

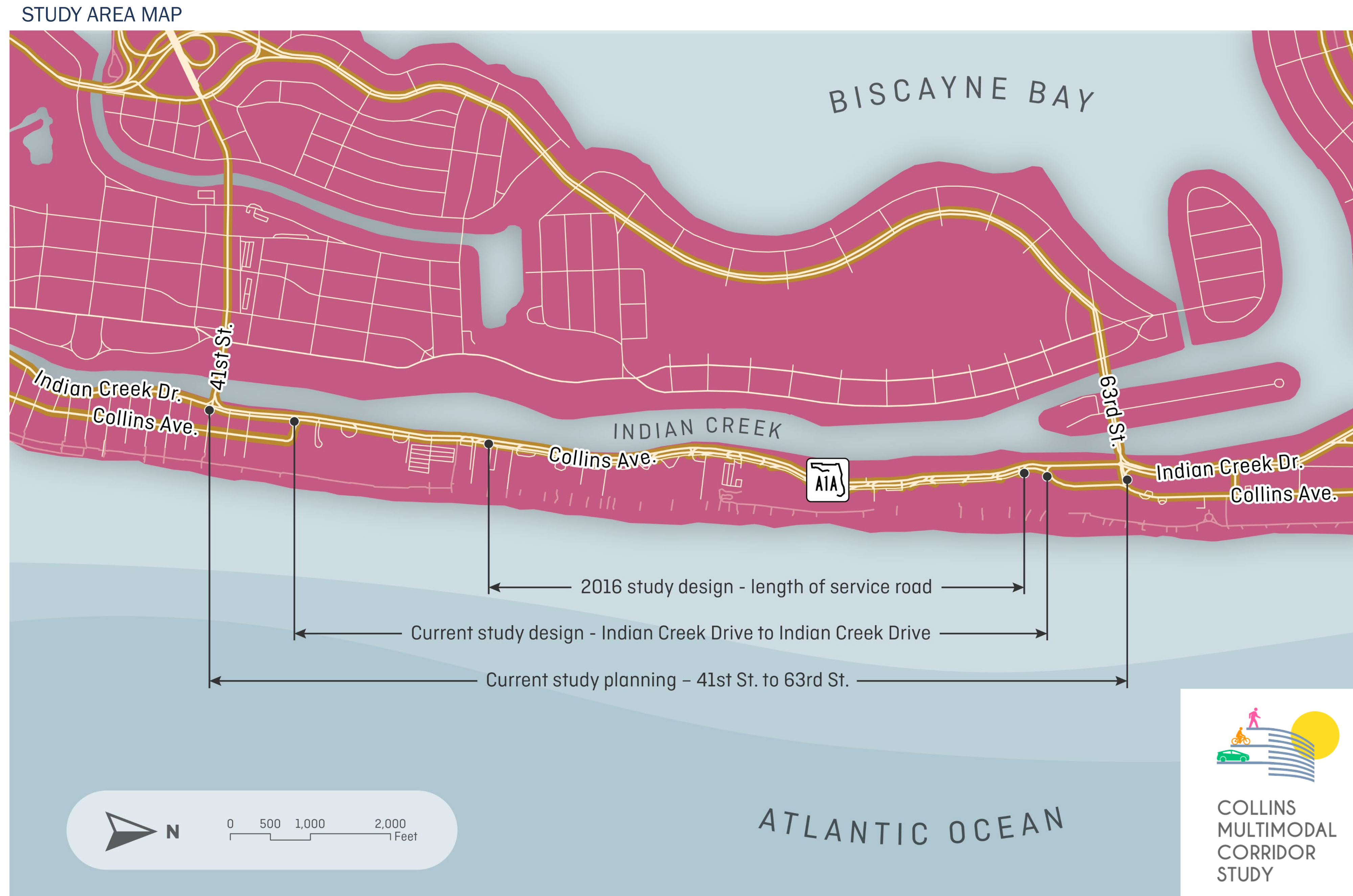
STUDY PURPOSE AND NEED

The Florida Department of Transportation (FDOT) is evaluating and planning for a multimodal improvement project along State Road (SR) A1A/ Collins Avenue from W 41 Street to W 63 Street, in the City of Miami Beach.

The purpose of the study is to **identify, develop, and evaluate multimodal improvements addressing existing and future mobility for all modes of travel including pedestrian, bicycle, motorists, and transit.**

This study will address the possibilities to repurpose the service road, improve walkability, increase the overall comfort for all users, and connect users within and beyond the study area.

STATION 1 PURPOSE AND NEED

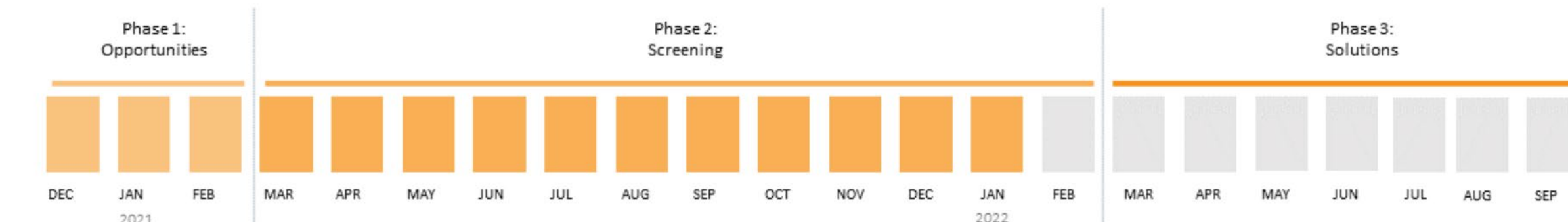


STUDY SCHEDULE

The study has three phases:

- 1 Opportunities** included data compilation and community engagement.
- 2 Screening** developed candidate alternatives and we are today seeking your feedback on what resonates with you.
- 3 Solutions** will develop a proposed set of near-term and long-term improvements based on your feedback, with a second public meeting to be scheduled for late spring 2022.

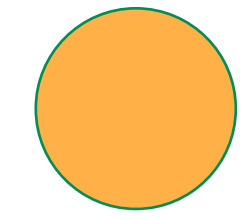
TIMELINE



WHERE DO YOU....

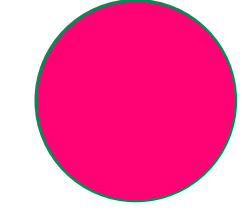
STATION 1 PURPOSE AND NEED

LIVE?

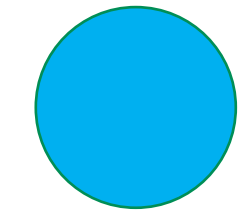


Place a sticky dot at locations in the study area that are important to your daily activities.

WORK?



VISIT OFTEN?



MEETING PURPOSE

The FDOT Project Team has developed two approaches (retrofit or reconstruct) with three alternatives that seek to balance community and stakeholder and stakeholder goals (both per adopted plans and community engagement):

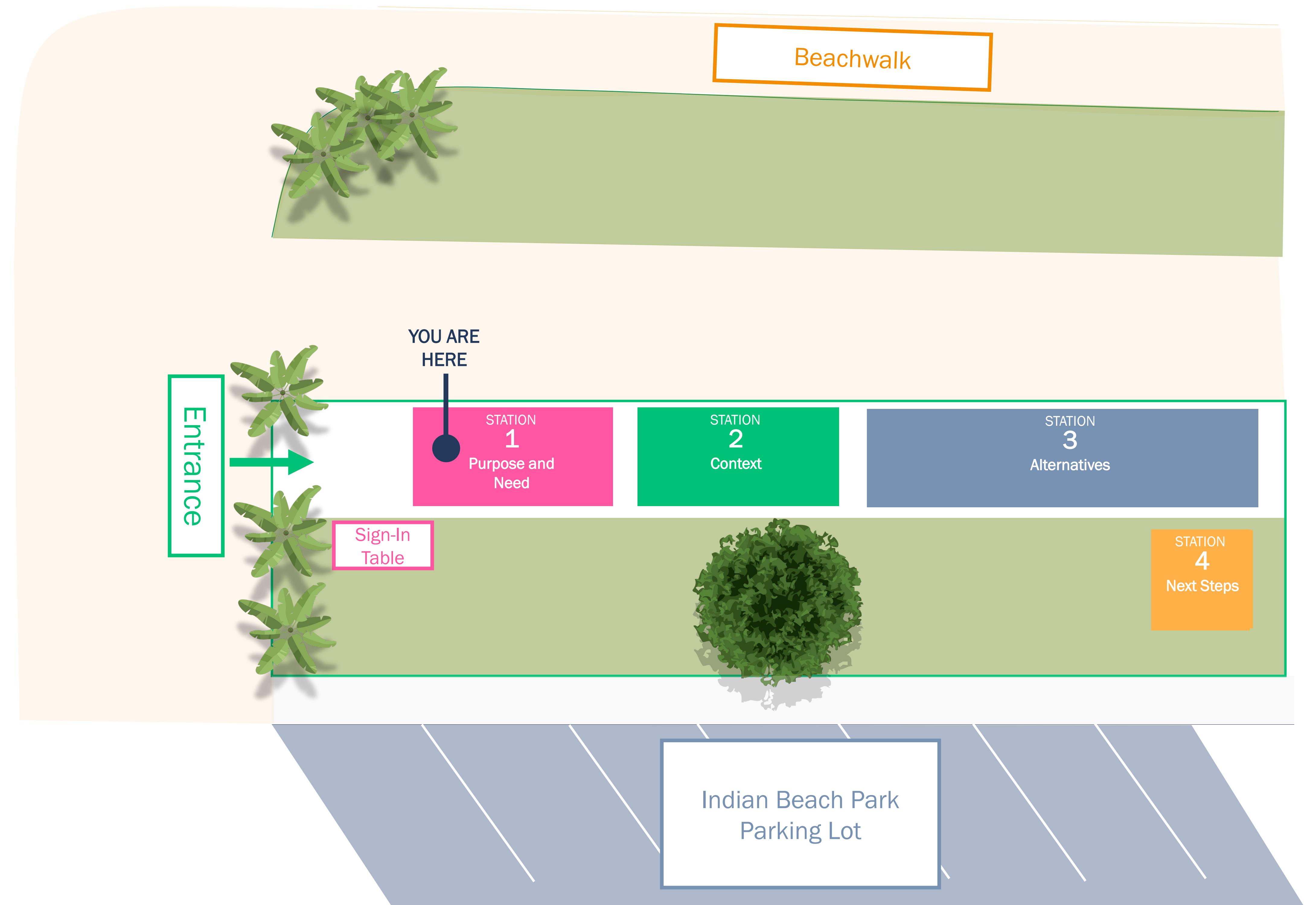
- **Alternative 1: Retrofit** – accommodate desired changes without full reconstruction (possible for a truncated alternative between 46th and the 5875 Block or extended with right-of-way impacts southward to 41st Street). Changes without right-of-way impacts might be feasible for implementation as part of repaving.
- **Alternatives 2 and 3: Reconstruct** – provides greater investment to replace aging utilities and provide greater resilience with different options for protected transit lanes. The reconstruct options would require more environmental studies and more impacts during construction.

This meeting seeks your feedback on which Alternative/Option combinations have the greatest potential for further study, and what design details in any alternative are most important to you.

Your input will be used to further develop those options with greatest potential and provide a recommended design and implementation plan at a second public meeting in late spring 2022.

STATION 1 PURPOSE AND NEED

PUBLIC WORKSHOP LAYOUT



*Illustrative map

STUDY AREA

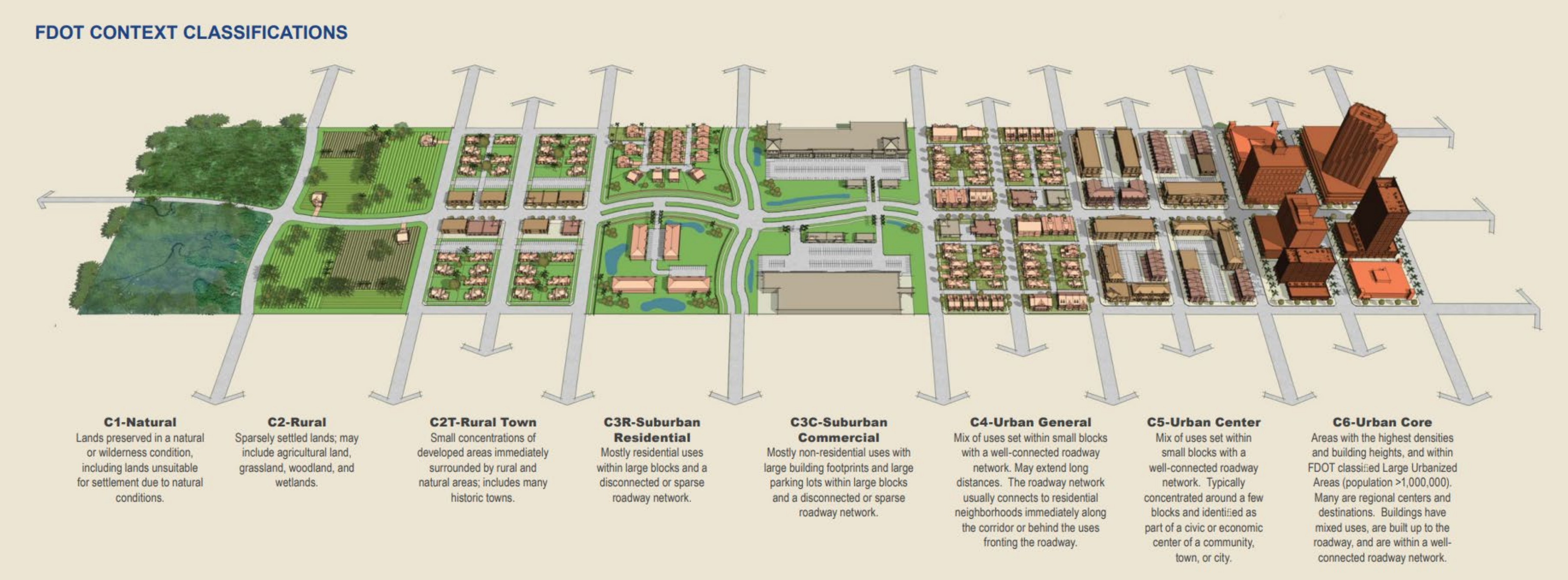
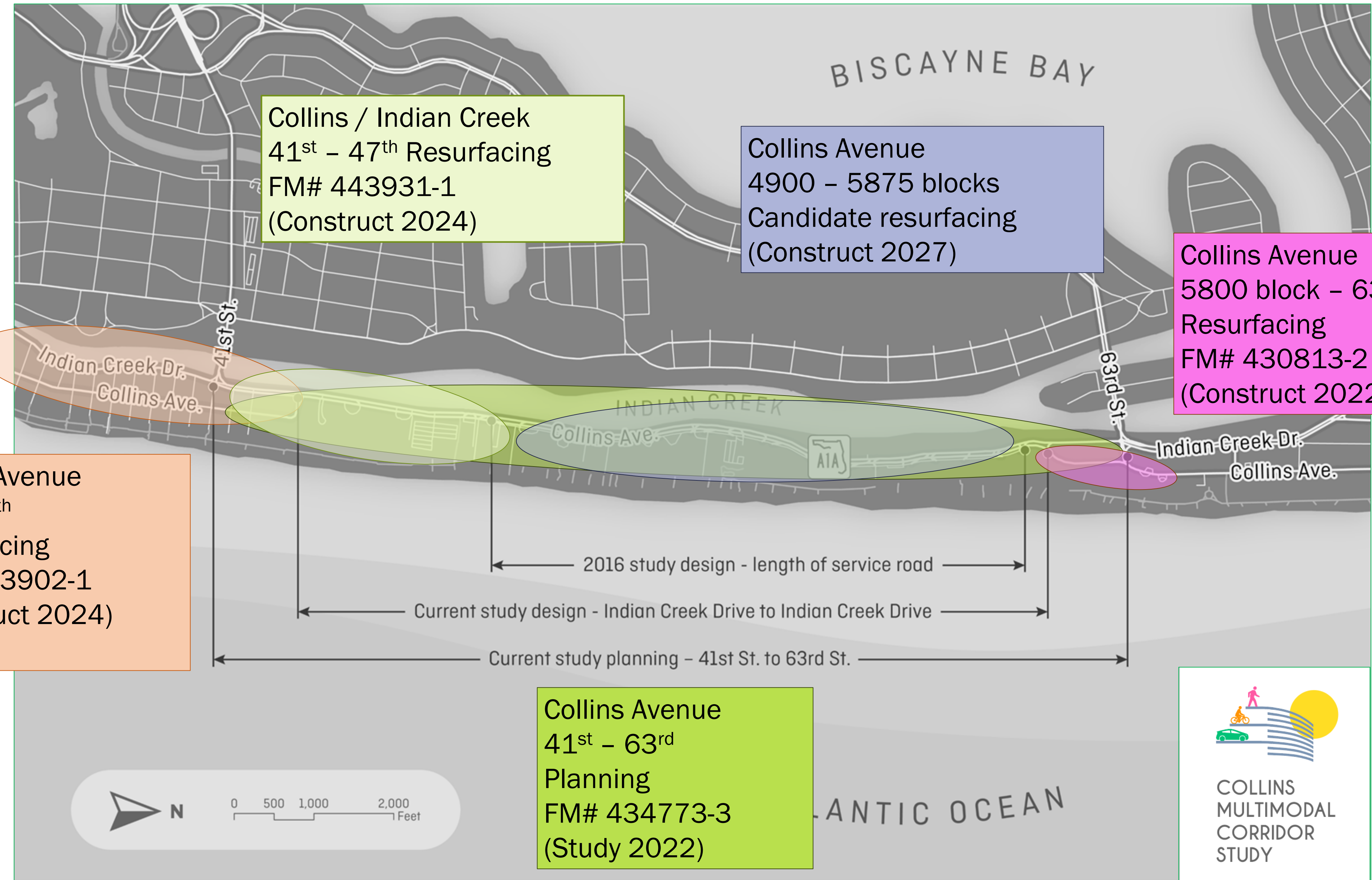
The Collins Avenue Multimodal Study (FM# 434773-3) is rethinking how to best serve multimodal needs in the MidBeach neighborhood.

The portion of Collins Avenue from 41st to 63rd Streets has a Context Classification of C-6 Urban Core, reflecting the most urban area type statewide.

This planning study encompasses a prior safety study (FM# 434773-1) that produced draft 60% design plans in 2016.

Several other projects, primarily related to resurfacing, provide opportunities to improve multimodal connectivity.

STATION 1 PURPOSE AND NEED

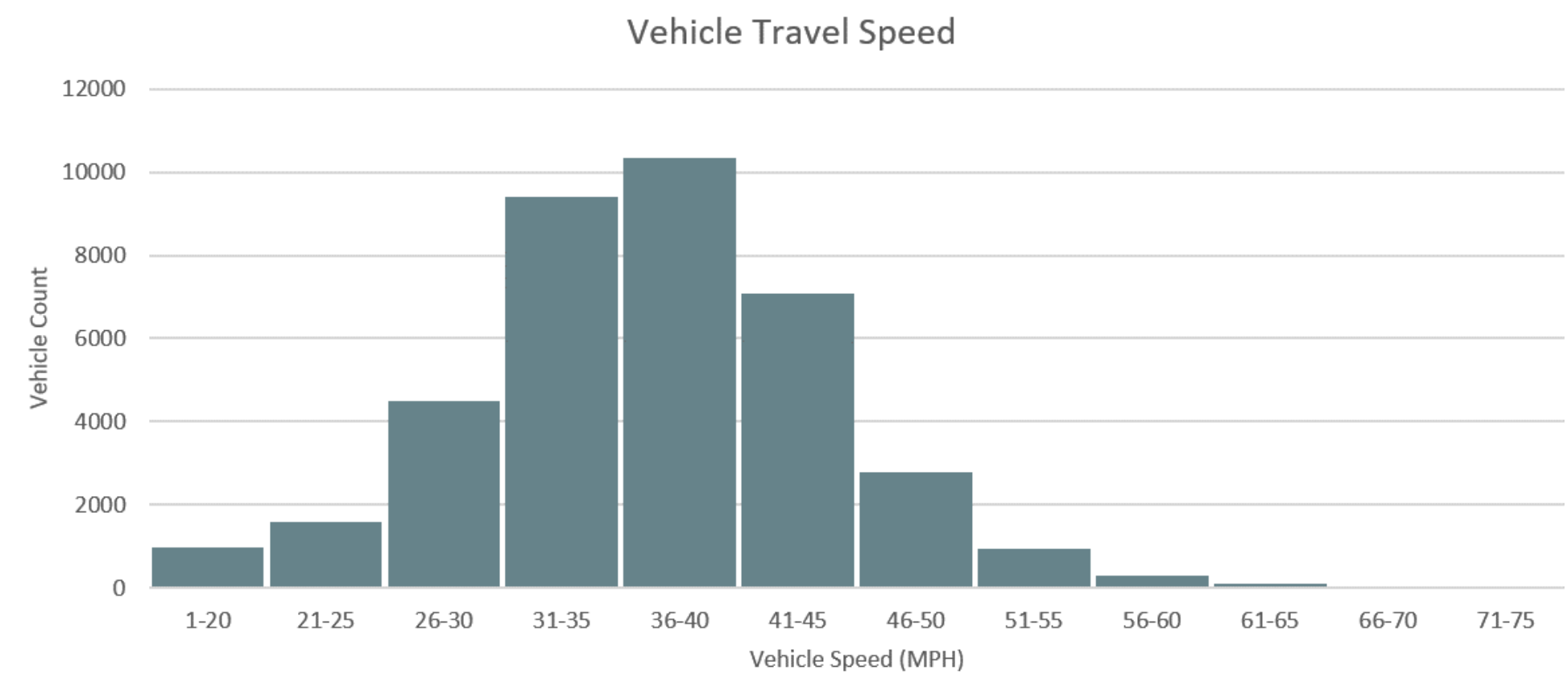


Collins Avenue 18th – 65th Intersection lighting
FM# 440170-1
(Multiple spot improvements, not shown on graphic)

TRAVEL PATTERNS

SPEED

Speeding traffic is one of the most compelling stakeholder concerns. About 57% of the traffic over the course of the day exceeds the 35 MPH mainline speed limit.



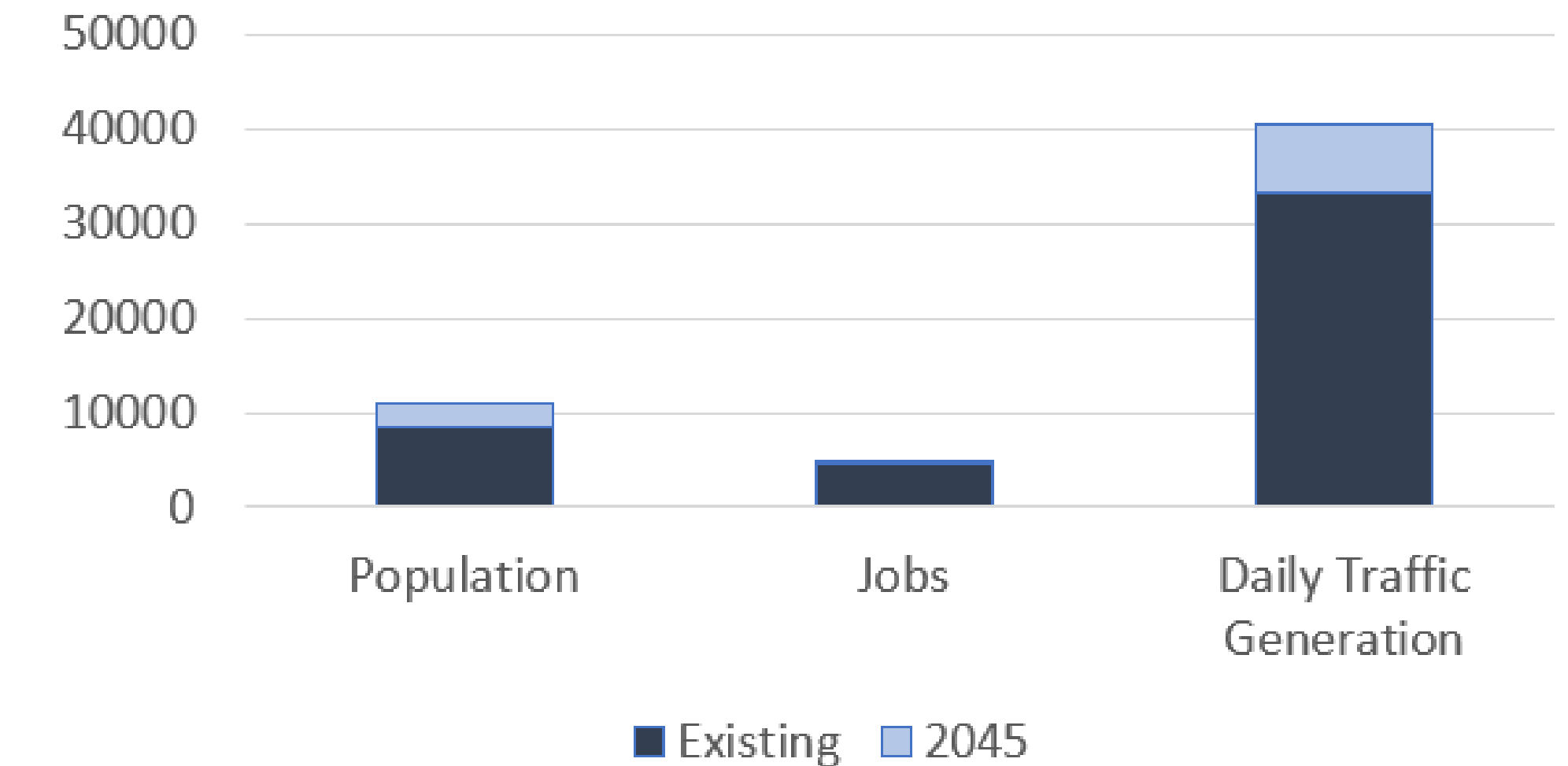
Source: Project data collection, May 2021

57% of traffic exceeds the 35 MPH speed limit.

STATION 2 CONTEXT

LONG-RANGE TRANSPORTATION PLAN

Adopted regional long-range forecasts indicate an additional 2,000 residents in the study area by 2045. Forecast daily traffic volumes are expected to grow at rates generally comparable to growth in development.

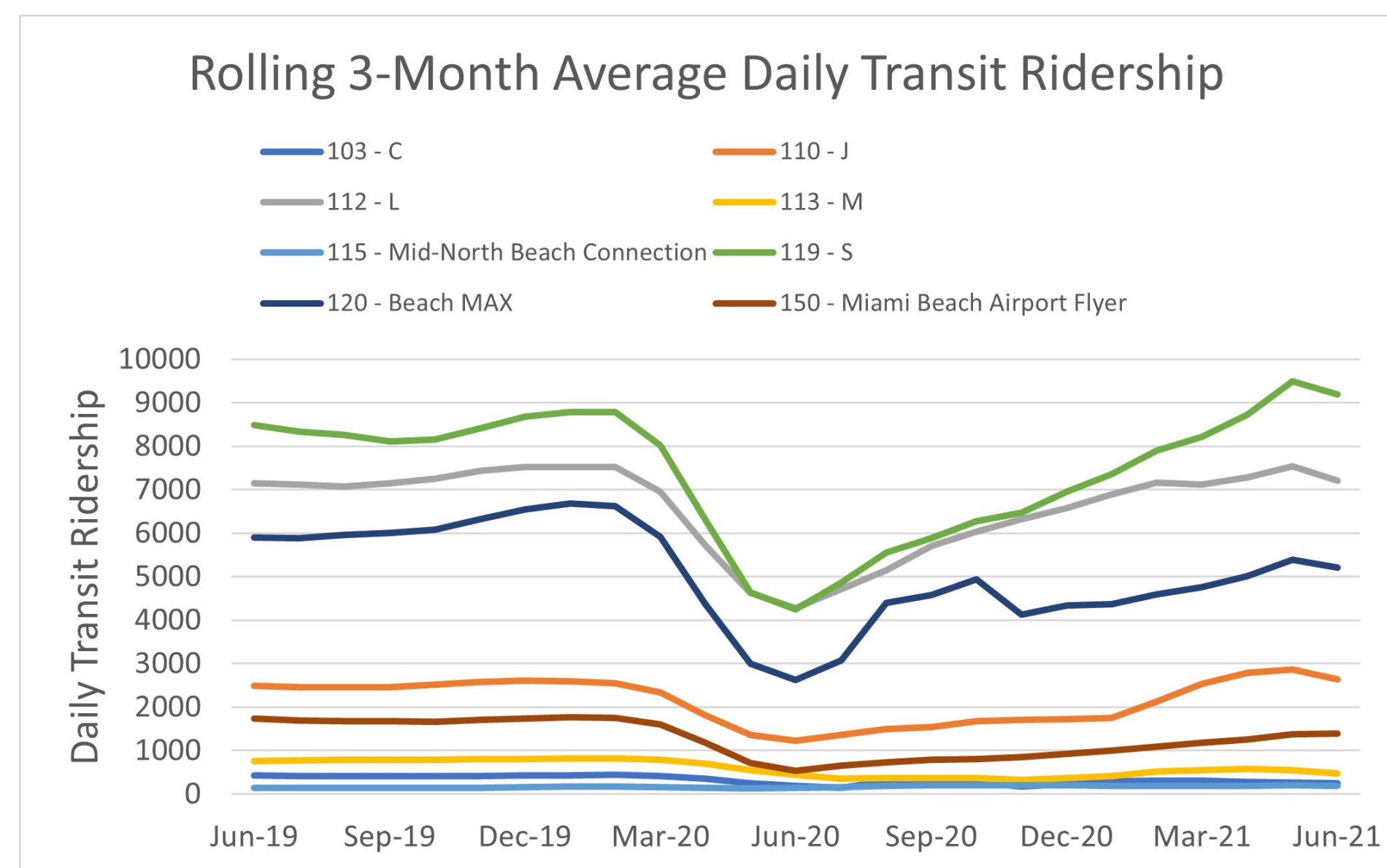


Source: Southeast Florida Regional Planning Model

+2,000 RESIDENTS are forecasted for this study area by 2045

TRANSIT RIDERSHIP

Ridership on transit routes in the corridor have rebounded nearly to pre-COVID levels. Transit routes serving the corridor are oriented in part to serve tourism, making these routes more resilient than many routes nationally.

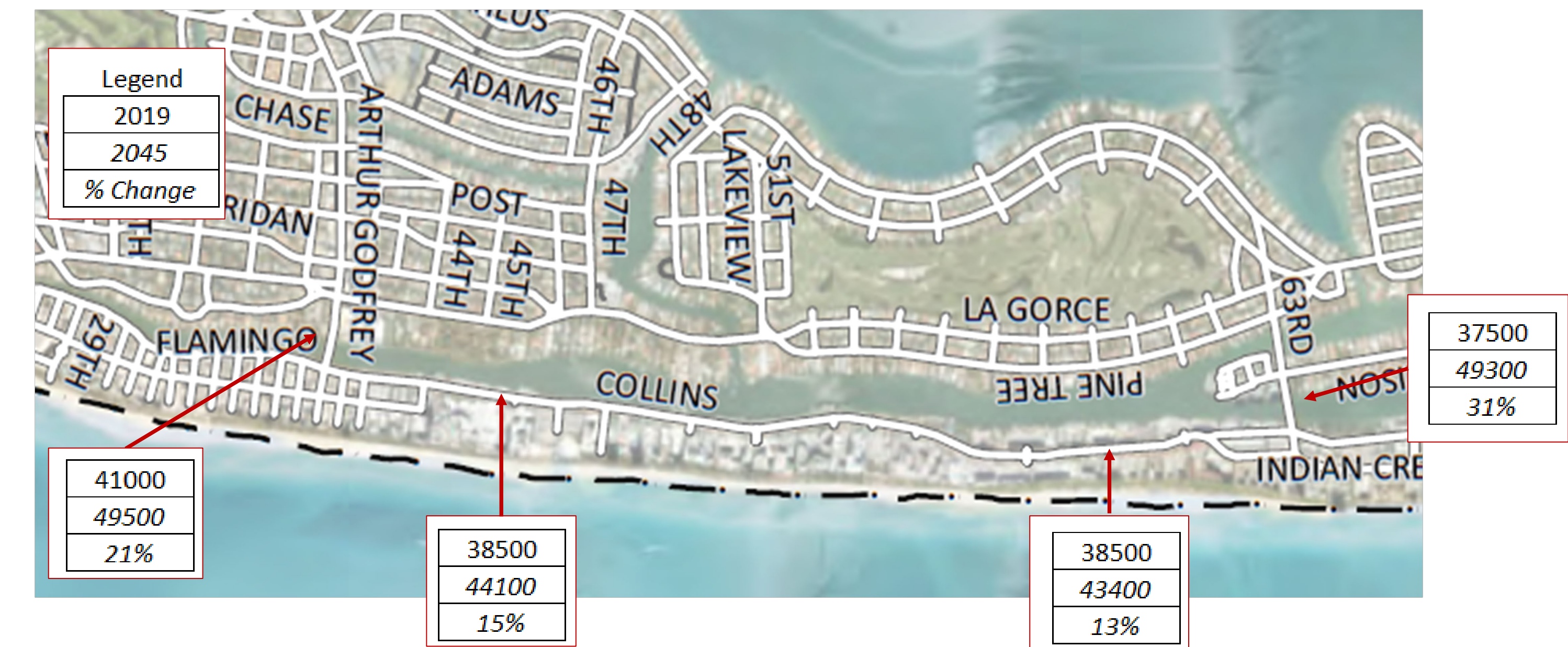


Source: Miami Dade Transit

Transit Ridership has Rebounded to pre-COVID levels

TRAFFIC VOLUME

Forecast daily traffic volumes are expected to grow at rates of 15% - 30%, generally comparable to growth in development by 2045. Similar growth rates are expected for all modes of travel.



Source: Southeast Florida Regional Planning Model

15-30% growth in daily traffic volumes

TRAVEL CONDITIONS

STATION 2 CONTEXT

TRAFFIC LEVEL OF SERVICE (LOS)

- LOS F currently exists at the junctions of Collins/Indian Creek with 41st and 63rd Streets
- Between these junctions, traffic operates at LOS C or better except for certain service road junctions where a few cars experience lengthy delays.

TRANSIT QUALITY OF SERVICE (QOS)

- Eight Miami-Dade Transit (MDT) routes serve the corridor: Quality of Service (QOS) for segments ranges from A to B
- Bus shelter quality is variable, with higher quality shelters reducing effective sidewalk width
- The Better Bus Network is being implemented starting in 2022

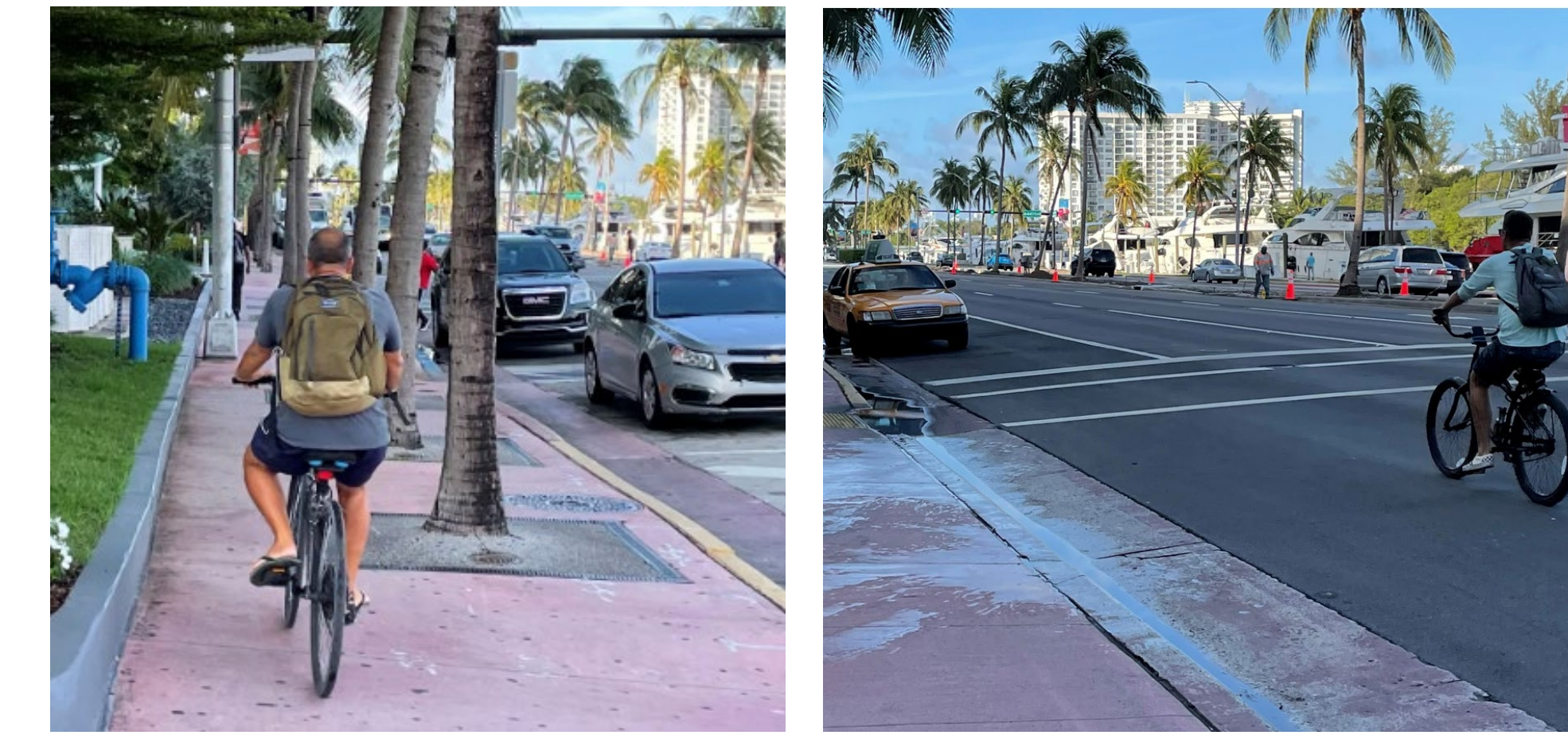
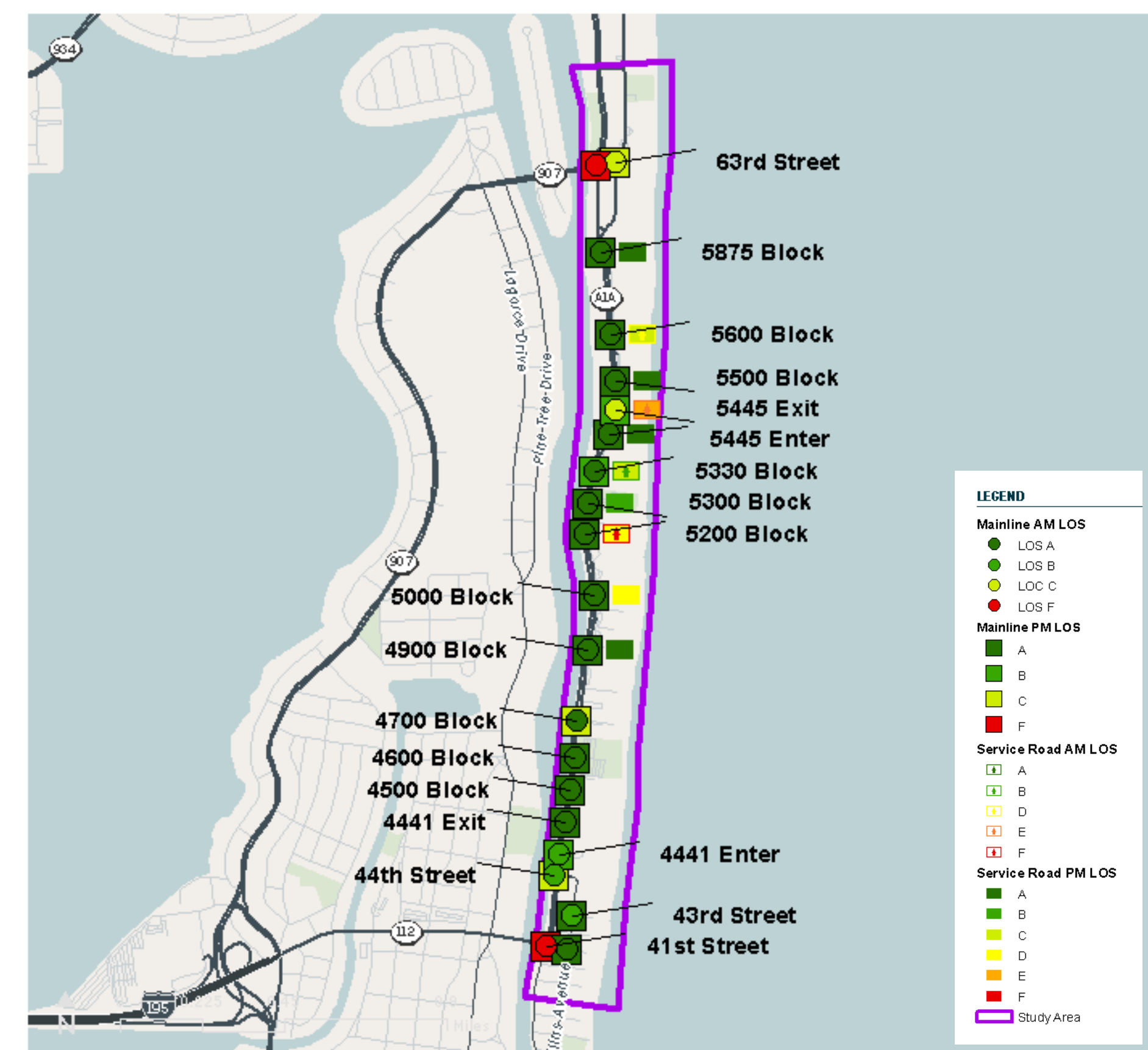
BICYCLE LEVEL OF SERVICE (BLOS)

- There are no dedicated facilities (marked lanes or designated paths) in the study area: BLOS for segments ranges from D to E
- Better facilities along Collins Avenue could help reduce pedestrian/bicyclist conflicts on the Beachwalk

PEDESTRIAN LEVEL OF SERVICE (PLOS)

- Sidewalks are affected by high traffic volumes and speeds; PLOS for segments ranges from C to D
- Signalized driveways lack guidance for pedestrians walking along Collins Avenue
- Utilities and street furniture create sidewalk obstructions

COLLINS MULTIMODAL CORRIDOR | INTERSECTION LOS



TRAFFIC SAFETY

- Many stakeholders note that the unconventional service road design creates a safety concern
- As shown in the “heat map” at right, crash frequency is greatest in the vicinity of 41st and 63rd Streets



INTERACTIVE ENGAGEMENT TOOLS

STATION 2 CONTEXT

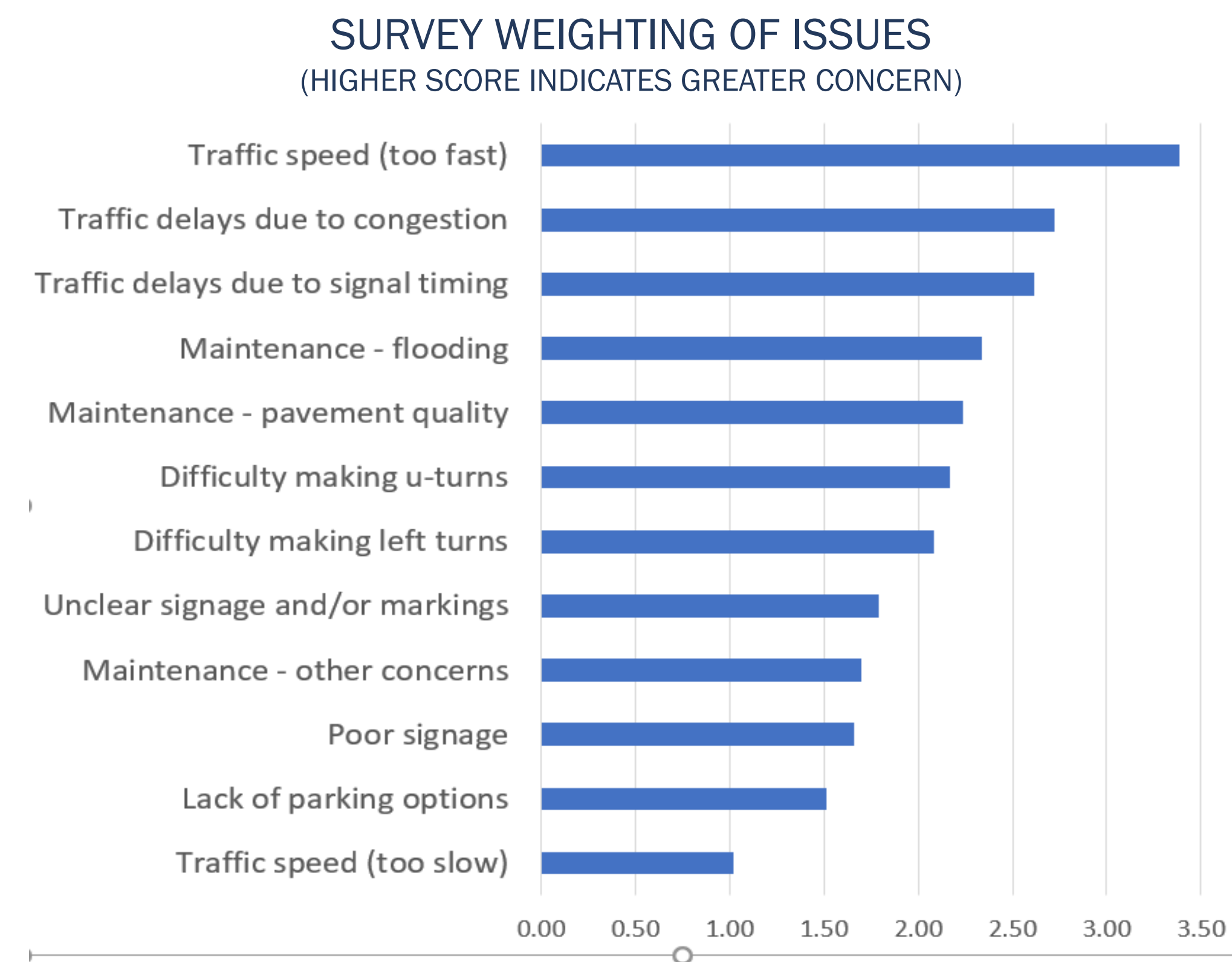
ONLINE SURVEY RESULTS

Survey active fall 2020 through August 2021

- 47 responses, representing
- 70% full-time residents
- 47% use bikes/scooters
- 33% use transit
- 31% retirees

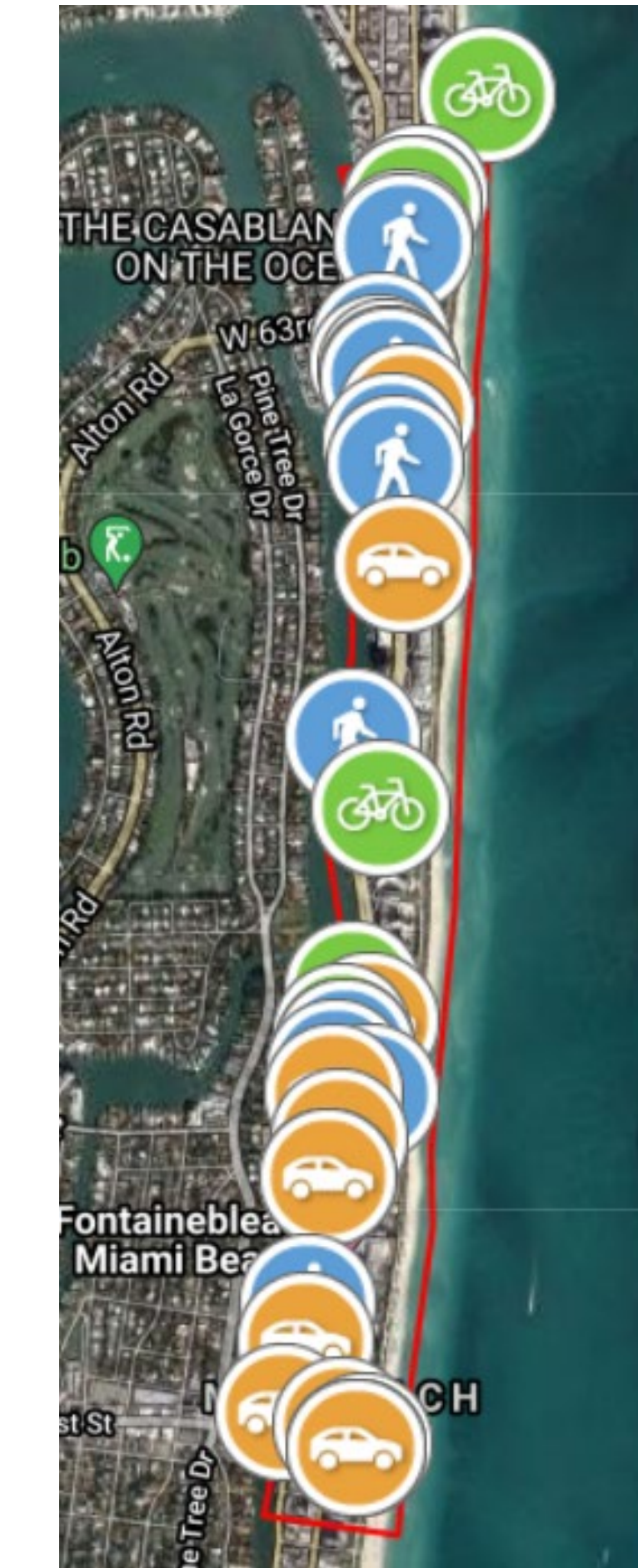
Areas of greatest concern including:

- Bicycle safety (67%)
- Speeding (67%)
- Pedestrian safety (65%)



WIKIMAP

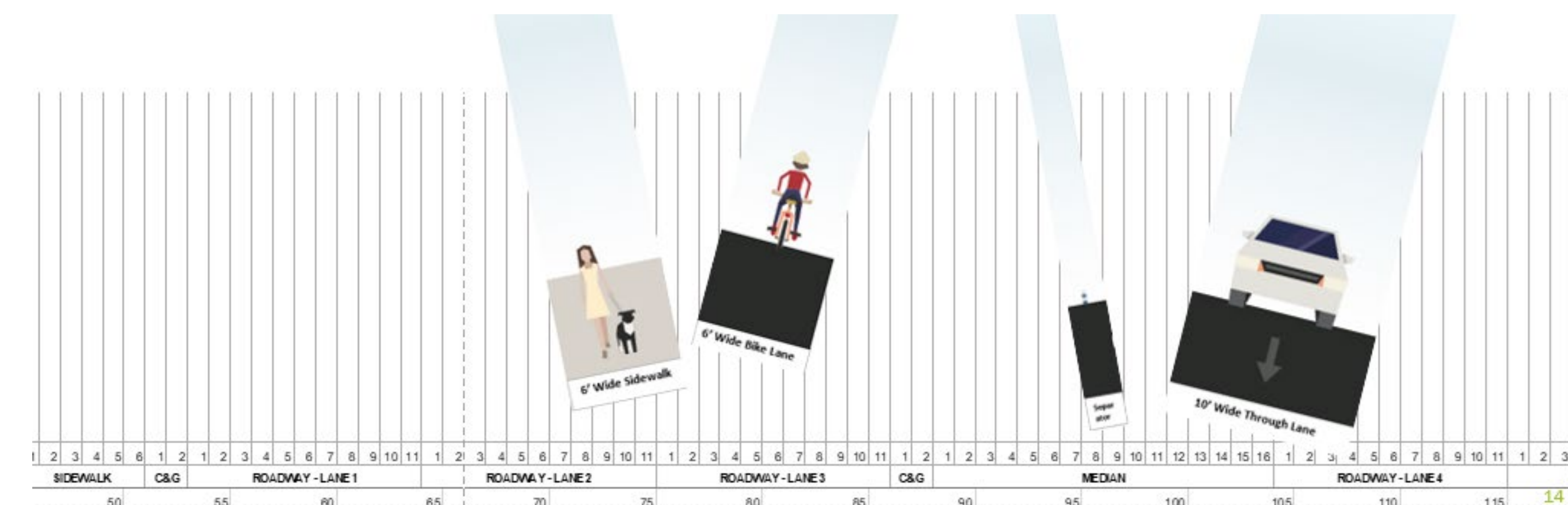
- Site specific concerns and recommendations provided via online platforms
- Can be accessed via FDOT project website: fdotmiamidade.com/collinsavestudy.html
- Will be maintained throughout the course of the study
- Comments to date relatively evenly split among walking, biking, and driving modes
- About two-thirds of the concerns identified are safety concerns



DESIGN WORKSHOP AND STREETMIX

An interactive Design Workshop in August 2021 used the tool StreetMix to evaluate options using cardboard cutouts to allow participants to mix and match design elements

The outcome of the event included interest in both dedicated bicycle and transit space and shared appreciation for the challenge of tradeoffs between retrofit and reconstruction approaches



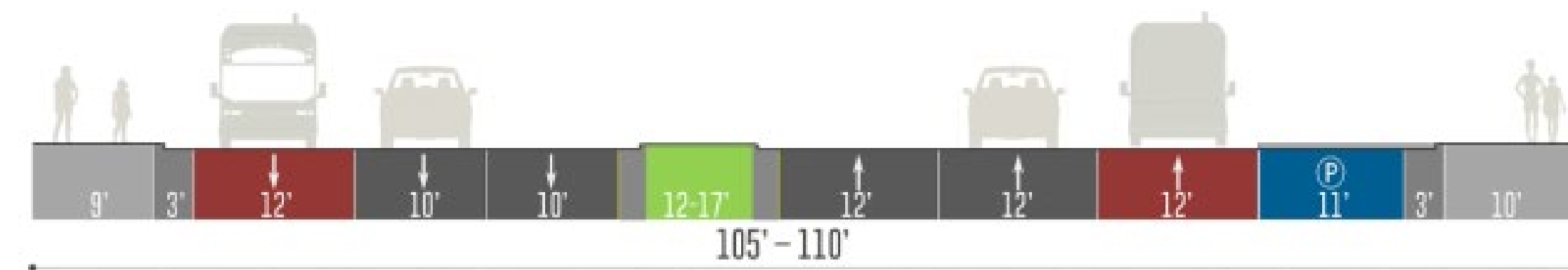
ALTERNATIVES DEVELOPMENT

STATION 2 CONTEXT

The alternatives presented at this public meeting were developed through synthesis of adopted plans, quantitative analysis of current and future conditions, and continuing stakeholder coordination.



The City of Miami Beach Transportation Plan recommends converting the service road space to use by bicyclists and dedicating two of the six travel lanes to buses.



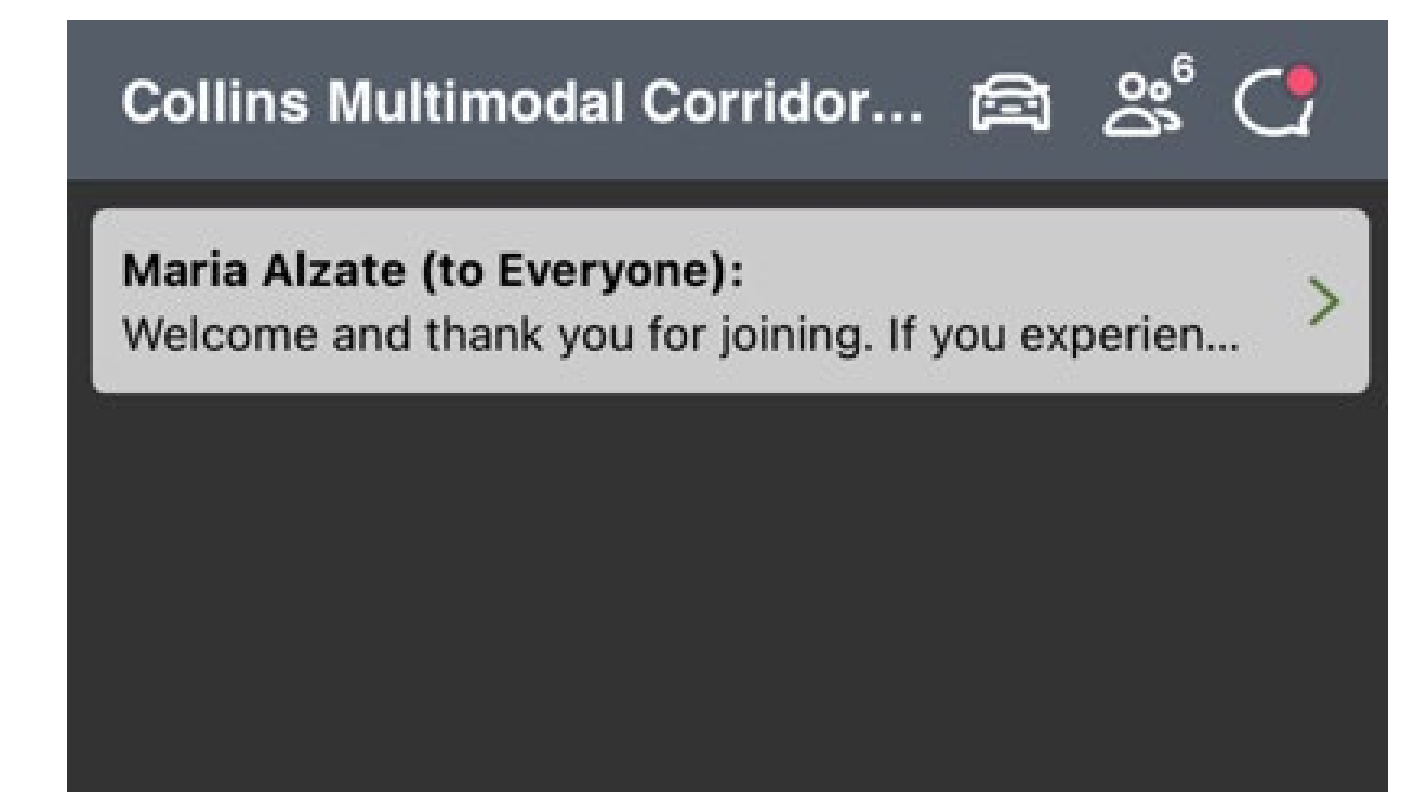
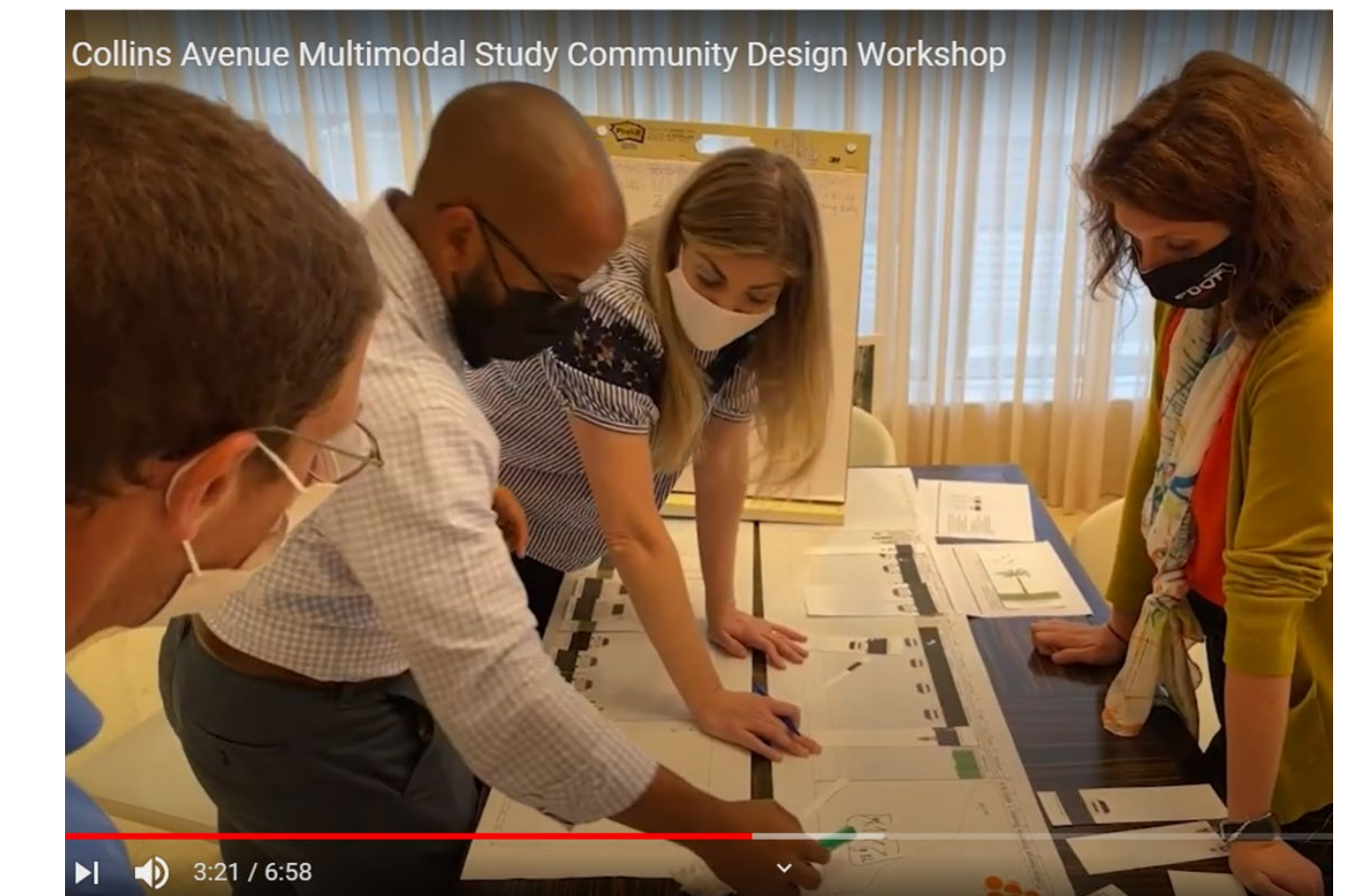
KEY STAKEHOLDER COORDINATION EVENTS

1. Virtual Project Advisory Team (PAT) Meeting #1 was held on Tuesday, March 2, 2021.
2. Collins Avenue Walking Audit Session #1 was held on Wednesday, May 12, 2021.
3. Collins Avenue Walking Audit Session #2 was held on Wednesday, May 19, 2021.
4. MidBeach Neighborhood Association (MBNA) Collins Avenue Working Group Community Design Workshop was held on Wednesday, August 18, 2021.
5. Continuing coordination with the MBNA Collins Avenue Working Group and City of Miami Beach

IDEAS GENERATED FOR ALTERNATIVES

The outreach to date generated several ideas. Some elements have been determined not to be feasible and have been dropped from further study, including double-decking one or more elements, light rail transit, and converting the median into a “paseo” or promenade. Other ideas will be incorporated in the next phase, including:

- Landscaping opportunities (with native species)
- Noise attenuation
- Vehicular speed management
- Maintenance, enforcement



PROJECT ALTERNATIVES: SECTIONS

Several alternative treatments were evaluated to improve bicycle and transit quality of service, with a focus on repurposing the **Existing** service road. These graphics show “typical section” views, looking northward in the vicinity of the 5000 block.

Alternative 1: Retrofit – where the service road exists (between the 4900 and 5875 blocks) this alternative could be constructed without moving outside curbs or major utilities. An **Alternative 1 Truncated** would only involve the current service road limits. For Alternative 1 two options are considered for the same typical section:

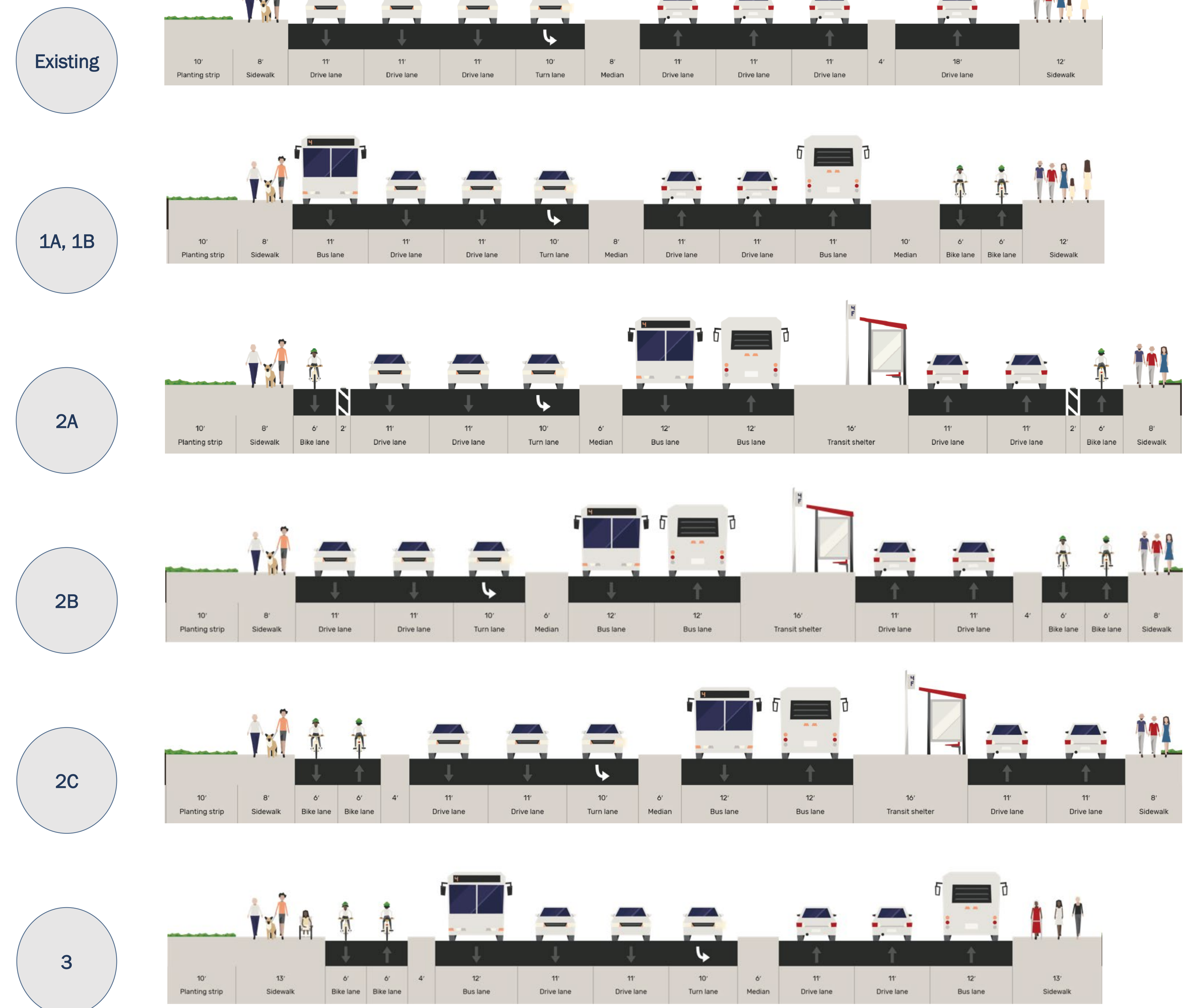
- 1A. With a curb-lane dedicated for transit (shown)
- 1B. Without a curb-lane dedicated for transit

Alternative 2: Reconstruct with transitway – provide more flexibility for protected transit lanes and bicycle facility flexibility by a full roadway reconstruction, but with more environmental studies required and more impacts during construction. Three options are considered:

- 2A. With concurrent-flow bicycle lanes in each direction
- 2B. With a two-way cycle track on the east side
- 2C. With a two-way cycle track on the west side

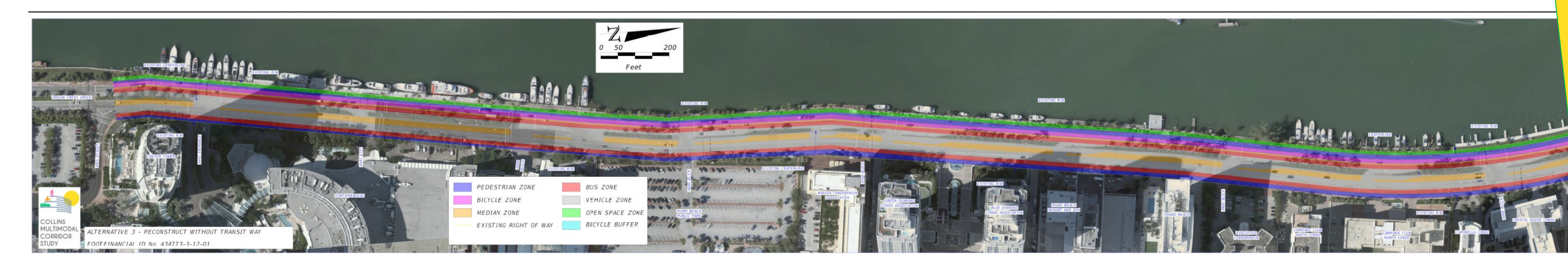
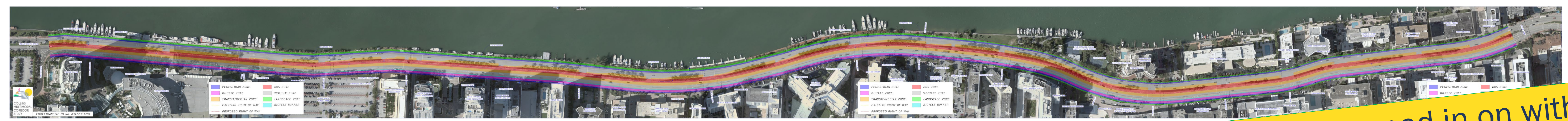
Alternative 3: Reconstruct without transitway – This reconstruction alternative combines elements of Alternative 1 and 2, combining possible dedicated curb lanes for transit and a two-way cycle track on the west side while retaining the Alternative 1 typical section footprint.

STATION 3 ALTERNATIVES



PROJECT ALTERNATIVES: FOOTPRINTS

STATION 3 ALTERNATIVES



These plots for Alts 1A, 2B, and 3 can be zoomed in on with PPT/PDF for review.

FEEDBACK: They will be stand-alone 12' long roll plots with sticky notes to add comments in the margins and we will take zoom-in snapshots for PPT presentations

CANDIDATE TRANSIT TREATMENTS

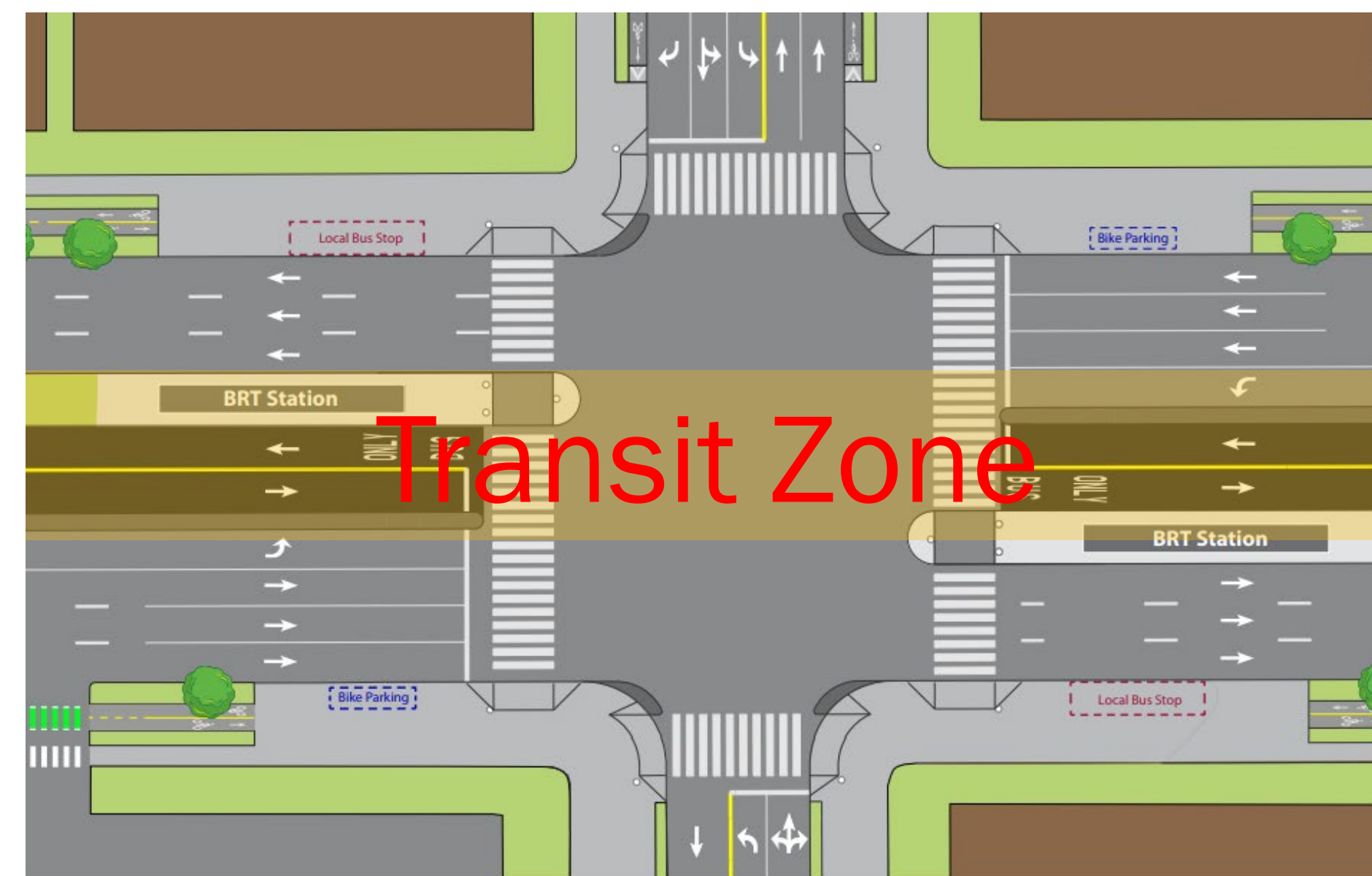
STATION 3 ALTERNATIVES

MEDIAN TRANSITWAY

- Buses travel in exclusive lanes separated by landscaped medians
- Median space used for *far side* bus shelters and *near side* left turn lanes
- Riders cross to the median for boarding
- Usually, part of a larger bus rapid transit (BRT) system
- Requires judgment as to whether all buses are served in the transitway or some remain at the curb; given the number of routes on Collins Avenue, rider expectations would best be served by all buses using the same shelter



Source: NACTO guidance on median transitway (shown with one-direction separated bicycle lanes)

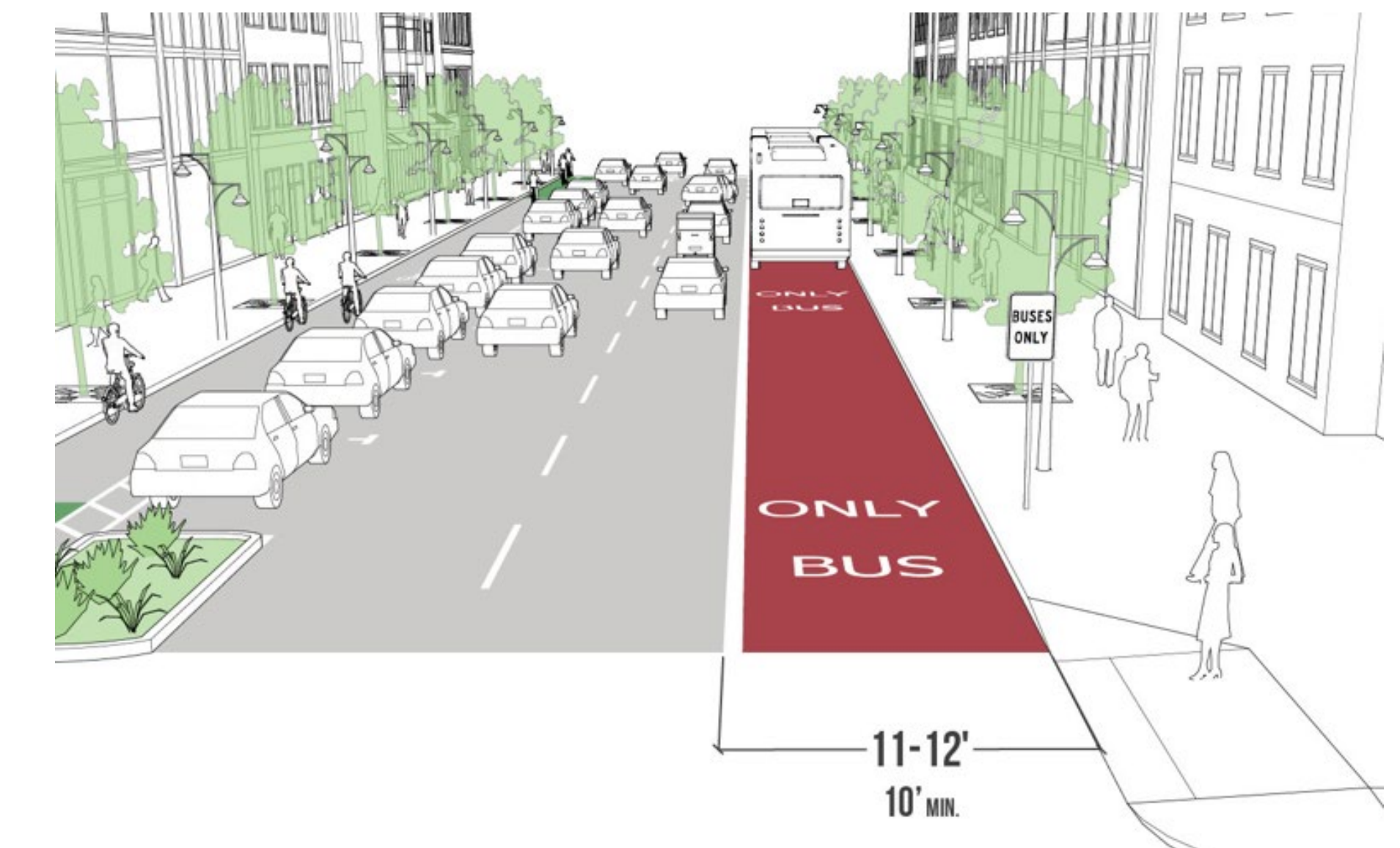


Source: Fairfax County, VA, DOT application of near-side left-turn lanes and far-side bus stops in transit zone

CURB TRANSIT LANE

- Curb lane limited to buses and right turns
- Can be implemented for “queue jumps” or “RED” lanes for shorter applications
- Could also be signed to be used by bicyclists
- Temporary blockages due to right turns or breakdowns are more likely with the curb transit lane, but bypassing blockages is easier since buses are readily able to change lanes as appropriate.

For any preferential transit lane treatment (median or curb), the efficiency of people movement in terms of persons per lane should be considered.



Source: NACTO guidance on median transitway (shown with one-direction separated bicycle lanes)



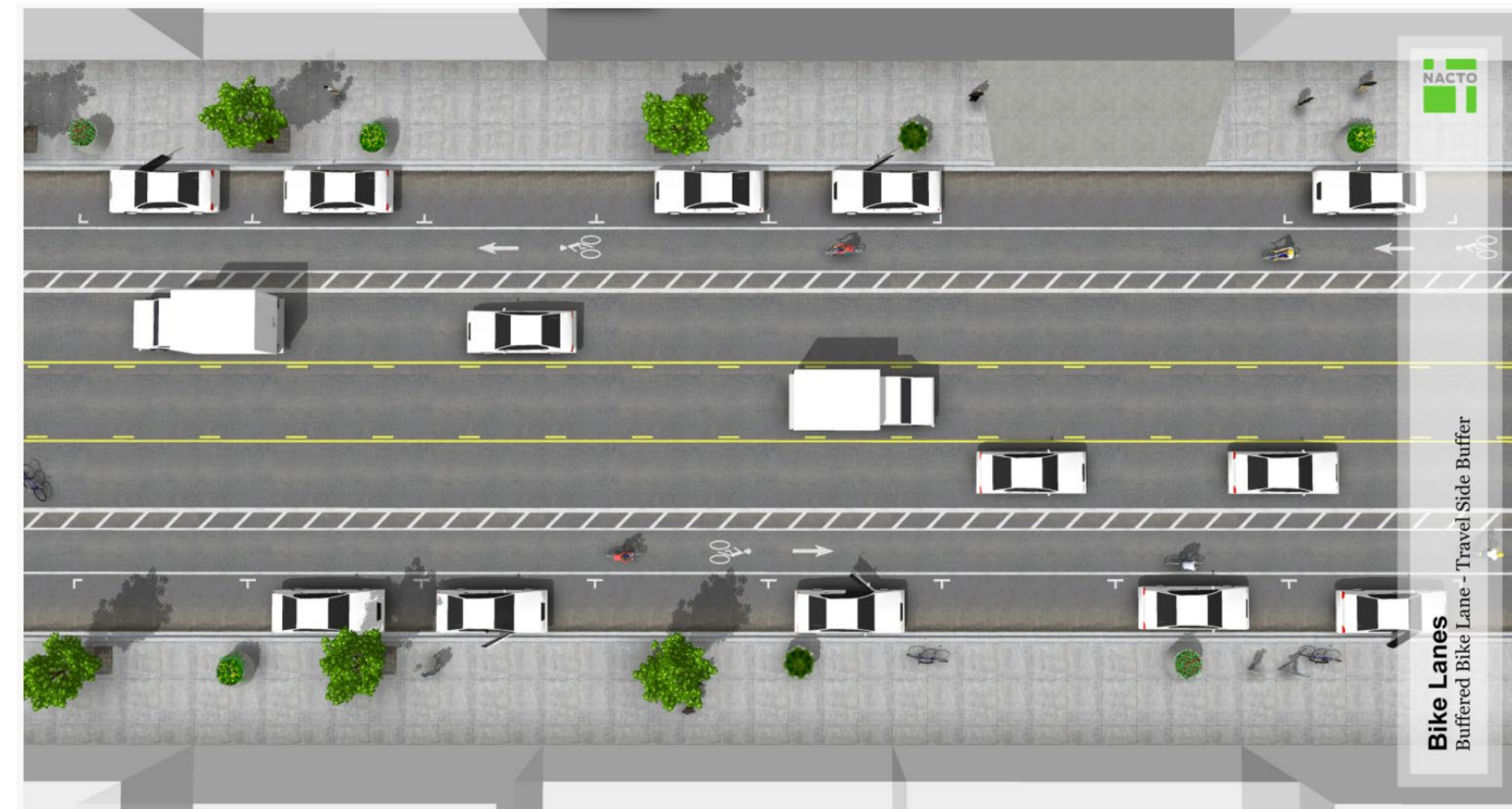
Source: NACTO guidance on shared bus/bike lanes

CANDIDATE BICYCLE TREATMENTS

STATION 3 ALTERNATIVES

CONCURRENT FLOW BICYCLE LANES

- Bicycles have a separate lane between the curb and the rightmost general purpose travel lane
- Most suitable for higher-speed cyclists



Source: NACTO guidance on concurrent-flow buffered bicycle lanes

TWO-WAY CYCLE TRACK

- Bicyclists have a facility for two-way flow on one-side of the street
- Suitable for cyclists not comfortable riding in or near traffic.

A two-way cycle-track needs to serve both north and south directions of bike travel on either the west or east sides of Collins Avenue, with a tradeoff between serving the greatest number of users (likely the east side) and providing the best quality of service to the cyclist (likely the west side).



Source: NACTO guidance on two-way cycle track

BUFFER / SEPARATOR TREATMENTS

- A variety of separation treatments are available; the best treatment depends on visibility, degree of porosity to/from the lane, and maintenance



West side offers:

- Better access to bridges to mainland
- Fewer driveway conflicts

East side offers:

- Better access to beaches
- Greater access for non-recreational origins/destinations which are greater on eastern side of street



Source: NACTO guidance on two-way cycle track

COMPARING ALTERNATIVES

STATION 3 ALTERNATIVES

Comparison of effects across Alternative / Option choices based on user perspectives

Best	Intermediate	Worst
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The comparison of alternatives highlights the tradeoffs inherent in the corridor:

- **Alternative 1 - Retrofit** provides meaningful improvement in multimodal conditions with limited right-of-way and property impacts
- **Alternative 2 – Reconstruct with median transitway** provides more comprehensive improvement to improve resilience and urban design but with greater right-of-way and property impacts
- **Alternative 3 – Reconstruct without median transitway** is a hybrid that retains the benefits of full reconstruction for resilience and urban design but with a smaller physical footprint

The Alternatives are fundamentally different so that a phased implementation does not facilitate a short term retrofit with a longer-term reconstruction.

Within Alternative 1, two phasing opportunities exist:

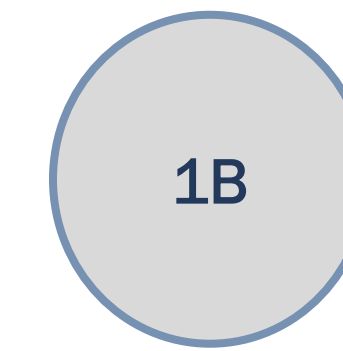
- Truncated approach in the near term followed by Full approach in the longer term, and
- Option B in the near term followed by restriping the curb lane for transit in Option A in the longer term

Elements	Alternative 1 - Retrofit			Alternative 2 - Reconstruct With Median Transitway			Alternative 3 - Reconstruct Without Median Transitway	
	Full		Truncated	Option A		Option B		Option C
	Option A	Option B	Option B	Option A	Option B	Option C		
Transit lane	Dedicated curb lane	None		Dedicated median lanes			None	
Bicycle lane	East side cycle track			Concurrent flow lanes	East side cycle track	West side cycle track	West side cycle track	
Limits of construction evaluated	44th - 5875 block		4900 block - 5875 block	44th - 5875 block			44th - 5875 block	
User Perspectives								
Collins Avenue motorist	Notable delay			Notable delay				
Driveway user	Limited U-turns, two-stage entrance/exits	Two-stage entrance/exits			Two-stage entrance/exits		Two-stage entrance/exits	
Local transit rider	Curb bus lane may help increase bus speeds			Median bus stops surrounded by traffic may be slightly less welcoming				
Through transit rider	Curb bus lane may help increase bus speeds			Median bus runningway less susceptible to driveway activity friction				
Pedestrian walking along Collins Avenue - west side						Greater separation from traffic		
Pedestrian walking along Collins Avenue - east side	Greater separation from traffic		Greater separation from traffic (for shorter distance)		Greater separation from traffic			
Pedestrian crossing Collins Avenue	Shorter crosswalk lengths			Shorter crosswalk lengths				
Delivery vehicle	Fewer loading areas at hotels/condos		Fewer loading areas at condos	Fewer loading areas at hotels/condos				
Casual or recreational cyclist oriented toward beaches	Better access to Beachwalk				Better access to Beachwalk			
Casual or recreational cyclist oriented toward mainland						Better access to bridges		
Advanced cyclist				Greater separation with low side-friction				
Safety	Removes high-speed weaving on frontage road, introduces many new driveway/cyclist conflicts			Removes high-speed weaving on frontage road, introduces many new driveway/cyclist conflicts		Removes high-speed merges on frontage road, introduces some new cyclist/driveway conflicts		
Drainage	Retain current trunk lines			Could elevate roadbed slightly to address some sea level rise				
Aesthetics and amenities	Retrofit opportunities focused on spot locations where space is available			Full reconstruction facilitates comprehensive / continuous design approach				
Impacts and timeline								
Historic District impacts mitigation	Notable effects south of 4900 block		Minor	Notable effects			Notable effects south of 4900 block	
Natural environmental impacts mitigation	Minor		Minor	Minor			Minor	
Estimated right-of-way acreage	0.3 acres / 10 properties		Negligible	1.3 acres / 43 properties			0.3 acres / 10 properties	
Estimated capital cost (excluding right-of-way)	\$4M - \$6M		\$2M - \$4M	\$25M - \$35M				
Approval process complexity	Design and ROW		Design	PD&E study, design, ROW				

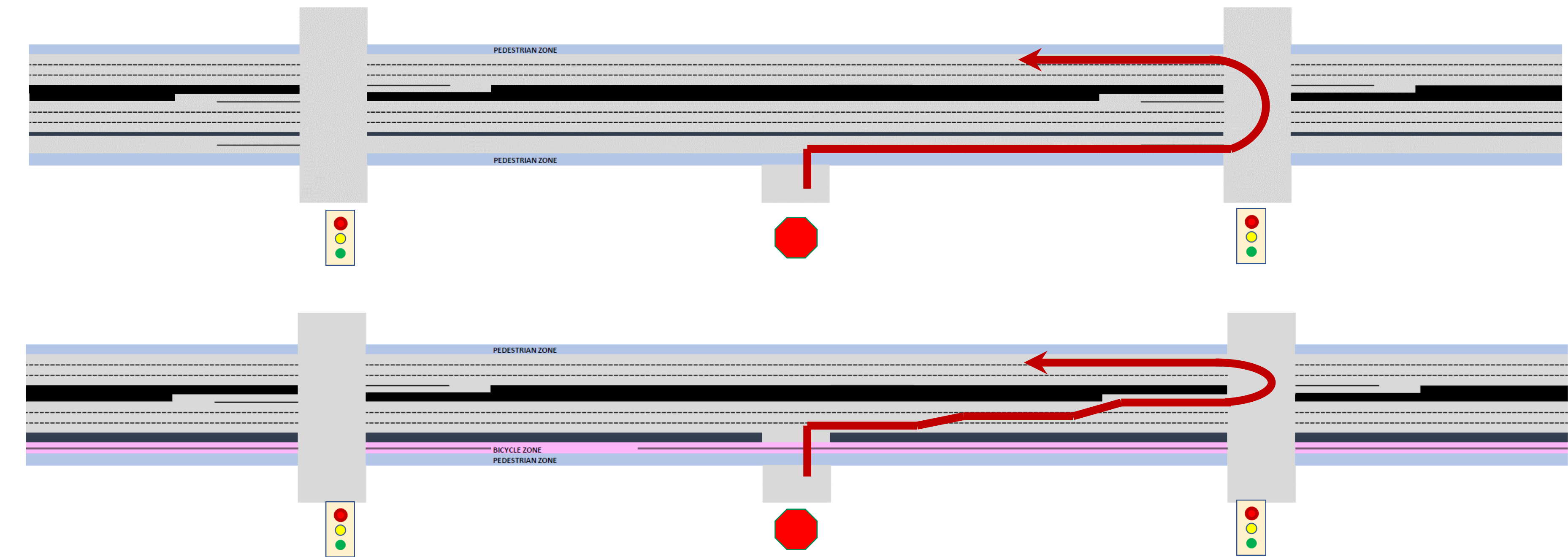
EFFECTS ON LOCAL ACCESS

REMOVING THE SERVICE ROAD

- Moves northbound U-turns from the service road to the mainline road and requires a sufficient gap to cross NB mainline traffic flow
- Makes conditions for service road properties (4900-5875 Block properties on east side) that are the same as for properties throughout the rest of the study area
- Can be facilitated with signal timing strategies that create longer gaps in upstream Collins Avenue traffic

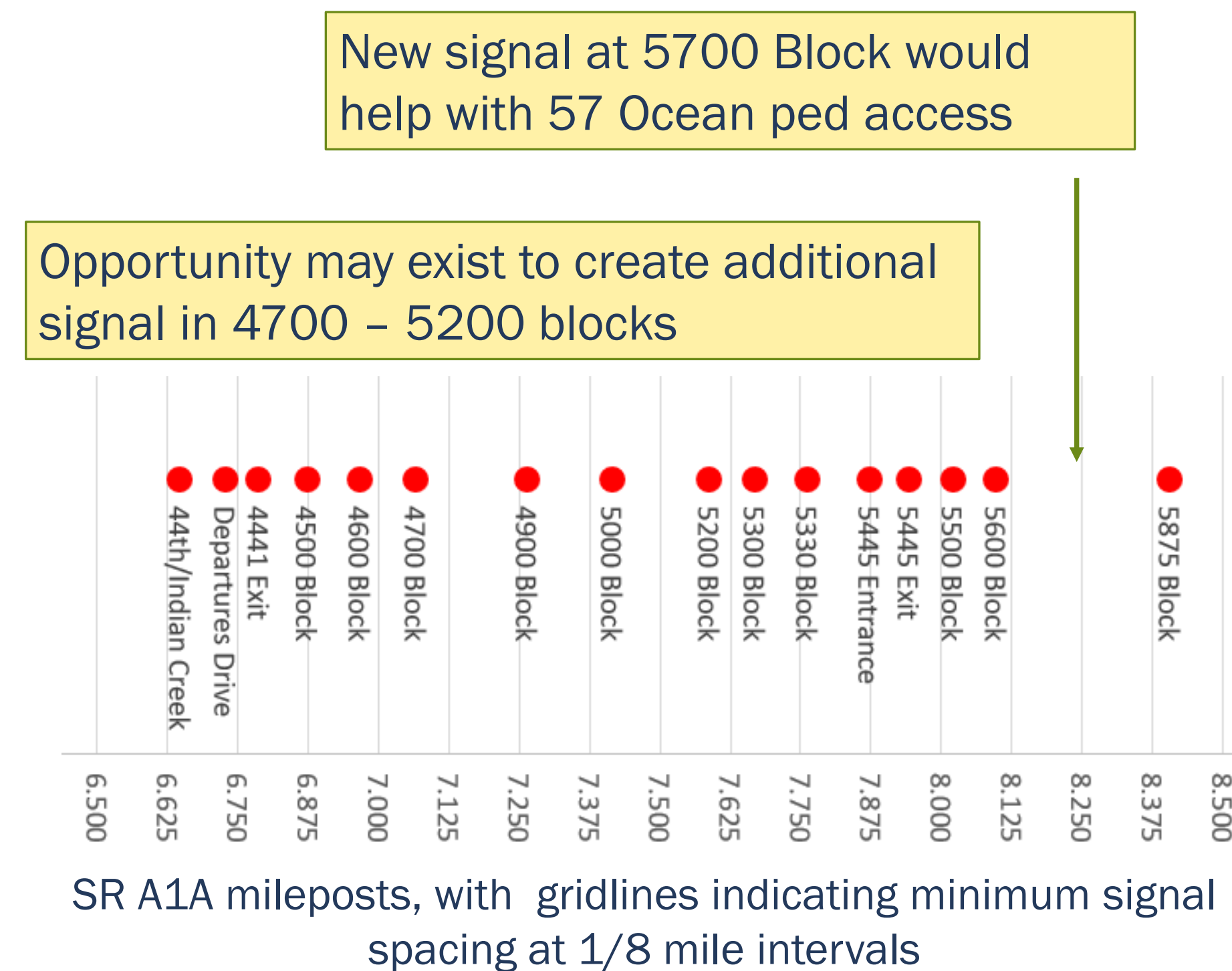


STATION 3 ALTERNATIVES



CONSIDERING ADDITIONAL SIGNAL LOCATIONS

- Between 44th Street and the 5875 Block, signals are generally located at intervals close to the 1/8-mile minimum distance recommended for the Urban Core (C6) context.
- Additional signals would help manage coordinated flow along/across Collins for all modes.



ADDRESSING CYCLE-TRACK SAFETY

A two-way cycle-track would require driveway users to be aware of cyclists traveling in both directions and may require a two-stage driveway exit:

1. to cross the sidewalk and cycle-track,
2. to make the right turn onto the Collins Avenue mainline.

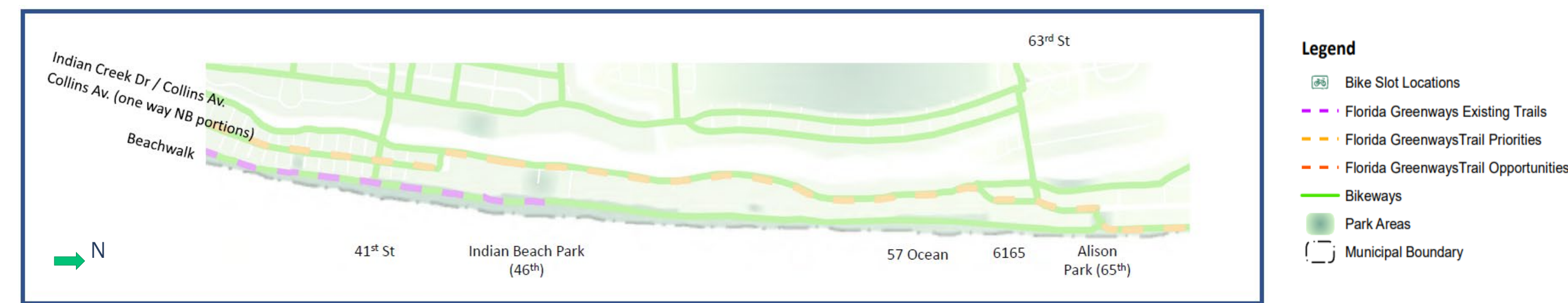


Source: Virginia Department of Transportation (showing two-stage entrance markings from Netherlands)

EFFECTS ON LOCAL ACCESS

STATION 3 ALTERNATIVES

MIAMI BEACH 2019 COMPREHENSIVE PLAN

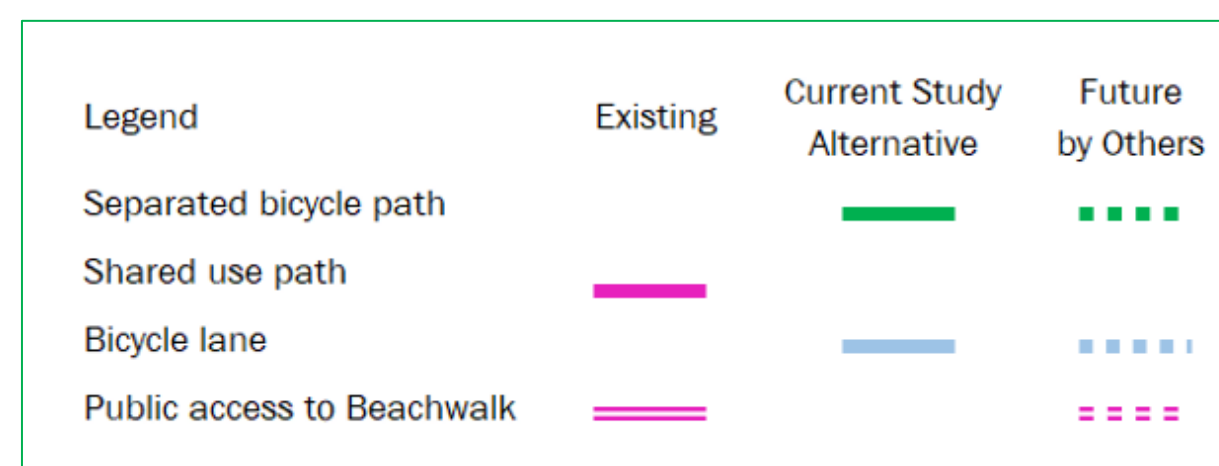
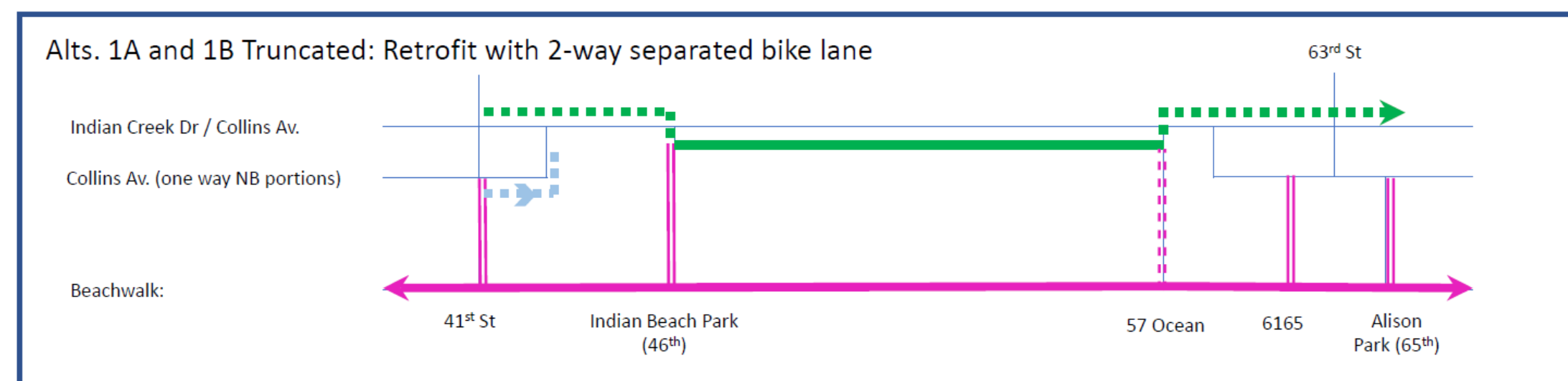
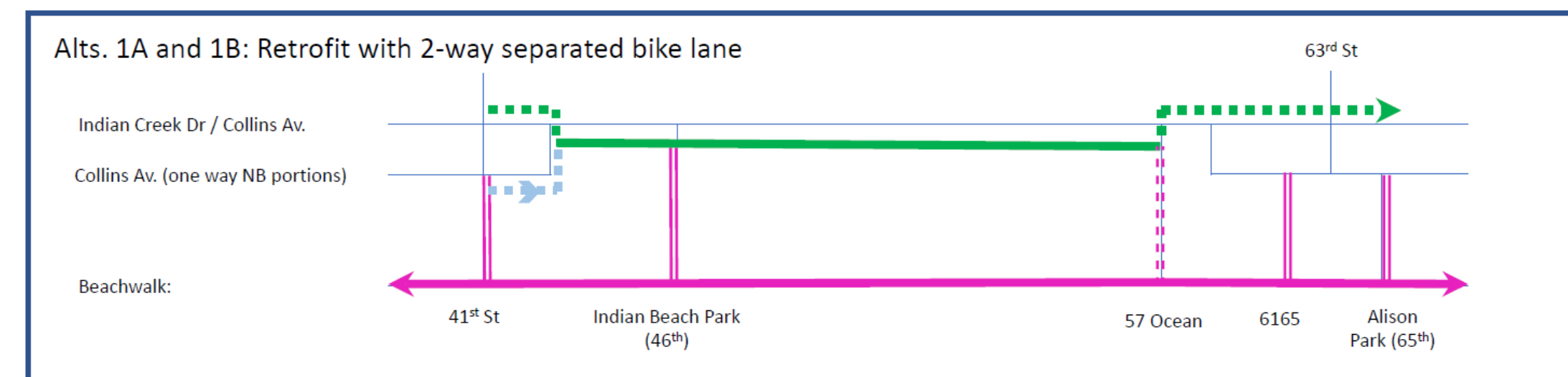


The Miami Beach 2019 Comprehensive Plan identifies both Collins Avenue and portions of the Beachwalk as designated elements of the Florida Greenways Trail. Greater reliance on Collins Avenue to accommodate trail users provides a desired parallel route for bicyclists to reduce bicycle/pedestrian conflicts on the Beachwalk.

Public comment has also focused on opportunities to connect these north-south bicycle facilities to the Indian Creek bridges at 41st and 63rd Streets. Future protected facilities for bicyclist travel beyond the current conceptual design limits may be more practical along Indian Creek Drive than Collins Avenue, due to available space to repurpose pavement. In any case where a bicycle facility crosses Collins Avenue, traffic signal protection is needed (i.e., a new signal in the 5700 block would be desired). in all cases shown.

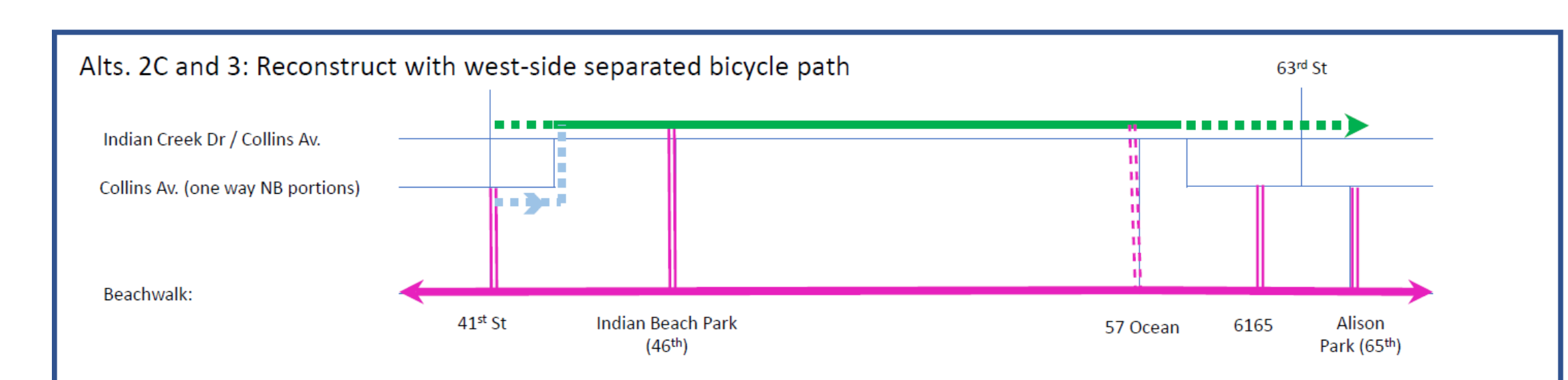
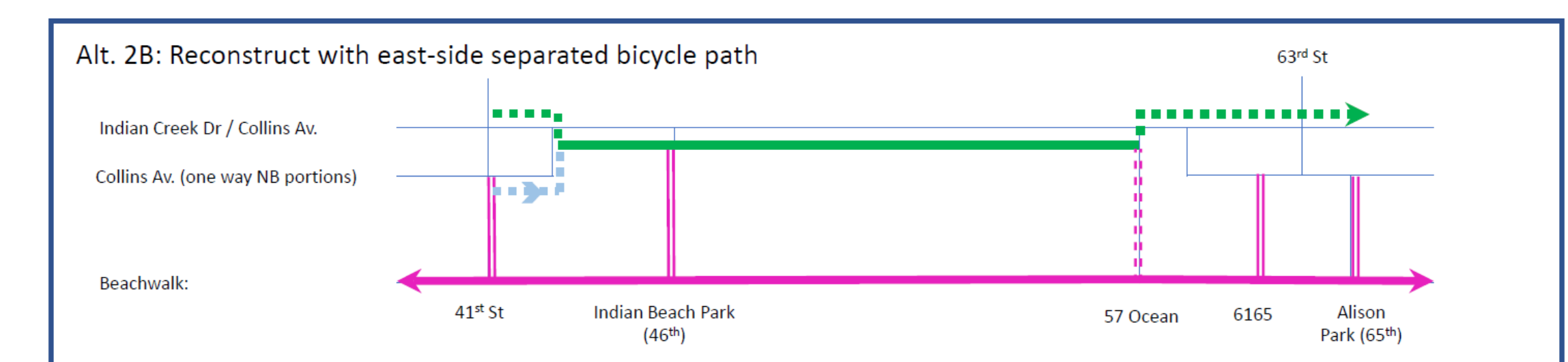
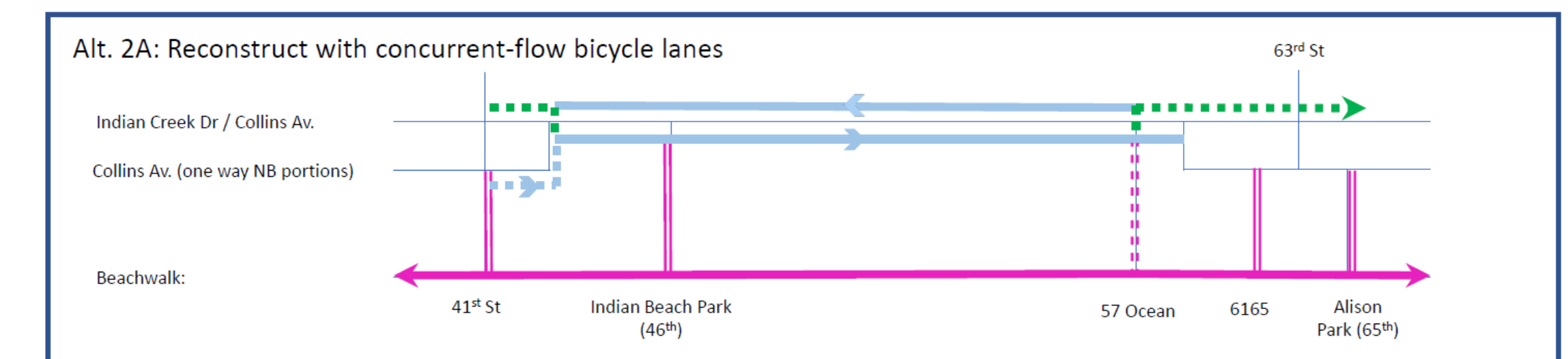
ALTERNATIVE 1 – RETROFIT OPTIONS

Retrofit options in Alternative 1 would leverage connections to the Beachwalk at 46th Street and 57 Ocean to provide redundancy for the Florida Greenways Trail.




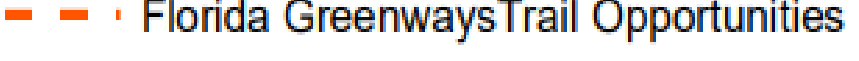


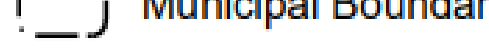


ALTERNATIVES 2 AND 3 – RECONSTRUCT OPTIONS

Reconstruct options in Alternatives 2 and 3 would create additional flexibility for either on-road bike lanes or a separated bike path on either west or east sides of the road

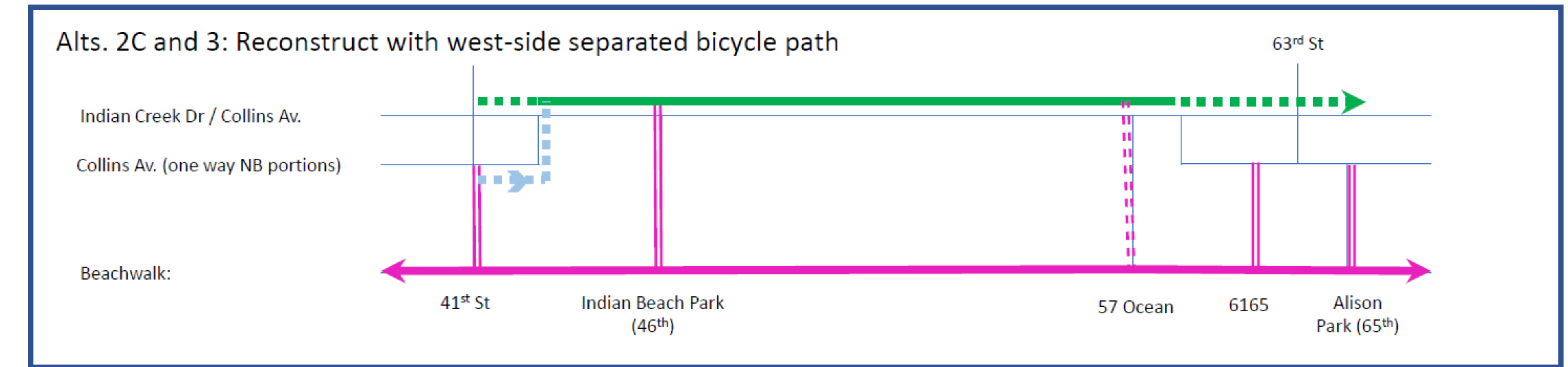
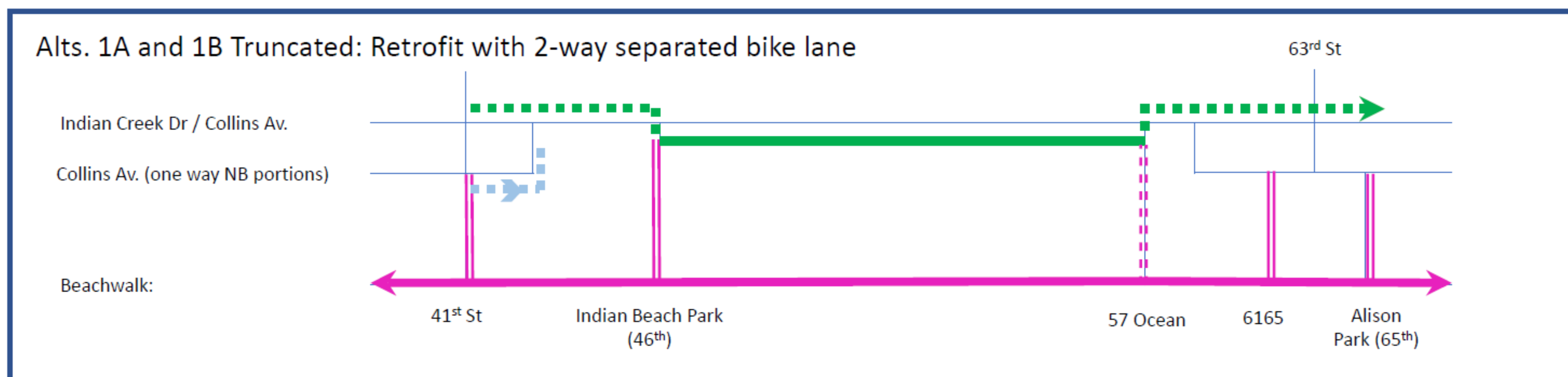
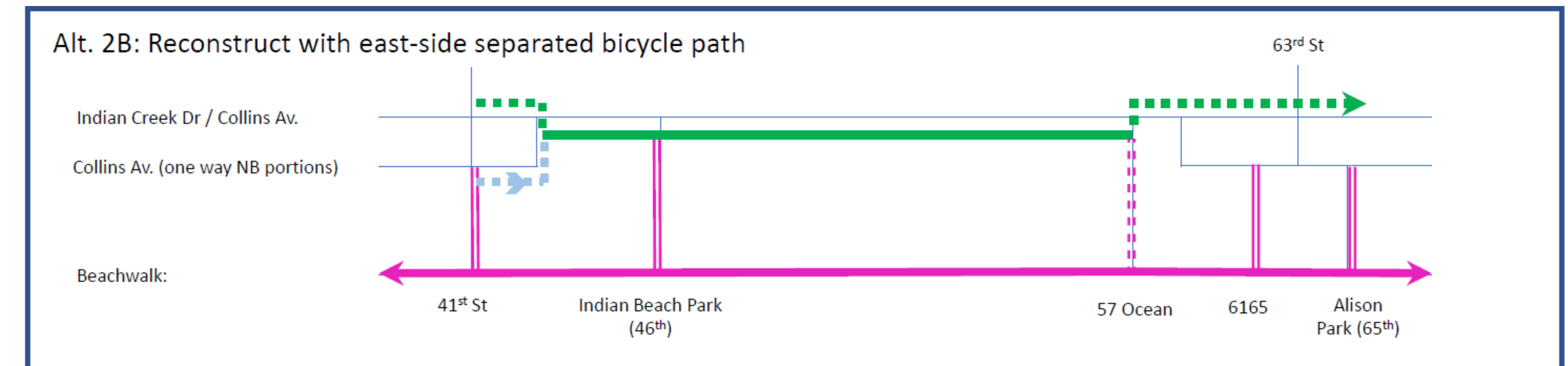
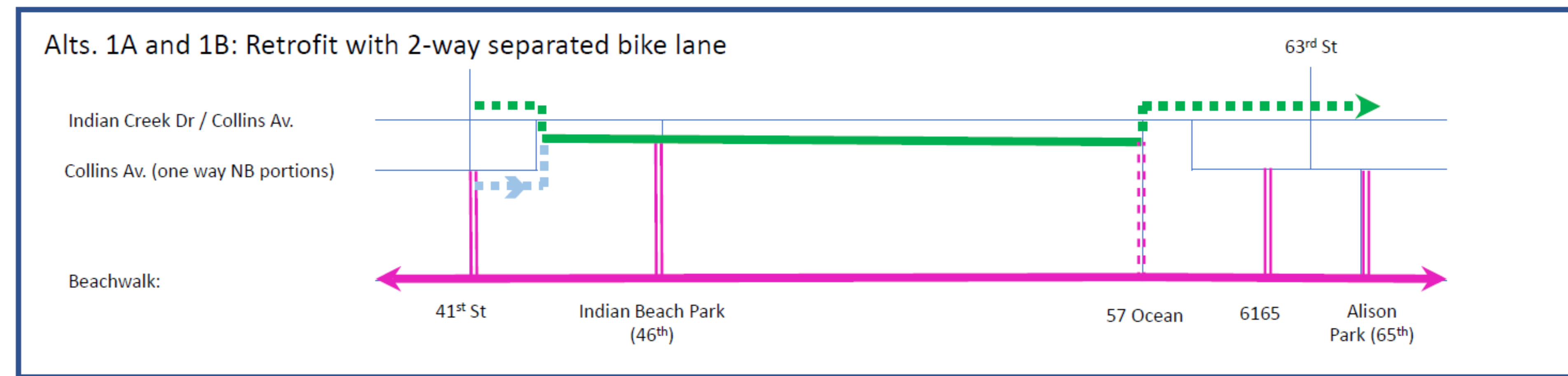
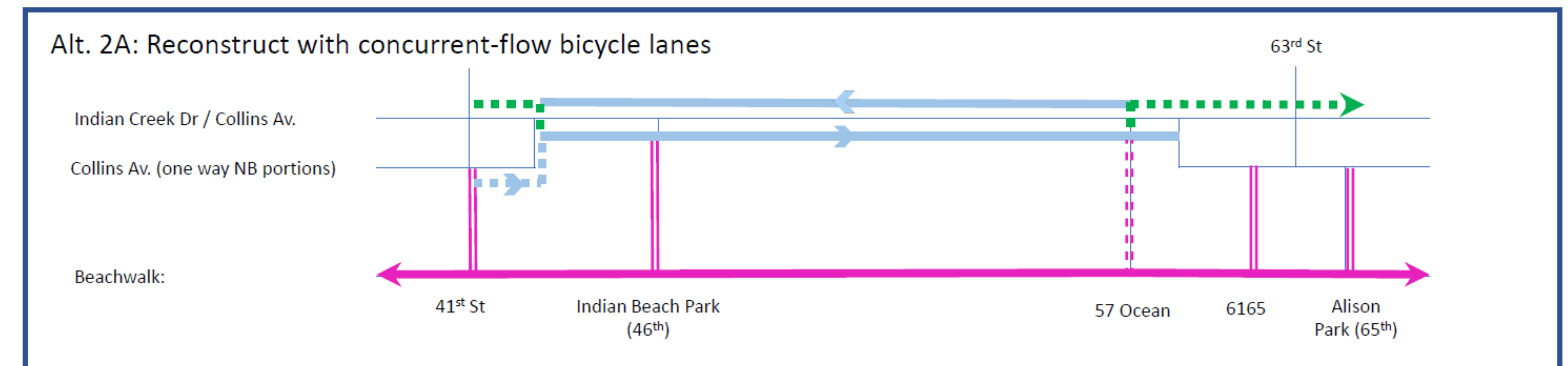
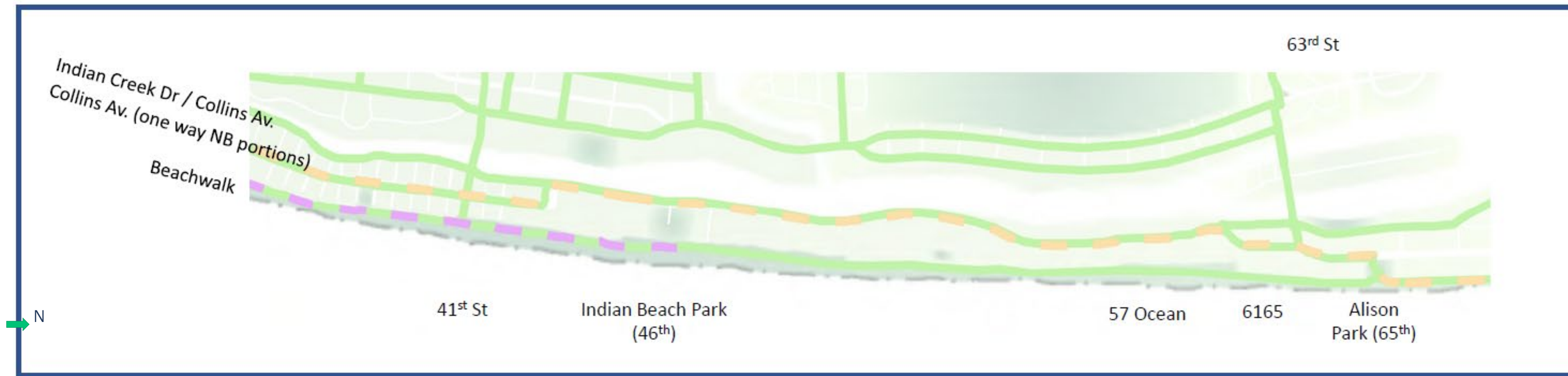


Legend

-  Bike Slot Locations
-  Florida Greenways Existing Trails
-  Florida Greenways Trail Priorities
-  Florida Greenways Trail Opportunities
-  Bikeways
-  Park Areas
-  Municipal Boundary

Legend

	Existing	Current Study Alternative	Future by Others
Separated bicycle path			
Shared use path			
Bicycle lane			
Public access to Beachwalk			



WHAT TRANSIT/BIKE ELEMENTS DO YOU PREFER?

STATION 3 ALTERNATIVES

Please indicate your preference for the type of transit and bicycle element that you find most desirable, without considering total costs or impacts. Place one dot for most desired transitway treatment and another dot for most desired bikeway treatment.

TRANSITWAY TREATMENT			BIEKWAY TREATMENT		
None (Alts 1B, 3)	Curb Lane (Alt 1A)	Median (Alts 2A, 2B, 2C)	West Side Cycle Track (Alts 2C, 3)	Concurrent Flow Bicycle Lanes (Alt 2A)	East Side Cycle Track (Alts 1A, 1B, 2B)

STUDY DETAILS

STATION 4 NEXT STEPS

After identifying which alternative(/ option best resonates with community feedback, the study team will develop a conceptual plan that includes further incorporation of design details, including treatments to address several areas of stakeholder interest across all alternatives.

SERVICE VEHICLE ACCESS

- Opportunities for loading zones both physically (greatest in Alt. 1A / 1B) and/or managed by time of day
- Consideration of operational limitations as shown in graphic below
- As one example, U-turns for autos in Alt. 1A would require cars to encroach into the curb transit lane; large trucks would be prohibited.



SPEED MANAGEMENT

Approaches to include:

- Design elements such as curb bulb outs and horizontal deflection as devices to visually frame and narrow the roadway for motorists
- Guidance regarding traffic signal operations and education/enforcement
- Consideration of noise attenuation strategies
- Multiple “E”s: engineering, education, enforcement, encouragement, evaluation



DRIVEWAY ACCESS

Reconstruction alternatives (2 and 3) will affect driveway aprons and public/private coordination regarding:

- Site access and circulation
- Monumental entrances and sight distance
- Maintenance of traffic during construction



AESTHETICS AND AMENITIES

STATION 4 NEXT STEPS

For all alternatives, elements both within and near the right-of-way can help facilitate safe and appropriate activities by all users, contribute to a high-quality sense of place, and can help to improve public health.

AESTHETICS AND AMENITIES OBJECTIVES:

be GREEN, COOL, and ACTIVE:

- Native foliage contributes to both increasing pedestrian comfort and reducing carbon footprint
- Shade can be created through both natural and manmade design elements
- Activating elements, ranging from benches to bikeshare stations, can encourage routine physical activity and support programmed special events.



LOCATION OPPORTUNITIES:

Use available space within the public right-of-way to achieve specific design objectives

MEDIAN AND BUFFER LANDSCAPING

Medians and other buffers in the typical section provide opportunities for a wide variety of landscape treatments including ground cover, shrubbery, planters, and street trees.



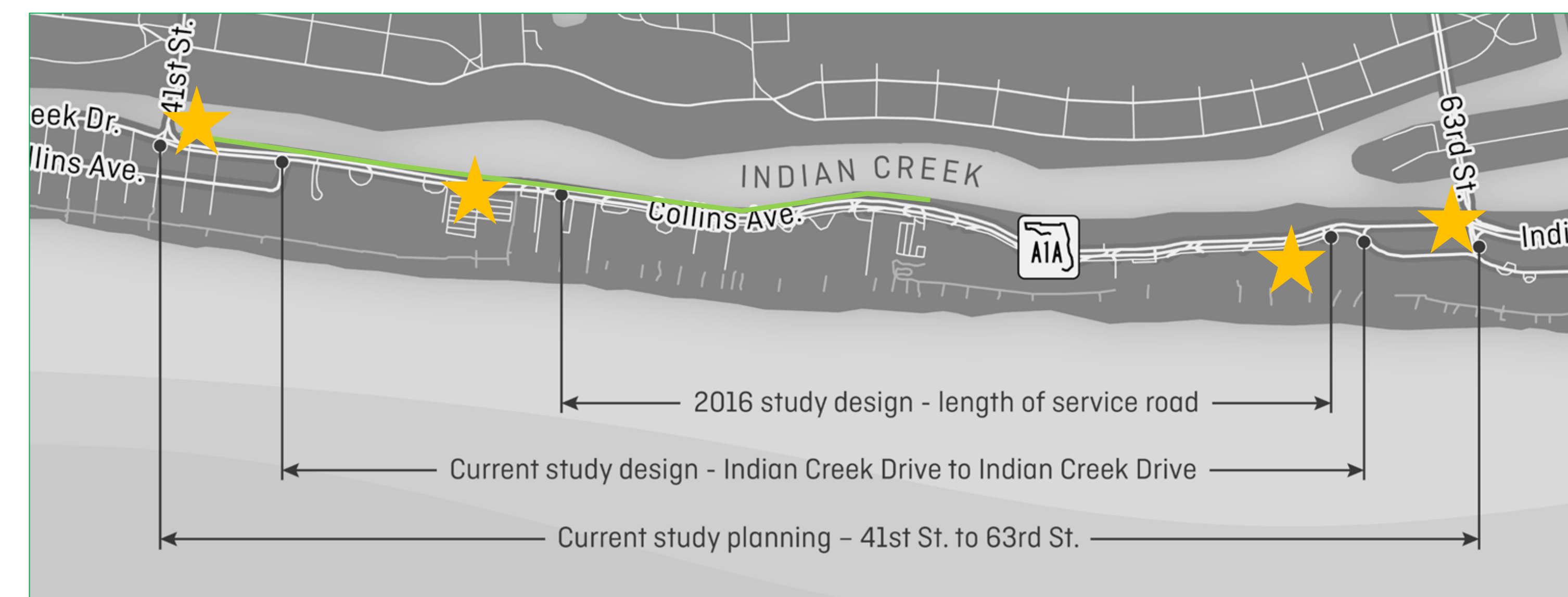
OPEN SPACE ZONE

Opportunities exist for landscaping along Indian Creek (recognizing access to boat docks must be maintained)



GATEWAY TREATMENTS

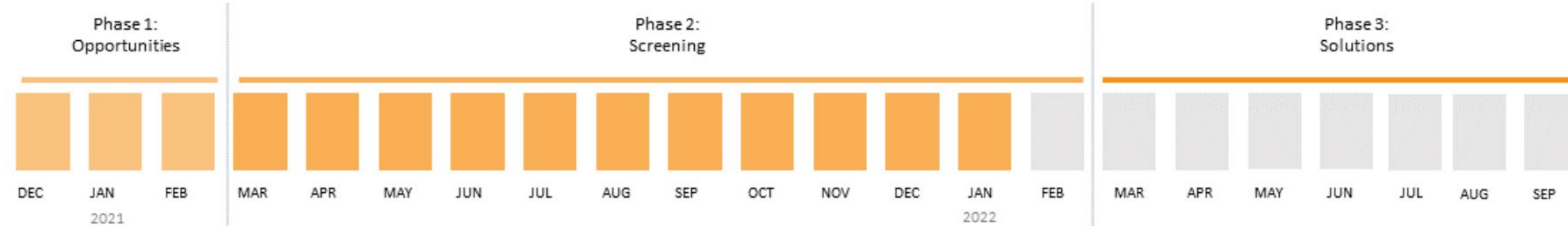
Focused treatments can help with wayfinding and celebrate community identity, particularly at key junctions such as Beachwalk access points



ENGAGEMENT

NEXT STEPS WILL INCLUDE:

- Completing the Screening phase with a briefing to the Miami Beach Mayor and Council
- Documenting existing conditions and project forecast traffic
- Developing detailed concept for alternative/options retained for further study
- Continuing “meet where you are” public engagement
- Second public meeting on recommendations in late spring 2022



We welcome your continued comments! Please feel free to comment after the meeting by any one or more of the following methods:

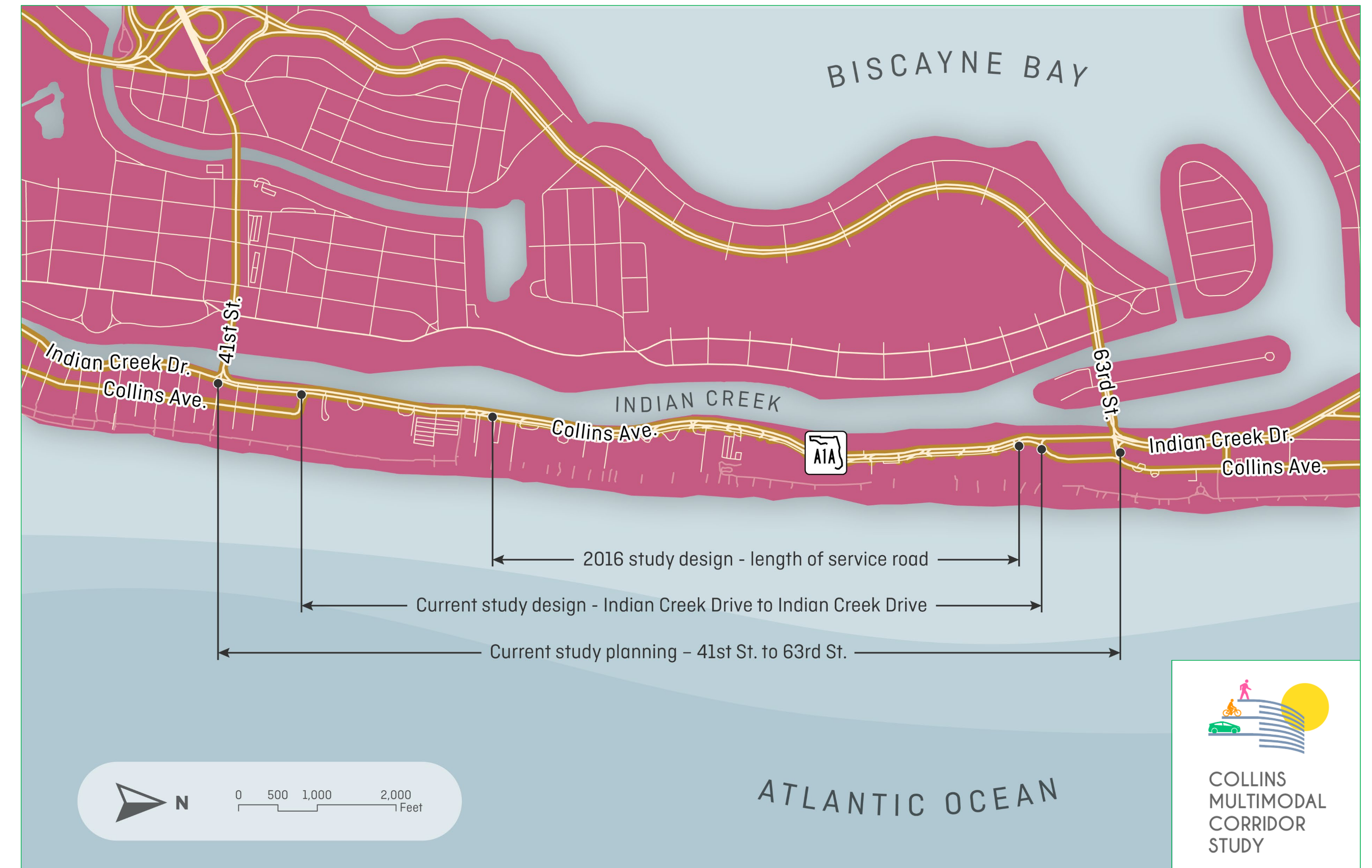
- Describing your concerns / suggestions directly on the project WikiMap
- Contacting one of our study leaders:

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STATION 4 NEXT STEPS



Scan this QR Code to access fdotmiamidade.com/collinsavestudy.html
 For access to study information and the project Wikimap

