



Washington Metropolitan Area Transit Authority

Increasing Bicycle Access to Metrorail

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Office of Long Range Planning
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About Metro



Metro Service Area:
1,500 square miles
3.9 million population

Rail:

- 86 stations
- 106 miles of track
- Avg weekday
750,000 trips

Bus:

- 1,500 buses
- Avg weekday
450,000 trips

Paratransit

- >8,000 trips/day



Bicycle Facilities & Policies

Facilities

Bus

- Racks on buses (holds 2 bikes)

Rail

- 2,000+ racks (inverted Us)
- 1200+ lockers
- *(New)* Bike & Ride secure group parking

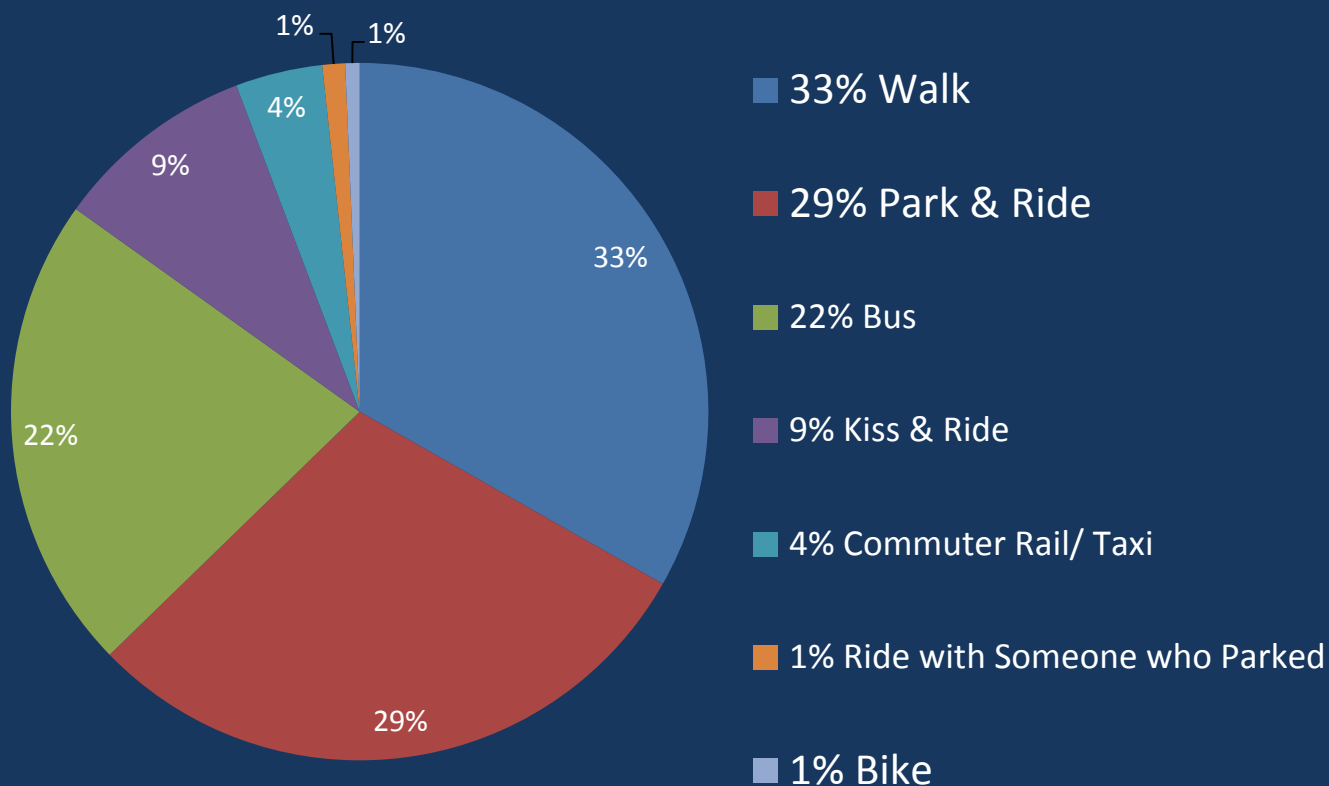
Policies

- Bikes can ride rail at most times, except rush hour
- Folding bikes can ride rail at any time, must be folded and encased during rush
- Bikes use elevators in Rail stations



Existing Mode of Access to Metrorail

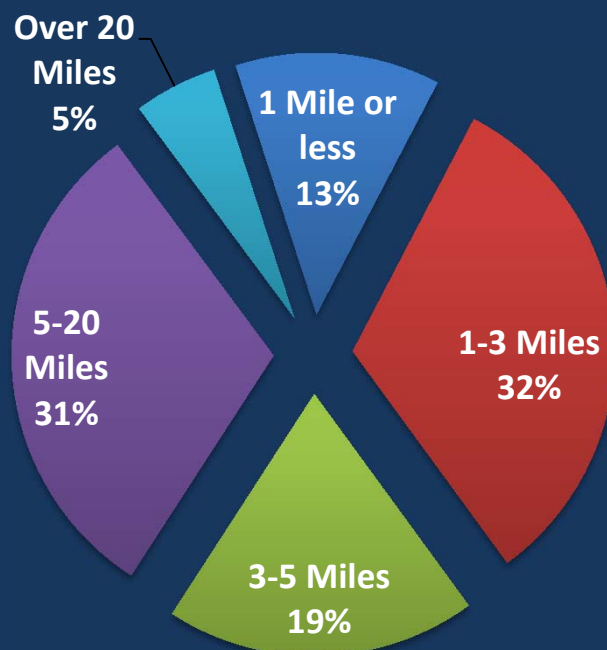
Metrorail AM Peak Arrivals – 250,000





Distance to Station for Parking Customers

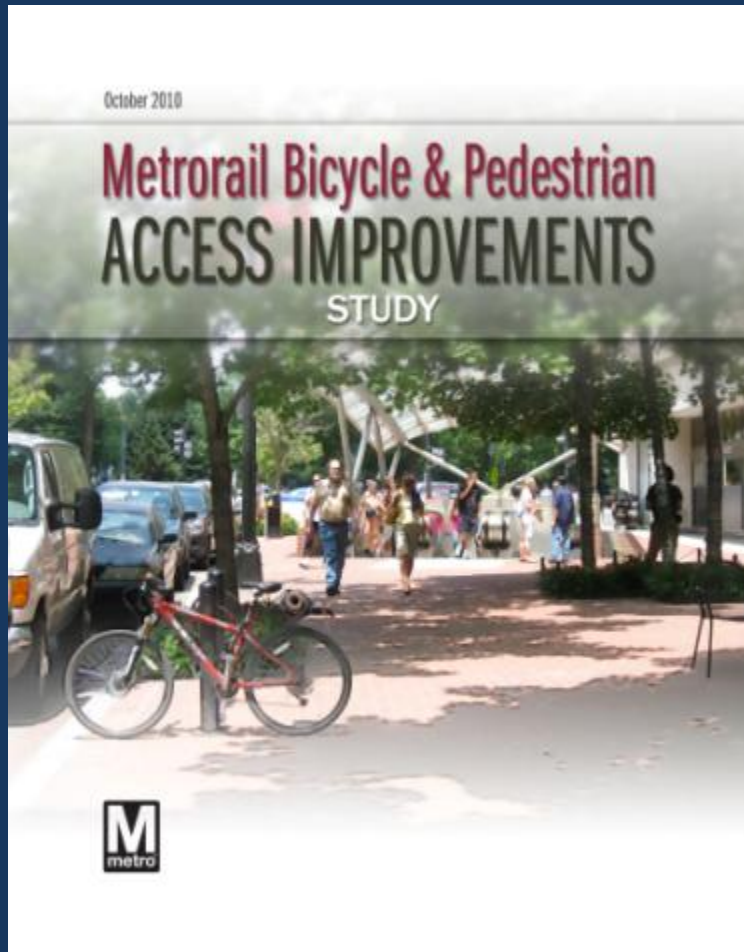
Parking Customers' Driving Distance to Parking Facilities



2007 Rail Passenger Survey, AM Peak.
Total: 44,273 customers



Develop Master Plan



- Holistic look at Authority-wide activities related to bicycle & pedestrian access
- Bike Security top concern of riders
- Resulted in almost 100 recommendations in 10 categories for Metro and partners
- Implementation recommendations for the near, short and long-term.
- *Study available on Metro's website*



Establish Bicycle Ridership Goals

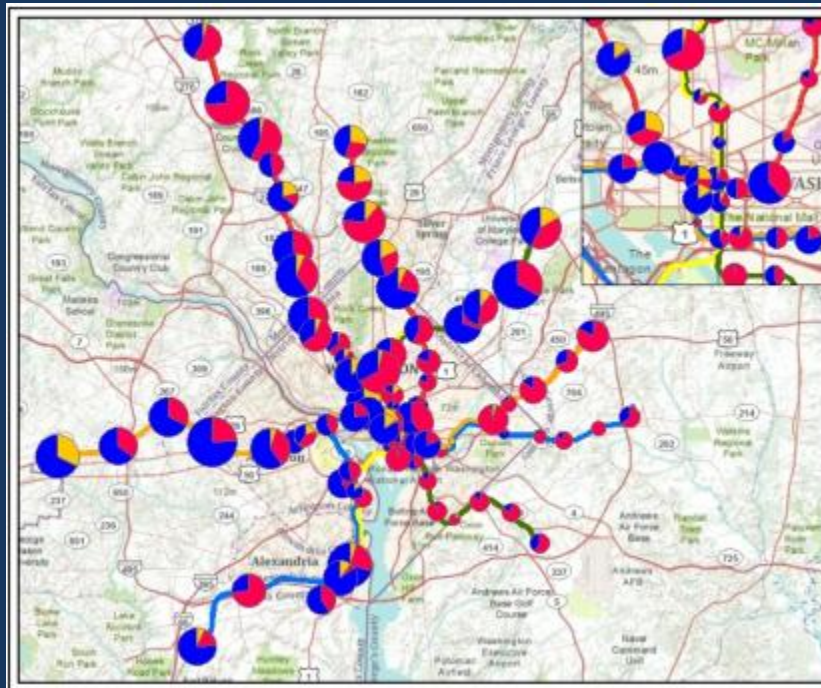
- Triple by 2020 and Quintuple by 2030

	2007	2020	2030
Mode Share	.7%	2.1%	3.5%
Est. No. of Riders (AM peak)	1,600	7,000	12,000



Analyze Data

Identifying demand



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

Legend



100
Bikes Not on Rack
Empty Space
Bikes on Rack



10 50 1 2 3
M

WMATA Line Surface D
Central Station 177,523 sq
feet; NACRO 100%
WMATA Data

Setting Station level ridership targets

Station Name (Blue-High Project Level of Effort, Red-Medium L.O.E., Yellow-Low L.O.E., White Data Row-No WMATA and No Supplemental Bike Pkg Provided)	Customer Survey		TDG Adj		TDG Adj		TDG Adj		TDG Adj		Growth Rate	
	2007	2007	2007	2007	2020	2030	2030	2030	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 SAM Counts (Includes Adjustments) needed in AM Peak to reach Target (2.1%)	Projected AM Peak SAMs	AM Peak Bike Arrivals needed to Reach Target (3.5%)						
Column2	Column3	Column4	Column5	Column6	Column7	Column8	Column9	Column10	Column11	Column12	Column13	Column14
Valley	0.50%	47	113	4.54%	332	5.0%	580	1.89	0.9			
East Falls Church	3.41%	92	102	4.46%	300	13.9%	524	1.34	1.0			
College Park-U of MD	1.05%	20	54	4.11%	276	19.5%	483	1.14	1.0			
Takoma	1.26%	46	87	3.80%	256	8.1%	447	1.47	1.0			
Bethesda	2.29%	78	78	3.41%	229	9.7%	401	1.18	1.0			
Medical Center	7.14%	78	78	3.41%	229	28.6%	401	1.19	1.0			
West Hyattsville	2.36%	55	78	3.41%	229	12.3%	401	1.28	1.0			
Silver Spring	1.12%	74	74	3.23%	252	3.3%	380	1.38	1.0			
Greenbelt	0.34%	17	69	3.02%	203	6.1%	354	1.88	0.9			
Braddock Road	1.73%	41	63	2.75%	185	12.9%	324	0.89	1.1			
Woodley Park-Zoo	2.10%	61	61	2.67%	179	7.2%	313	1.28	1.0			
Stady Grove	0.42%	45	60	2.62%	176	2.9%	308	1.23	1.0			
Dunn Loring	1.98%	54	57	2.49%	167	7.0%	293	1.40	1.0			
Friendship Heights	1.79%	57	57	2.49%	167	7.3%	293	1.19	1.0			
Rochville	1.49%	35	57	2.49%	167	8.5%	293	1.17	1.0			
Twinsbrook	1.27%	28	56	2.45%	157	7.4%	288	1.30	1.0			
Ballston	1.02%	47	54	2.36%	159	3.8%	277	1.33	1.0			
Grosvenor	0.90%	29	53	2.32%	156	5.8%	272	1.80	1.0			
King Street	1.35%	34	52	2.27%	153	7.6%	267	1.14	1.1			
Francis-Springfield	0.62%	39	48	2.10%	141	3.2%	246	1.17	1.0			
West Falls Church	0.40%	15	47	2.05%	138	5.2%	241	0.94	0.9			
Huntington	0.69%	43	43	1.88%	126	2.6%	221	1.14	1.0			
Forest Glen	2.78%	40	40	1.75%	177	6.9%	295	1.49	0.9			
Union Station	0.35%	35	46	1.75%	118	2.9%	205	0.88	1.0			
Glenmont	0.57%	25	38	1.66%	112	3.0%	195	1.29	0.9			
Van Dorn Street	1.38%	33	33	1.44%	97	5.1%	169	1.28	1.1			
Virginia Square-GMU	0.73%	12	33	1.44%	97	5.3%	169	1.40	1.1			



Identify Capital Needs





Prioritize Projects & Develop CIP

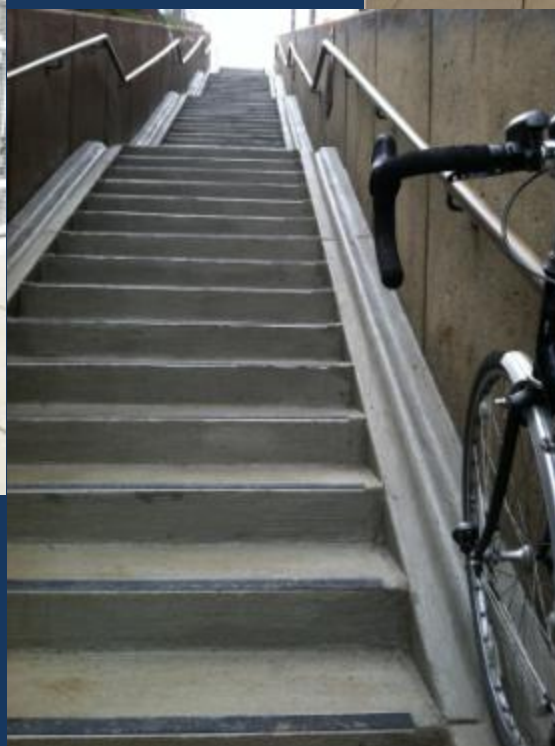
Recommendation types that need to be prioritized	Prioritization Considerations	Percent of Total Need Funded	Estimated Dollars to be Allocated
Add lighting at existing bike parking locations	Bike theft and vandalism rates, station crime statistics, Transit Survey comments, site specific factors.	70%	\$300,000
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



Implement Projects



College Park
Bike & Ride



More racks at Vienna

Bike channel at RI Ave



Coordination with Local Jurisdictions

- Integrating Bike Share stations with Metro
- Met Branch Trail & RI Ave Pedestrian Bridge Coordination
- Joint development/Adjacent Construction review



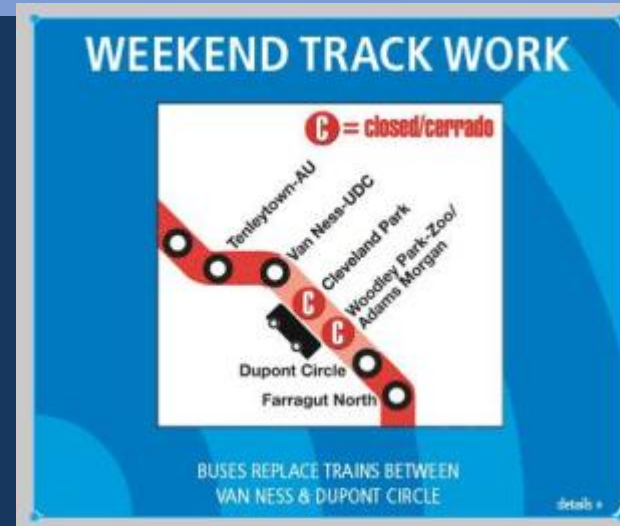
WMATA MBT Easement





Bikesharing & Transit – the ‘Why’

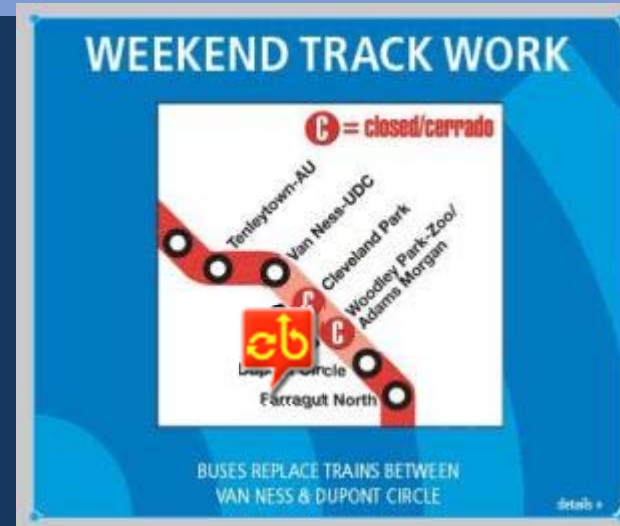
- #1 – Addresses 1st mile/last mile problem
- Potential for core capacity relief during peak periods
- Emergency /Incident alternative
- Bike safety & security





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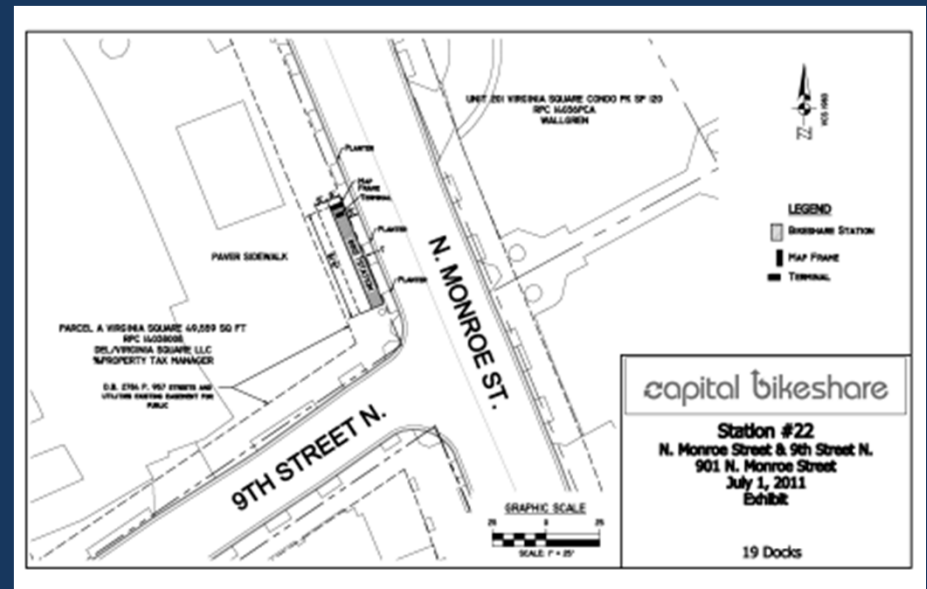
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Bikesharing & Transit – the ‘How’

- Space allocations/considerations & Agency review
- Property ownership matters
- Developing agreements for: right of entry, maintenance, insurance & liability





Thank you!

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