

A background image of a street scene. In the foreground, three people are walking across a crosswalk: a woman in a teal shirt and white pants carrying a white bag, a woman in a white striped shirt and light blue pants, and a young child in a white shirt and blue pants. In the background, a silver SUV is parked on the side of the road. A sign on the right side of the road reads "INVERRARY".

Lauderhill Transportation Master Plan

Staff Working Group Meeting #5
Potential Solutions

Agenda

1. Lauderdale TMP: Schedule
2. Review of Potential Solutions
3. Next Steps

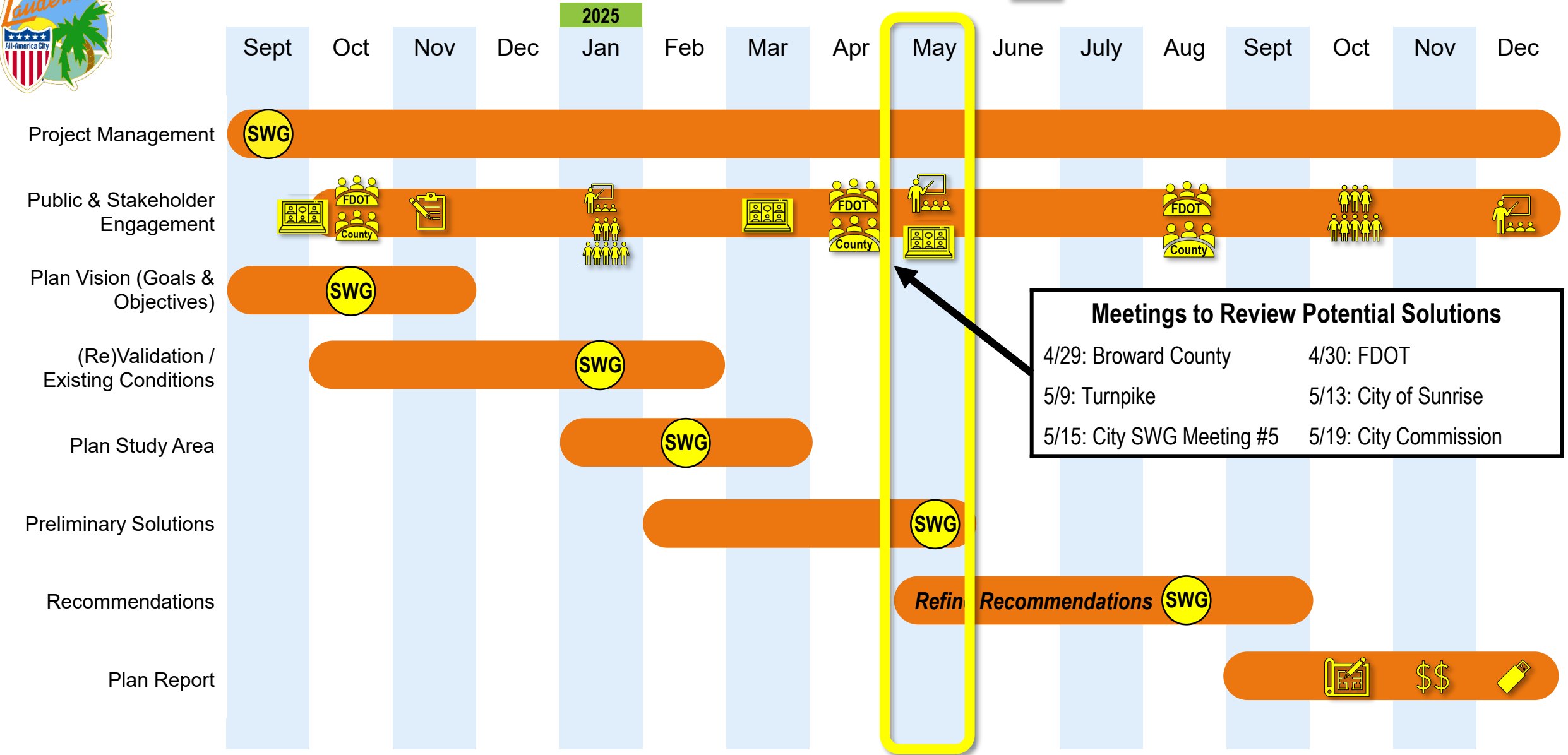
Meeting Goals:

- ✓ Select Plan Study Area roadways

Lauderhill TMP: Schedule



- City Staff Working Group Mtg
- Community Survey or Meeting
- FDOT / Broward County Mtg
- City Commission or Advisory Board Meeting
- Stakeholder Mtg



Lauderhill TMP: Plan Study Area

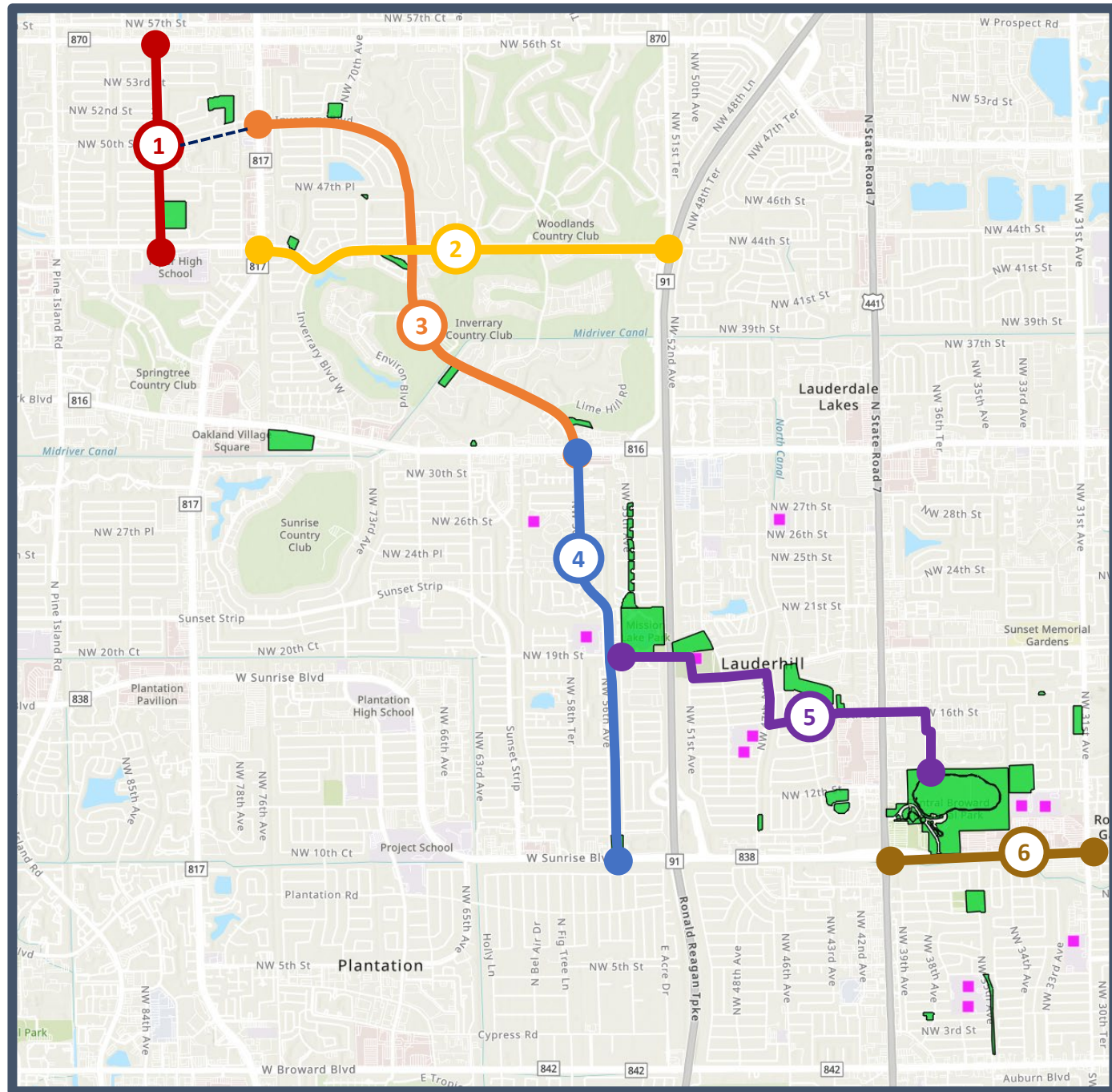
The Plan Study Area are the six roadways, primarily city-owned, that will have transportation projects identified in the TMP (including concepts, scopes-of-work, and planning-level cost estimates). The transportation projects will improve roadway safety and citywide connectivity, consistent with best practices and the TMP Vision.

The Plan Study Area was identified based on data review and community engagement feedback, as well as the opportunity for improvements.


Numerous City parks, public schools, neighborhoods, and essential destinations will be connected, as well as BCT Routes 55, 2, 81, 19, and 36 and all Community Shuttle Routes

Plan Study Area Roadway

- 1 **NW 82 Av:** Commercial Blvd to NW 44 St
- 2 **NW 44 St:** University Dr to Rock Island Rd
- 3 **Inverrary Blvd:** University Dr to Oakland Park Blvd
- 4 **NW 56 Av:** Oakland Park Blvd to Sunrise Blvd
- 5 **NW 19 St:** to County Regional Park
- 6 **Sunrise Blvd:** US 441 to NW 31 Av



Lauderhill TMP: Solutions Examples

 Roundabout or Mini Roundabout



 Raised Intersection



 New Pedestrian Bridge (over canal)



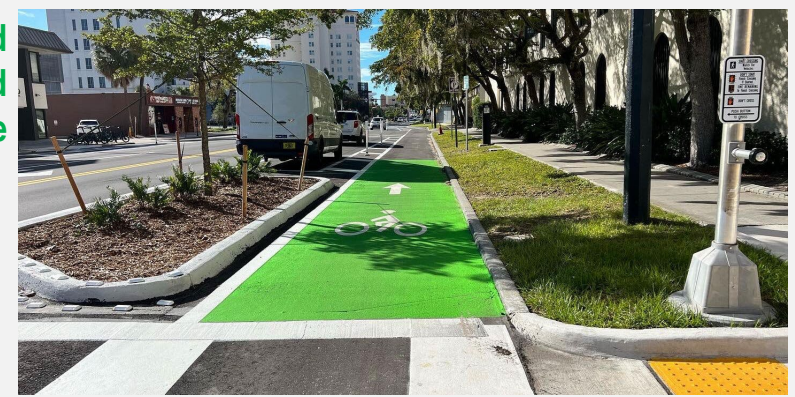
 Peanut Roundabout



 Lane Repurposing Quick Build



Repurposed to Protected Bike Lane

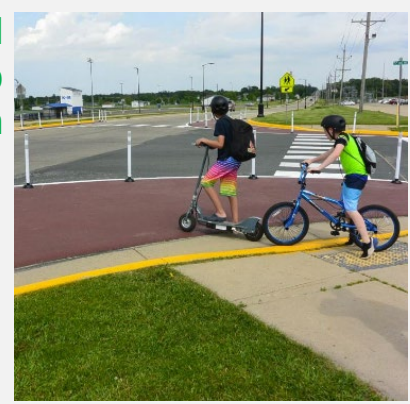


Narrow Side Street Curb Radii Before After

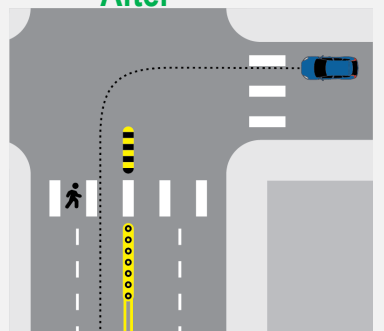
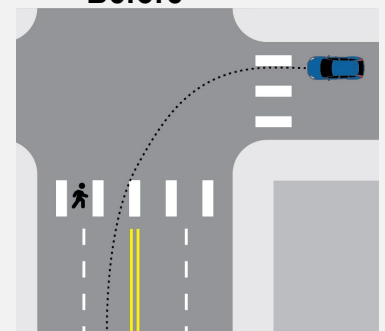


Tighter corner radii reduce crossing distance and slow turning traffic. (Credit: Michele Weisbart)

Quick build curb extension



Hardened Centerline Before After



Lauderhill TMP: Solutions Examples

 Protected or Raised Bike Path



 Shared Use Path



 Striped Bike Lanes



 Raised Crosswalk with RRFB



With
textured
pavement



 Sharrows & Wayfinding



 Center Lane Median

Quick-Build,
with
pedestrian
refuge



 Signalized Midblock Crossing



Lauderhill TMP: Boundary Intersections

Recommendations



These recommendations apply to intersections where a corridor terminates or lies outside the jurisdiction of Lauderhill. They are general in nature and can be implemented in coordination with other jurisdictional partners to enhance connectivity into and out of Lauderhill, as needed. **The intersections are University Dr, Rock Island Rd, Oakland Park Blvd, Sunrise Blvd, and US-441**

Walking Improvements

- Restripe or stripe crosswalks and add at all legs of the intersection if possible
- Add leading pedestrian intervals
- Upgrade to directional curb ramps and tactical striping where missing
- Construct median refuge islands with median noses extended beyond the crosswalk

Biking Improvements

- Bike boxes or protected intersections can be added to help permit left-turn movements and increase comfort of people biking
- Add conflict paint

Addressing Turning Speeds

- Implement protected left turn signal phase
- Harden the centerline to guide people turning
- Add curb extensions / sharpen turn radii as space permits

High Visibility Crosswalk with Refuge



Curb Extension



Median Island



Bike Boxes



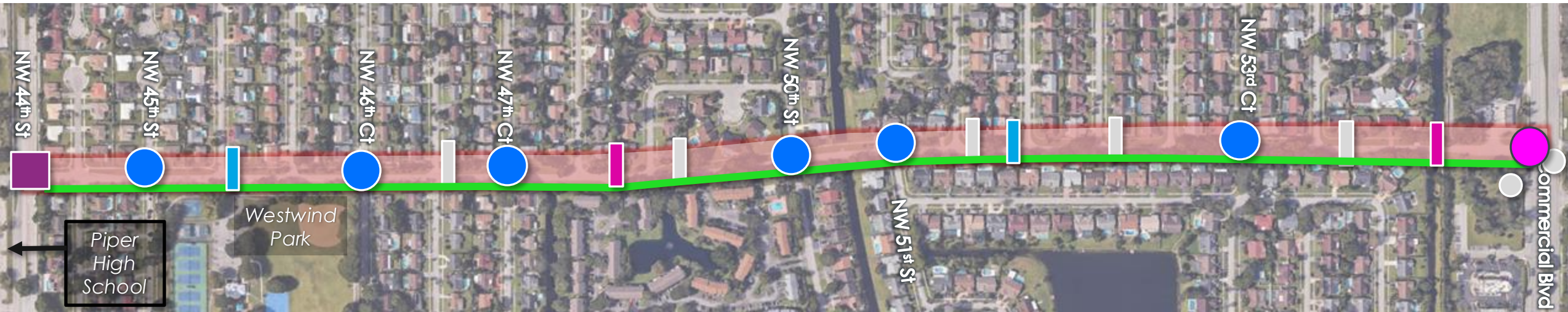
NW 82 Av: Recommendations

Improve comfort and safety of neighborhood roadway / route to school

Existing Conditions

● Bus Stops

▬ Speed Hump



Construct Shared Use Path On East Side with Raised Side Street Crossings

Speed Humps

Raised Crosswalk with Rectangular Rapid Flashing Beacon (RRFB)

● Roundabout

● All-way Stop Improvements

- Add conflict stripping, curb extensions, and rebuild ramps to meet current design standards

● Evaluate installing a signal

- Facilitates left turns
- Provides designated crossings; may also include median refuge island

Intersection Improvements

- Shown on right

NW 82 Av at NW 44 St



Vehicle Improvements

- Implement protected left turn signal phase
- Add curb extensions / tighten curb radii as space permits

Walking Improvements

- Restripe or stripe crosswalks at all legs of the intersection
- Add leading pedestrian intervals
- Upgrade to directional curb ramps and tactical striping where missing
- Construct median refuge islands

Biking Improvements

- Add bend out and wider crosswalk on the eastern leg at the shared use path crossing as space permits
- Add warnings for people walking and biking
- Add conflict paint

Corridor Wide Strategies

Narrow Side Street Curb Radii with Curb Extensions

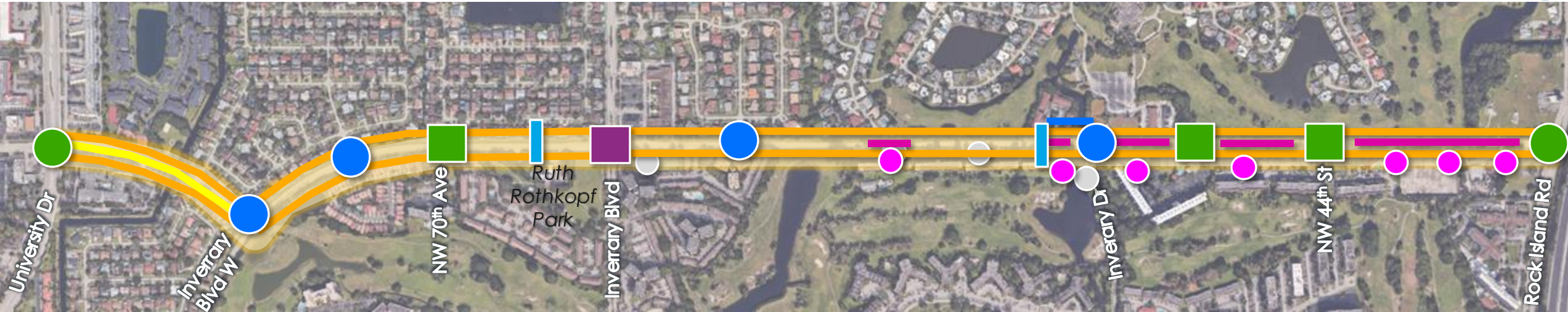
- Slows drivers
- Limits turning conflicts

NW 44 St: Recommendations

Redesign NW 44 St to reduce vehicle speeds to 25 MPH

Existing Conditions

● Bus Stops



Roundabout



Intersection Improvements

- *Bike Protected Intersection*
- *Median refuge islands*
- *Leading pedestrian intervals*



Raised Intersection

- *Can include RRFBs*



Boundary Intersection Improvements

- *Alternative options on detailed slide*



Lane Repurposing

- *Reduce from four to two-lanes*
- *See detailed slide*



Protected or Raised Bike Path



Raised Crosswalk with RRFB



Center Lane Median

- *Reduces left-turn density*



Convert to Right in / Right out



New Sidewalk

Corridor Wide Strategies

Narrow Side Street Curb Radii with Curb Extensions

Paint Conflict Markings at Intersections and Driveways

- Limits turning conflicts
- Alerts people biking and driving to potential for conflict



NW 44 St: Lane Repurposing of 4-Lane Segment University Dr to Inverrary Blvd W

Recommendations

Redesign to better match context and set design speed to 25 MPH

- 14,000 AADT and limited crossings or driveways indicates excess capacity

Near term condition:

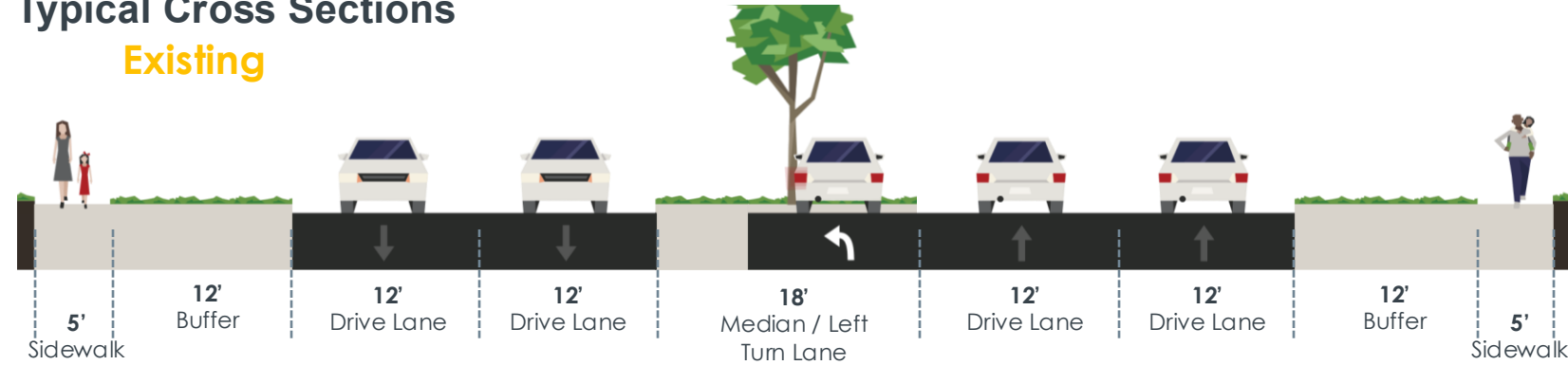
- Quick build to allow users to experience changes and tweak design

Long term condition

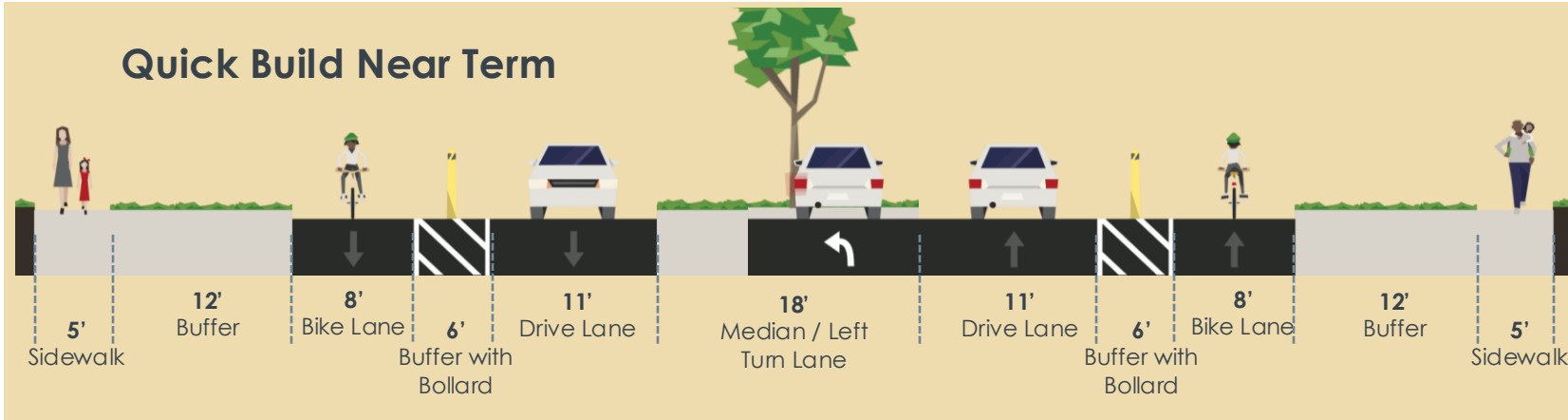
- Provide high quality bike facilities and landscape opportunities
- Ensure fire / emergency access
- Combine with traffic calming treatments to eliminate turn lane and better facilitate turns like roundabouts, raised intersections, and raised crossings

Typical Cross Sections

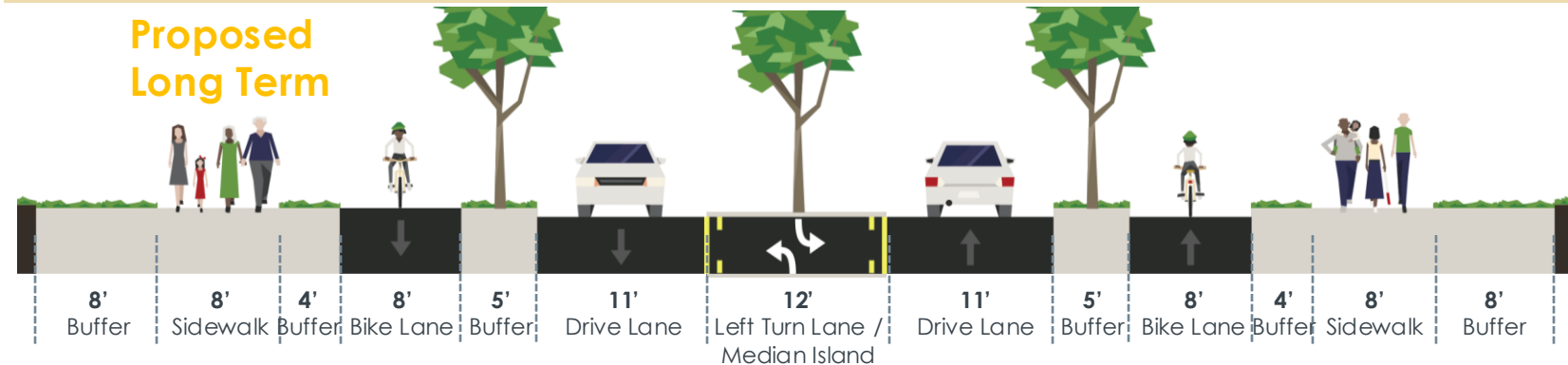
Existing



Quick Build Near Term



Proposed Long Term



Inverrary Blvd: Recommendations

Redesign Inverrary Blvd to reduce vehicle speeds to 25 MPH

Corridor Wide Strategies

Paint Conflict Markings at Intersections and Driveways

- Limits turning conflicts
- Alerts people biking and driving to potential for conflict

Narrow Side Street Curb Radii with Curb Extensions

- Slows drivers
- Limits turning conflicts

Evaluate Lighting

- Address nighttime visibility and increase comfort people walking and biking

Lane Repurposing

- Reduce from four to two-lanes
- **Construct protected or raised bike lanes**
- Construct wider sidewalks
- See detailed slide

Raised Crosswalk with RRFB or Signal

Center Lane Median

- Reduces left-turn density

Convert to Right in / Right out

Eliminate Bus Stop

Roundabout

Peanut Roundabout

- Elongated roundabout
- Improves safety
- Reduces speeds
- Includes raised crosswalks

Intersection Improvements

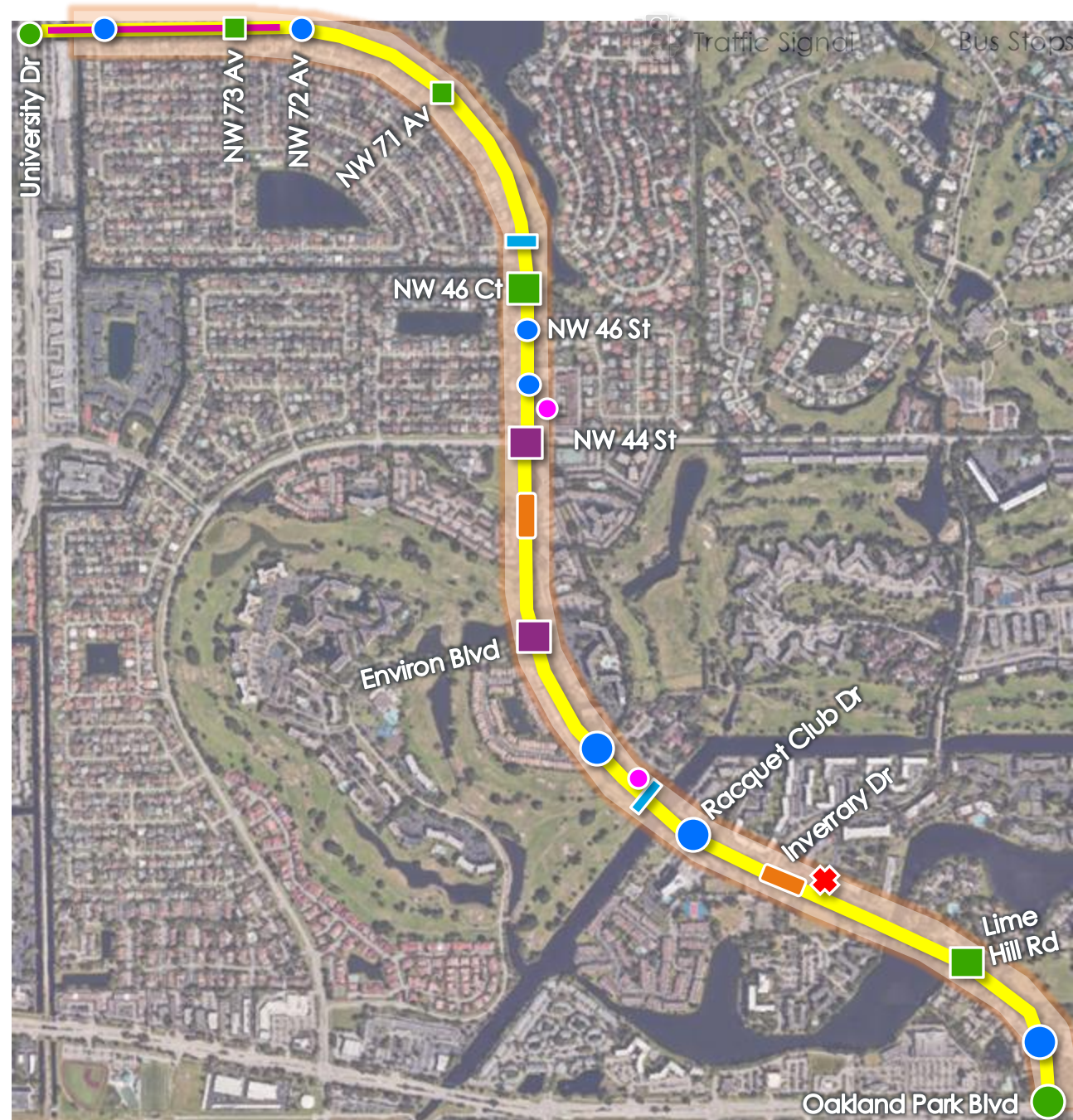
- Bike Protected Intersection
- Median refuge islands
- Leading pedestrian intervals

Raised Intersection

- Can include RRFBs or Pedestrian Signal

Boundary Intersection Improvements

- Alternative options on detailed slide



Inverrary Blvd: Lane Repurposing

Recommendations

- Redesign Inverrary Blvd to reduce vehicle speeds to 25 MPH

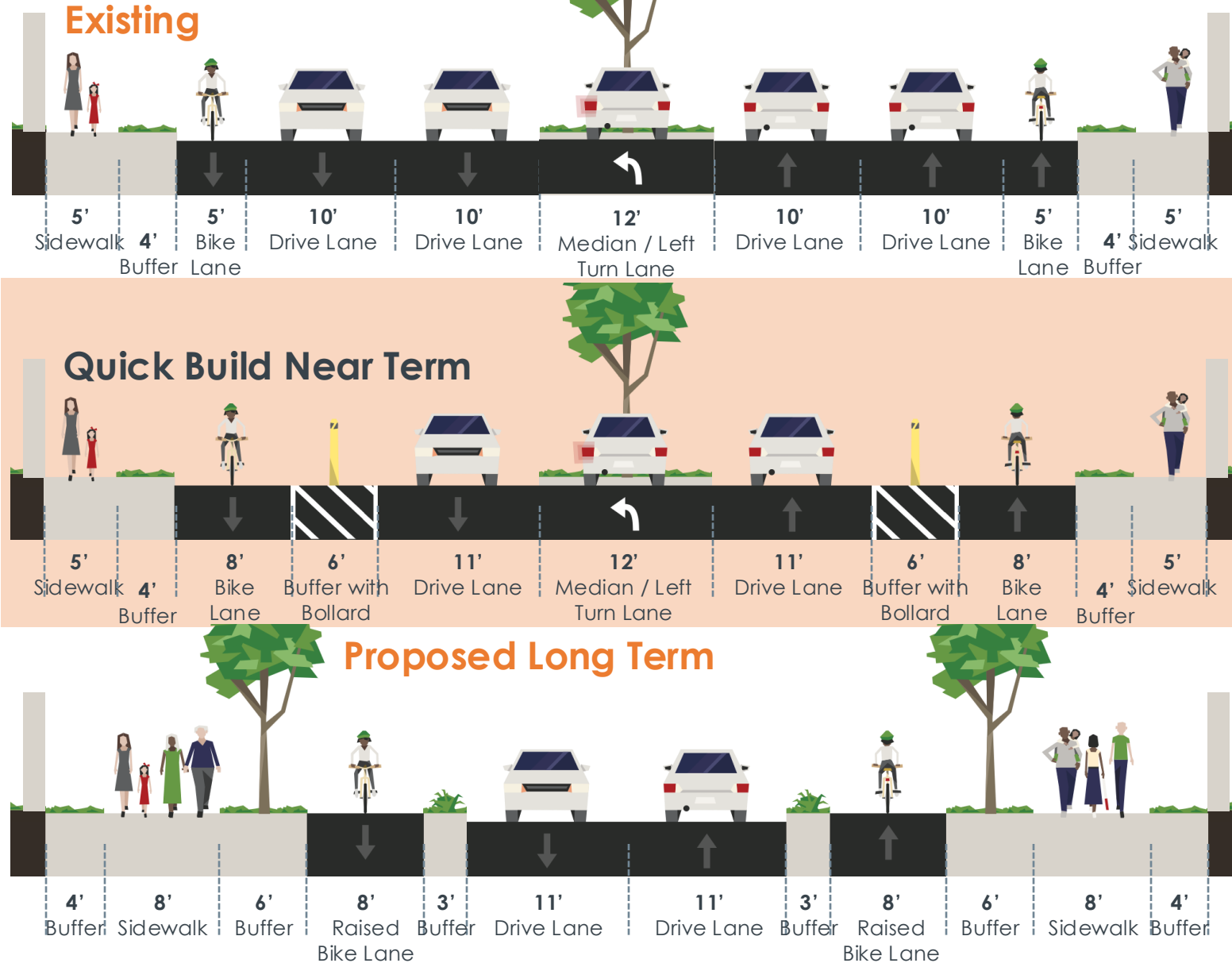
Near term condition:

- Quick build to allow users to experience changes and tweak design

Long term condition

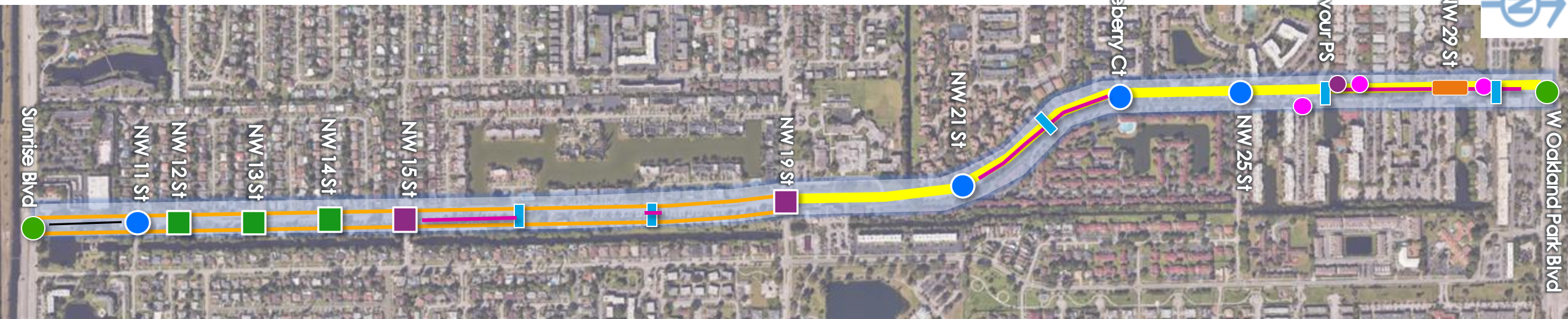
- Provide space to separate sidewalk from barrier wall
- Provide high quality bike facilities and landscape opportunities
- Ensure fire / emergency access
- Combine with traffic calming treatments to eliminate turn lane and better facilitate turns like roundabouts, raised intersections, and raised crossings













Typical Cross Sections



NW 56 Av: Recommendations

Redesign NW 56 St to reduce vehicle speeds to 25 MPH



-  Roundabout
 - 3-Lane segment may require Lane Repurposing
-  Peanut Roundabout
-  Intersection Improvements
 - Curb extensions
 - Bike boxes
 - Add median noses and hardened centerlines
-  Raised Intersection
 - Can include RRFBs
-  Boundary Intersection Improvements
 - Alternative options on detailed slide
-  Lane Repurposing
 - Reduce from three to two-lanes
 - See detailed slide
-  Protected or Raised Bike Path
-  Raised Crosswalk with RRFB
-  Center Lane Median
-  Convert to Right in / Right out
-  Hardened Centerline
-  Move Bus stop
 - Utilize right turn lane for Endeavor PS as BCT Bus pull out

Corridor Wide Strategies

Narrow Side Street Curb Radii with Curb Extensions

Paint Conflict Markings at Intersections and Driveways

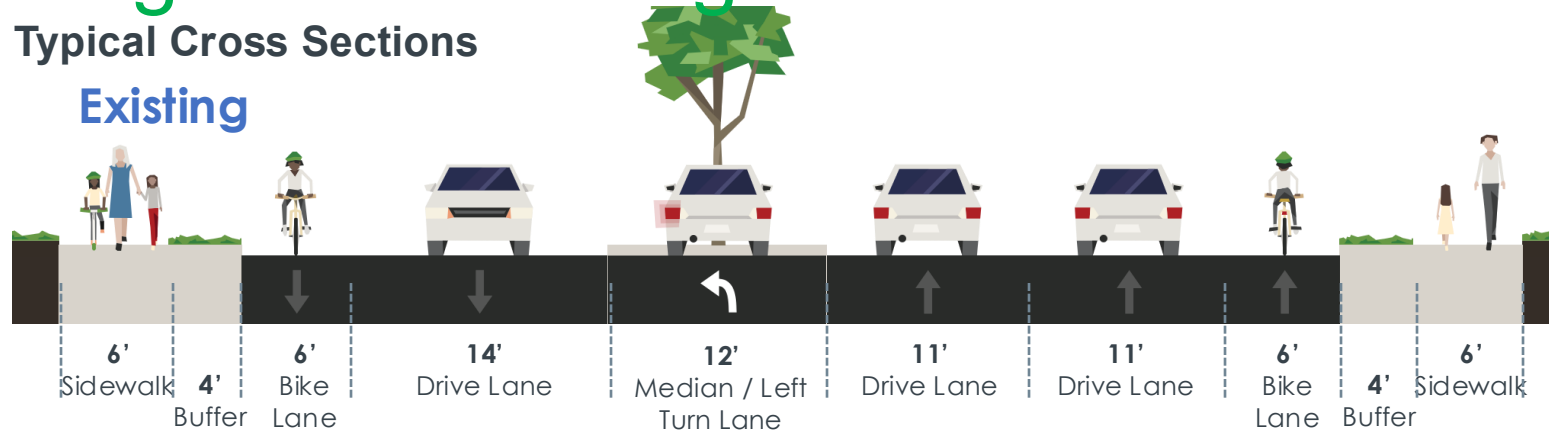
- Limits turning conflicts
- Alerts people biking and driving to potential for conflict



NW 56 Av: Lane Repurposing of 3-Lane Segment North of NW 29 St to NW 19 St

Typical Cross Sections

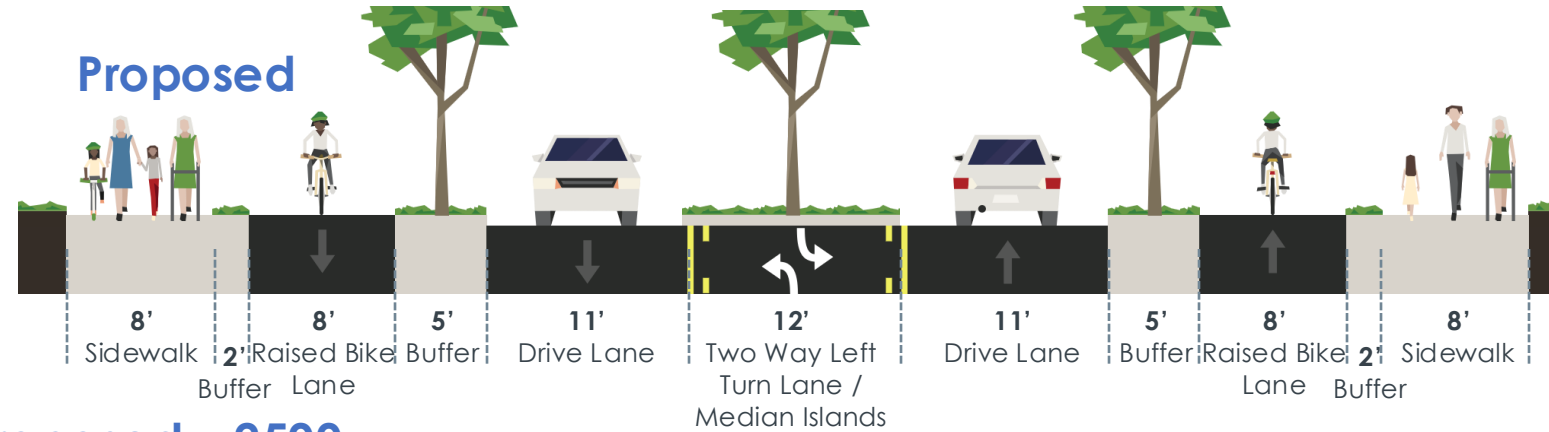
Existing



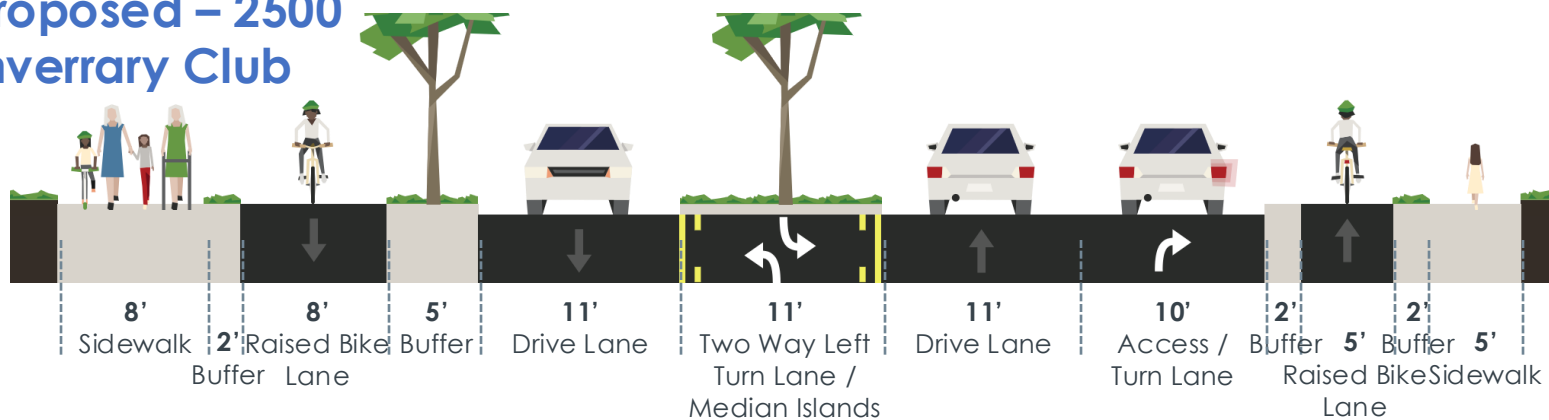
Recommendations

- **No Quick Build Option**
- Lane Repurposing needed to provide high quality bike facilities with landscaped buffers
- Ensure fire / emergency access so no consistent median; median islands may be feasible
- Combine with traffic calming treatments to eliminate turn lane and better facilitate turns like roundabouts, raised intersections, and raised crossings
- Right turn lane required at gate for 2500 Inverrary Club

Proposed

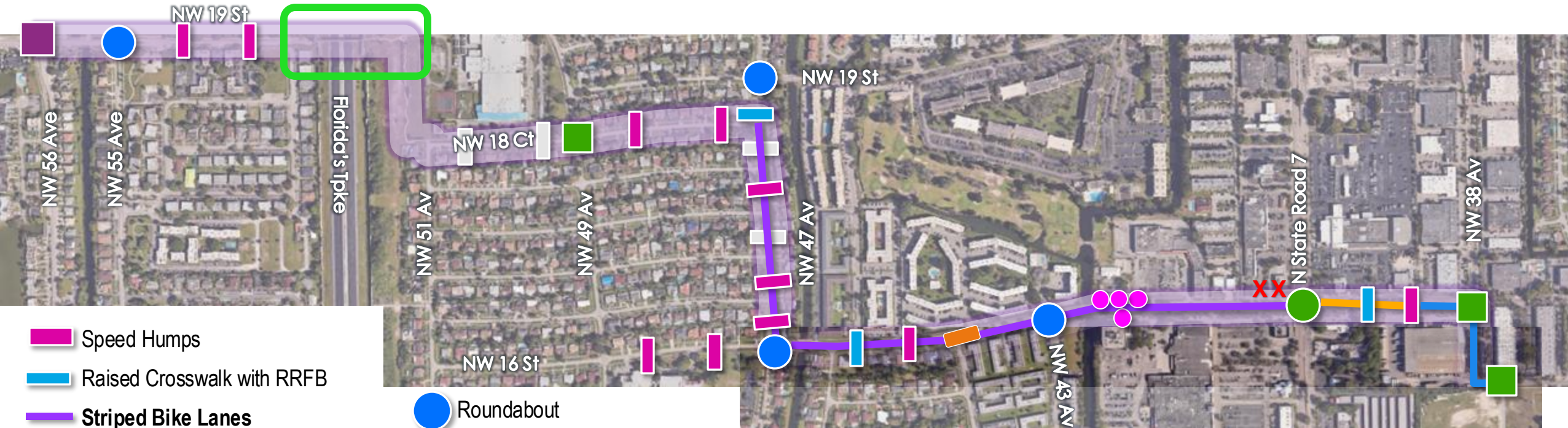


Proposed – 2500 Inverrary Club



NW 19 St to Central Broward Park: Recommendations


Create a seamless pedestrian / bicycle route from west of the Turnpike to Central Broward Park



 Speed Humps

 Raised Crosswalk with RRFB


 **Striped Bike Lanes**
• *Keeps people biking out of the way of transit*

 Protected or Raised Bike Path

 Add Sharrows & Wayfinding


 Convert to Right in / Right out

 Remove Access Point


 Improvements to Pedestrian Bridge
• *Alternative options on detailed slide*

 Roundabout

 Peanut Roundabout

 Intersection Improvements
• *Alternative options on detailed slide*

 Raised Intersection
• *Can include RRFBs*

 Boundary Intersection Improvements
• *Alternative options on detailed slide*

Corridor Wide Strategies

Narrow Side Street Curb Radii with Curb Extensions

Paint Conflict Markings at Intersections and Driveways

- Limits turning conflicts
- Alerts people biking and driving to potential for conflict

Rebuild Roads

- Rebuild roads to urban standard that include curb and gutters



NW 19 St to Central Broward Park: Recommendations

Pedestrian Bridge Recommendations

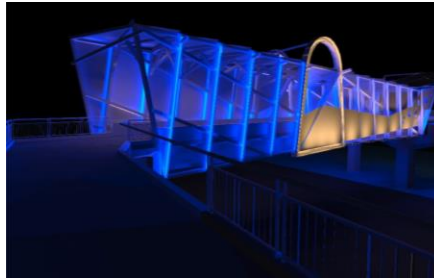
Integrate Art on Soundwall and Bridge

Both the bridge structure itself and the soundwall leading up to it are opportunities to both engage the public and create local art.



Novel Lighting

Consider novel lighting solutions at the bridge that increases regional pride and make it a place and feels safe to walk at night.

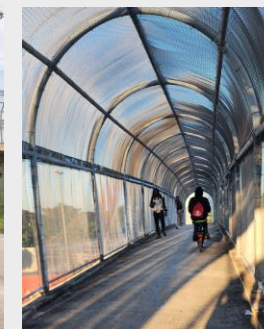
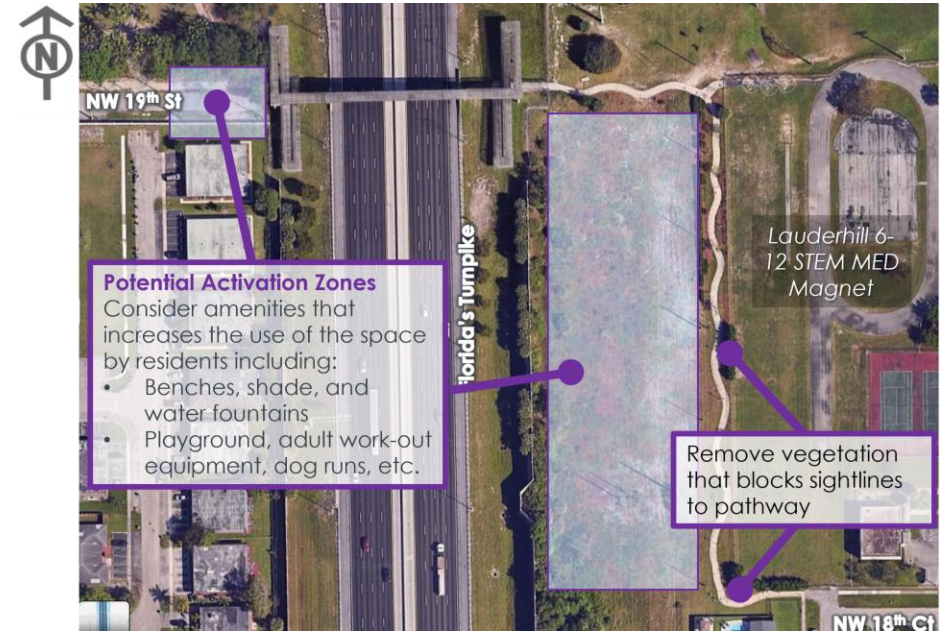


Rebuilding Opportunity

The current configuration of the bridge is not wide enough to meet current shared-use path standards. In considering new configurations the following can help guide new designs:

- **Explore straightening out entrance ramps**

- Wide enough for people biking to comfortably pass people walking
- Turn radii comfortable for cargo bikes and large strollers to navigate
- Provides shading, ample lighting, and does not block sight lines
- Potential direct staircase in addition to a rolling option to cross

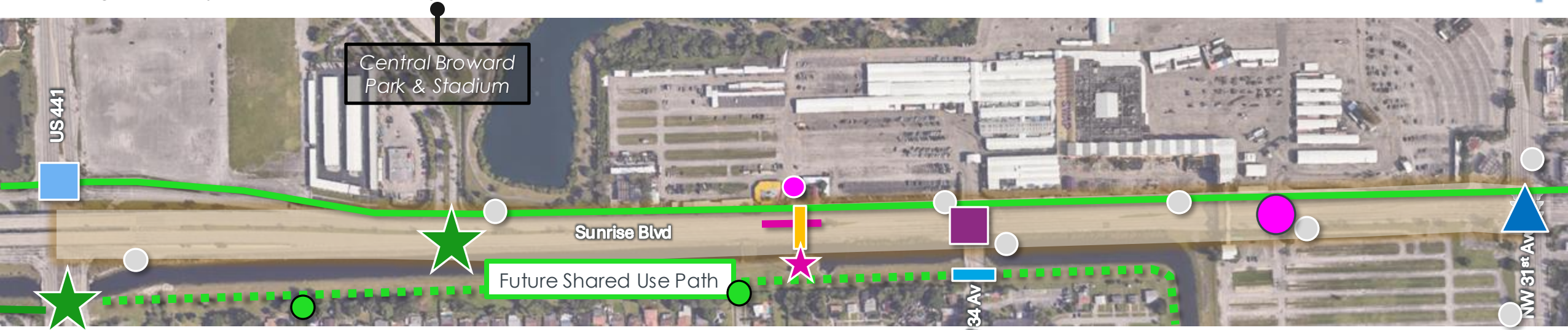


Views of western and eastern access to the bridge, plus configuration












Sunrise Blvd: Recommendations

Redesign roadway to move people, not just cars



-  Evaluate installing a signal
 - Driven by future potential development
 - Include a protected intersection, median islands, and dedicated phases for people walking and biking
-  Intersection Improvements
 - Add protected intersection with refuge islands
 - Ensure future multi-use path connects to and crosses intersection
-  US 441
 - Add raised crossings at slip lanes
 - Evaluate pedestrian crossing phases to ensure comfortable walking pace for people over 65 or who use mobility devices
 - Consider the addition of refuge islands

-  Signalized Midblock Crossing
 - Including median island and curb extensions to shorten crossing distance
-  Bridge Improvements
 - Consider improvements that limit obstructions and prevent machine tampering
 - Ensure future shared-use path connects to bridge
-  New Pedestrian Bridge
 - Provides alternative north-south and east-west path to US 441 for people walking and biking

-  Add Shared Use Path Access Point
-  Add Median
-  Convert to Right in / Right out
-  Construct Shared Use Path
-  New Raised Crosswalk with RRFB
-  BSAP Project (by others)
 - Intersection at NW 31 Av is included in the BSAP project

Corridor Wide Strategies Paint Conflict Markings and Raise Pathways at Intersections and Driveways

- Limits turning conflicts
- Alerts people biking and driving to potential for conflict

Narrow Side Street Curb Radii with Curb Extensions

- Slows drivers
- Limits turning conflicts

