Miami Beach City Commission Workshop on Pedestrian and Bicycle Safety

May 24, 2021

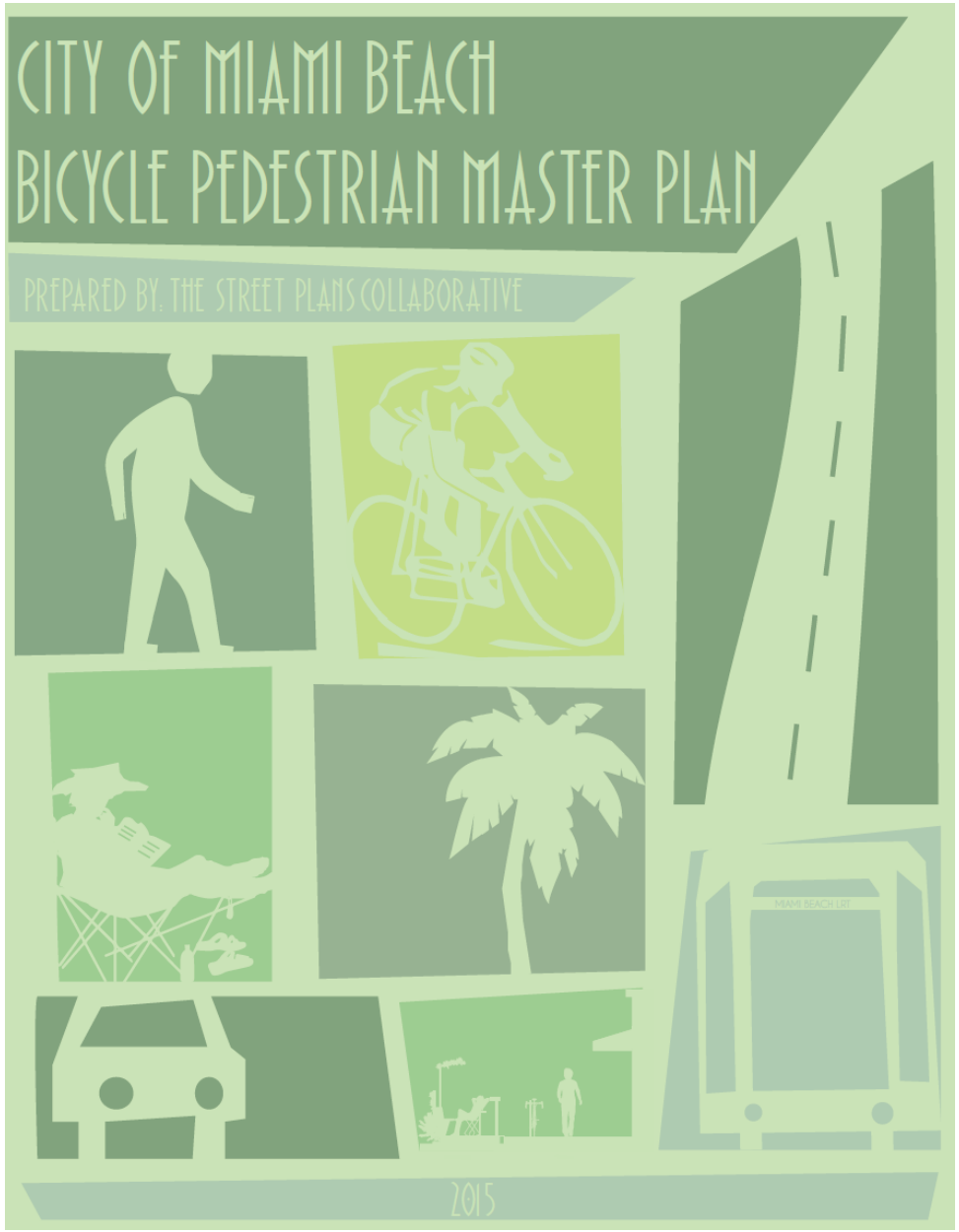
MIAMIBEACH

Meeting Agenda

- Introduction and Purpose of Workshop
- Bicycle-Pedestrian Master Plan Background
- Current Status of Bicycle-Pedestrian Master Plan Implementation
- Assessment of Leading International and National Cities
- City of Cambridge, MA Cycling Safety Ordinance
- Potential Quick-Build Pilots
- Challenges and Opportunities in Miami Beach
- Discussion

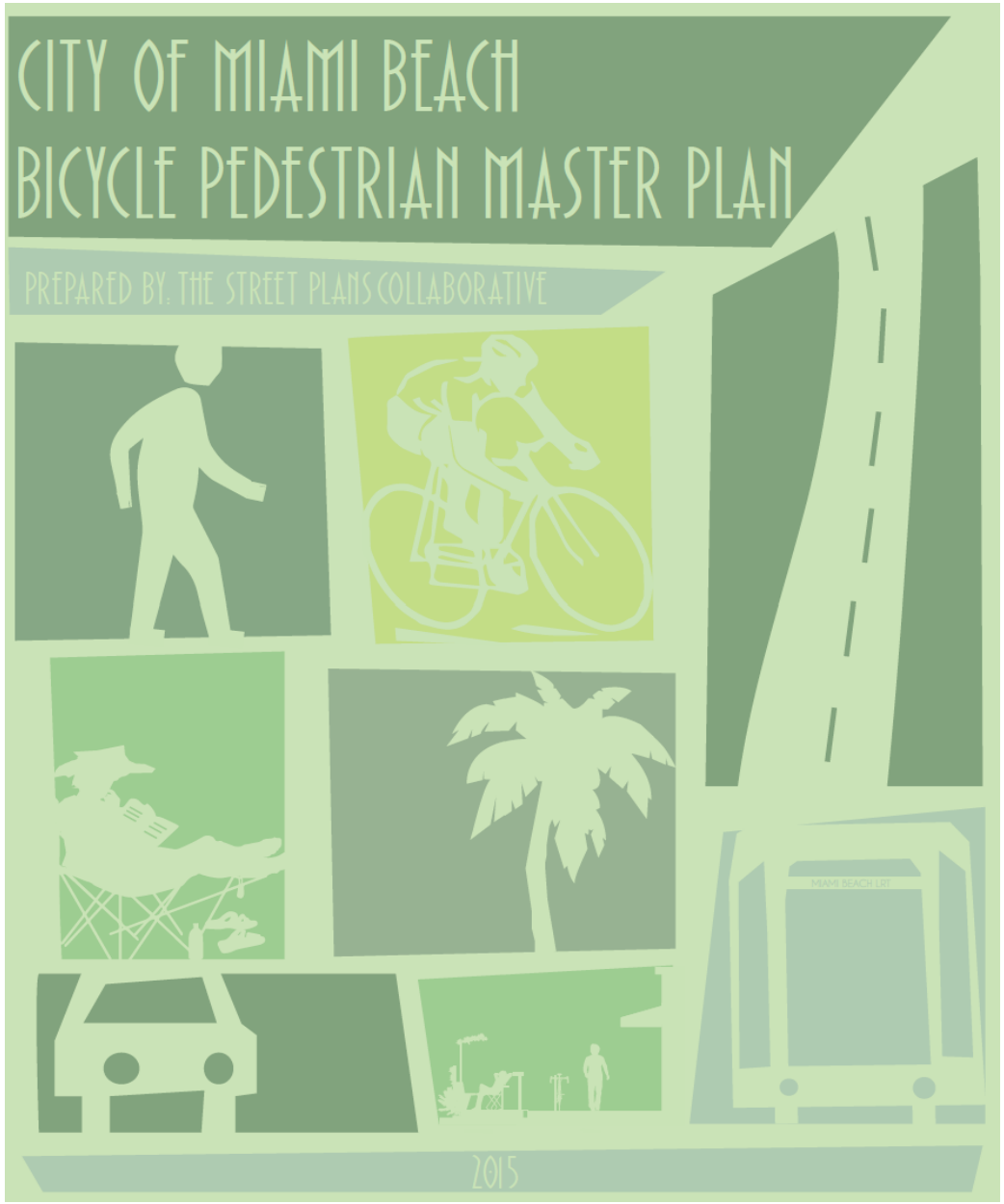
Purpose of Workshop

- Provide background and status of the Bicycle-Pedestrian Master Plan projects
- Present progressive policy and implementation strategies from other cities
- Discuss City of Cambridge, MA Cycling Safety Ordinance and appropriate approach for Miami Beach
- Present current challenges and discuss opportunities to implement bicycle-pedestrian projects quicker



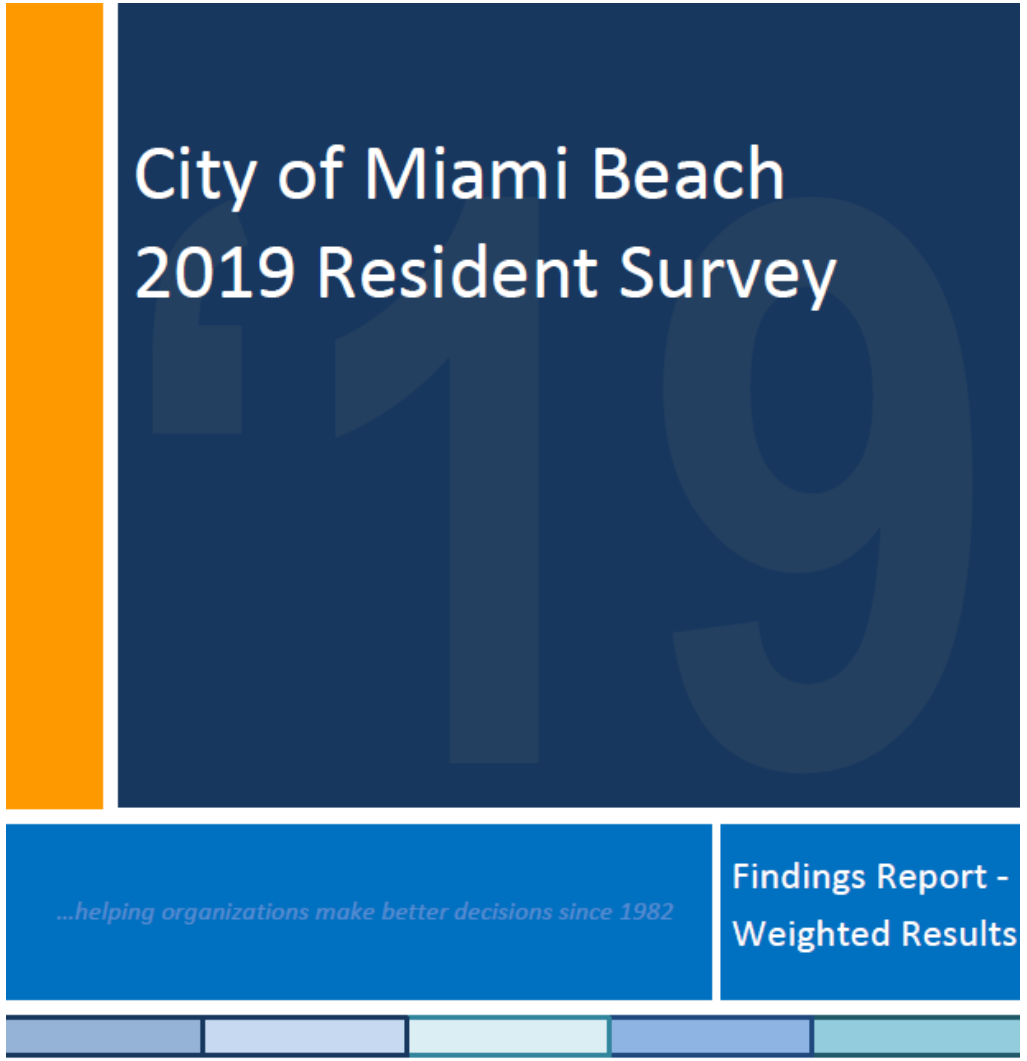
Intended Outcomes

- Obtain your input and recommendations on:
  - Strategic approach to master plan project implementation (short and long-term)
  - Pursuing an ordinance that ties implementation of bicycle/pedestrian projects to the City's Neighborhood Improvement/Resilience Program
  - Resources needed to expedite master plan project development and implementation
  - Progressive ideas for the master plan update



2019 Community Survey Results

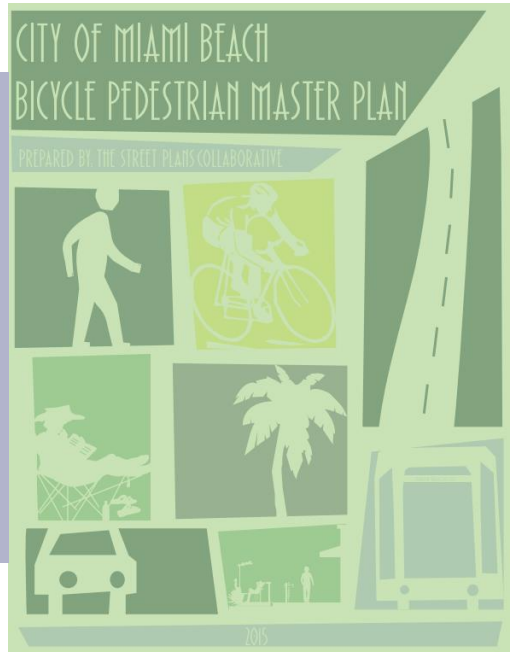
- 37% of residents feel unsafe riding bike in the City
- 25% of residents walk or bike as their primary mode of transportation
- 33% of residents consider biking as the most viable alternative to driving
- 53% of households have someone regularly riding a bicycle
- 74% of residents feel unsafe when crossing the street at an intersection

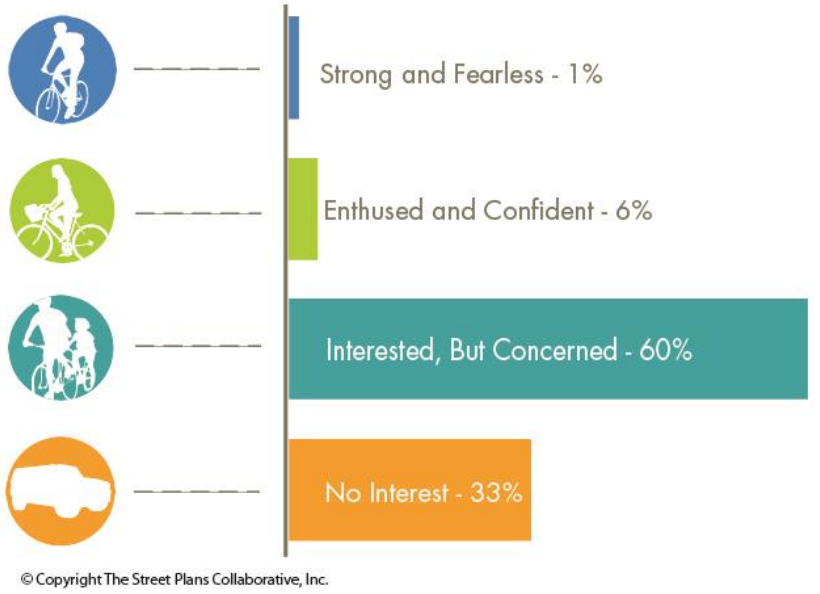


Bicycle-Pedestrian Master Plan Background

Overall Transportation Context

- 3 concurrent planning efforts:
  - Bicycle/Pedestrian Master Plan
  - Street Design Guidelines
  - Transportation Master Plan
- Goal – Make it easy and safe for people to walk, bike, and take transit
- Expand use of protected bicycle facilities and dedicated transit lanes
- Shift away from car use as the dominant mode for residents and visitors – modal priorities

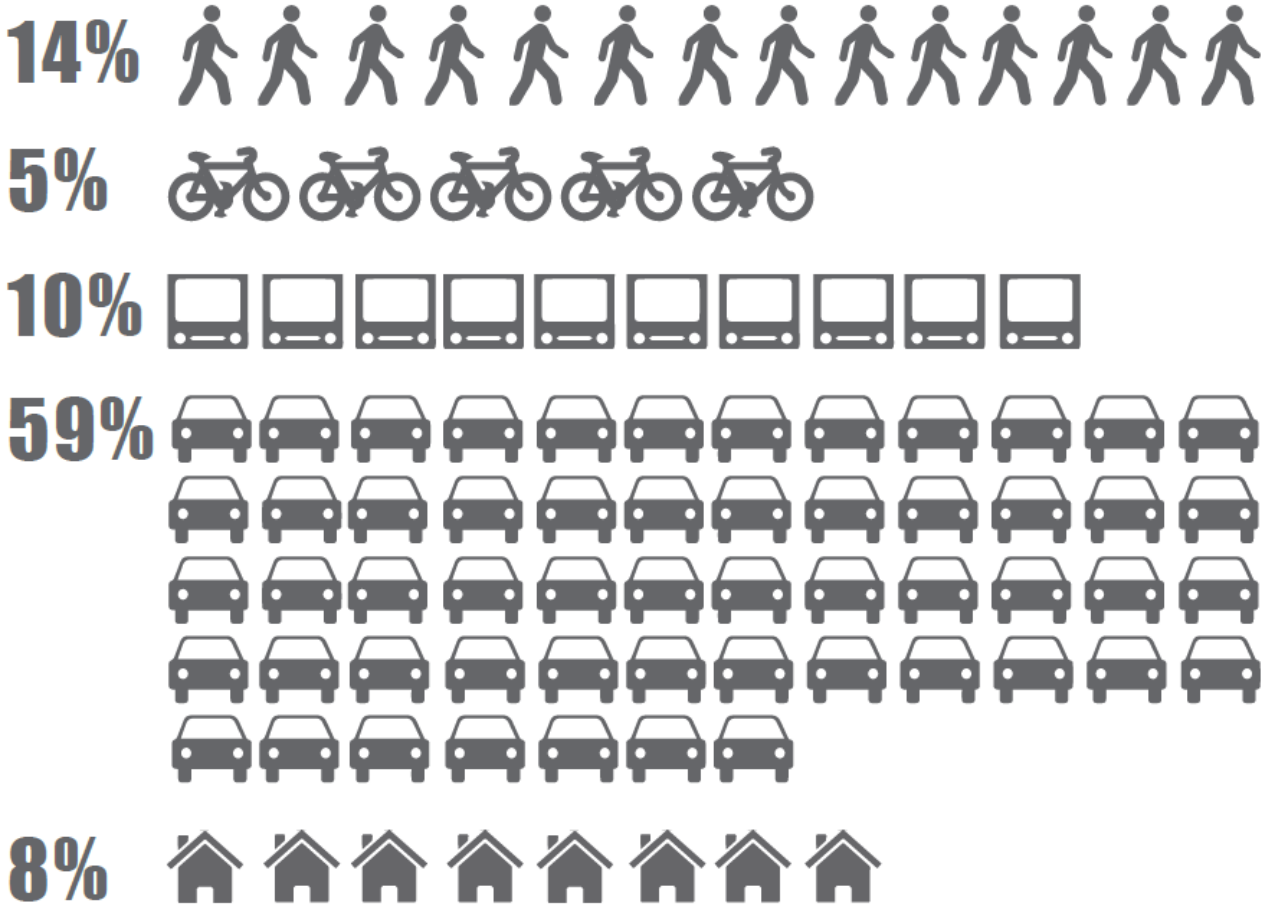




Why Is This Important?

Per the 2012 American Community Surveys:

- 30% of all residents and employees on Miami Beach are walking, biking or taking transit.
- Including tourists, the number jumps to 45%.
- South of Dade Blvd that number jumps above 50%!



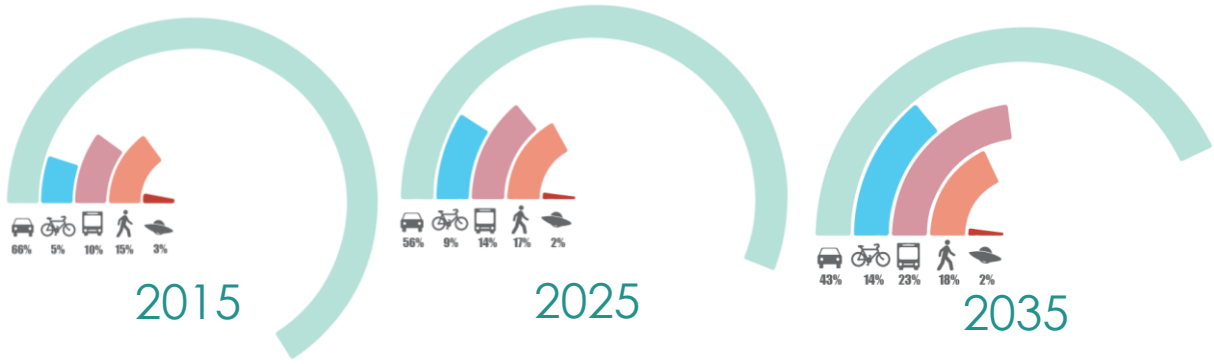
Policy Through The Master Plan

- First in southern United States to adopt a pedestrian first modal hierarchy
- Increase walk/bike/transit mode-share from 30% to 55% in 15 years
- Targets based on comparisons with other cities, street network, land use, and intersection density
- Individual projects will not in themselves drive the change, but together they will add up
- Ratio of people space to car space is a measurable variable that drives change

RESOLUTION NO. 2015-29083

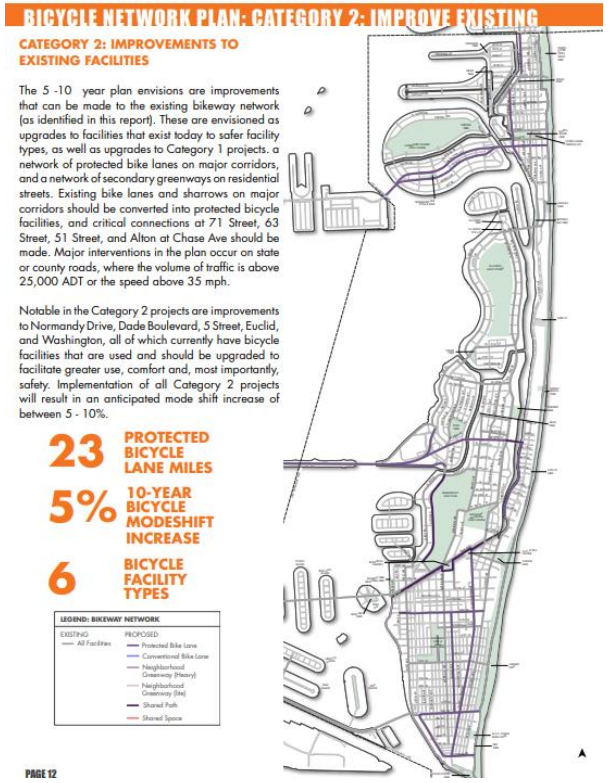
A RESOLUTION OF THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA, ADOPTING THE MODE HIERARCHY PRESENTED AT THE MARCH 18, 2015 CITY COMMISSION WORKSHOP ON TRANSPORTATION.

WHEREAS, given the existing traffic congestion, the high number of special events, and the limited capacity in the City of Miami Beach's transportation network, residents and visitors have experienced an increased level of difficulty moving though the City; and



BPMP Background

- Three tier strategy
  - Closing the gaps – 5 Years
  - Short term (tactical) - 10 Years
  - Long term (aspirational) - 20 Years
- Each tier tied to modal goals
- Focus on expanding protected bike lanes
  - Short term – modular separators/ delineators/planters
  - Long term – grade separated



Miami Beach Street Design Guidelines

- **Design standards for streets for people and not just cars**
- Tool-kit be used by all MB departments across all projects/streets
- Guidelines for bike, pedestrian and open space projects
- Provided a complete streets frame-work for the City
- Recommended a network of Pedestrian Priority Zones

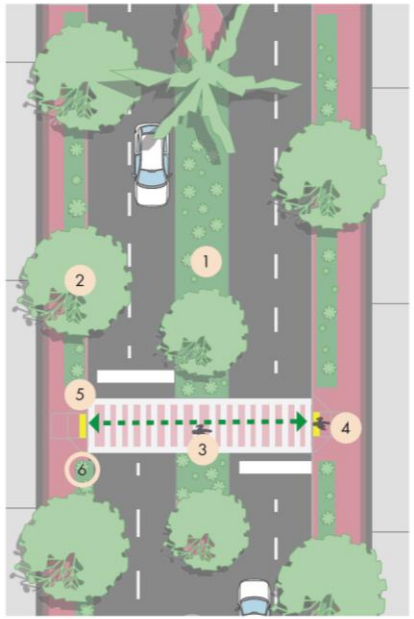


Fig. 2.18 Pedestrian Mid-block crossing.

TYPICAL TREATMENTS

1. Raised Median/ Nose
2. Street Trees
3. Raised/High Visibility Crosswalk
4. Curb ramps
5. Audible/Dynamic pedestrian signals
6. Solar RRFB pedestrian flashing beacon (optional)
7. Offset crosswalk forces pedestrians to face oncoming traffic before crossing.

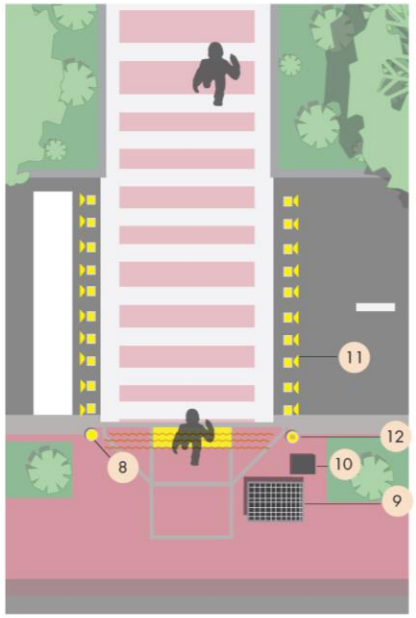


Fig. 2.19 In pavement beacons

8. Automatic sensor to activate crosswalk (optional)
9. Solar cell panel or AC powered
10. Control unit
11. Embedded amber LED strobe lights (can be seen 1,500 feet away)
12. Push button crosswalk activator (optional)

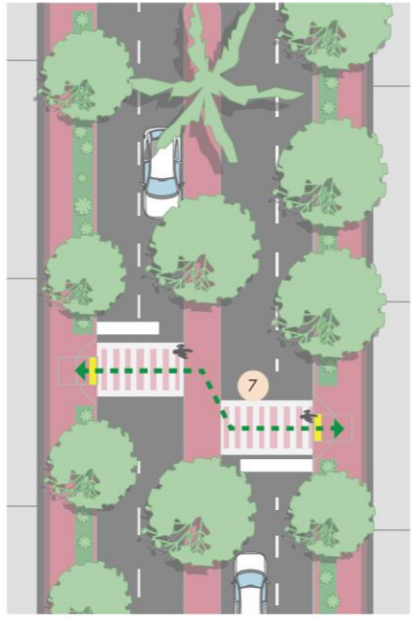


Fig. 2.20 Offset pedestrian mid-block crossing.

MID-BLOCK CROSSINGS

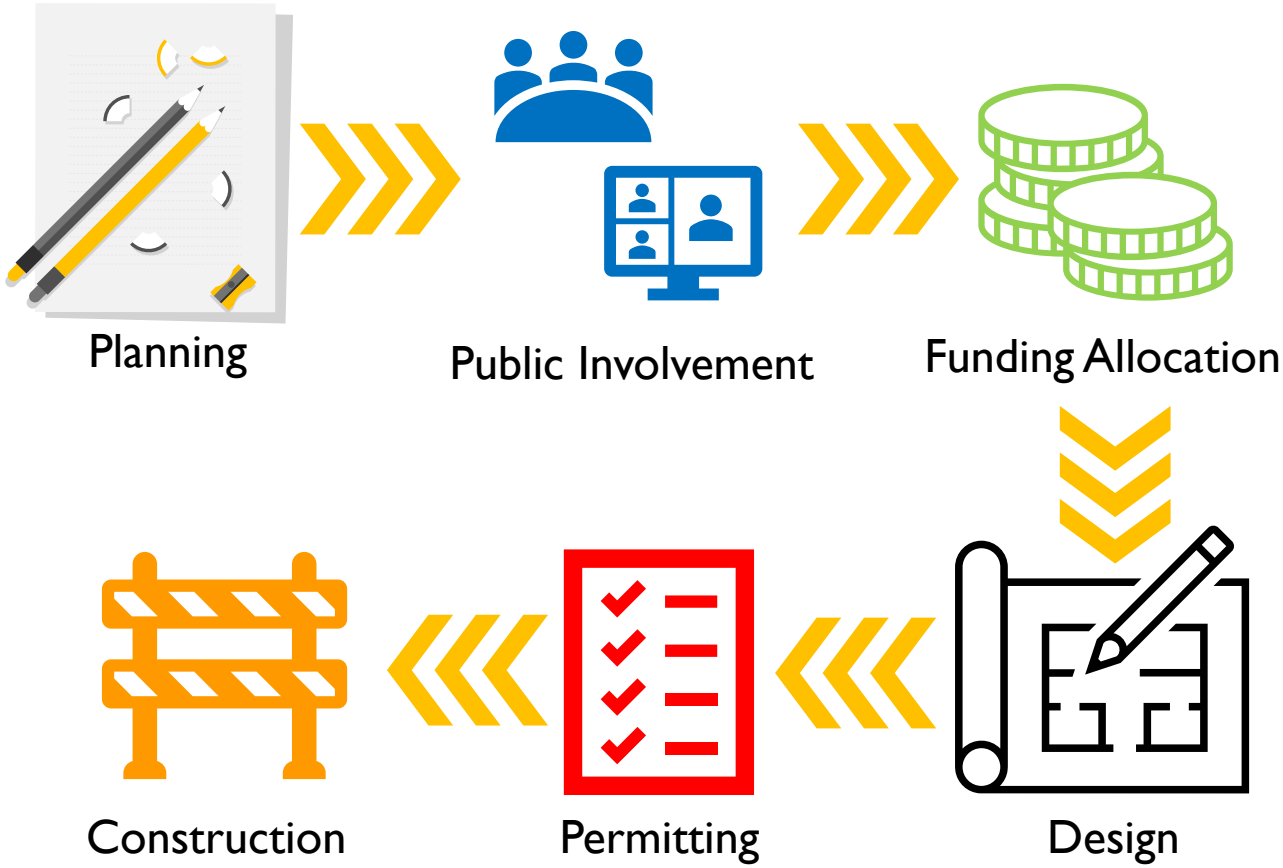
Mid-block pedestrian crossings shall be based on frontage access and pedestrian movement desire lines.

- They shall be well marked and include overhead signage
- Provide curb extension where there is on-street parking to enhance pedestrian visibility.
- Provide raised crossings at high traffic areas.

Bicycle-Pedestrian Master Plan Current Status

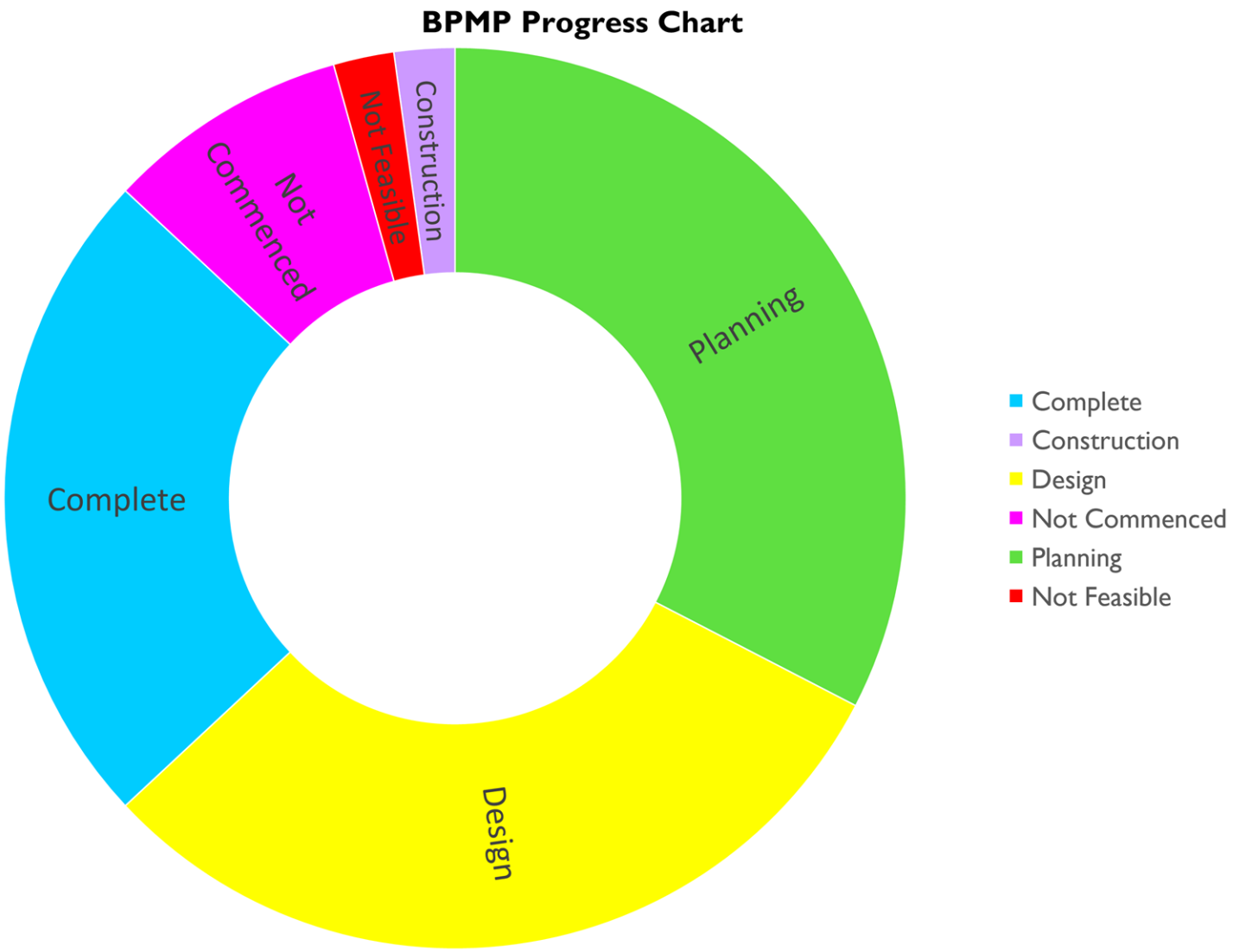
BPMP – Project Implementation Process

- Project development is divided into phases from Planning to Construction
- Some projects can move directly into design while others require feasibility and traffic studies prior to design



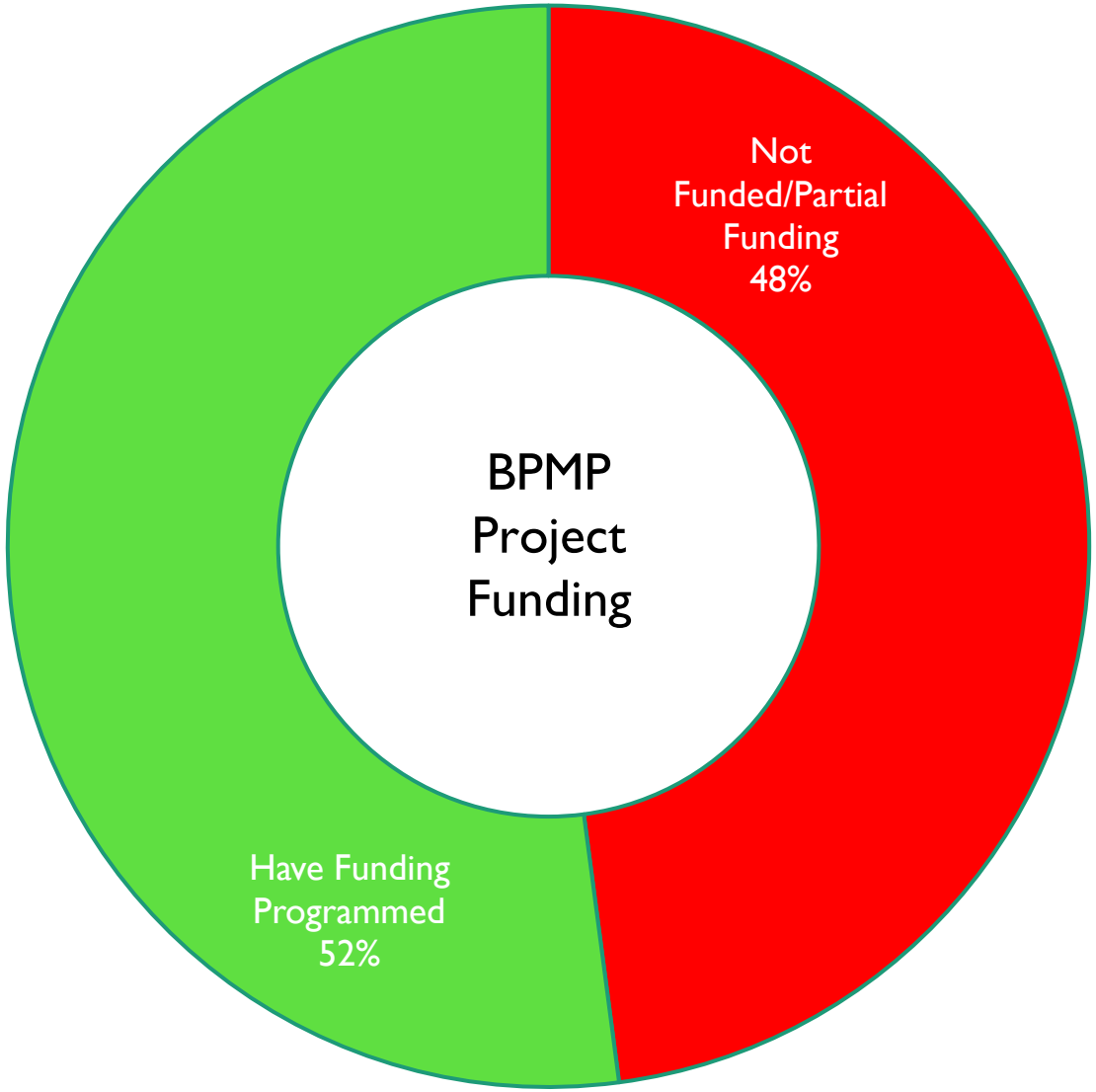
BPMP Progress Since 2016 Adoption

- 46 bicycle projects (32.47 Miles) identified in Phase 1 BPMP Project Bank and Priority 1 Transportation Master Plan
- Project Status – as of May 2021
  - Quick-Build and Pilot Projects - 7.55 Miles
  - Green Bike Lanes – 11.25 Miles
  - Completed Projects – 6.73 Miles
  - Construction – 1.15 Miles
  - Design – 10.88 Miles
  - Planning – 9.47 Miles
  - Not Feasible – 0.31 Miles
  - Not Commenced – 1.06 Miles
  - **89% of Priority 1 projects are either completed or in development**



BPMP Project Funding

- 48% of Priority 1 projects are not funded or partially funded in the 5-year capital plan
- Many bicycle/pedestrian projects are programmed in the capital plan as separate above-ground enhancements tied to neighborhood improvement projects
- City has been able to leverage over $8 Million in grant funding
- No funding allocated for pilot or short-term project implementation or maintenance



BPMP Partially Funded Projects

MIAMIBEACH RISING ABOVE

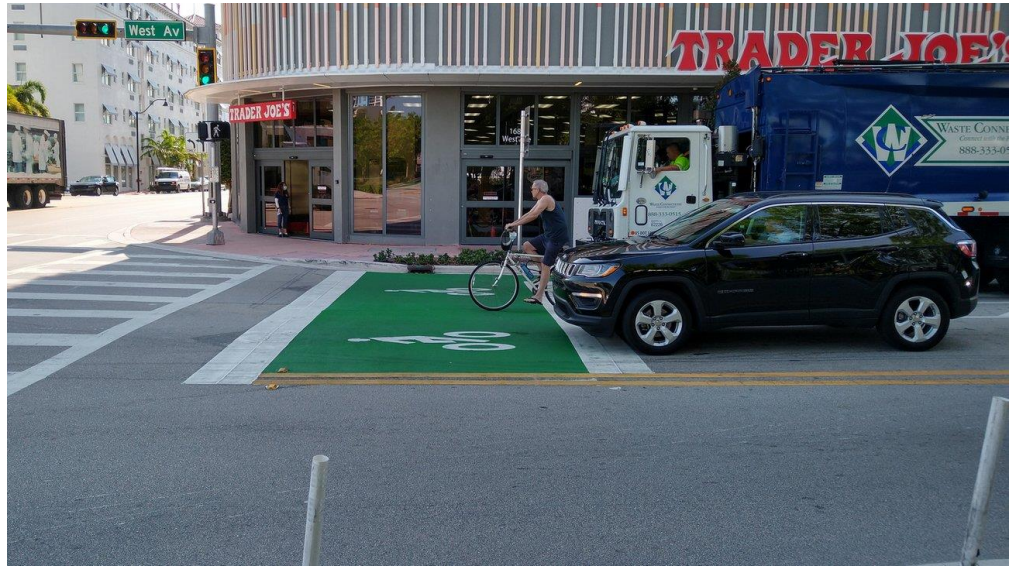
- Partially funded projects **depend on neighborhood improvement projects** for implementation and cannot be implemented as stand-alone
- Strategy relies on economies of scale to reduce project cost and neighborhood impact
- Key partially funded projects include:
  - North Bay Road Neighborhood Greenway – 3.25 Miles
  - Meridian Avenue Shared Use Path – 0.7 Miles
  - 51st Street Neighborhood Greenway – 0.4 Miles
  - Tatum Waterway/Byron Avenue Protected Bike Lanes – 0.8 Miles
  - 10th Street Neighborhood Greenway – 0.7 Miles
  - South Beach Pedestrian Priority Zones
  - Alton Road/South Pointe Drive Protected Bike Lanes – 0.78 Miles
  - Dickens Avenue/Park View Island Shared-Path – 0.4 Miles
  - Pine Tree Drive/LaGorce Drive Protected Bike Lanes – 4.32 Miles
  - West Avenue Protected Bike Lanes – 1.3 Miles
  - 72nd Street/73rd Street Protected Bike Lanes – 0.7 Miles
  - Royal Palm Neighborhood Greenway – 0.75 Miles

Miami Beach – City of Firsts

- 2015 – First City in the southeast U.S. to adopt a new modal hierarchy prioritizing pedestrians
- 2015 and 2016 – First municipality in Miami-Dade County to paint existing bike lanes green
- 2018 – First protected bike lane in Miami-Dade County (West Avenue)
- 2020 - First lane repurposing project in Miami-Dade County (Meridian Avenue)
- 2021 – First bicycle box in Miami-Dade County (West Avenue/17 Street intersection)

<u>Temporary Pilot Projects</u>

- 2020 - First parking-protected bike lanes in Miami-Dade County (Washington Avenue)
- 2020 - First slow streets pilot program (Flamingo Park neighborhood)



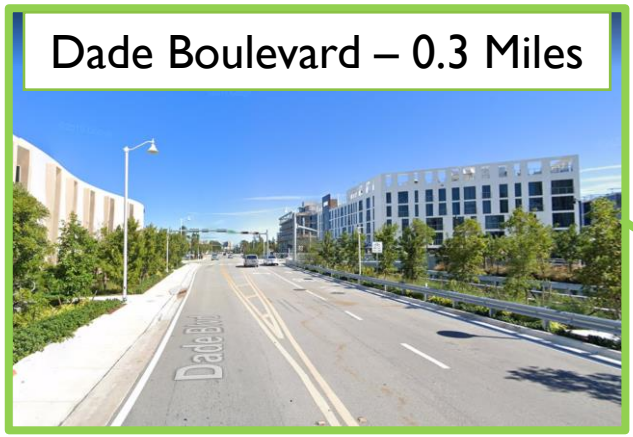
Key Gaps in the Network

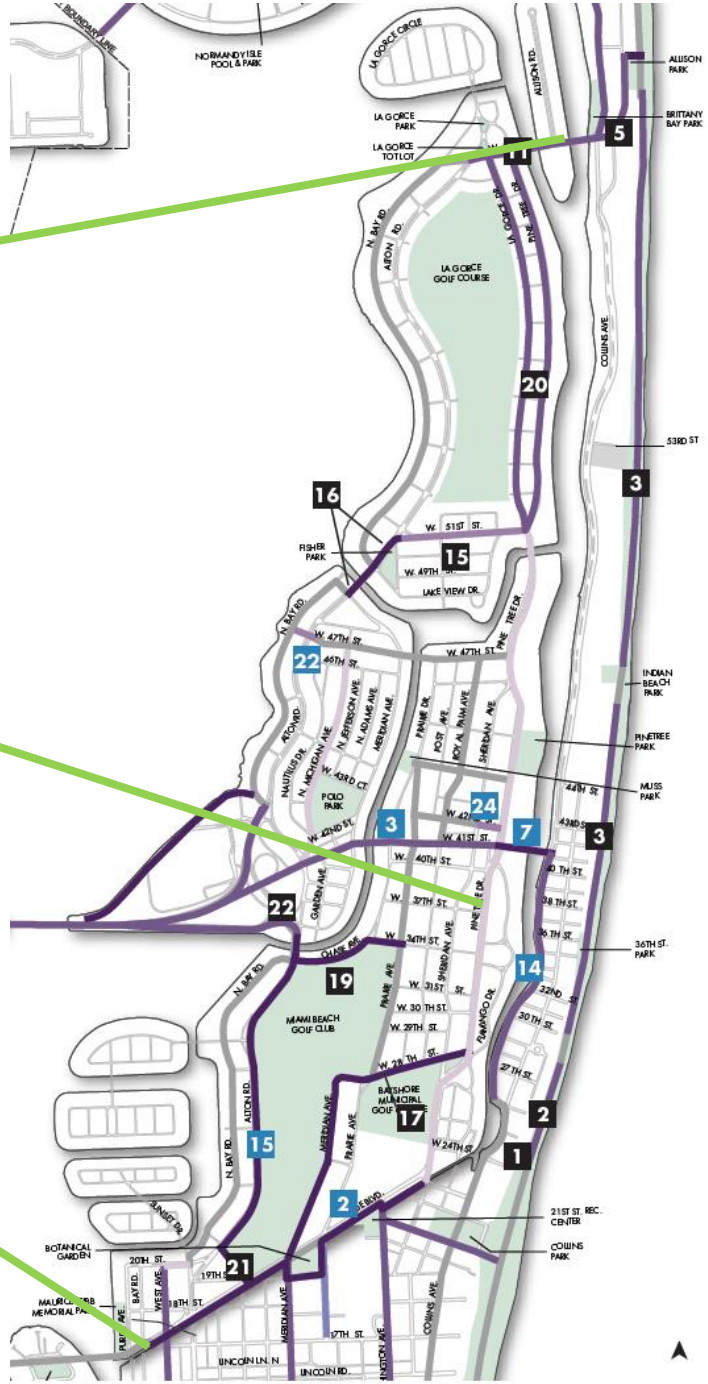
- Given its geographic characteristics, Miami Beach has critical gaps in its bicycle network
- Addressing gaps requires trade-offs
- Not addressing these gaps will result in an incomplete and unsafe network

63rd Street – 0.7 Miles

Pine Tree Drive/LaGorce Drive – 4.32 Miles

Dade Boulevard – 0.3 Miles





Assessment of Leading International and National Cities

Assessment Details

- City's consultant conducted in-depth assessments of Amsterdam, Copenhagen, Stockholm, and Santa Monica, California
- Research concentrated on progressive policy, design innovation, leading edge projects, implementation approach, and education practices
- Innovative practices were compared to Miami Beach current policies and strategies to develop a technical memo on lessons learned

Case Study Take-Aways

Case Study Element	Applicability to Miami Beach
Engagement	
Strong advocacy and public engagement at the forefront supported by **political will**	Continue to work with bike advocates and the community at-large to help set policy and implement the master plan
Implementation	
Utilize **Pilot & Demonstration** projects	Continue **Pilot & Demonstration** Project Implementation in advance of permanent/high-cost projects
Align with **resurfacing/ stormwater/wastewater** projects	**Allocate funding** for bike infrastructure within utility and resilience projects
Implement **Solar powered bike facilities +** Install **bike counters & Implemented "Green Wave"** technology	**Fund permanent bike counter** program
Program	
Foster **TDM** strategies	Continue the **City's TDM** efforts
Offer **subsidized & complimentary bike amenities** – parking, maintenance, valet	Develop a **bike plan for special events +** Encourage biking through **free bike valet parking + maintenance**
Policy	
Limit **on-street parking + implement car free zones**	Reduce on-street parking and increase availability of off-street parking. Leverage private parking facilities.
Implement **congestion pricing**	Explore **congestion pricing or cordon tolls with state and county government**

Cambridge's Cycling Safety Ordinance

Cycling Safety Ordinance History

Origins

- 2015 Bicycle Plan
- 2018 Sidewalk/Street Plan

Impetus

- Advocacy groups recognized slow progress in Bicycle Plan

Original Ordinance

- Passed in 2019
- Ties protected bike lanes to Reconstruction Via Sidewalk/Street Plan

Ordinance Amendment Vision

- Install 25 mi of separated bike facilities in 6-8 years along specific corridors

Ordinance Amendment Results

- Quick Build vs. Permanent Construction
- Set Construction Schedule

Ordinance Highlights

2019 Ordinance

- Mandates that any "Sidewalk and Street Reconstruction Plan" shall include improvements to comply with the Cambridge Bicycle Plan and Pedestrian Plan
- Established that compliance was not required only if the City Manager can demonstrate that the project is impractical due to physical features or financial constraints

2020 Amendment

- Sets specific deadlines for the implementation of protected bicycle facilities on certain corridors
- Introduces temporary projects when permanent projects are far in the future
- Sets deadlines for implementation of temporary projects
- Assigns final decision authority on implementation timeline and possible extensions to the City Council

Working Together for Cambridge

Lessons Learned and Take-Aways

- **Strong political will** ensure plan implementation
- Codifying that every **neighborhood improvement or roadway corridor project** includes bicycle-pedestrian master plan recommendations to ensure network build-out
- Mandating the **Miami Beach Street Design Guideline** is applied on every neighborhood improvement project at DCP stage to ensure cohesive inclusion of bicycle-pedestrian improvements
- When possible, **fund and separate "filling the gap" projects** from major infrastructure projects which tend to be delayed
- Fund and pursue the **demonstration & pilot** project model

Pilot Projects

How do we get there? Accelerating Project Delivery

Demonstration	Pilot	Interim Design	Permanent
			
Up to 1 Month	Up to 1 Year	Up to 5 Years	5+ Years
$	$$	$$$	$$$$

Material Durability

Public Input

Investment

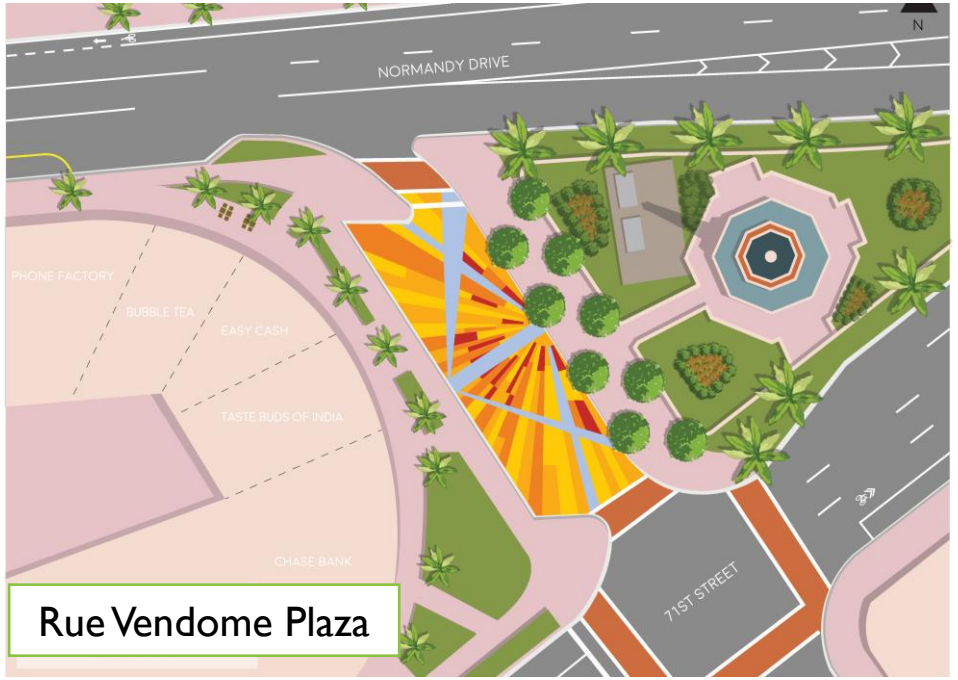
Evaluation

Demonstration and Pilot Project Benefits

- Pilot and temporary projects help advance the BPMP network with low impact materials
- Reduce cost while achieving immediate safety and connectivity benefits
- Refine design and test design treatments without great investment
- Achieve community acceptance prior to investing in permanent construction

Tactical Urbanism

- Temporary low-cost changes to the built environment to address transportation or social needs of the community
- Projects are typically implemented as part of community events
- The City has already been implementing tactical urbanism – Rue Vendome Plaza and Slow Streets
- There is no current procedure or guide for Tactical Urbanism in Miami-Dade County and these projects must follow the same permitting process as permanent projects



Rue Vendome Plaza

Flamingo Neighborhood Slow Streets

Pilot Funding

- No funding approved in FY 2021
- FY 2022 budget enhancements requested for
  - Maintenance of existing pilots ($223,000)
    - Flamingo Park neighborhood slow streets
    - Washington Avenue bike lanes
  - Implementation of new pilots ($79,000)
    - Pennsylvania Avenue bike lanes
    - Bicycle parking islands

Shifting the Approach to Implementation

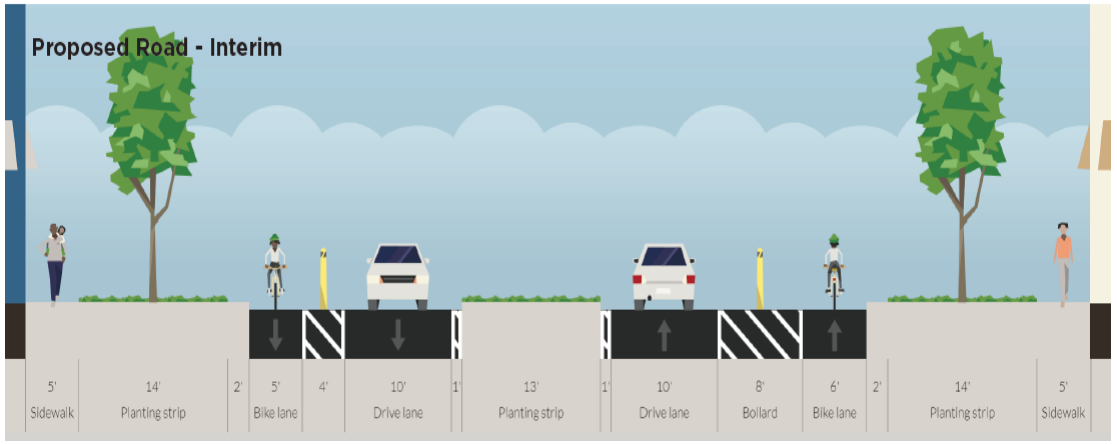
Pilot Ideas (Not Funded)

North Beach Pedestrian Improvements

- Project is not included in the adopted Master Plan
- Implement painted bulb-outs and planters at intersections within Biscayne Beach neighborhood to reclaim pedestrian space at intersections
- Monitor and experience safety benefits at low cost
- No significant challenges and no parking impacts expected
- Pilot cost - $75,000

Pine Tree Drive/LaGorce Drive Protected Bike Lanes

- Priority 1 in the BPMP
- Purpose: create protected bike lanes to close this critical north-south gap in the network
- Contributes to improving corridor safety by introducing a bike lane through lane reduction and reducing vehicular speeds
- Challenge: lane repurposing - Pine Tree Drive is a Principal Collector under County jurisdiction
- Opportunity: initiate demonstration project to test bike lanes while City conducts a comprehensive feasibility analysis
- Pilot Cost: $100,000



South Beach Promenade

- Project is not included in the adopted Master Plan
- Create enhanced pedestrian connection linking Lincoln Road, Española Way, and Ocean Drive
- Project is undergoing a comprehensive planning analysis
- Opportunity: tactical urbanism to advance implementation, measure effectiveness, and achieve results at low cost
- Challenge: relocation of on-street parking on Drexel Avenue
- Pilot Cost: $150,000

Challenges and Opportunities

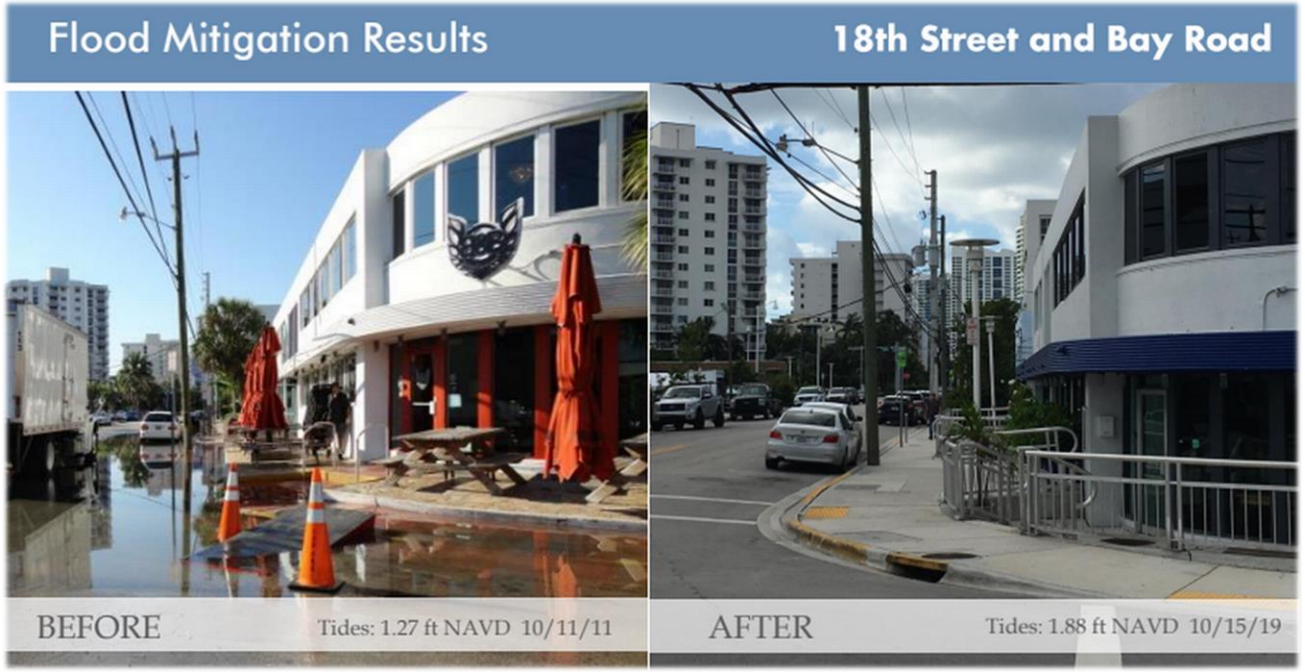
Current Challenges: Limited Right-of-Way and Competing Interests

- Given our built-out environment and limited right-of-way, many master plan projects depend on trade-offs to secure implementation
- Design trade-offs can include:
  - Narrowing travel lanes
  - Repurposing travel lanes
  - Impacts to on-street parking
- Successful example of design trade-off
  - Meridian Avenue Protected Bike Lanes

North Beach Greenways (81st Street)
Proposed Parking Repurposing/Relocation

Current Challenges: Status of Neighborhood Improvement Projects and Resilience Program

- All case study cities had a strong tie between the neighborhood reconstruction program and bicycle/pedestrian plans
- Miami Beach's Integrated Water Management Plan does not have specific years for implementation of projects which affects bicycle/pedestrian project development
- Street Design Guidelines best-practices are not consistently incorporated in neighborhood improvement projects due to feasibility, funding, or permitting



Current Challenges: Jurisdiction Issues and Permitting

- City must secure permits from County and/or FDOT for any modifications to streets including bicycle and pedestrian improvements
- Extensive permitting process significantly delays projects
- No design guidelines or expedited permit process at County or FDOT for pilot/demonstration projects which makes quick-build projects not so quick to build

Meridian Avenue Protected Bike Lanes Project Duration															
Project Phase	60 Days	60 Days	60 Days	60 Days	60 Days	60 Days	60 Days	60 Days	60 Days	60 Days	60 Days	60 Days	60 Days	60 Days	60 Days
Planning and Traffic Study	120 Days														
Miami-Dade County Study Approval			240 Days												
Design							120 Days								
Miami-Dade Plans Approval									300 Days						
Construction													120 Days		

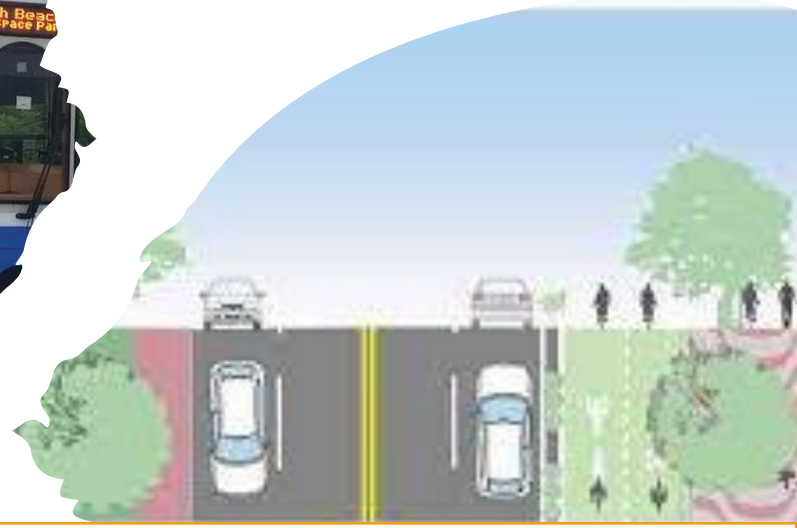
Total Project Duration - 2 ½ Years

Current Challenges: Limited Department Resources

- Adopted master plan includes 46 Priority 1 projects totaling over $50 Million
- Prior to COVID, Department had 11 FTEs with 3.5 FTEs assigned to master plan implementation
- Due to COVID financial impact, 2 FTEs were eliminated this fiscal year
- Currently, Department has total of 9 FTEs
- Based on Department's current Program Budget, only 1.8 FTEs are responsible for the development of 40+ bicycle/ pedestrian projects
- Submitted an FY 2022 budget enhancement request to recover the 2 FTEs eliminated during COVID

Traffic Engineering/Operations and Traffic Signals

Transit Operations



Bike/Ped Planning and Implementation

Topics for Discussion

- Strategic approach to funding and implementation of master plan projects (short and long-term)
- Pursue a cycling safety ordinance to ensure accountability for timely implementation of projects
- Limited resources: staffing and funding needs
- Master plan update focusing on short-term/quick-build projects and other progressive ideas
- Collaborate with the County to develop a process to expedite implementation of bicycle/pedestrian projects, including quick-build and pilots