



Bicycle/Pedestrian

MOBILITY PLAN

for the Miami Downtown Development Authority Area

Brickell Area Association

January 18, 2011



Work Order #GPC IV-02



Kimley-Horn
and Associates, Inc.



Study Objectives

- Prepare a pedestrian and bicycle mobility plan for the Miami DDA area:
 - To enhance pedestrian safety and walking experience
 - To provide bicycle facilities and amenities to use as method of transportation
- Develop and recommend pedestrian and bicycle projects and strategies to help implement the DDA's goals





Context



“Downtown Miami is the business, social and cultural epicenter of the Americas, which capitalizes on its unique position as a major world city in a tropical waterfront environment.”

- DDA Master Plan 2025 Vision Statement

- Grand boulevards
- Waterfront vistas
- Transit accessibility
- Sustainability





Context

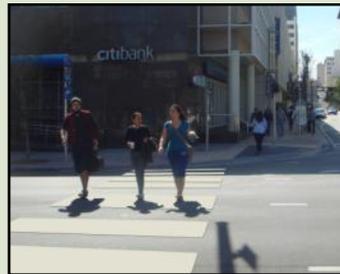
- Can you spend a **pleasant** hour walking and end up in a variety of great and interesting places?
- Is the bicycle as **convenient** to use as the automobile?



Pedestrian Activity Map



Bicycle/Pedestrian **MOBILITY PLAN** for the Miami Downtown Development Authority Area



RECOMMENDED IMPROVEMENTS



Recommended Improvements

Summary List



Area Wide Improvements

- [Project 1: Modal Priority Zone](#)
- [Project 2: Low-Speed Design Principles](#)
- [Project 3: One-Way to Two-Way Street Conversion](#)
- [Project 4: Festival Streets](#)
- [Project 5: Pedestrian Throughway Zone](#)
- [Project 6: Pedestrian Shade Corridors](#)
- [Project 7: Pedestrian Lighting](#)
- [Project 8: Pedestrian Signalization Improvements](#)
- [Project 9: Automated Pedestrian Detection](#)
- [Project 10: Miami River Greenway Improvements](#)
- [Project 11: Bike Route 1 Improvements](#)
- [Project 12: Other Bicycle Improvements](#)

Metromover Access Improvements

- [Project 13: Financial District Metromover Station](#)
- [Project 14: Brickell Metromover Station](#)
- [Project 15: Tenth Street Metromover Station](#)
- [Project 16: Fifth Street Metromover Station](#)
- [Project 17: Third Street Metromover Station](#)
- [Project 18: First Street Metromover Station](#)
- [Project 19: College/Bayside Metromover Station](#)



Recommended Improvements

Summary List (continued)



Segment Improvements

[Project 20: Biscayne Boulevard Median Improvements](#)

[Project 21: Pedestrian Mobility Improvements – Biscayne Blvd.–North](#)

[Project 22: Pedestrian Mobility Improvements – Biscayne Blvd.–South](#)

[Project 23: Pedestrian Mobility Improvements – Brickell Avenue](#)

[Project 24: Pedestrian Mobility Improvements – Miami Avenue](#)

[Project 25: Pedestrian Mobility Improvements – S Miami Avenue](#)

[Project 26: Pedestrian Mobility Improvements – NE 2nd Avenue–North](#)

[Project 27: Pedestrian Mobility Improvements – NE 2nd Avenue–South](#)

[Project 28: Pedestrian Mobility Improvements – SE/NE 2nd Avenue \(from the Miami River to NE 6th Street\)](#)

[Project 29: Pedestrian Mobility Improvements – SW 1st Avenue](#)

[Project 30: Pedestrian Mobility Improvements – Brickell Bay Drive](#)

[Project 31: Court House Pedestrian Improvements](#)

[Project 32: High Density Bicycle Parking](#)

[Project 33: NW 1st Street Transit Mall](#)

Non-Engineering Improvements

[Project 34: Education Improvements](#)

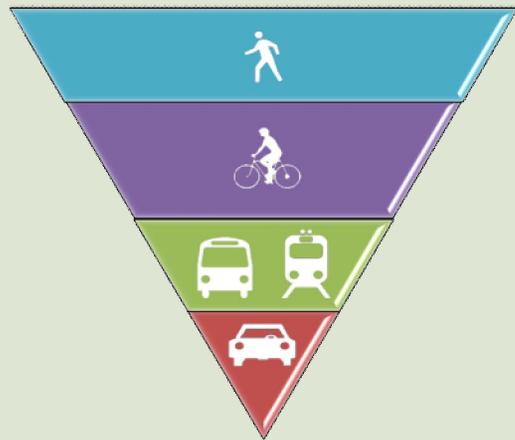
[Project 35: Encouragement Improvements](#)

[Project 36: Enforcement Improvements](#)

[Project 37: Evaluation and Monitoring](#)



Modal Priority Zone



- Establish a Modal Priority Zone
 - Prioritizes the safe and effective movement of pedestrians and bicycles
 - Recognizes that the downtown core is a unique setting where non-motorized transportation is a particularly viable and sustainable solution
- Typically implemented through adoption by local government
- Sometimes called Pedestrian Priority Areas
- Examples
 - San Francisco, CA
 - Minneapolis, MN
 - Vancouver, BC



Modal Priority Zone

- Vancouver Case Study – Clean, Green, and Healthy
 - Transportation Master Plan established Pedestrian Priority Areas in 1997
 - City Council adopted Climate Change Action Plan in 2005



Making all streets more accessible, safe, and enjoyable for walking is a priority of the City of Vancouver. Pedestrians are given the highest priority, and we design streets with this in mind.

- City of Vancouver, Engineering Department website
<http://vancouver.ca/engsvcs/transport/cleanGreen/index.htm>



Low-Speed Design Principles

- As streets are redesigned, reconstructed, and redeveloped, use low-speed design principles:
 - to achieve lower speeds in the study area through techniques such as
 - smaller corner radii
 - pedestrian bulb-outs
 - traffic circles that accommodate bicycles and pedestrians
 - utilizing other traffic calming devices where appropriate
- Perceptual design features such as patterns painted, stamped, or built into the roadway surface encourage motorists to reduce speeds





Pedestrian Throughway Zone



- As streets are redeveloped relocate street furniture obstructing bicycle and pedestrians paths to establish a clear throughway pedestrian network throughout downtown Miami consistent with Miami 21
- A desired minimum pedestrian travel zone width of 6 feet should be provided in areas with active pedestrian activity such as downtown Miami
- For higher pedestrian volume areas, such as Biscayne Boulevard, Flagler Street, and transit stations, additional width should be provided
- Trees, planting strips, utilities, traffic signal equipment, benches, water fountains, bicycle parking racks are examples of street furniture



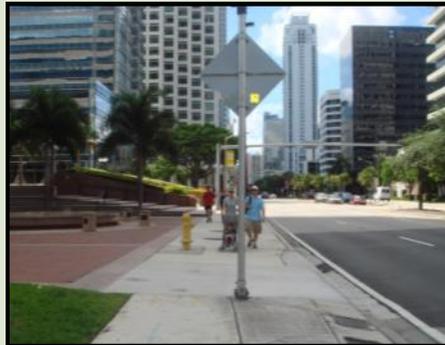
Bike Route 1 Improvements

- Modify curb ramps and travel path to reflect the Bike Route as a shared used path with substantial use by bicycles, pedestrians, joggers and other non-motorized transportation mode





Bike Route 1 Improvements



- widen narrow curb ramps from the minimum of 4 feet to at least 8 feet to reflect shared use path design
- reorganize street furniture zone to maintain at least 8 feet of minimum sidewalk width
- move signs away from middle of path



Metromover Access Improvements



- Provide improved access to the Metromover Stations
- Improvements include:
 - ADA access improvements
 - New sidewalks
 - Widen existing sidewalks
 - Raised mid-block crosswalks
 - Marked crosswalks
 - Pedestrian crossing signs
 - Curb ramp improvements



Project 13: Financial District Metromover Station



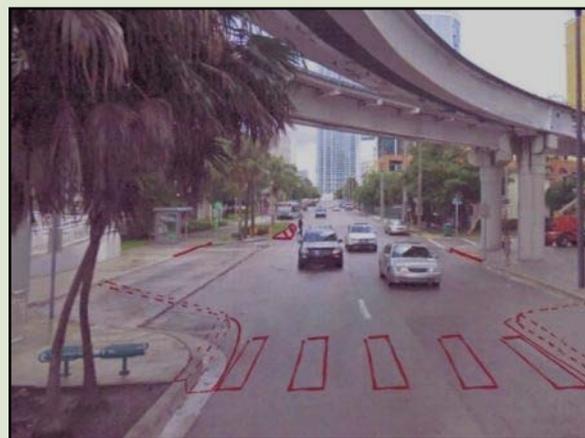
- Modify curb to include curb ramps on the east side of the intersection of S 14th Street and S Miami Avenue
- Provide marked crosswalk on the east side of the intersection of S 14th Street and S Miami Avenue
- Modify curb to include curb ramps at SE 14th Street and the alley between S Miami Avenue and Brickell Avenue
- Reduce lane width to provide a wider sidewalk on the south side of SE 14th Street
- Provide mid-block crosswalk across SE 14th Street at the west entrance to the Metromover Station
- Add pedestrian crossing signs





Project 14: Brickell Metromover Station

- Extend west curb 10 feet north to provide added space for pedestrian activity at the crosswalk landing on SW 1st Avenue
- Provide curb extension on east side of SW 1st Avenue (between on-street parking)
- Provide mid-block raised crosswalk across SW 1st Avenue
- Add pedestrian crossing signs
- Remove existing curb ramps and reconstruct sidewalk on both sides at unmarked crosswalk 90 feet north of the station
- Provide “advance stop bar” for the un-signalized crosswalk





Project 23: Pedestrian Mobility Improvements Brickell Avenue

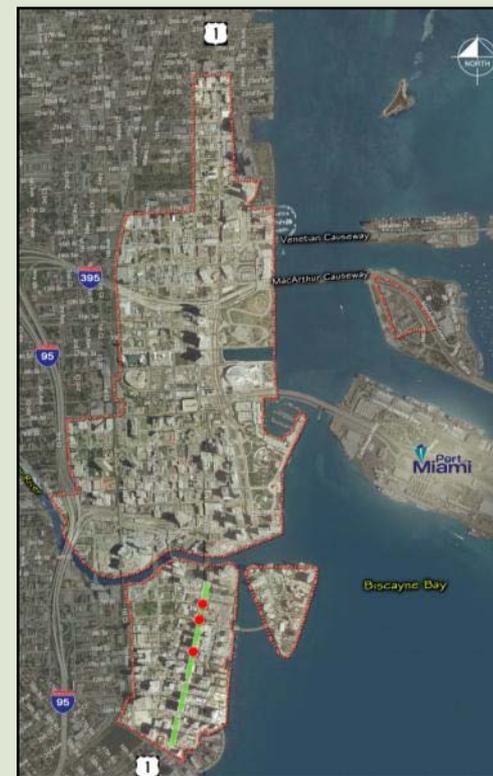
- Install pedestrian mobility improvements along Brickell Avenue from Miami River to SE 15th Road

Pedestrian Mobility Improvements – Brickell Avenue

	Crosswalk Improvement				Curb Modification			
	North	South	East	West	NW corner	NE corner	SE corner	SW corner
Brickell Avenue @ SE 7 th Street	CW				CR	CR		
Brickell Avenue @ SE 8 th Street	CW				CR	CR		
Brickell Avenue @ SE 10 th Street	CW				CR	CR		

Legend:

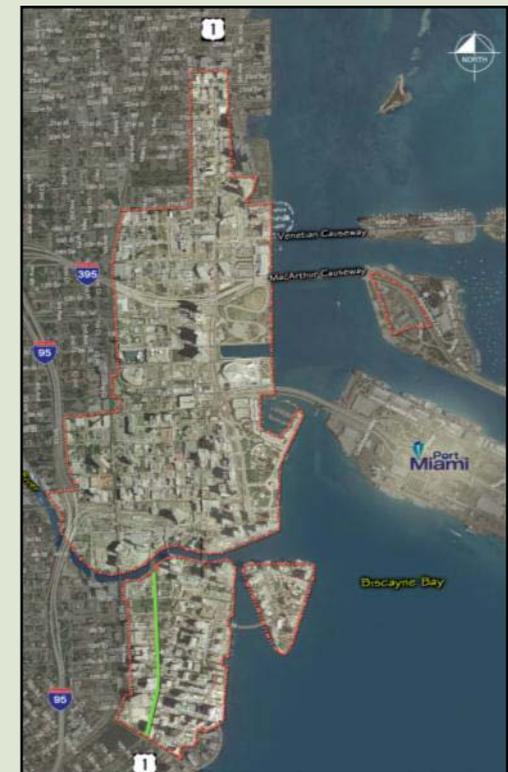
- CW Add new pedestrian crosswalk as indicated above
- CR Add new curb ramp as indicated above





Project 25: Pedestrian Mobility Improvements S Miami Avenue

- Install pedestrian mobility improvements along S Miami Avenue from Miami River to SE 15th Road as indicated in the S Miami Avenue Streetscape project performed by the Miami DDA



Source: South Miami Avenue Streetscape Design, prepared for the Miami DDA by AECOM, September 2010



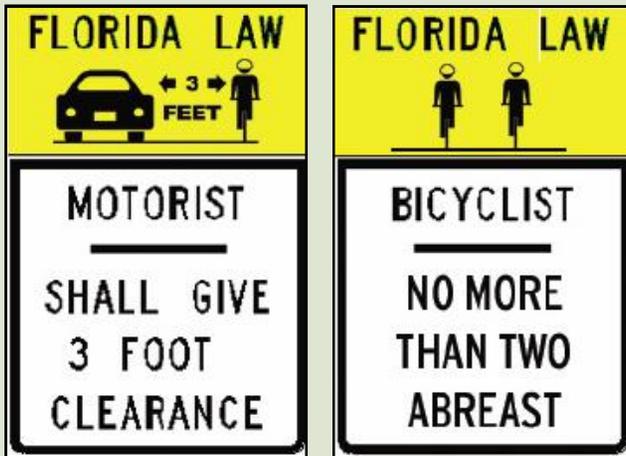
High Density Bicycle Parking



- Install bicycle parking corrals at the following locations
 - Flagler Street and NW Miami Court (NE corner)
 - SE 1st Street and SE 3rd Avenue (SW corner)
 - SW 9th Street and SW 1st Avenue (SE corner)
 - Brickell Avenue and SE 13th Street (NE corner)



Education Improvements



- Objective
 - Promote the concept of urban mobility within downtown Miami to the general public in order to get more people walking and biking
- Strategies
 - Provide educational pamphlets and workshops
 - new facilities such as bicycle-activated signals, bicycle lanes, sharrows, raised crosswalks, and un-signalized mid-block crossings.
 - Support DWNTWN Ambassador Program
 - in distributing these materials and spreading the word about the importance of walking and bicycling.
 - Educate downtown police force
 - utilizing the Florida Bicycle Law Enforcement Guide and the new Bicycle Law Enforcement Video to enhance enforcement.

