THE BICYCLE MASTER PLAN

Bicycle Master Plan Update

May 23, 2017

Montgomery County Planning Department
David Anspacher, Project Manager

Agenda

[1] Welcome

[2] Updates

[3] Review Comments on Preliminary Bikeway Recs

[4] New Topics

    a. Breezeway Network Memo

    b. Bicycle Parking Stations

    c. Master Plan Scenarios

[5] Public Comment

[3] Preliminary Bikeway Recommendations

Preliminary Bikeway Recommendations

- Bikeable Shoulders
  - Rural major highway / country arterials
  - Suburban major highway / arterials
  - Residential primaries

Rural Areas

Major Highway
Laytonsville Road / MD 108

Country Arterial
Sundown Road

Staff Recommendation: bikeable shoulders

Suburban Areas

Major Highway
Woodfield Road / MD 124

Arterial
Briggs Chaney Road

Staff Recommendation: sidepaths

Residential Primaries

Residential Primary
Postoak Road

Staff Recommendation: typically sidepaths, though advisory bike lanes or conventional bike lanes could be appropriate

[4a] Breezeway Network

Breezeway Network

- Characteristics
  - High-quality construction
  - Multiple speeds
  - Minimal delay

Breezeway Network

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  - High-quality construction
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Breezeway Network

- Design Speed

- Complete Separation from Traffic

- Complete Separation from Pedestrians

- Minimal Intersection Delay and Conflicts

- High-Quality Pavement Surface

- Free of Obstructions
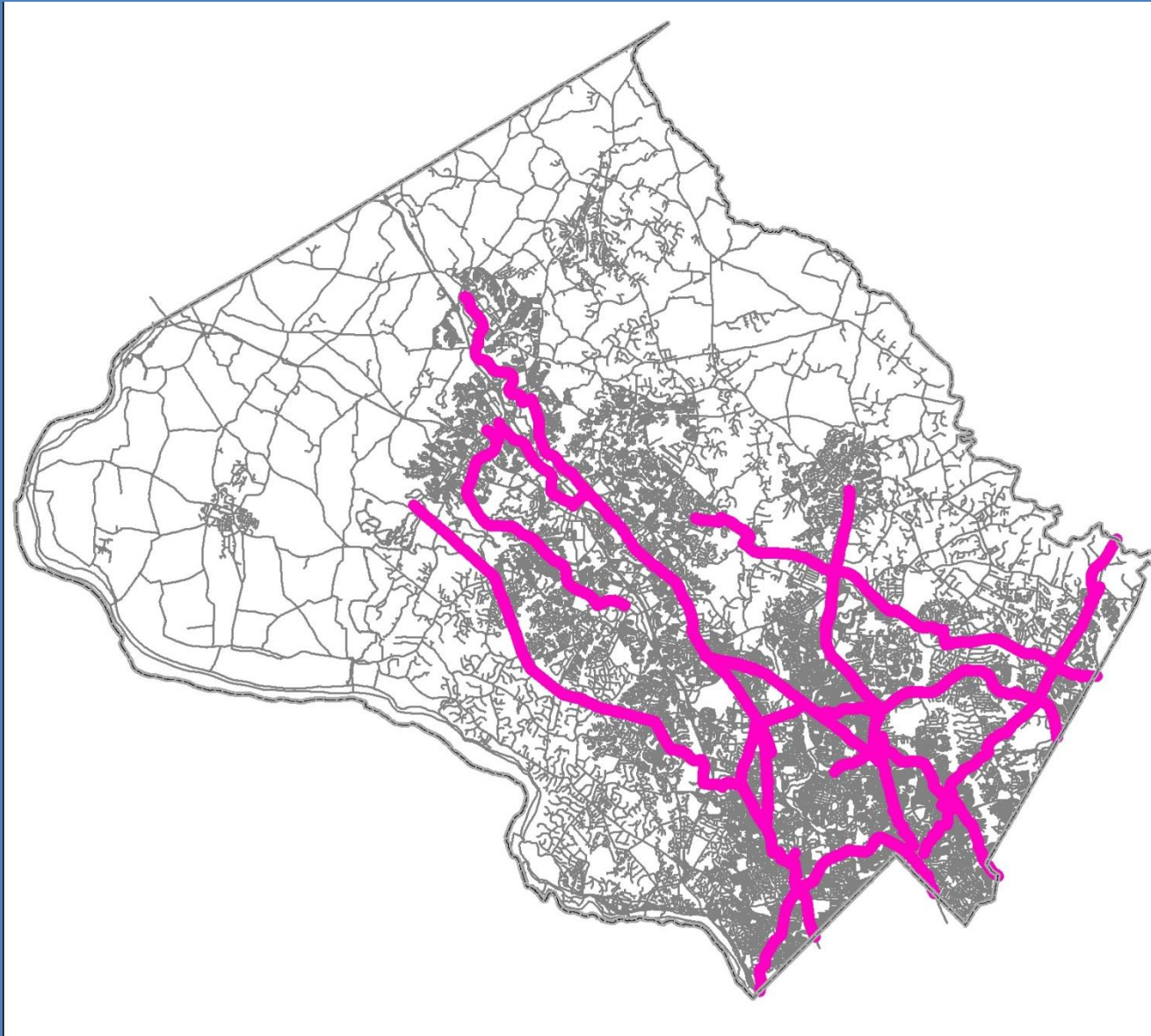
- Well lit

- Branding & Wayfinding

Breezeway Network

Minimal Intersection Delay / Conflicts

Source: John Greenfield

Pavement Quality

Breezeway Network

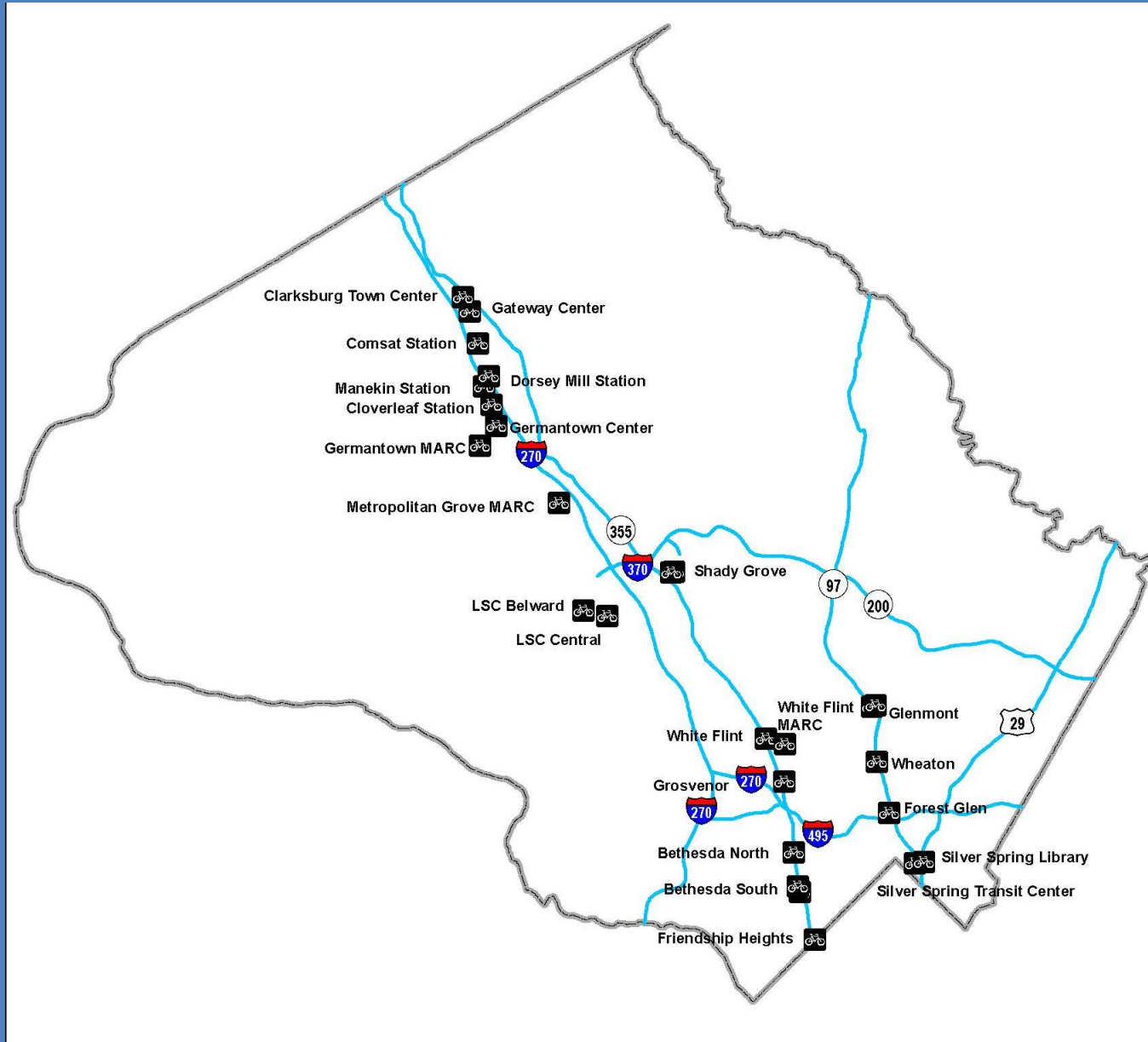# [4b] Long-Term Bicycle Parking

Long-Term Bicycle Storage

Urban Bicycle Parking Station, Berkeley, CA

Long-Term Bicycle Storage

Suburban Bicycle Parking Station, Austin, Texas

Long-Term Bicycle Storage

Long-Term Bicycle Storage

Station	Service	Total
Bethesda Metrorail Station North Entrance	Red Line	290
Bethesda Metrorail Station South Entrance	Red Line & Purple Line	520
Clarksburg Town Center Station	Corridor Cities Transitway	20
Cloverleaf Station	Corridor Cities Transitway	20
Comsat Station	Corridor Cities Transitway	20
Dorsey Mill Station	Corridor Cities Transitway	20
Forest Glen Metrorail Station	Red Line	410
Friendship Heights Metrorail Station	Red Line	480
Gateway Center Station	Corridor Cities Transitway	20
Germantown Center Station	Corridor Cities Transitway	20
Germantown MARC Station	MARC Brunswick Line	60
Glenmont Metrorail Station	Red Line	180
Glenmont Metrorail Station	Red Line	180
Grosvenor Metrorail Station	Red Line	420
LSC Belward Station	Corridor Cities Transitway	60
LSC Central Station	Corridor Cities Transitway	80
Manekin Station	Corridor Cities Transitway	20
Medical Center Metrorail Station	Red Line	560
Metropolitan Grove MARC Station	MARC Brunswick Line	30
Shady Grove Metrorail East	Red Line & Corridor Cities Transitway	440
Shady Grove Metrorail West	Red Line	340
Silver Spring Library	Purple Line & Retail	40
Silver Spring Metrorail Station	Red Line & Purple Line & MARC	880
Wheaton Metrorail Station	Red Line	390
White Flint MARC Station	MARC Brunswick Line	40
White Flint Metrorail Station	Red Line	430
Total		5,970

Long-Term Bicycle Storage (Red Line)

Assumed 5% of peak period boardings, or 5,220 boardings

Average of three approaches. 5,200 apportioned to stations by:

1. 2040 station boardings

2. Number of residences within 2 miles

3. WMATA 2030 station targets

Long-Term Bicycle Storage

Station	Approach #2 (2040 Boardings)	Approach #3 (Residences)	Approach #4 (WMATA Targets)	Average
Bethesda	740	640	770	720
Forest Glen	150	690	400	410
Friendship Heights	440	430	570	480
Glenmont	270	440	380	360
Grosvenor	280	460	530	420
Medical Center	400	520	770	560
Shady Grove	1,200	230	590	670
Silver Spring	830	720	730	760
Wheaton	270	580	320	390
White Flint	640	490	160	430
Total	5,220	5,200	5,220	5,210

Long-Term Bicycle Storage (MARC)

- Started with 2016 boardings (peak period)

- Grew boardings by 1% to 2040

- Focus on stations with greatest potential demand

  - Germantown

  - Metropolitan Grove

  - Silver Spring

  - Assumed 40 spaces for future White Flint station

Long-Term Bicycle Storage (Purple Line)

- Assumed 5% of 2040 peak period boardings

- Focused on stations with greatest potential demand

  - Silver Spring Transit Center

  - Silver Spring Library

  - Bethesda

Long-Term Bicycle Storage (CCT)

- Assumed 5% of total peak boardings (2040)

- Apportioned by # of residences with 2 miles of station

- Since stations are close, grouped demand to three stations:
  - LSC Belward (includes nearby station demand)
  - LSC Central (includes nearby station demand)
  - Shady Grove

[4c] Bikeway Scenarios

Monitoring Report

OBJECTIVE	METRIC		ACTUAL		TARGET	
			2017 (BASELINE)	2019 (FUTURE YEAR)	2022 (5-YEAR TARGET)	2027 (10-YEAR TARGET)
GOAL 2: CREATE A HIGHLY-CONNECTED, CONVENIENT AND LOW-STRESS BICYCLING NETWORK						
2.1	Percentage of potential bicycle trips that can be made on a low-stress bicycle network.		TBD			
2.2	Percentage of dwelling units within 2.0 miles of Red Line, Brunswick Line, Purple Line, and Corridor Cities Transitway stations that can access the station on a low-stress bicycling network.	Red Line	18%			
		Brunswick Line	12%			
		Purple Line	15%			
		Corridor Cities Transitway	23%			
2.3	Percentage of dwelling units located within the attendance zone of elementary, middle and high schools that are connected to each school through a low-stress bicycle network.	Elementary Schools	20%			
		Middle Schools	10%			
		High Schools	5%			
2.4	Percentage of dwelling units within 2.0 miles of a public facility will be connected to that facility through a low-stress bicycling network.	Public Libraries	10%			
		Recreation Centers	22%			
		Recreational and Regional Parks	37%			

Bikeway Scenarios

- Baseline (existing master plan buildout)

- Building the Core (BiPPAs)

- Rail Transit Focus

- Connecting the Gaps

- Breezeway Network + Core

- Full Buildout (proposed Bicycle Master Plan)

THE
BICYCLE
MASTER PLAN