

Bicycle and Pedestrian Improvements in Transit Programs



Bicycle and Pedestrian Partnership Council
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FDOT Transit Office

Authority

- ❖ *“President Obama has made livable communities a key aspect of his agenda.”*
- ❖ *If we are to create livable communities, “the range of transportation choices available to all Americans--including transit, walking, bicycling and improved connectivity for various modes – must be expanded.”*



Ray LaHood

U.S. Secretary of Transportation



Authority/Responsibility

- ❖ Several grant programs administered by the Federal Transit Administration (FTA) can be used to fund the design, construction, and maintenance of bicycle and pedestrian facilities
- ❖ Must be a capital project which has a functional relationship to a transit facility
 - ❖ Provides access
 - ❖ Previously, distance was not defined
- ❖ Competing with other transit capital projects



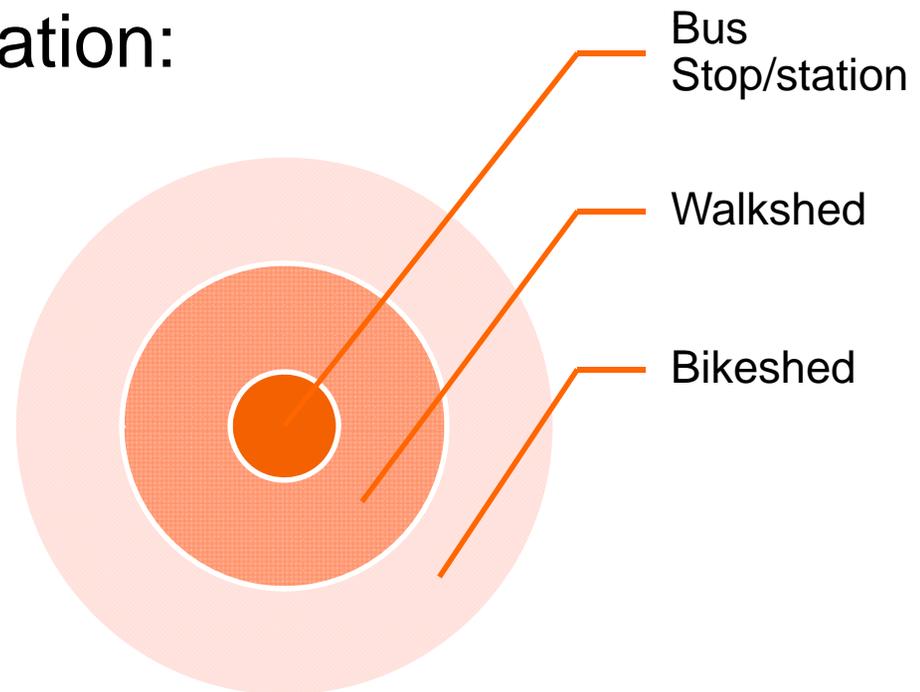
Authority/Responsibility

- ❖ 5307 grant funds - Urbanized Area Formula Program funds apportioned to urbanized areas of at least 200,000
 - ❖ At least 1% for transit enhancement activities
 - ❖ 90 to 95% federal share
- ❖ Eligible relevant activities
 - Improved pedestrian and bicycle access to transit facilities and vehicles, such as:
 - ✓ Bicycle parking/storage
 - ✓ Buses with bicycle racks
 - ✓ Sidewalks/crosswalk (new, retrofit)



Authority/Responsibility

- ❖ New FTA policy expands the catchment area around transit stops in which pedestrian and bicycle improvement projects can be funded
- ❖ From transit stop/station:
 - ✓ Walkshed ½ mile
 - ✓ Bikeshed 3 miles



Role/Current Practice

- ❖ Identify bicycle and pedestrian needs through the following methods:
 - ✓ Inventory of transit stops
 - ✓ GIS mapping of modal connections
 - ✓ Automated passenger counters and bus sensors on bike racks determine high boarding stops
 - ✓ Public Input and requests
 - ✓ Driver/Operator suggestions
 - ✓ Coordinating with City/County/FDOT on project reviews
 - ✓ Coordinating with the MPO Bicycle and Pedestrian Committees
- ❖ Most transit agencies have inventories and phased implementation plans for bus stops, stations and facilities



Planning Partners

- ❖ City/County technical review teams and project review committees
- ❖ FDOT technical review teams and project review committees
- ❖ MPO bicycle and pedestrian advisory committees
- ❖ MPO Long Range Transportation Plan Updates
- ❖ Cities, Counties and MPOs on Transit Development Plan (TDPs) review committees



Opportunities

- ❖ Most agencies collaborate and communicate with other planning agencies to identify needs
 - ✓ Could use more staff to ensure better coordination

- ❖ Most agencies investing in bike racks on bus and bike parking at transit stops/stations
 - ✓ Rely heavily on Cities, Counties and State to assist in providing access to the stops and stations
 - ✓ Not their right-of-way, need to obtain permits



Bikes on Bus Program in Florida



Program Background

In 1990's the Intermodal Surface Transportation Efficiency Act (ISTEA) encouraged connectivity between transportation modes to optimize existing urban transportation facilities and strengthen the entire system



Program Background



- ❖ Led to exploration of a Bikes on Buses (BOB) program
- ❖ A national pilot program was proposed for several urban areas nationwide
- ❖ Miami selected in Florida
- ❖ Goal was to expand the transit service area in low density and urban fringe areas through bicycle access



Miami Pilot Project Results

- ❖ Conducted market profile of potential BOB users
- ❖ Recommendations for demonstration routes serving numerous destinations of interest to bicyclists and bus patrons



Miami Pilot Project Results



- ❖ Recommendations for bike racks:
 - ✓ 2 bikes per rack
 - ✓ right of center
- ❖ Staggered stop bars for each lane at narrow intersections
- ❖ Training for bus operators for safe turning movements



Miami-Dade Transit Bicycle Parking Plan

- ❖ Recommendations for:
 - ✓ Bike Rack Designs
 - ✓ Amount of bike parking
 - ✓ Locations / stops or stations
 - ✓ Costs/funding sources
 - ✓ Management
 - ✓ Marketing



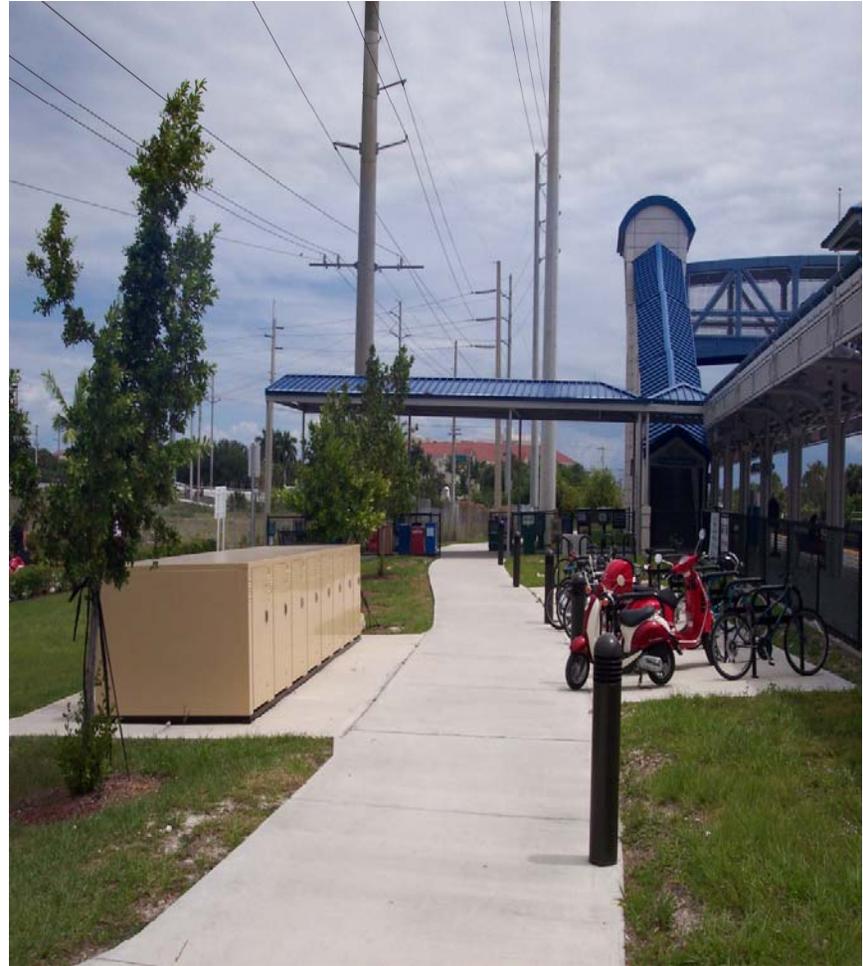
Miami-Dade Transit Bicycle Parking Plan

- ❖ Bicycle lockers were recommended at Tri-rail stations
- ❖ Bike lockers rental cost:

\$25/3 months

\$45/6 months

\$70/year



Miami-Dade Transit Bicycle Parking Plan



Lockers protect the bike from:

- ✓ Weather
- ✓ Theft
- ✓ Vandalism

Provides a reliable place to park



BOB Data and Information



Bike Locker Renter Survey:

- ❖ Over 50% of users earned more than \$70,000/year
- ❖ 72% use the service to commute to work
- ❖ Racks and lockers should be placed within view of transit security and inside of the fare paid zone
- ❖ Preferred the inverted U rack rather than the grid bike rack



BOB Data and Information

Agency		2004	2005	2006	2007	2008
Broward county Transit, Fort Lauderdale	Bicycles	30,000	31,300	31,696	32,584	30,560
	% of total	0.94%	0.95%	0.96%	0.94%	0.95%
Pinellas Suncoast Transit Authority, St. Petersburg	Bicycles	13,850	15,320	19,499	28,461	33,007
	% of total	1.71%	1.80%	2.10%	2.99%	3.14%
Hillsborough Area Regional Transit, Tampa	Bicycles	7,751	10,191	17,086	20,730	20,663
	% of total	0.95%	1.11%	1.72%	2.04%	1.90%
Space Coast, Brevard	Bicycles	4,000	4,000	5,480	6,967	8,081
	% of total	6.14%	5.72%	7.20%	8.19%	7.93%
StarMetro, Tallahassee	Bicycles	900	1,200	1,367	1,524	2,227
	% of total	0.02%	0.03%	0.03%	0.04%	0.05%

Source: Agency reporting of Bikes on buses and National Transit Database (NTD) ridership reports.



Recent Transit Agency Survey



- ❖ 18 of the 29 systems reporting had 100% of buses equipped with racks
- ❖ LYMMO a Bus Rapid Transit (BRT) in Orlando did not have racks on their buses due to:
 - ✓ Rapid boarding
 - ✓ Short route length



Recent Transit Agency Survey

- ❖ Some agencies reported they do not provide bike racks at bus stops
- ❖ Some agencies reported that they had bike racks at limited locations:
 - ✓ terminal areas,
 - ✓ transit centers,
 - ✓ transfer centers, or
 - ✓ Park and Ride stops
- ❖ Manatee County Area Transit (MCAT) has bike racks at all locations with bus shelters



BOB Capacity Issues

- ❖ Most riders want to bring back to complete the last leg of their trip
- ❖ If Bus Racks are full
 - ✓ Wait for next bus
 - ✓ Park bike at bus stop
- ❖ Typically, bikes not allowed inside bus for safety and ADA space considerations
 - ✓ A local agency decision
 - ✓ Bikes are allowed on most commuter rail systems (including Tri-Rail)
- ❖ Not all bus stops have bike racks



Bus Bike Rack Design



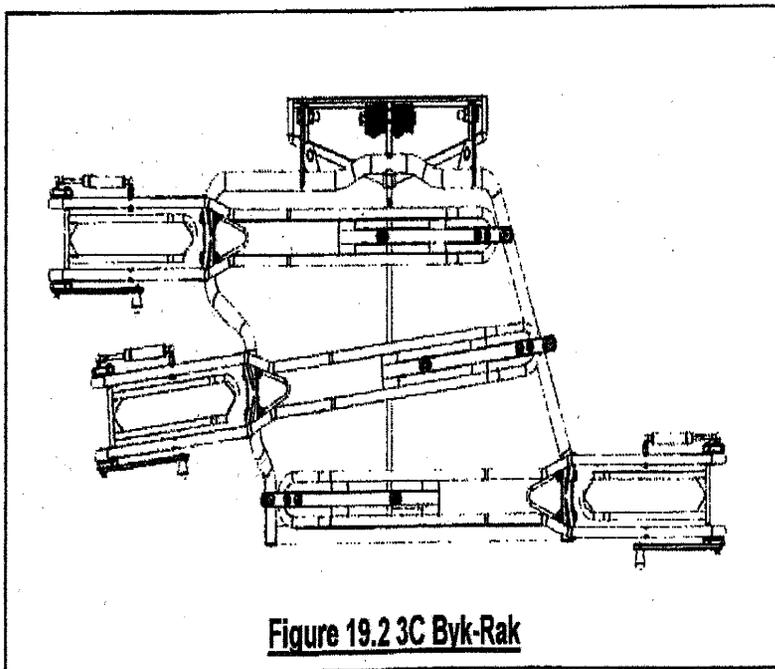
- ❖ 2 Bike rack typical on most buses
- ❖ 3 Bike Rack typically not accepted because they obstruct headlights and drivers windshield view



New Bus Bike Rack Design

3 Bike Bus Rack

Currently approved for use on North American Bus Industries (NABI) buses only



Considerations for the Future

- ❖ Where appropriate, increase use of 3 bike bus racks
- ❖ Promote bike sharing programs
- ❖ More research needed on how to transport bikes safely inside the bus
- ❖ Shared exclusive Bike/Bus lane research



Contact Information

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Yield to the Bus !

