



Washington Metropolitan Area Transit Authority

Improving Bicycle & Pedestrian Access to Metrorail CIP Station Survey and Project Implementation

Office of Long Range Planning
Bicycle and Pedestrian Subcommittee
January, 2011

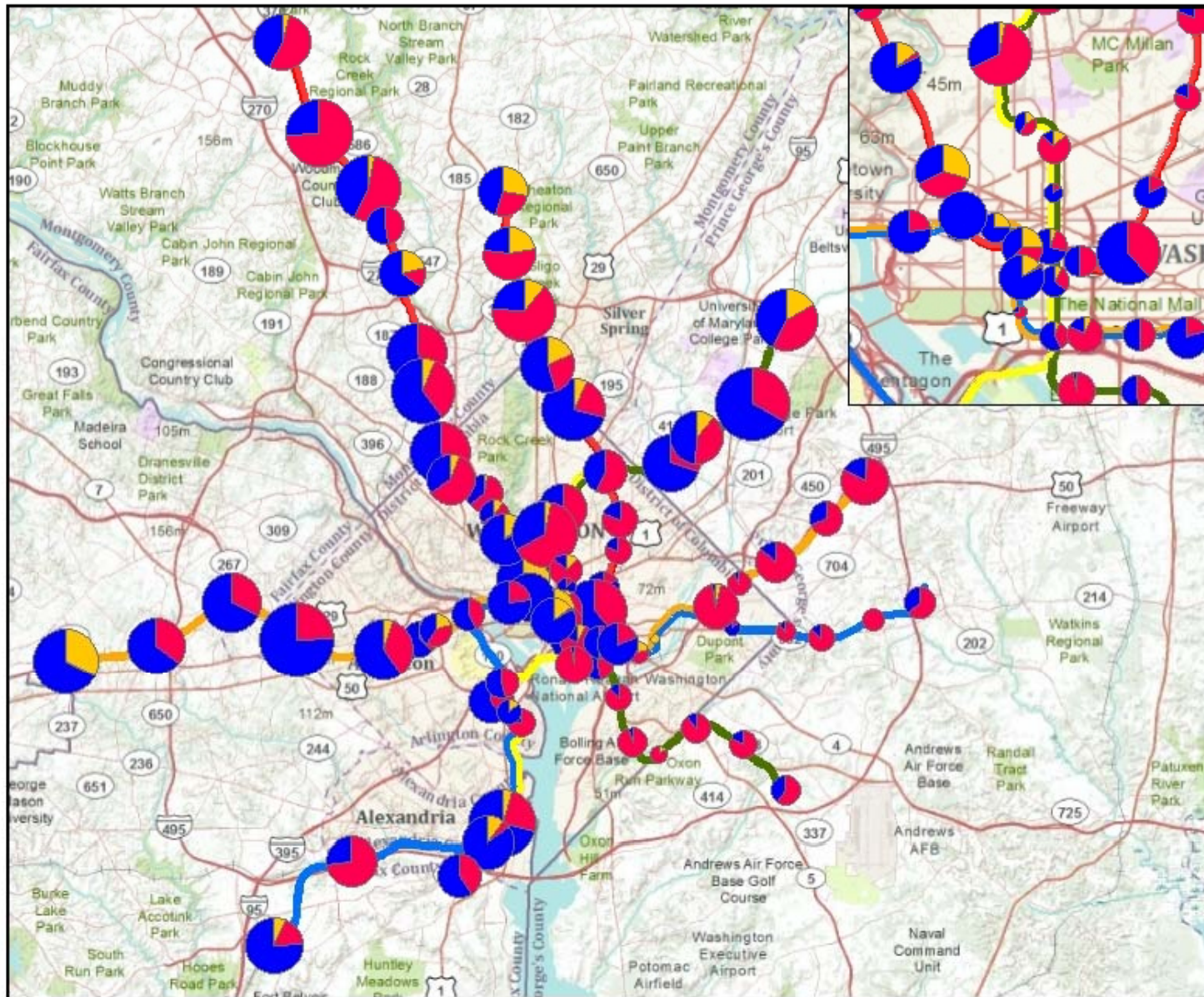


Recap of CIP Program

- Timeframe: FY12-17
- Funding availability: \$7M
- Tasks –
 - Project Identification: Station survey
 - Project Prioritization: Align projects with Agency goals
 - Project Implementation: Mobilize and construct



Bike Census



Number of Parked Bicycles by Station

Bicycle Parking Census
May 1 to June 15, 2011

Size of pie = total capacity on racks
plus bikes not on racks

Legend



- Bikes Not on Racks
- Empty Spaces on Racks
- Bikes on Racks



10.50 1 2 3

Miles

WMATA Low Surface Distortion Projection
Central Meridian: -77.033 Standard Parallel: 38.833
Datum: NAD83 NSRS2007; Units: Feet
WMATA Enterprise GIS



Estimating Bike Ridership – Goals by Station

Station Name (Blue--High Project Level of Effort, Red--Medium LOE, Yellow--Low LOW; White Data Row=No WMATA and No Supplemental Bike Pkg Provided)	Customer Survey		TDG Adj	TDG Adj	TDG Adj	TDG Adj	TDG Adj	Growth Rate	
	2007	2007			2020	2030	2030	2020	2030
	AM Peak Bike Access Percent	AM Peak Arrive By Bike (Customer Survey)	TDG Adjusted Distribution of Parking System-wide (COUNT)	TDG Adjusted Distribution of Parking System-wide (SHARE)	Total BAM Counts (includes Adjustments) needed in AM Peak to reach Target (2.1%)	Projected AM Peak BAMS	AM Peak Bike Arrivals needed to Reach Target (3.5%)		
Vienna	0.50%	47	113	4.94%	332	5.0%	580	1.09	0.94
East Falls Church	3.41%	92	102	4.46%	300	13.0%	524	1.34	1.03
College Park-U of MD	1.05%	20	94	4.11%	276	19.5%	483	1.14	1.00
Takoma	1.28%	46	87	3.80%	256	8.1%	447	1.47	1.03
Bethesda	2.29%	78	78	3.41%	229	9.7%	401	1.19	1.04
Medical Center	7.14%	78	78	3.41%	229	28.8%	401	1.16	1.05
West Hyattsville	2.36%	55	78	3.41%	229	12.3%	401	1.29	1.02
Silver Spring	1.12%	74	74	3.23%	252	3.3%	380	1.38	1.09
Greenbelt	0.34%	17	69	3.02%	203	6.1%	354	1.08	0.97
Braddock Road	1.73%	41	63	2.75%	185	12.9%	324	0.89	1.18
Woodley Park-Zoo	2.10%	61	61	2.67%	179	7.2%	313	1.26	1.04
Shady Grove	0.42%	45	60	2.62%	176	2.0%	308	1.23	1.03
Dunn Loring	1.98%	54	57	2.49%	167	7.0%	293	1.48	1.09
Friendship Heights	1.79%	57	57	2.49%	167	7.3%	293	1.19	1.00
Rockville	1.49%	35	57	2.49%	167	8.5%	293	1.35	1.07
Twinbrook	1.27%	28	56	2.45%	197	7.4%	288	1.36	1.06
Ballston	1.02%	47	54	2.36%	159	3.8%	277	1.32	1.05
Grosvenor	0.90%	29	53	2.32%	156	5.8%	272	1.06	1.03
King Street	1.35%	34	52	2.27%	153	7.6%	267	1.14	1.12
Franconia-Springfield	0.62%	39	48	2.10%	141	3.2%	246	1.17	1.00
West Falls Church	0.40%	15	47	2.05%	138	5.2%	241	0.84	0.94
Huntington	0.69%	43	43	1.88%	126	2.6%	221	1.14	1.09
Forest Glen	2.78%	40	40	1.75%	177	6.9%	205	1.49	0.99
Union Station	0.35%	35	40	1.75%	118	2.0%	205	0.98	1.07
Glenmont	0.57%	25	38	1.66%	112	3.0%	195	1.29	0.97
Van Dorn Street	1.38%	33	33	1.44%	97	5.1%	169	1.26	1.19
Virginia Square-GMU	0.73%	12	33	1.44%	97	5.3%	169	1.46	1.17



Project Identification

- **TOTAL RECOMMENDATIONS: 3,028**
- **Total Cost: \$25 M**
- New or improved trails and sidewalks: **53,238** linear ft.
- Intersection improvements: **743**
 - Of which **221** curb ramp installations are needed.
- New bike parking locations: **448**
- Existing bike parking locations that need to be covered: **56**



Field Survey Results: GIS





Field Survey Results: Bike Parking

Potential Locations for New Bicycle Parking

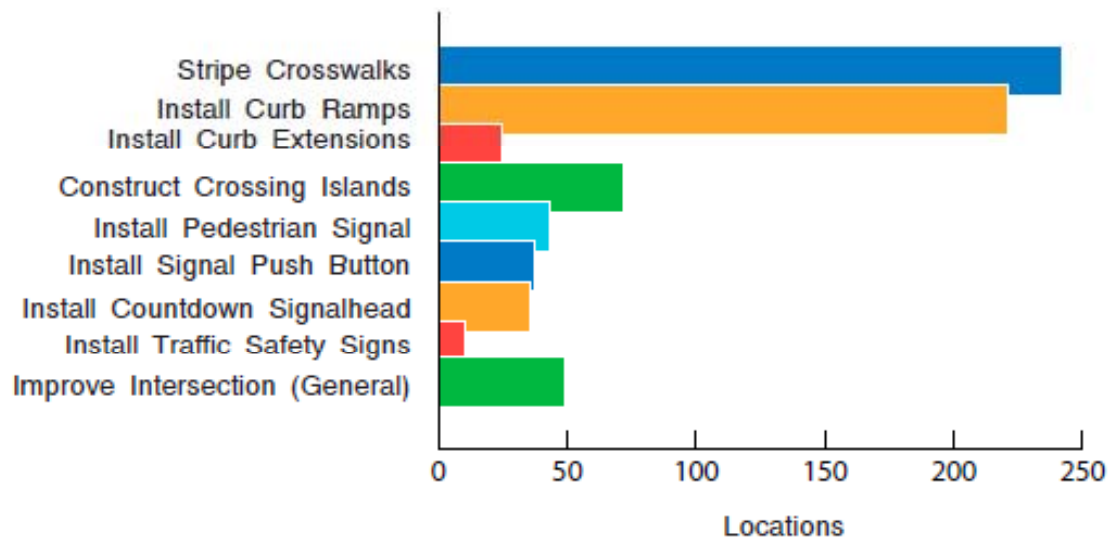
Parking Type	New Parking Options		Additional Capacity Needed to Meet 2020 Goal
	Total Number of Locations Identified	Total Capacity Identified	
Covered Inverted-U Racks	259	5,034	2,832
Uncovered Inverted-U Racks	35	568	312
Bike & Ride	30	1,508	740
On-Demand Locker	77	770	312
Other	9	320	112
Total	410	8,200	4,308



Field Survey Results: Intersection Improvements

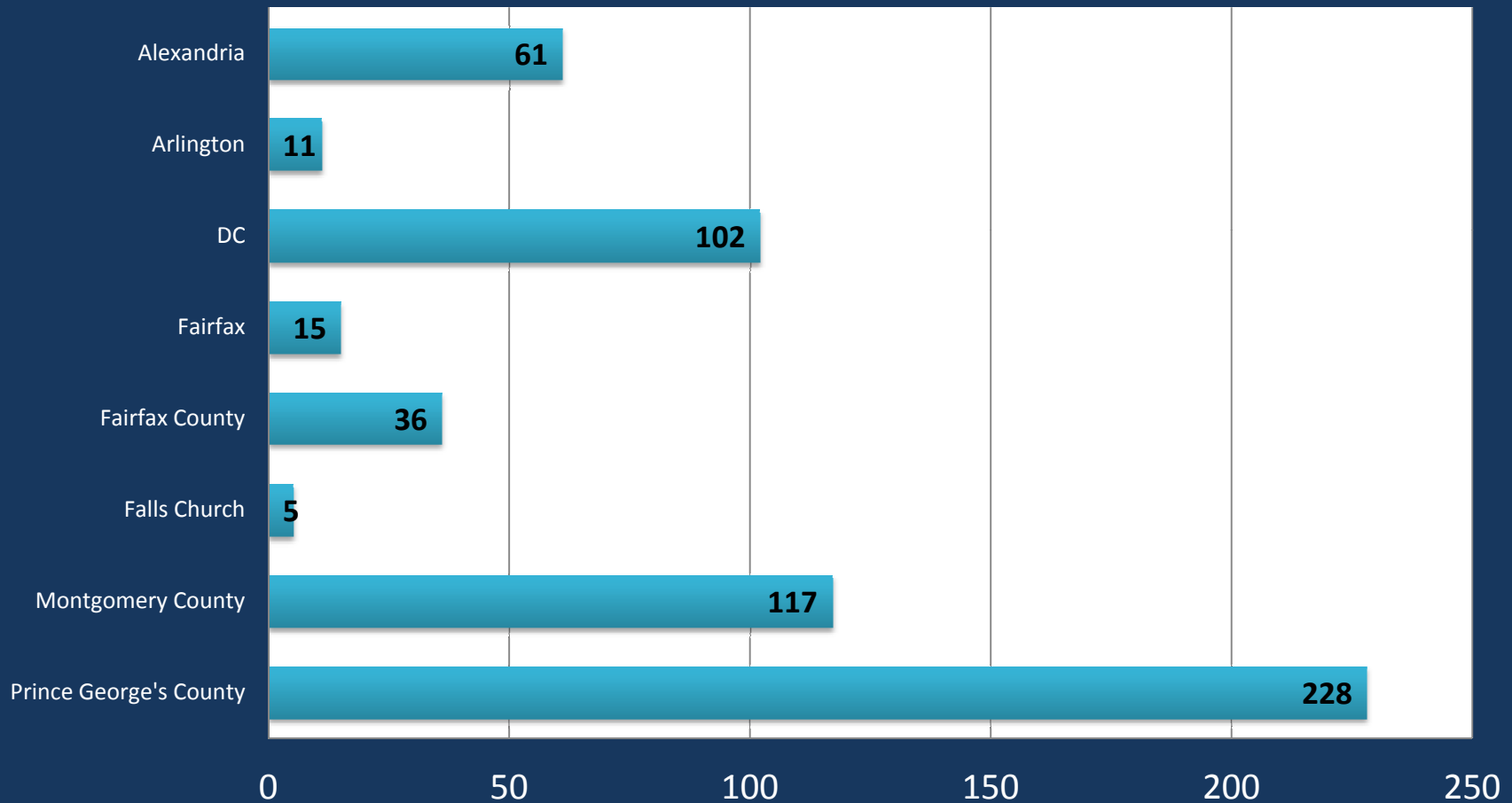
Recommended Pedestrian Improvements

Recommended Intersection Improvements



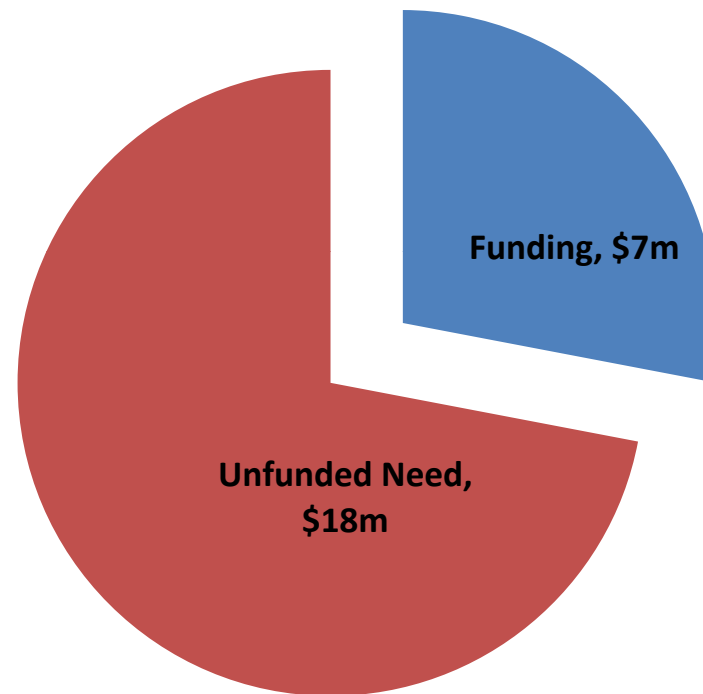


Intersection Improvements by Jurisdiction





Project Prioritization



Total Need: \$25 million



Project Prioritization

Recommendation types that need to be prioritized	Prioritization Considerations	Percent of Total Need Funded	Estimated Dollars to be Allocated
Add lighting at existing bike parking locations	Bike theft and vandalism rates, station crime statistics, Transit Survey comments, site specific factors.	70%	\$300,000
Provide wayfinding signs	Severity of need, Transit Survey comments, site specific factors, coordination with local partners, equitable distribution among jurisdictions.	NA	\$125,000
Add racks with freestanding and cantilevered covers	Locations where no other covered options are available, total volume of existing and projected need; equitable distribution among jurisdictions.	12%	\$475,000
On-demand lockers (see Pilot Program on page 17 for initial investment)	Bike theft and vandalism rates, station crime statistics, high turnover potential, equitable distribution among jurisdictions.	6%	\$125,000
Bike & Ride Centers	High demand stations, high security needs due to bike theft and vandalism rates, Transit Survey comments.	25%	\$1,600,000
Off-site bike lanes	Severity of need, routes leading directly to high capacity parking locations, total volume of existing and projected need, presence of a local partner.	49%	\$250,000
Construct new and widen existing sidewalks and paths	Location on or off WMATA property, priority rating: High, level of difficulty rating: Low, severity of need, potential volume of customers served.	42%	\$1,750,000
Curb ramps	Location on or off WMATA property, relationship to larger pathway improvement needs, severity of the problem, potential impacts on customers with physical disabilities.	57%	\$500,000
Curb extensions and crossing islands	Location on WMATA property, coordination with WMATA Bus and Parking divisions and local transportation agency.	98%	\$250,000
Total Cost			\$5.375 million



Project Implementation: Completed

MEDICAL CENTER BEFORE AND AFTER, REPLACING OLD RACKS



VIENNA STATION BEFORE AND AFTER, NEW ACCESS POINT



FRANCONIA – SPRINGFIELD BEFORE AND AFTER, NEW SIDEWALK TO IMPROVE SAFETY





Jurisdictional Coordination

Next Steps:

- Assist with project implementation: off-site bike lanes, intersection improvements
- Explore funding opportunities for unfunded projects from needs list.
- Continue to update, refine needs list, including inventory update in 2012

