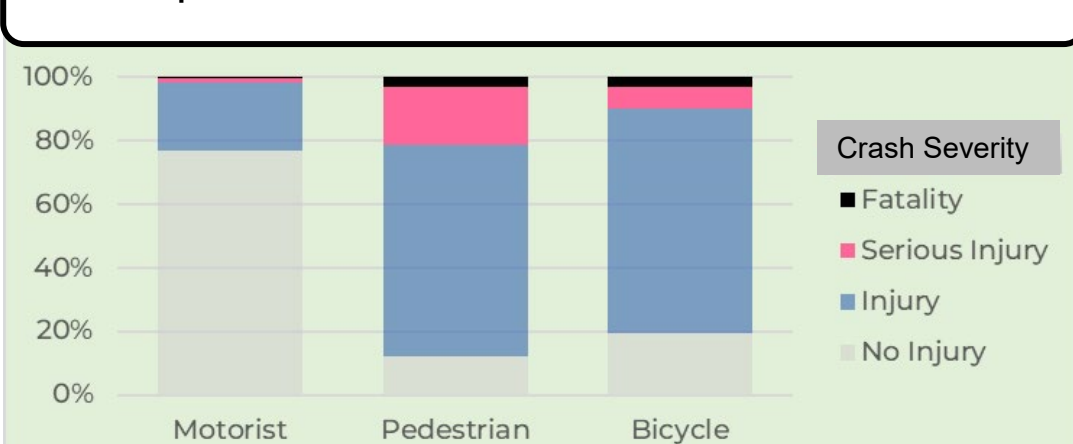
Data Gathering

A photograph of a Starbucks Coffee storefront at night, overlaid with a semi-transparent blue filter. The scene shows the entrance with large glass windows and doors. A dark awning with the Starbucks logo is visible. Several people are present: a man in a black t-shirt stands near the entrance, a woman and a child walk towards the camera, and others are seated at outdoor tables. A red car is parked on the left. A parking sign with a 'P' and 'C' is visible on the right. The overall atmosphere is quiet and urban.

Safety Along E Palmetto Park Rd

- **1,868** crashes occurred in Downtown (2018-2023).
- **28%** (534) along E Palmetto Park Rd, **21%** along US 1/Federal Hwy, & **15%** along Dixie Hwy.
- **Six** people lost their lives, **466** were injured.
- Bicyclists & Pedestrians were involved in **4%** of all crashes, but they represent **11%** of all injuries & fatalities.

Impact of Traffic Crashes on Vulnerable Road Users



PALMETTO PARK RD INJURY CRASHES

make
connections
East Palmetto Downtown

NUMBER OF INJURY AND FATAL CRASHES



BOUNDARIES



INTERSECTION CONTROL



Crashes 2018-2023

Moving towards Zero Traffic Deaths



October 25th, 2022:

Council Passes Vision Zero Resolution

February 1, 2023:

City awarded \$300,000 SS4A Action Plan Funding

May 17, 2024:

City awarded \$4 million in Demonstration Planning Funding

October 24, 2024:

First Vision Zero Action Plan Community Meeting

Transit + New Mobility

Regional – rail and express bus > 10 miles

- Brightline
- TriRail
- Palm Tran (Route 1)

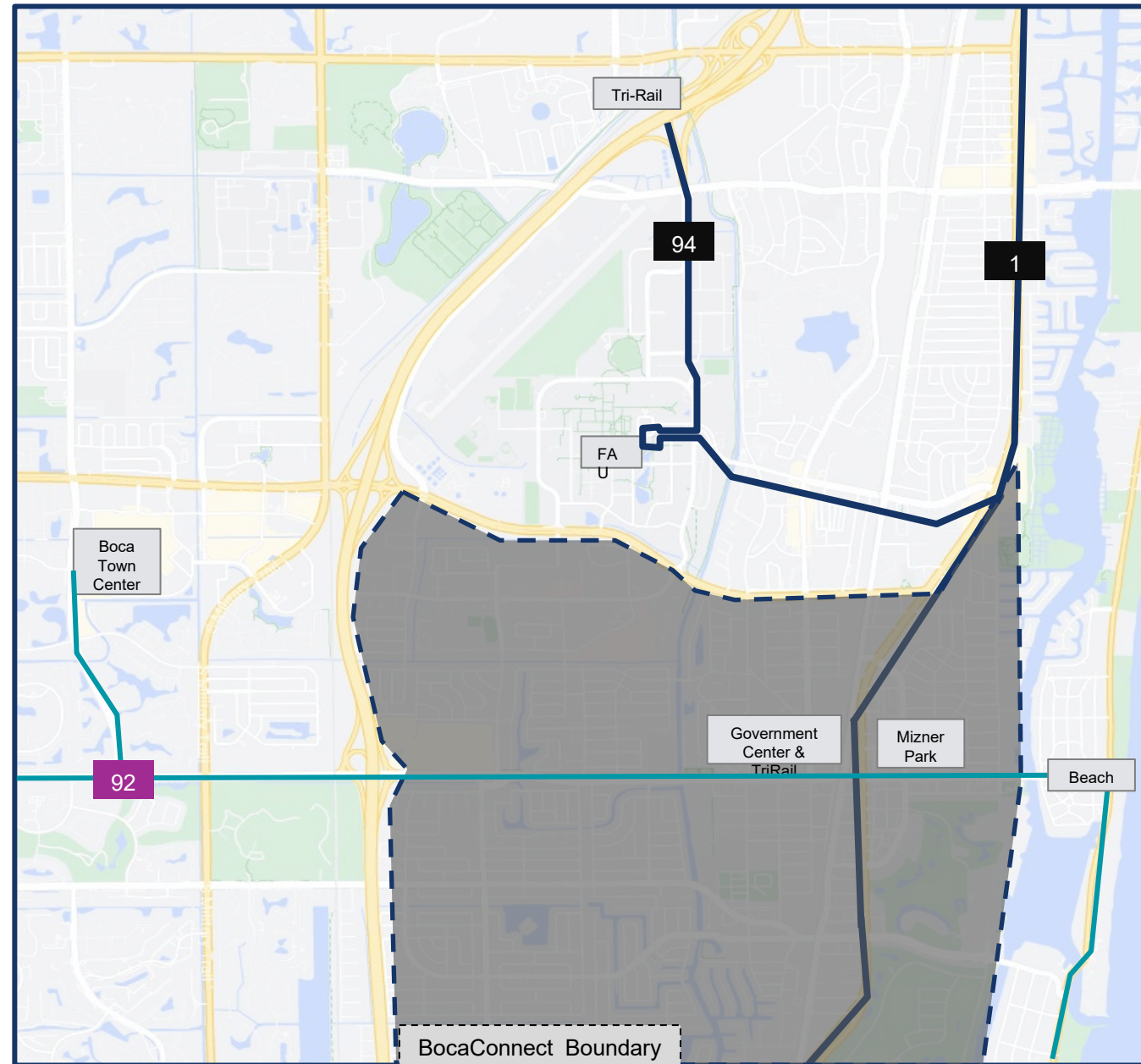
City bus – bus service 2-10 miles

- TREN service
- Palm Tran 94
- Palm Tran 92
- Palm Tran 1

On-demand

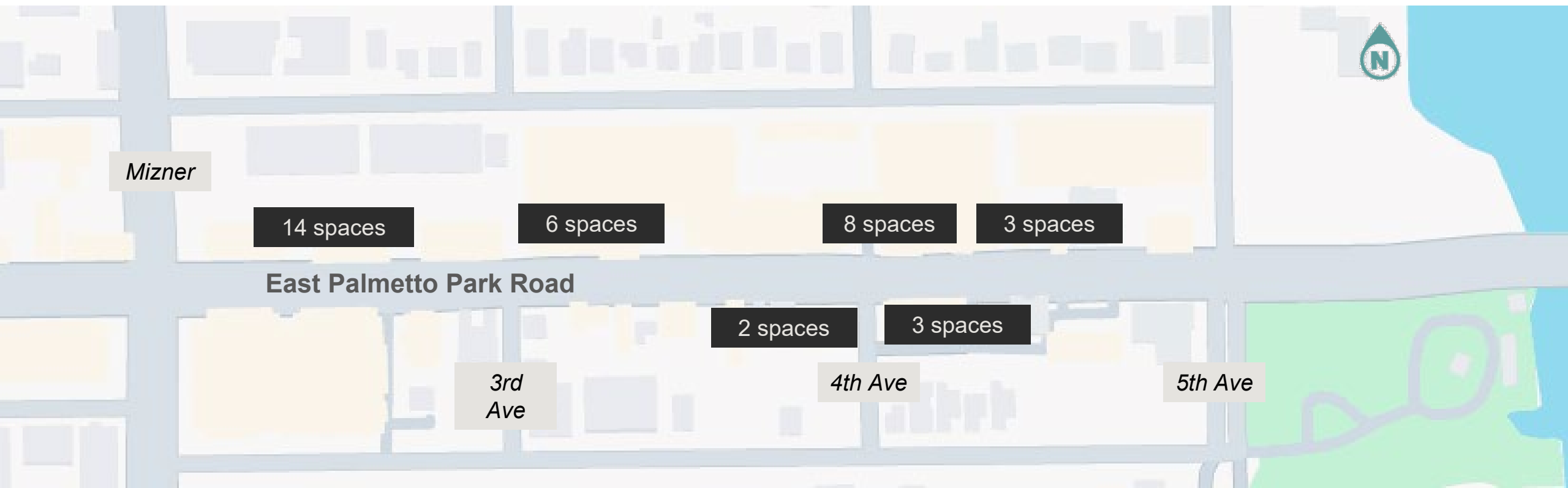
- BocaConnect
- Uber/Lyft

Current Transit and Microtransit



Parking

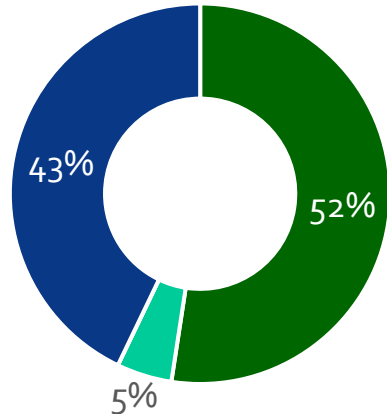
- Even during peak times, there were available parking spaces.
- Deliveries are problematic.
- 36 on-street spaces between Mizner Blvd and 5th Ave, monthly revenue = \$10,500



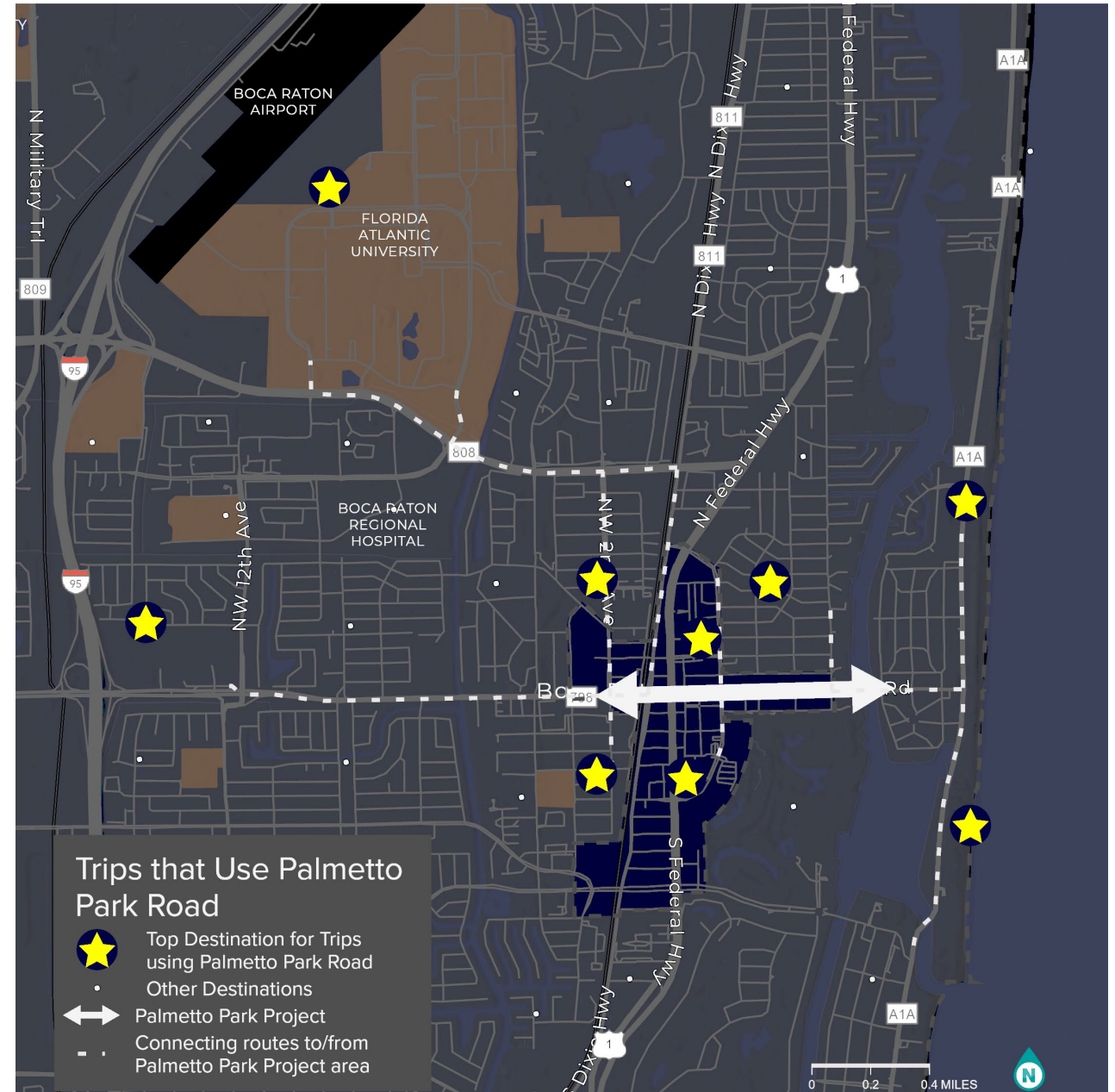
Connectivity

- Travel to and from destinations in and around Boca Raton often necessitates traveling on Palmetto Park Road.
- Key destinations include:
 - Mizner Park
 - Royal Palm Place
 - Palmetto Square
 - FAU
 - Beach area
 - Neighborhoods surrounding downtown

Downtown Trips



- Trips Start/End in Downtown
- Trips Within Downtown
- Trips Passing through Downtown



Community Input & Impact



Community Outreach

- **Active Project Website** (*thousands of page views*)
- **Interactive Comment Map** (*thousands of comments*)
- **Online Survey** (*over a thousand responses*)
- **Social Media Blasts**

Seven Outreach Events

4/3/24: Door-to-Door

4/8/24: Citizen's Pedestrian & Bikeway Advisory Board

4/10/24: State of the City

4/17/24: Community Meeting

5/9/24: Chamber of Commerce Breakfast

5/10/24: NACTO Workshop

5/15/24: Stakeholder Meeting



State of the City, April 10, 2024



Door-to-Door outreach, April 3, 2024



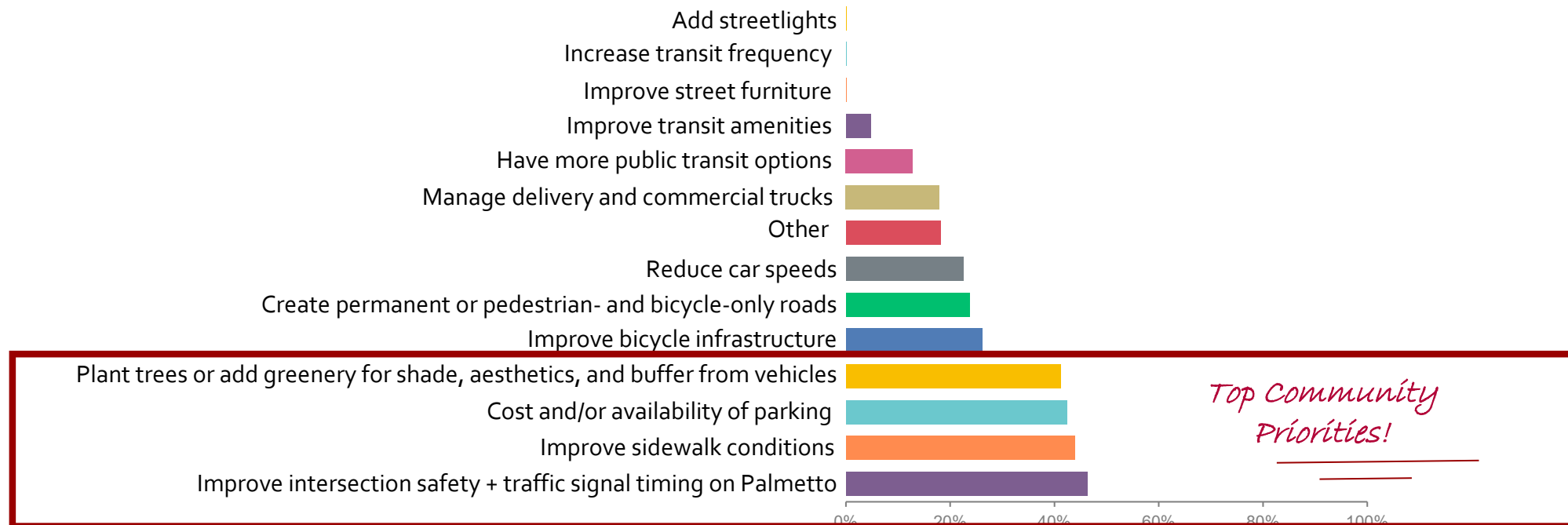
CPBAB meeting, April 8, 2024



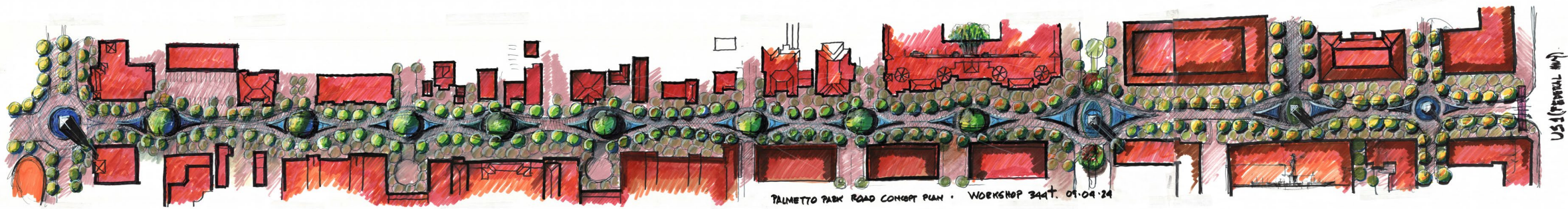
Community meeting, April 17, 2024

Community Input

Which would most improve your experience in
Downtown Boca Raton?



Community Suggestions

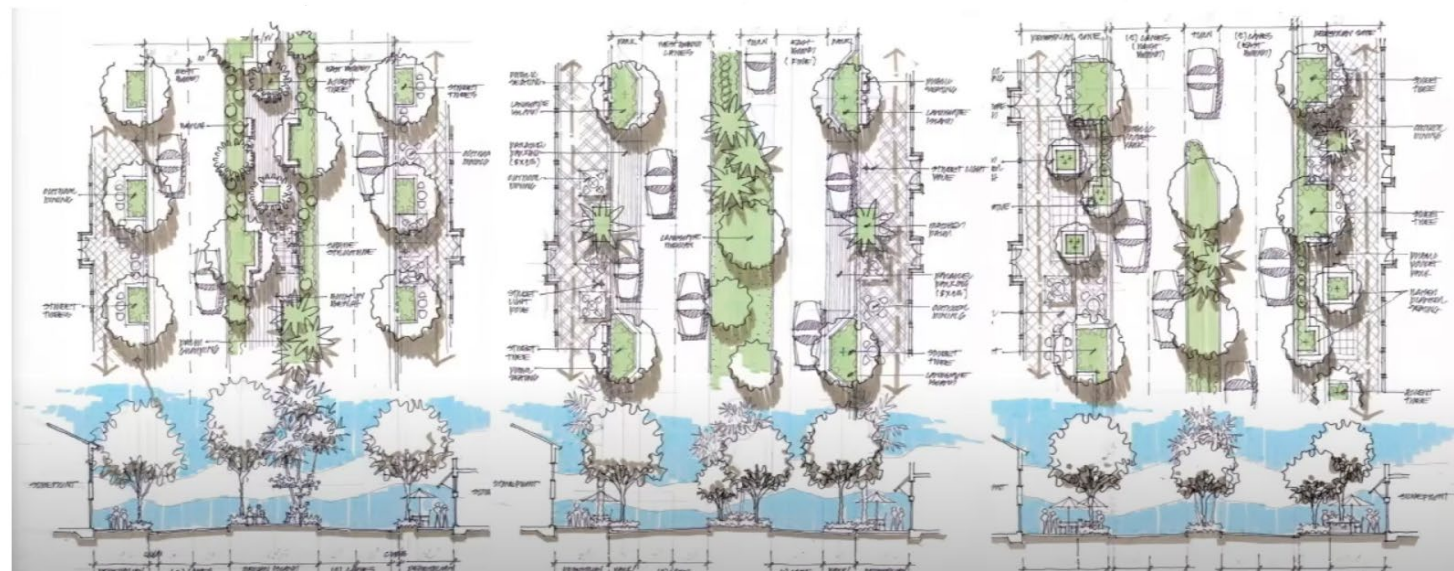


Parking for
Businesses

High Line
Design

Traffic
Calming

Access to the
Barrier Island



Community Impact

“Overall, the survey responses reveal a mix of concerns, suggestions, and positive feedback regarding the current state and future development of downtown Boca Raton. The responses highlight the **need for a balanced approach** that addresses the challenges of traffic congestion, pedestrian safety, and overdevelopment while preserving the unique character and appeal of the city.”

Community Input

- Desire for a Safer East Palmetto
- Increasing Traffic Congestion
- Parking Availability & Cost
- Lack of Pedestrian Realm
- Need for Shade & Placemaking

Solution Themes

- Safety/Vision Zero Aligned
- Traffic Impact
- Parking
- Walkability
- Shade & Sustainability
- Public Safety
- Evacuation Route

City of Boca Raton
**VISION
ZERO**



East Palmetto Park Road Concepts





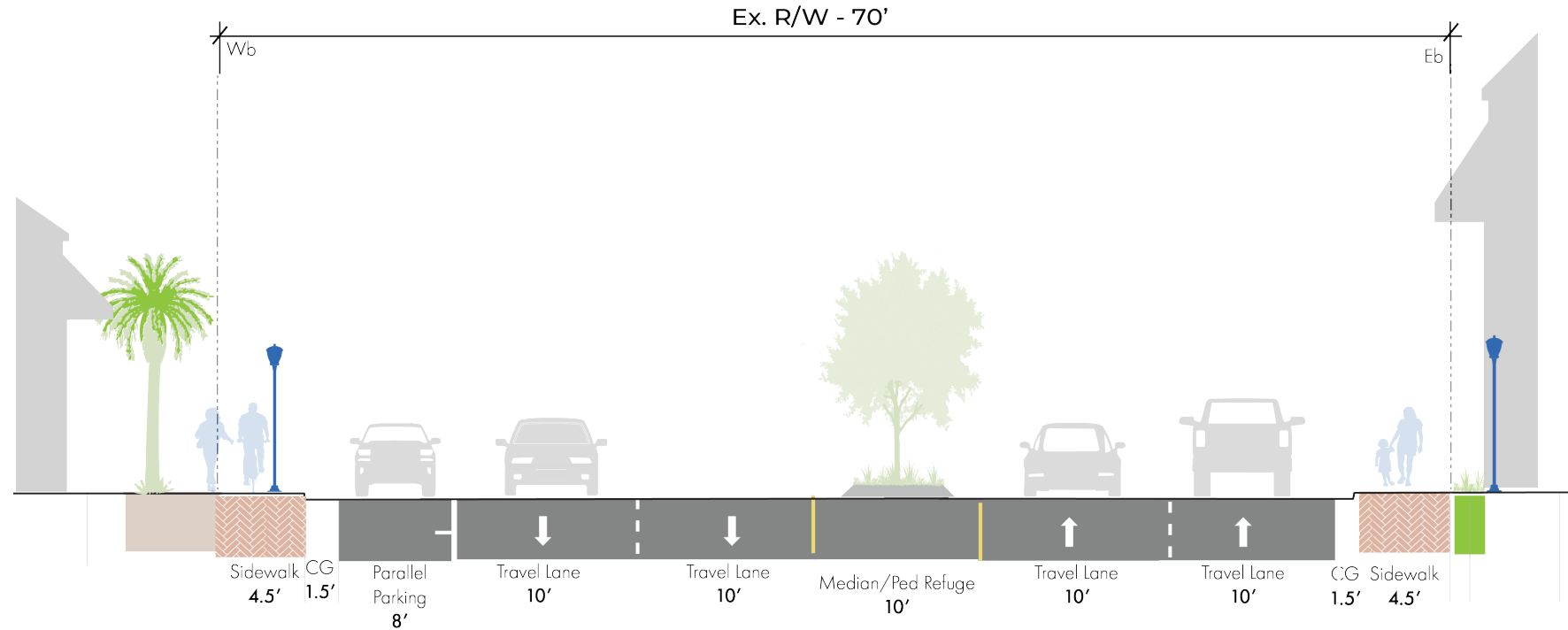
Evaluated Options

- No Build (Current Conditions, As Is)
- Enhanced (Repurpose Some On-Street Parking)
- Further Enhanced (Repurpose One Eastbound Through Lane)
- Pedestrian Realm on Both Sides (Repurpose One Lane in Each Direction)
- Repurpose Outside Travel Lanes during Off-Peak Only
- Sun Line
- Elevate Palmetto
- Elevate Dixie

Current (No Build)

East of US 1

- 70 feet of total public Right-of-Way
- 5 lanes, including median/left turn lanes
- On-street parking
- Sidewalks vary in width: 4-8 feet
- Intermittent trees



Current



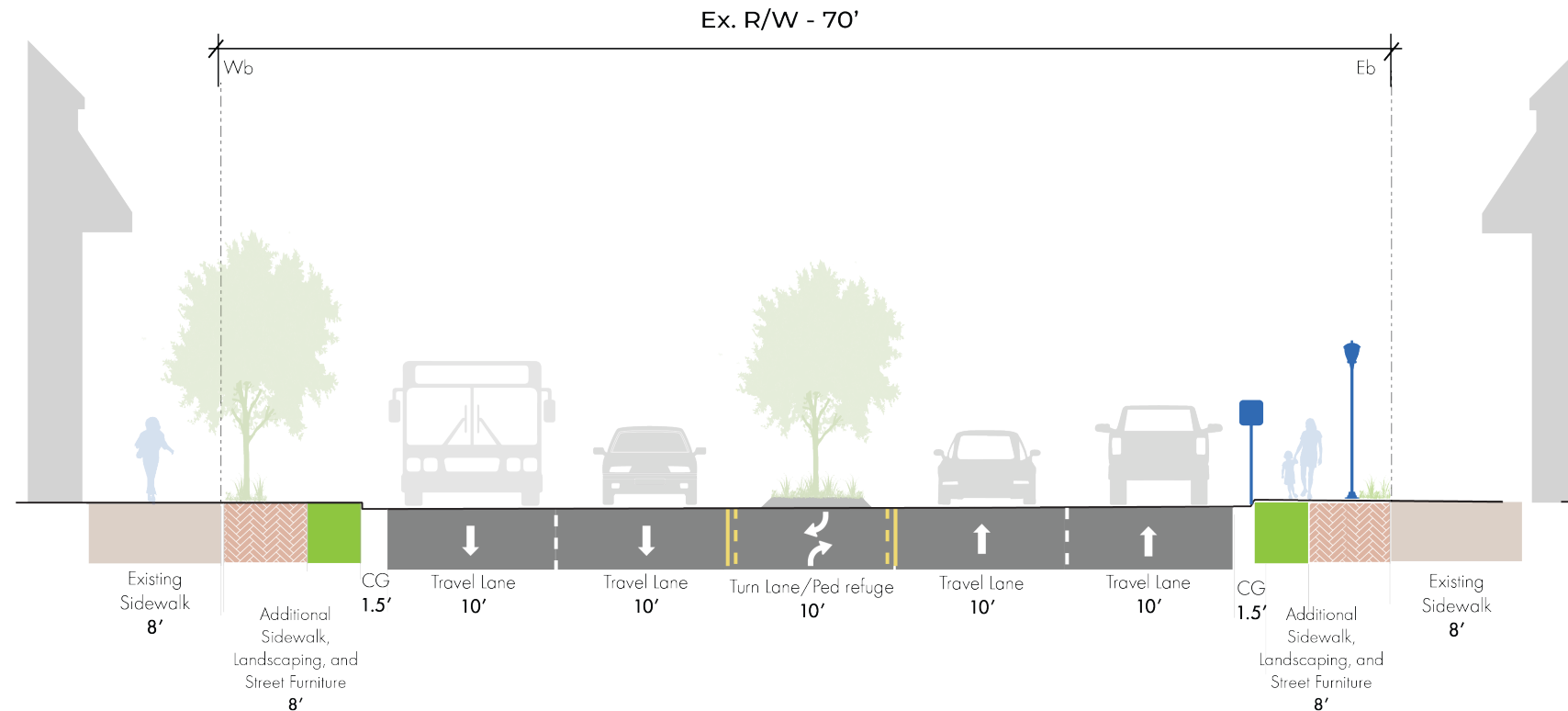
Current



Enhanced E Palmetto

East of US 1

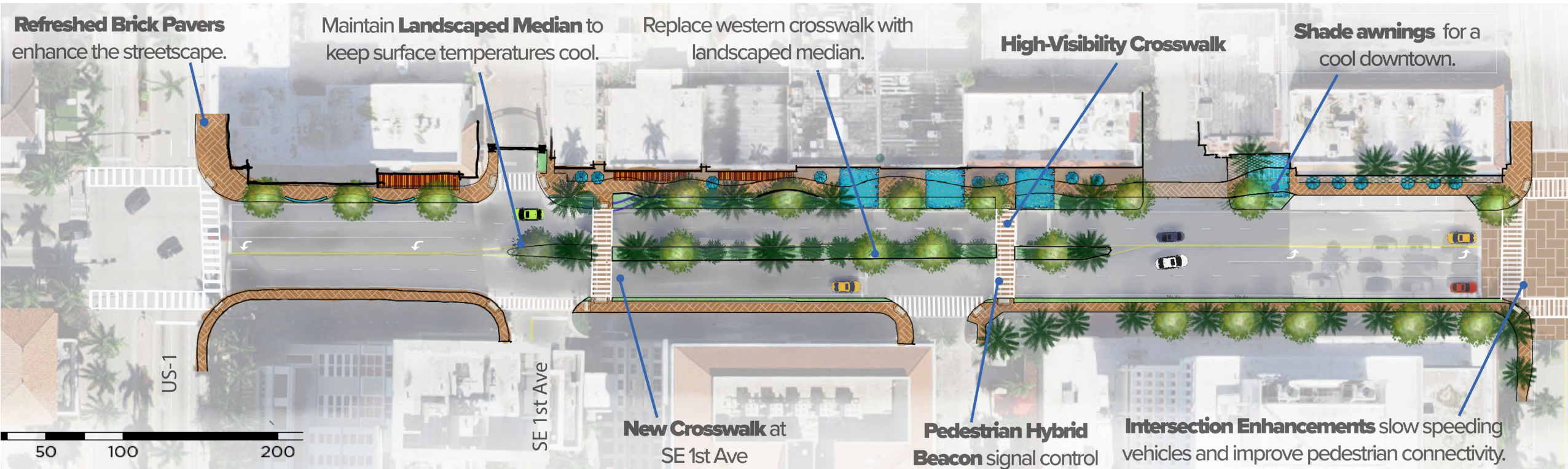
- Maintains current number of travel lanes
- Some parking repurposed for expanded sidewalks & green space
- Valet parking maintained
- Other on-street parking flexible



Enhanced E Palmetto

East of US 1

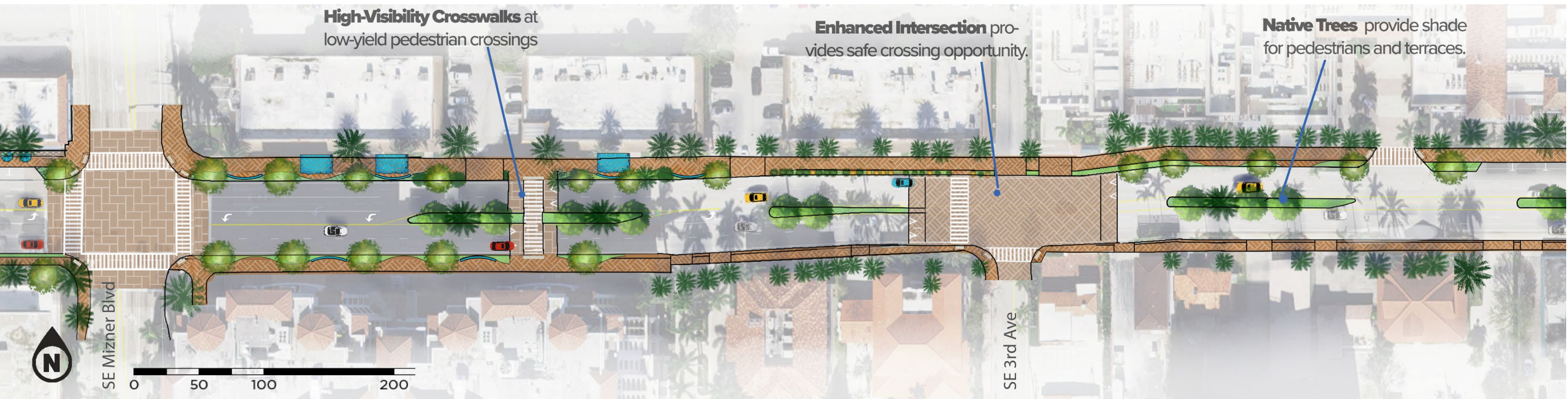
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Enhanced E Palmetto

East of US 1

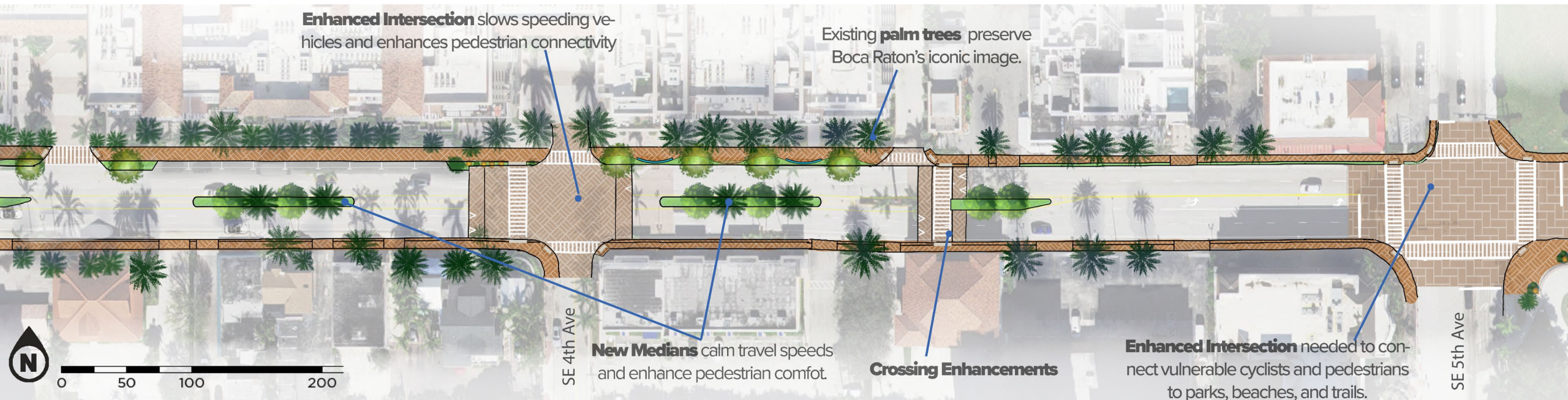
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Enhanced E Palmetto

East of US 1

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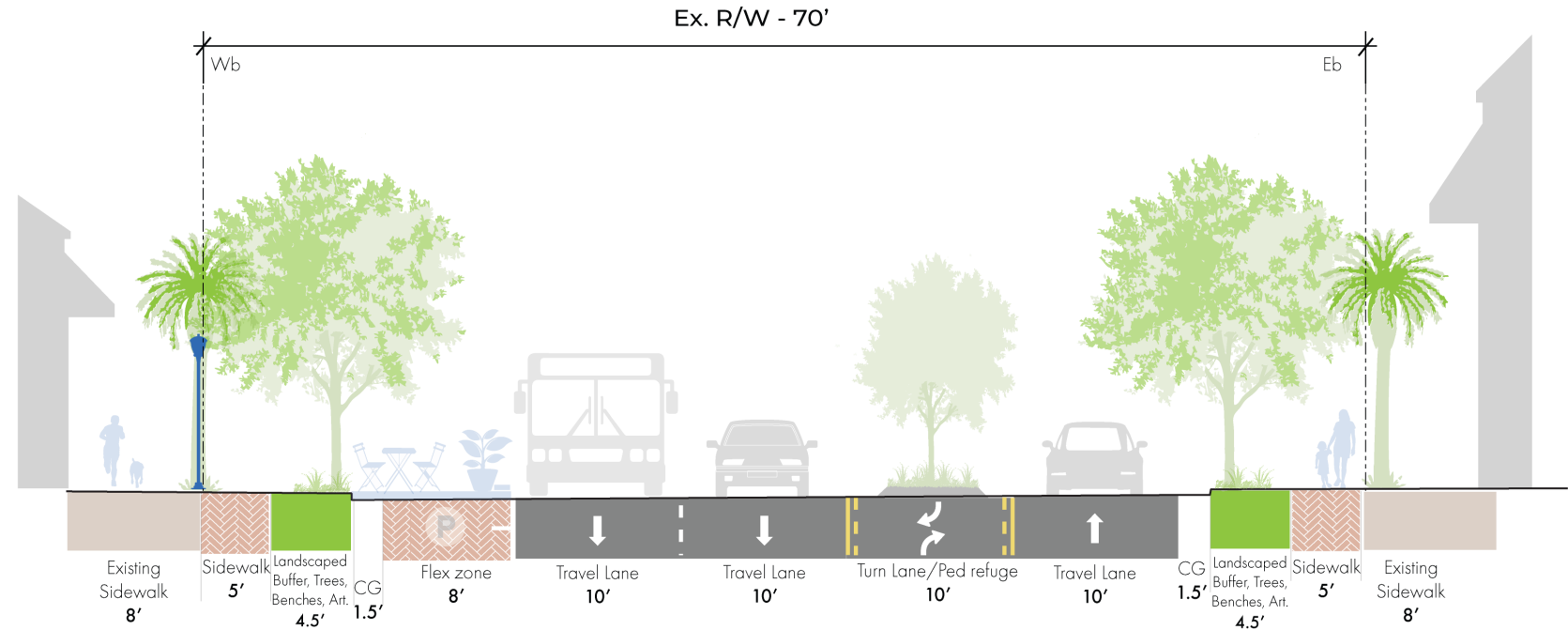
Enhanced



Further Enhanced

East of US 1

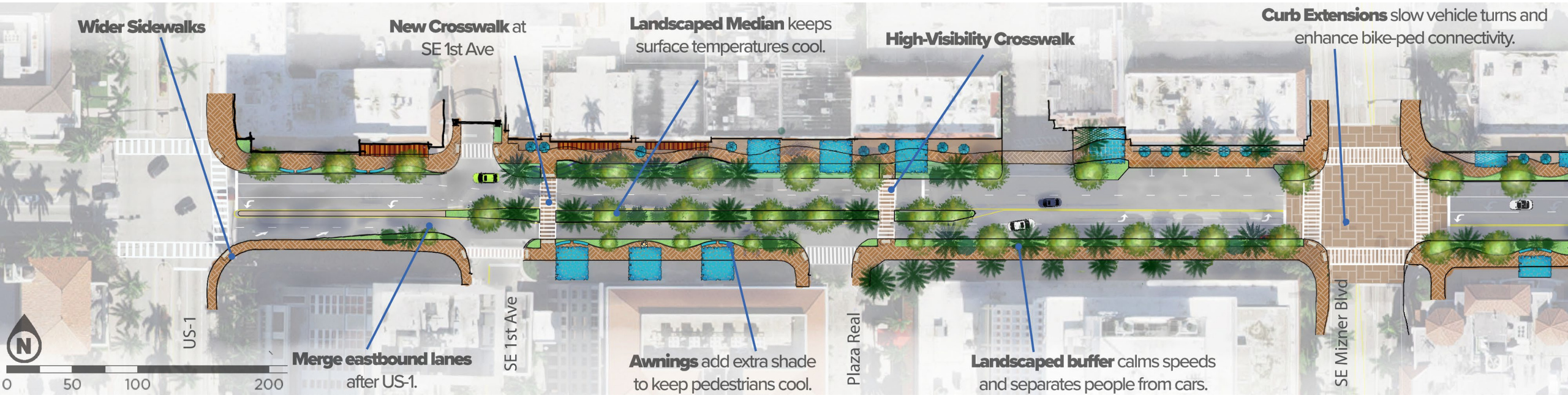
- 5-to-4 lane conversion
- Repurposed space for:
 - Wider sidewalks
 - Shade
 - Street Furniture
 - Public Art
 - Flexible zone
- Reduced pedestrian crossing distances
- Valet parking maintained
- Other on-street parking flexible



Further Enhanced

East of US 1

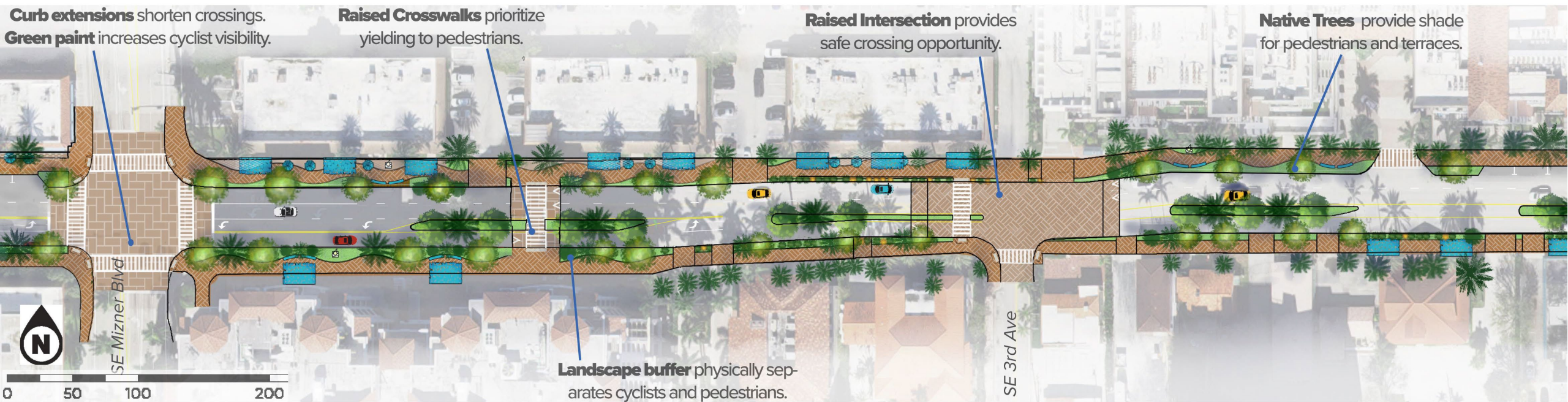
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Further Enhanced

East of US 1

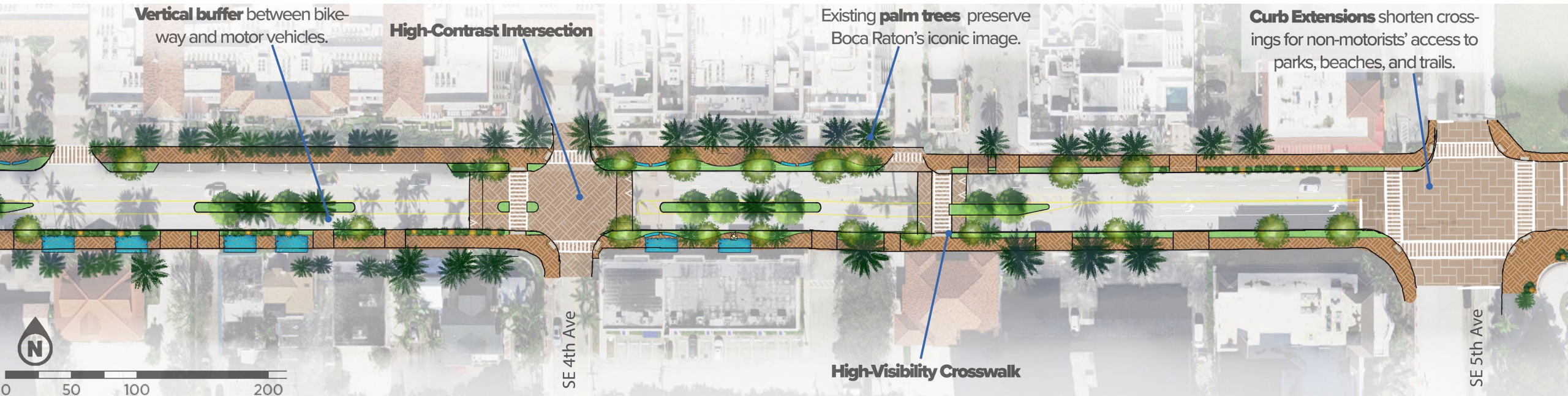
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Further Enhanced

East of US 1

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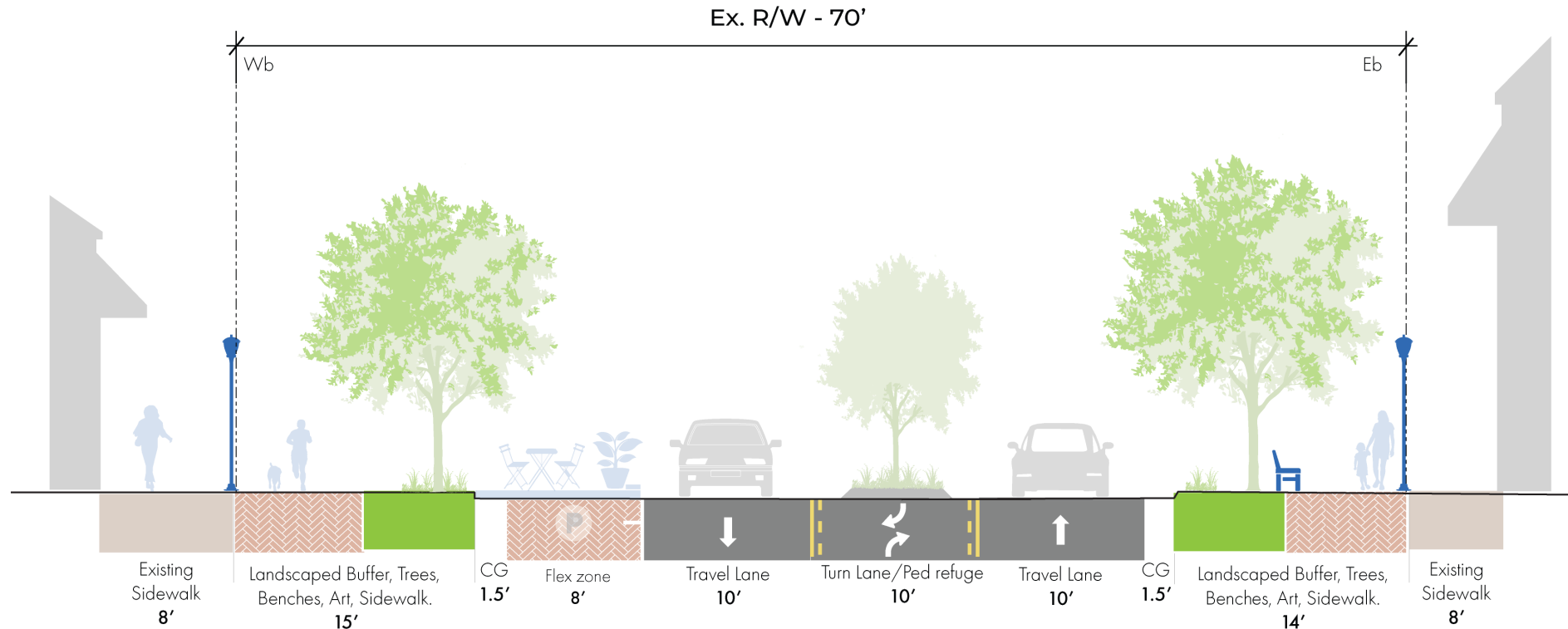
Further Enhanced



Pedestrian Realm on Both Sides

East of US 1

- 5-to-3 lane conversion
- Repurposed space for:
 - Wider sidewalks
 - Shade
 - Street Furniture
 - Public Art
 - Flexible zone
- Reduced pedestrian crossing distances
- Valet parking maintained
- Other on-street parking flexible



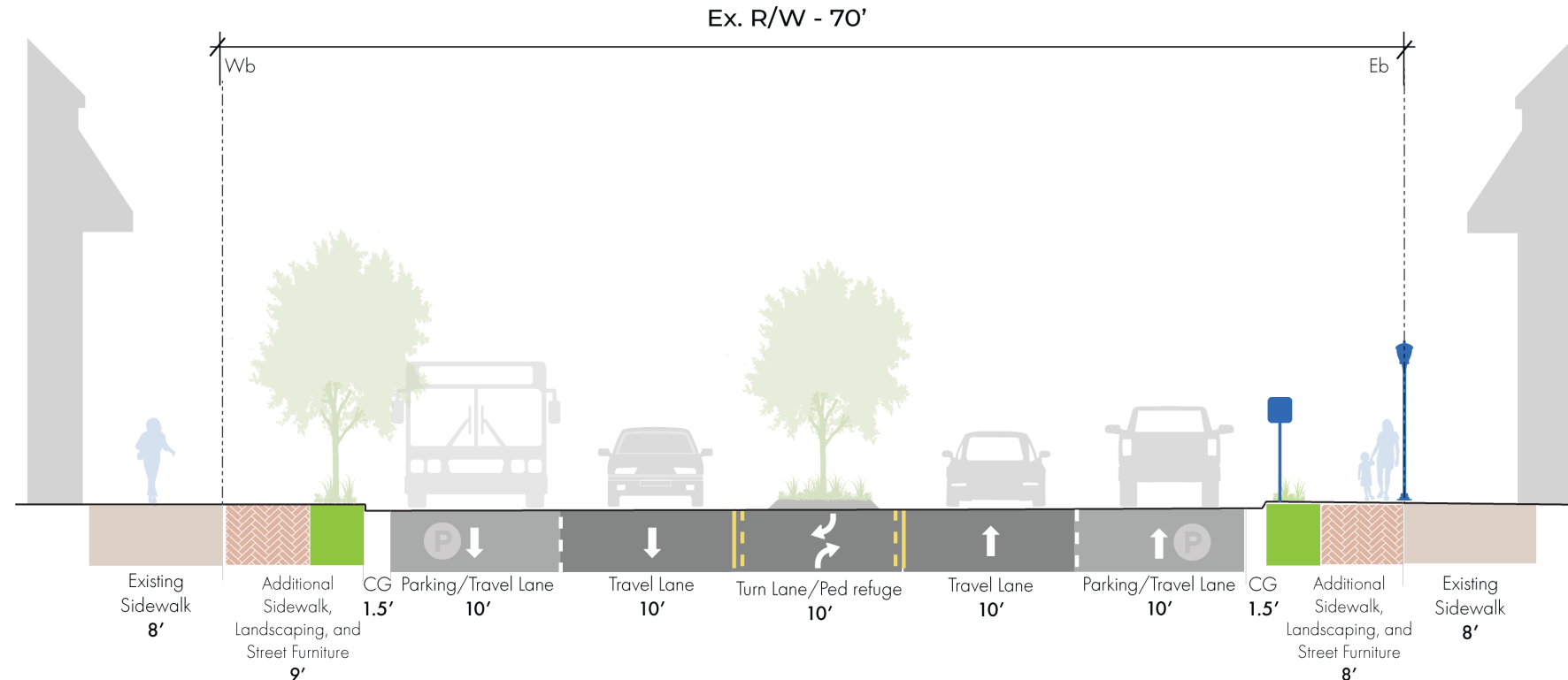
Pedestrian Realm on Both Sides



Travel Lane/On-Street Parking Conversion

East of US 1

- Maintain Travel Lanes at Peak Times
- Convert Outside Lanes to Parking during Off-Peak Times
- Repurposed current parking space for:
 - Wider sidewalks
 - Shade
 - Street Furniture
 - Public Art
 - Flexible zone
- Valet parking maintained

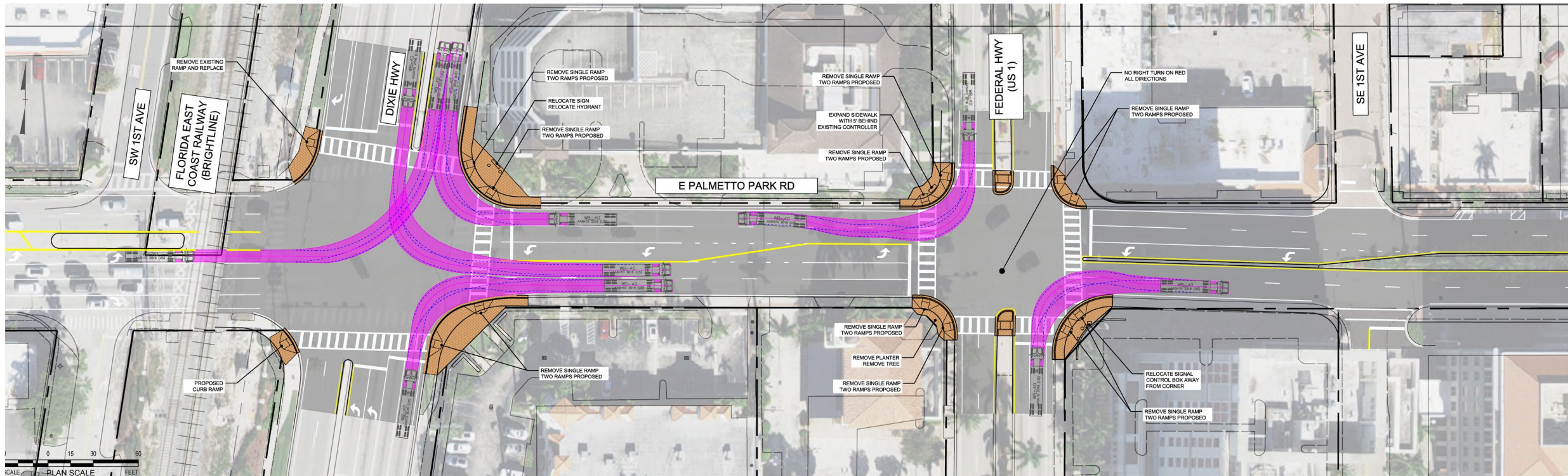


Tradeoff Analysis



Intersection Safety Improvements

- Between 2018-2023, almost a third of all Downtown crashes occurred along East Palmetto Park Road.
- Two people died at the intersections of US 1/Federal Hwy and Dixie Hwy, including a cyclist. Both were angle crashes. Four pedestrians and three cyclists were also injured.
- Tightening curbs will:
 - Reduce speeds that cause severe crashes
 - Protect vulnerable road users & reduce crossing distances
 - Still be maneuverable by trucks and large vehicles



Traffic Impacts

Average
Travel Time
(in minutes)
between NW
2nd Ave and
East of the
Drawbridge

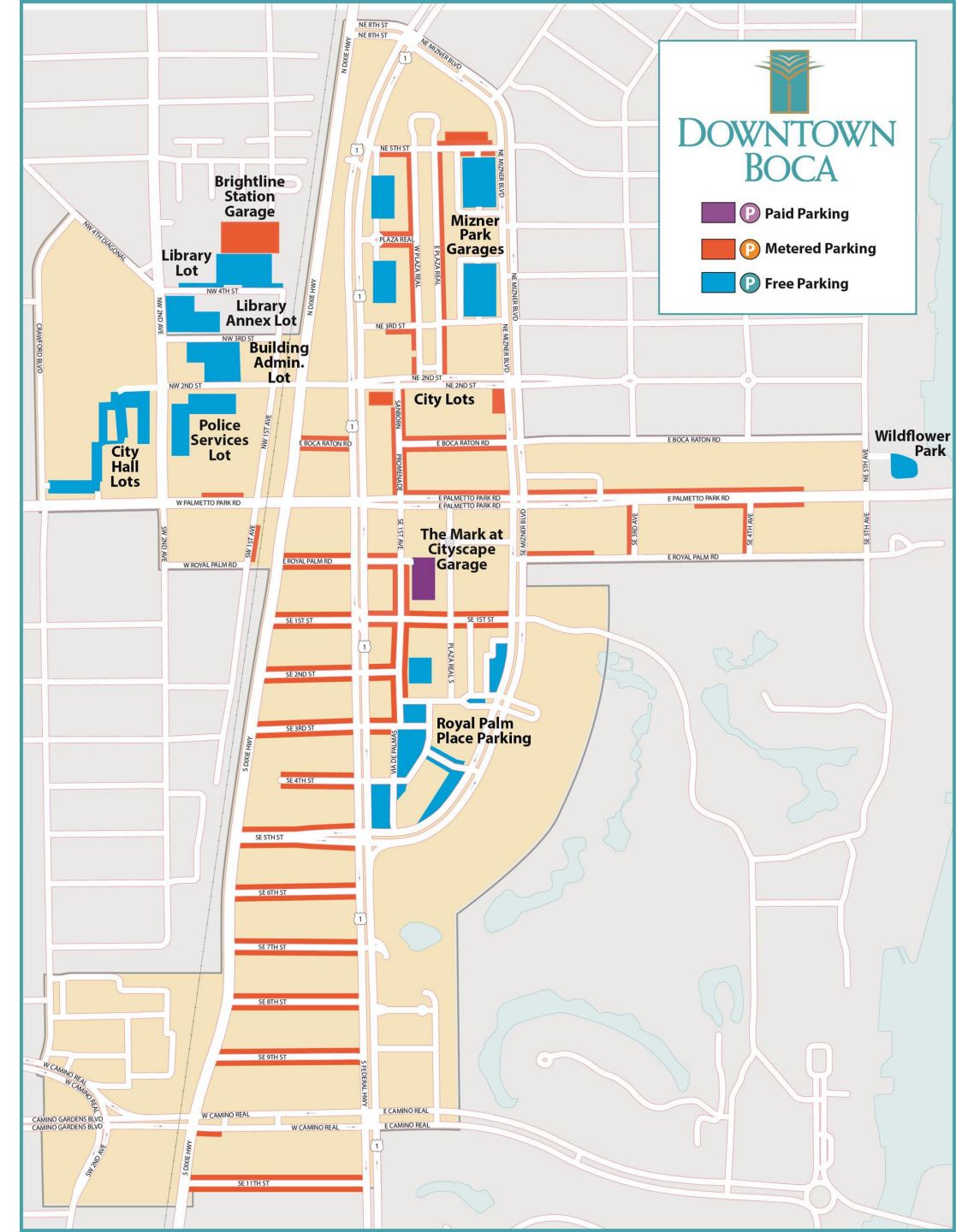


Current Conditions	Future No Build/ Enhanced E Palmetto (All lanes stay)	Linear Park (Removing one Eastbound lane)	Full Road Diet (Only one lane in each direction)
4.72	5.71	6.66	14

Findings:

- If no lanes are removed, travel time will increase by **1** minute in 20 years.
- If one Eastbound lane is removed, travel time will increase by less than **2** minutes in 20 years.
- If East Palmetto Park Rd is reduced to one lane in each direction, travel time will increase by over **9** minutes in 20 years.

- High Demand Parking
 - Mizner Park + Royal Palm Place
- Zone-Based Parking instead of Singular Space-Based
 - Technologies for: Pricing, time limits, permits
- Flexible Curbside Management
 - Programming loading, parking, multimodal lanes, civic uses
- Shared Parking Opportunities
 - Public-Private Partnerships
- Microtransit
 - Adjust fare structure based on data
 - Grow the system with both fixed & flexible routing



Tree Canopy

No Build



Existing Tree Canopy = 25,000 sq ft

Enhanced



Proposed Tree/Shade Canopy = 40,000 sq ft
→ **60% increase in Canopy**

Further Enhanced



Proposed Tree/Shade Canopy = 55,000 sq ft
→ **120% increase in Canopy**



Pedestrian Realm on Both Sides

→ **200%+ increase in Canopy**

No Build



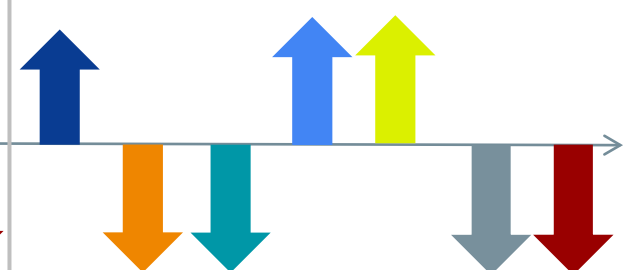
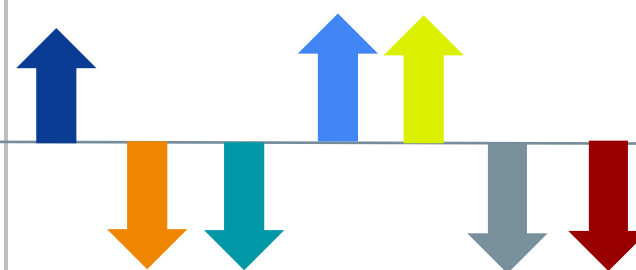
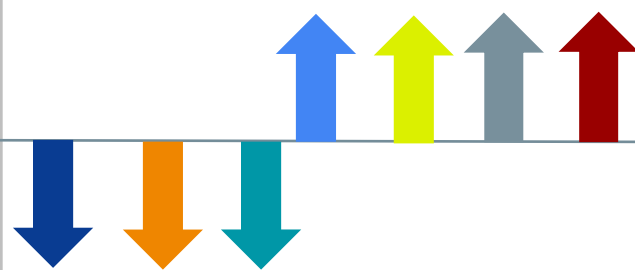
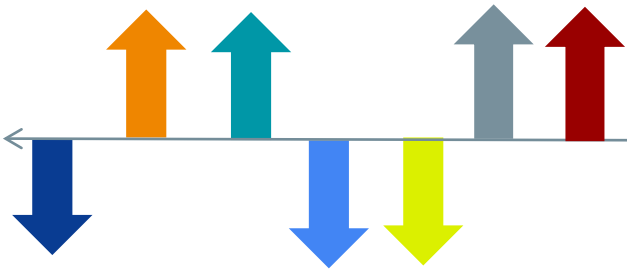
Enhanced



Further Enhanced



Pedestrian Realm on Both Sides



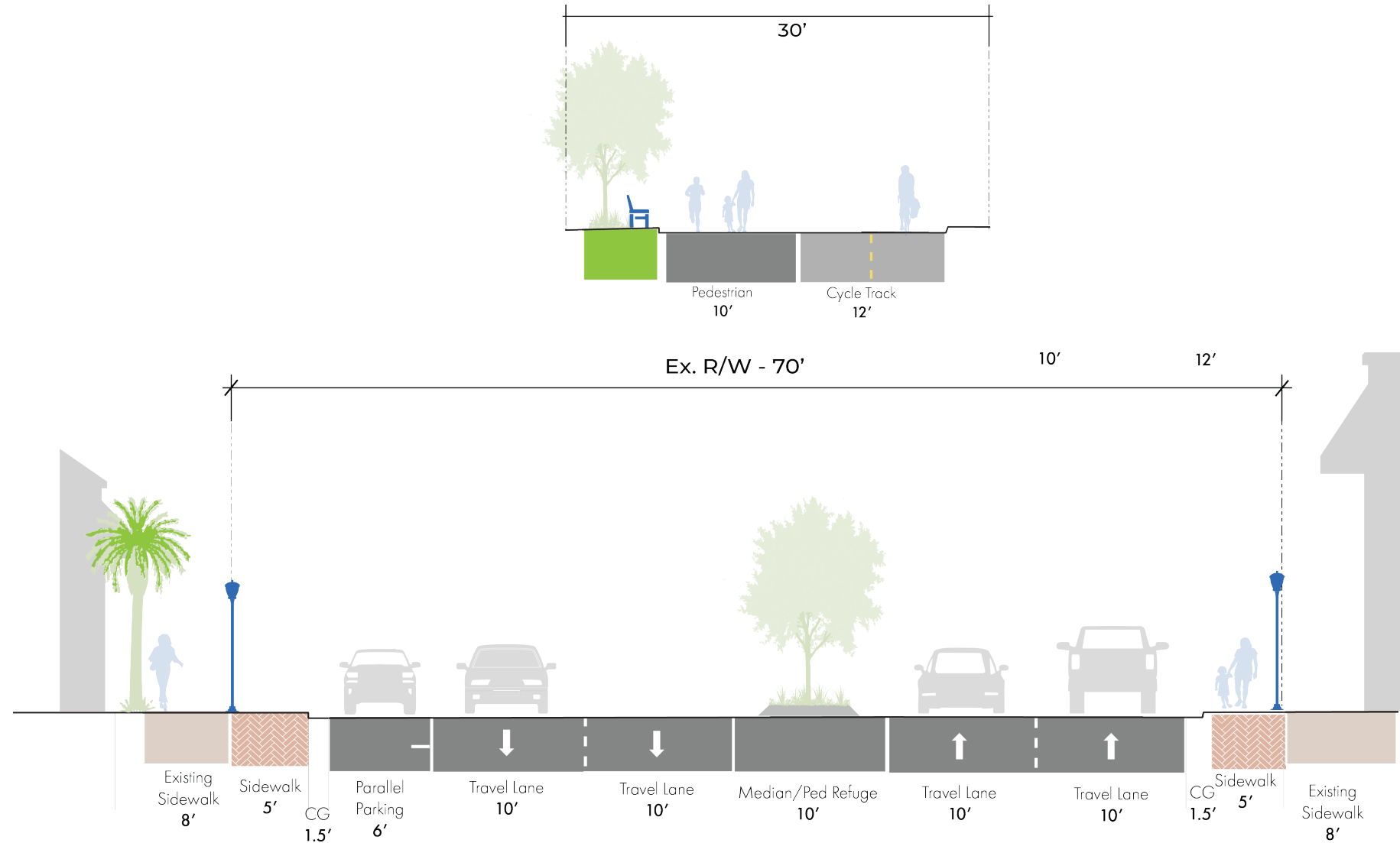
The Sun Line



Sun Line

East of US 1

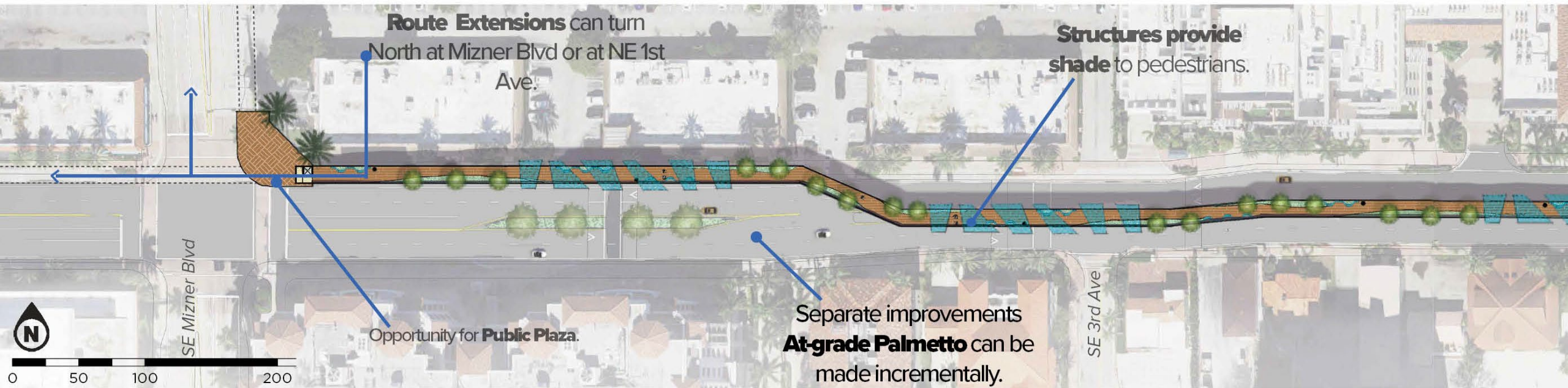
- Elevated walkway/bikeway over the median to minimize conflicts
- Maintain existing E Palmetto cross section
- Scenic viewshed of Downtown Boca
- Two options for the Sun Line to go north and connect to Brightline:
 - Mizner Blvd
 - NE 2nd Ave



Sun Line

East of US 1

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Sun Line

East of US 1

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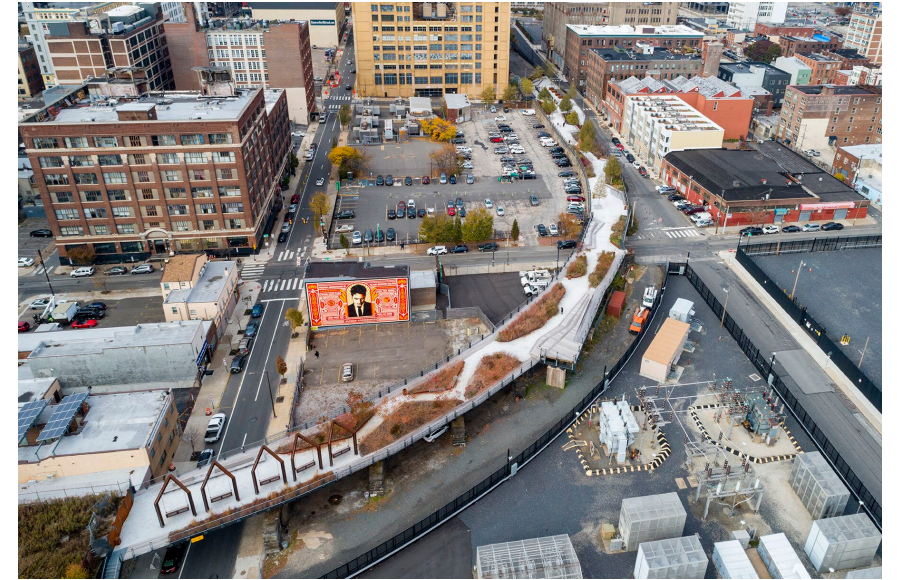


Sun Line Precedents

High Line, New York
City, NY



Rail Park,
Philadelphia, PA



The 606,
Chicago, IL

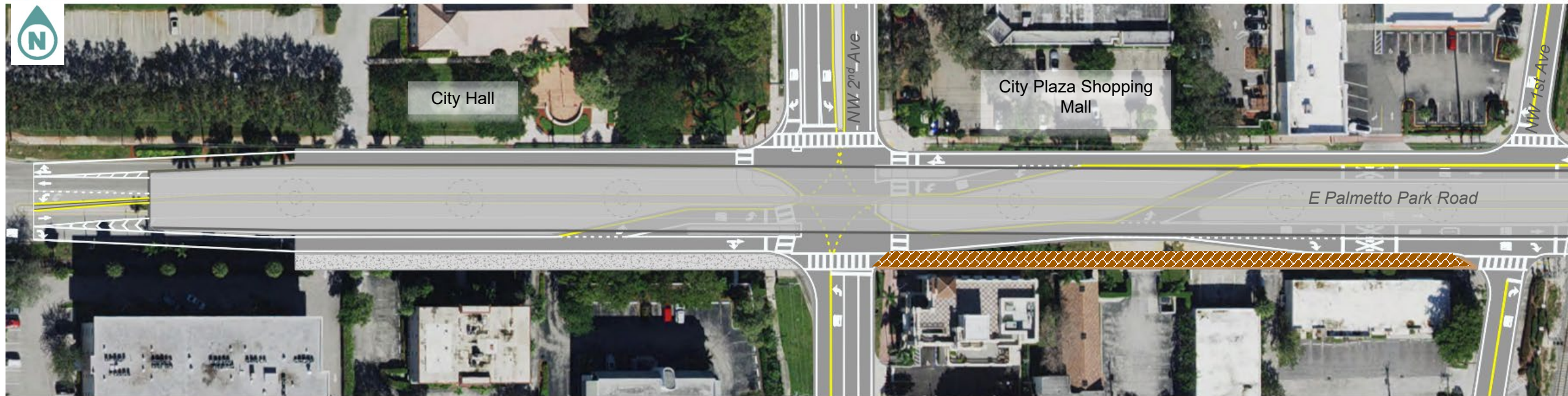


Other Options



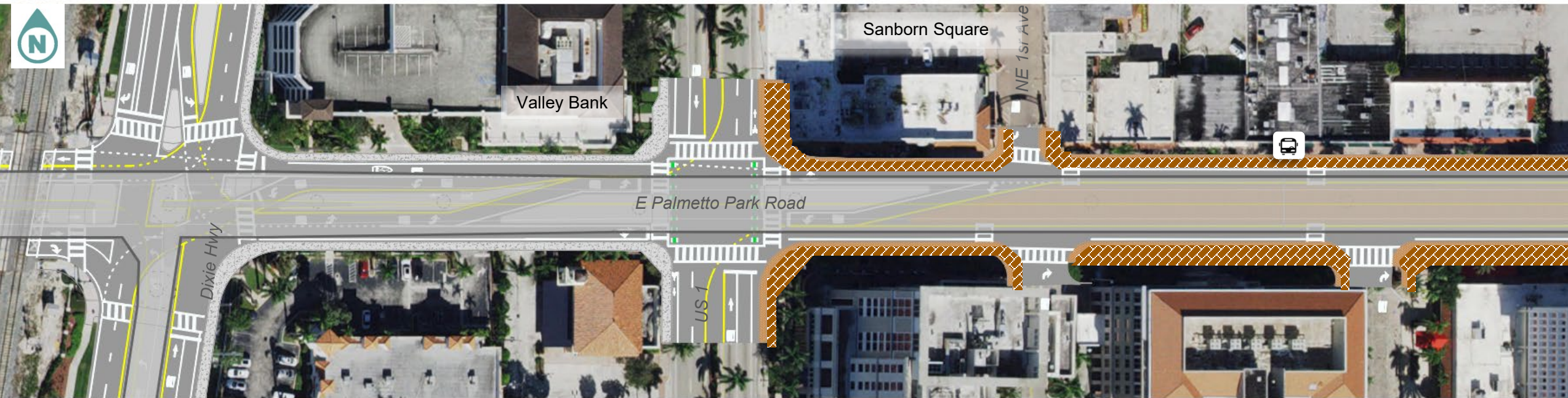
Elevate E Palmetto

NW 3rd Ave to NW 1st Ave



Elevate E Palmetto

NW 1st Ave to Plaza Real



Elevate E Palmetto

Plaza Real to SE 3rd Ave

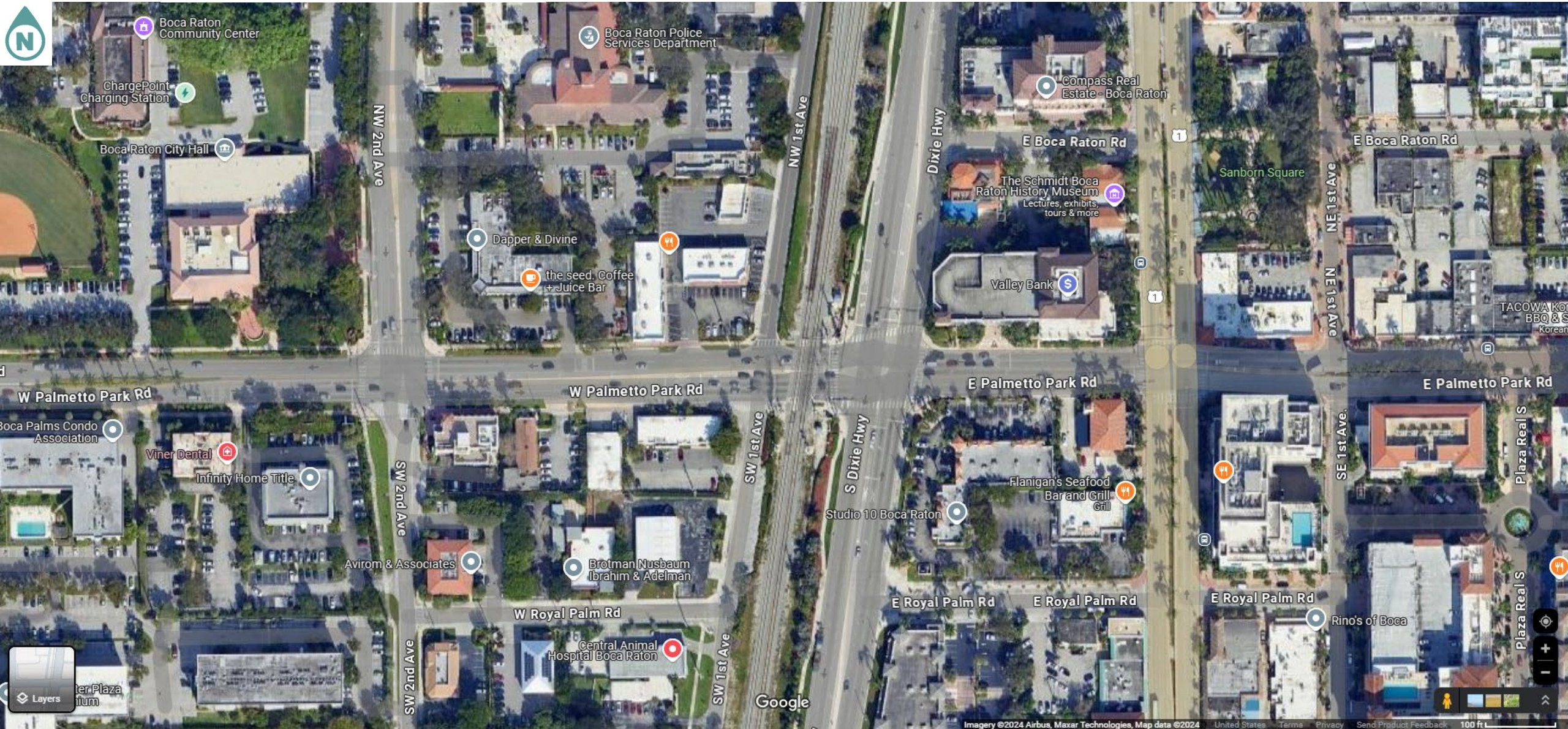


Elevate E Palmetto

SE 3rd Ave to NE 5th Ave



Elevate Dixie



Next Steps



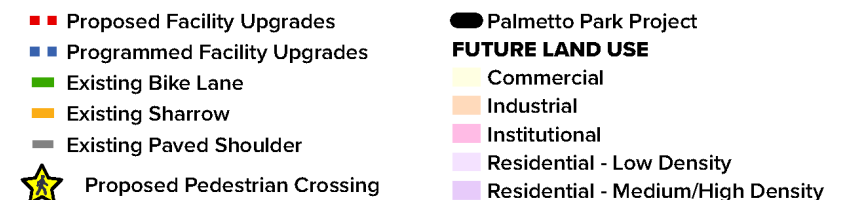
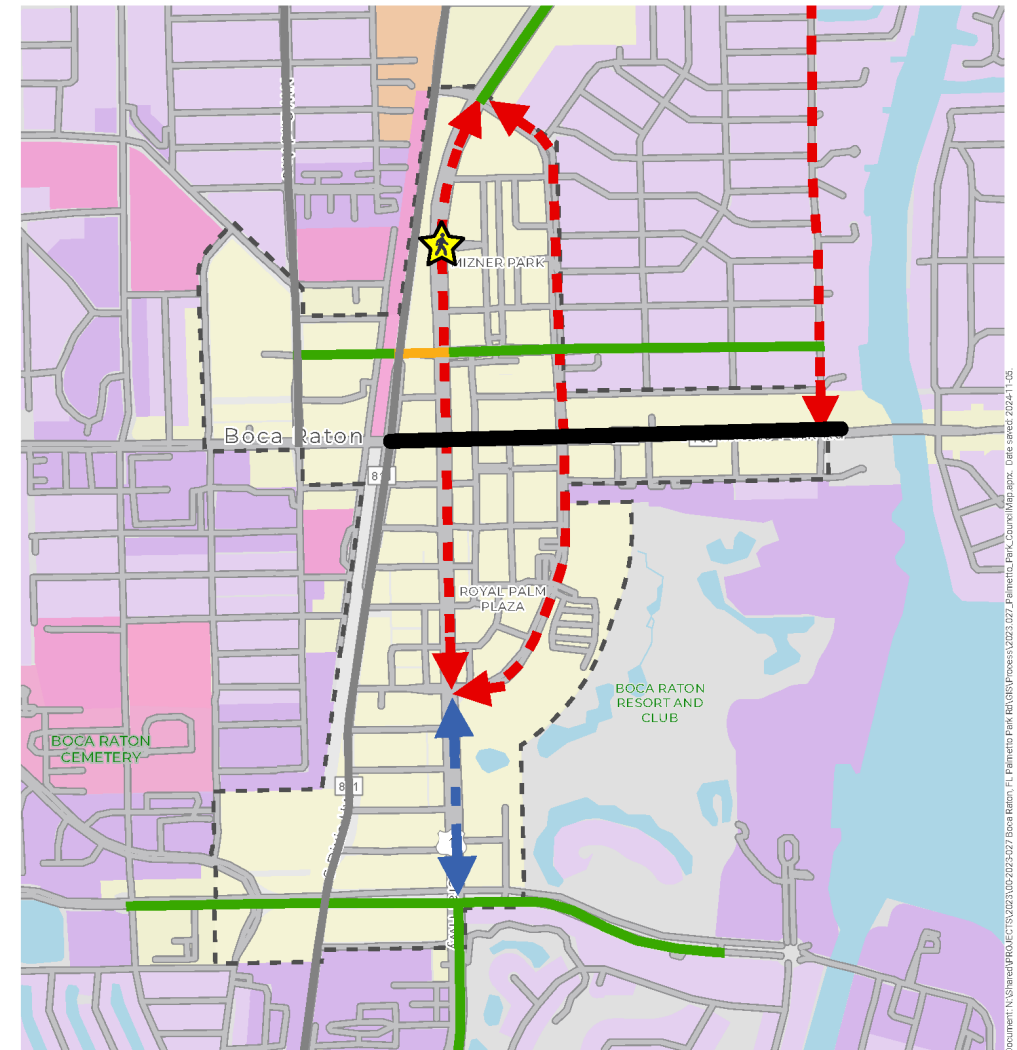


Next Steps

- Concepts moving forward to feasibility.
- Street Network surrounding East Palmetto Park Road.
- Policy & Programmatic Changes.

Downtown Connectivity

- While East-West Streets are lower-speed, North-South bike and pedestrian connectivity and access is “high-stress”.
- Most major north-south facilities have inadequate bike facilities.
- US 1 protected bike lane improvements happening.
- Mizner Blvd and 5th Ave can serve as low-stress north-south, protected bike facilities that connect to E Palmetto Park Rd and NE 2nd St.



**make
connections**
East Palmetto»Downtown

Thank you!

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