# MONTGOMERY COUNTY BICYCLE MASTER PLAN



# MASTER PLAN FRAMEWORK

### Framework



DEFINING THE VISION

### **Vision Statement**



# Montgomery County will become a world-class bicycling community.



# Goals



#### **Four Goals**

- 1. Increase bicycling rates in Montgomery County.
- 2. Create a highly-connected, convenient and low-stress bicycling network.
- 3. Provide equal access to lowstress bicycling for all members of the community.
- 4. Improve the safety of bicycling.

# Objectives, Metrics, Targets and Data

**DEFINING** THE VISION

GOALS

OBJECTIVES

METRICS

TARGETS

DATA COLLECTION

2.1 OBJECTIVE

By 2043, 65 percent of potential bicycle trips will be able to be made on a low-stress bicycling network.

#### METRIC

Percentage of potential bicycle trips will be able to be made on a low-stress bicycling network.

#### DATA REQUIREMENT (SOURCE)

- Level of Traffic Stress Network (M-NCPPC).
- Regional Travel Demand Model Trip table (M-NCP-PC).
- Bicycle trip length decay function (MWCOG Household Travel Survey).
- Location of dwelling units (M-NCPPC).

Note: See Appendix D for a description of Level of Traffic Stress.

ACHIEVING THE VISION

# Achieving the Vision











# **Proposed Bikeway Classification**

# BICYCLE FACILITY CLASSIFICATION





### Trails

#### off-street trails | stream valley park trails









### Trails

#### off-street trails | stream valley park trails









# Separated Bikeways

#### separated bike lanes | sidepaths









# Separated Bikeways

separated bike lanes | sidepaths





SEPARATION FROM TRAFFIC



LEAST



#### buffered bike lanes |conventional bike lanes











#### buffered bike lanes |conventional bike lanes











#### advisory bike lanes | contra-flow bike lanes











advisory bike lanes | contra-flow bike lanes









# **Bikeable Shoulders**







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SHOULDERS





# Shared Roads

#### neighborhood greenways | shared streets









# Shared Roads

#### neighborhood greenways | shared streets









MOST

# Shared Roads

#### priority shared lane markings







# Bikeway Recommendations

CATEGORY	BIKEWAY TYPE	EXISTING	PROPOSED	TOTAL	
	Off-Street Trails	99	73	172	
Trails	Stream Valley Park Trails	28	0	28	
	Neighborhood Connectors	11	3	14	
Separated Bikeways	Shared Use Paths	117	456	573	
	Separated Bike Lanes	2	97	99	
Striped Bikeways	Buffered Bike Lanes	0	7	7	
	Conventional Bike Lanes	10	15	25	
	Advisory Bike Lanes	0	0	0	
	Contra-Flow Bike Lanes	1	5	6	
Bikeable Shoulders	Bikeable Shoulders	0	128	128	
Shared Roads	Neighborhood Greenways	0	48	48	
	Shared Streets	0	1	1	
	Priority Shared Lane Markings	0	5	5	
Total		266	839	1,105	



- Arterial for bikes
- Connects major activity centers
- High-capacity
- High-quality construction
- Safely accommodates multiple speeds
- Minimizes delay
- Prioritizes bicycling and walking through intersections

### **Design Speed**

- Urban Areas: 12 mph
- Suburban Areas: 20 mph





Source: John Greenfield









# **Bicycle Parking: Short Term**



# **Bicycle Parking: Short Term**



#### Friendship Heights

Blocks with unmet short-term bike parking supply: 27

- With at least one rack: 22%
- With no racks: 78%
- With insufficient racks: 96%

Total short-term bike spaces needed: 160

# Bicycle Parking: Short Term

- # of Blocks Evaluated: 1,152
- Blocks with at least one bike rack: 22%
- Blocks with no bike racks: 78%
- Blocks with insufficient bike parking: 85%

# **Bicycle Parking: Long Term**



Suburban Location Boulder, Colorado

Urban Location Berkeley, California

# **Bicycle Parking: Long Term**



### Recommendations



# www.mcatlas.org/bikeplan

# **Bicycle-Supportive Programs**





DC Public Schools Bike Curriculum

## **Bicycle-Supportive Policies**





Lower speed limits on neighborhood greenways

# IMPLEMENTING THE VISION

# Funding





### **Design Standards**





MONTGOMERY COUNTY PLANNING DEPARTMENT

#### BICYCLE FACILITY DESIGN TOOLKIT

MAY 2018



### Implementation



- Higher quality shared use paths
- Interim vs permanent separated bike lanes
- Developer contributions

### Prioritization



Bicycle Pedestrian Priority Areas.
Neighborhood greenways.
Potential bicycling demand.

### Low-Stress Bicycling Network



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### Modified Travel Demand Model



### Modified Travel Demand Model





MONITORING THE VISION

### Monitoring the Vision



# Monitoring the Vision

OBJECTIVE	METRIC		EXIST- ING (2018)	FUND- ED	HIGH PRIOR- ITY	TIER 1	TIER 2	TIER 3	TIER 4	BUILD OUT			
GOAL 2: CREATE A HIGHLY-CONNECTED, CONVENIENT AND LOW-STRESS BICYCLING NETWORK													
2.1	Countywide Connectivity		14%	N/A	20%	25%	35%	50%	55%	85%			
2.2	Connectivity to Transit Stations	Red Line	10%	10%	20%	35%	55%	60%	65%	80%			
		Brunswick Line	10%	15%	20%	30%	50%	55%	55%	75%			
		Purple Line	5%	10%	20%	30%	60%	65%	70%	75%			
		Corridor Cities Transitway	0%	0%	0%	30%	35%	40%	40%	75%			
2.3	Connectivity to Public Schools	Elementary Schools	40%	40%	40%	40%	40%	45%	45%	60%			
		Middle Schools	25%	25%	25%	30%	30%	35%	35%	55%			
		High Schools	15%	15%	15%	15%	20%	20%	25%	35%			
GOAL 3: PROVIDE EQUAL ACCESS TO LOW-STRESS BICYCLING FOR ALL MEMBERS OF THE COMMUNITY													
3.1	Connectivity to Low Income Areas		50%	N/A	65%	65%	75%	80%	80%	90%			

# Equity Analysis: Existing Conditions



# Equity Analysis: Tier 4



# Equity Analysis: Full Build



### Monitoring the Vision



# www.mcatlas.org/bikeplan

# OUTREACH

![](_page_58_Picture_0.jpeg)

The Bikeway ReactMap encouraged the public to comment on the Bicycle Master Plan's preliminary bikeway recommendations. Users could view the map legend, review a brief description of bikeway facility types and add comments about the bikeway recommendations.

![](_page_58_Picture_2.jpeg)

![](_page_58_Picture_3.jpeg)

» MCATLAS.ORG/BIKEREACT

![](_page_58_Picture_5.jpeg)

![](_page_58_Picture_6.jpeg)

#### VENGA CON NOSOTROS AL PASEO EN BICICLETA

Obtenga más información sobre el **Plan Maestro de Bicicletas** de Montgomery Planning.

MONTGOMERYPLANNING.ORG/BIKEPLAN

M THE MONTGOMERY COUNTY PLANNING DEPARTMENT

![](_page_58_Picture_11.jpeg)

NEXT STEPS

- Tonight: County Council Public Hearing
- September / October: Council Worksessions
- Fall 2018: Council Approval

![](_page_61_Picture_0.jpeg)

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www.montgomeryplanning.org/bikeplan