MCPB
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Bicycle Master Plan Framework Report

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DESCRIPTION

At this Planning Board session staff will provide an overview of the draft framework report for the Bicycle Master Plan, highlighting the recommended framework for the plan and reviewing key issues. This session will provide the Planning Board and the public an opportunity to weigh in on the proposed approach to the Bicycle Master Plan. It will also provide the Planning Board the opportunity to identify aspects of the report they would like to review in greater detail during a worksession scheduled for September 8 and, if needed, a second worksession scheduled for September 15. During the September 8 worksession staff will also respond to all public input received on July 28th.

BACKGROUND

On September 10, 2015, the Planning Board approved a Scope of Work for the Bicycle Master Plan. Task 4 of the Scope of Work is the development of a report that outlines the approach to the Bicycle Master Plan and includes a discussion of the issues identified in the Scope of Work. The framework report is intended to fulfill Task 4 of the Scope of Work, and will be used to develop the Bicycle Master Plan Working Draft.

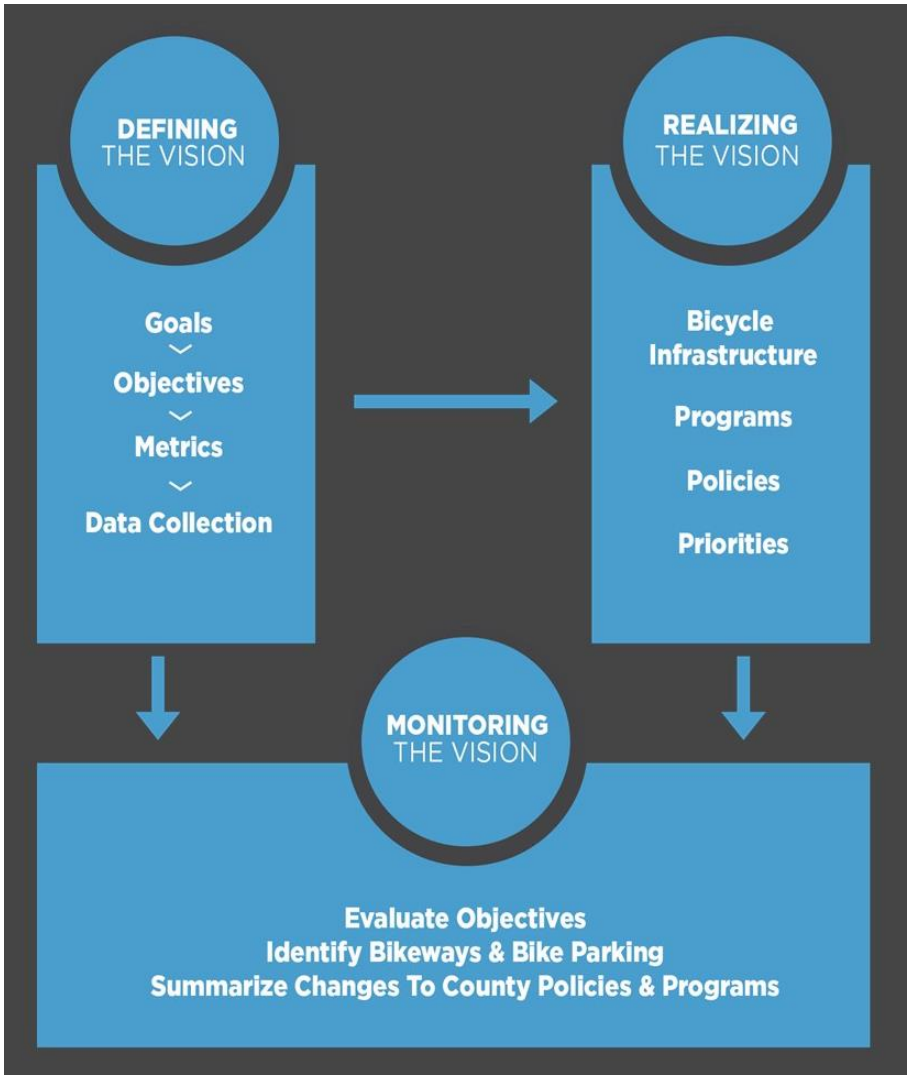
OUTREACH

During the development of the framework report, the Bicycle Master Plan team met with the Community Advisory Group six times. The technical advisory group was also provided the opportunity to comment on the draft framework report. Comments were received from the Montgomery County Department of Transportation, City of Rockville and City of Takoma Park.

DISCUSSION OF APPROACH TO BICYCLE MASTER PLAN

The Bicycle Master Plan is intended to set forth a vision for Montgomery County as a world-class bicycling community, where people in all areas of the County have access to a comfortable, safe and connected

bicycle network, and where bicycling is a viable transportation option that improves our quality of life. The plan framework is composed of three interconnected steps.



FRAMEWORK REPORT ISSUES

The framework report indicates how the Bicycle Master Plan will respond to many of the issues identified in the Scope of Work, as well as other issues that have come up since the Planning Board approved the Scope of Work in September 2015. Below is a list of the issues and a brief description of how each will be handled in the development of the Bicycle Master Plan. The framework report provides a more thorough explanation.

Issue 1: Plan Framework

The Framework Report proposes a structure for the Bicycle Master Plan that is composed of three major parts.

The first part is Defining the Vision by imagining a future that meets the goal of providing all residents access to a comfortable, safe and connected bicycle network, and expressing that vision through the goals and objectives of the Bicycle Master Plan.

The second part is Realizing the Vision by describing specific actions that the government, property owners, stakeholders and the public can take to fulfill the vision. These actions include establishing bicycling-supportive infrastructure, programs and policies needed to make the vision a success.

The third part consists of Monitoring the Vision by setting up an ongoing monitoring and evaluation program to track how well the vision of the plan is being fulfilled by evaluating our success in meeting the goals and objectives of the plan. This monitoring program supports the implementation of the plan by providing an ongoing assessment of how effective we are in creating the bicycle environment envisioned in the plan.

See page 6 of the framework report.

Issue 2: What is the state of the practice in using data and performance metrics to develop a bicycling network?

Staff reviewed numerous bicycle plans including many of the leading bicycling communities[1] and determined that the state of the practice in using data and performance metrics is poor. We have found that the goals and objectives sections of most plans lack coherence and are not tied to the development and implementation of their plan.

Many plans use goals and objectives interchangeably, even though they have different meanings in a planning process. Most objectives we reviewed were not measurable, not achievable and not time specific.

[1] Staff reviewed the goals and objectives for these plans: Arlington, VA, Boston, MA, Cambridge, MA, Davis, CA, Fort Collins, CO, Minneapolis, MN, Portland, OR, San Diego, CA, Salt Lake City, UT, Sacramento, CA, Seattle, WA, and Washington, DC.

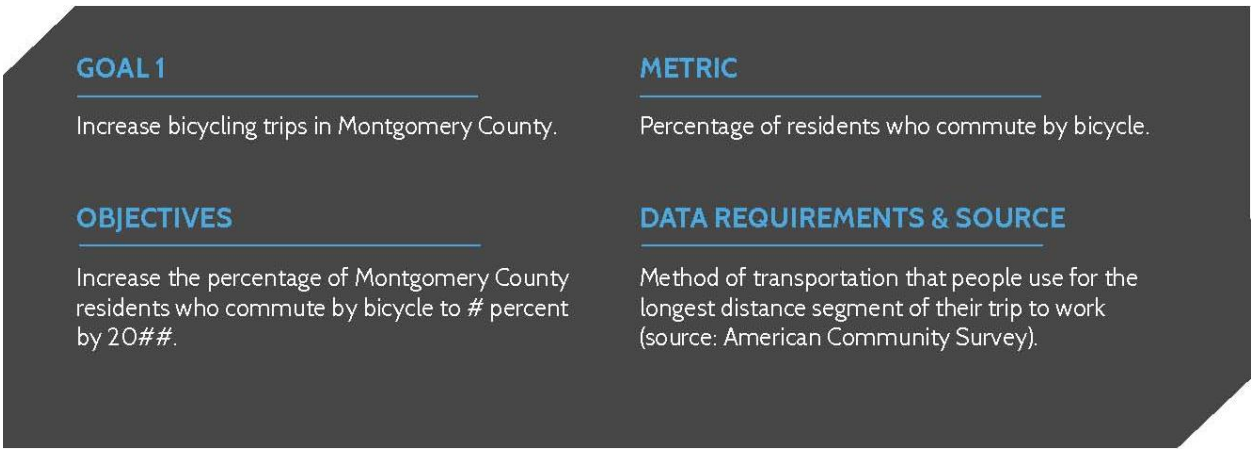
Our proposed approach seeks to make goals, objectives and performance metrics and integral part of the Bicycle Master Plan.

See pages 9 to 29 of the framework report.

Issue 3: Approach to Goals and Objectives

The proposed approach for the Bicycle Master Plan seeks to make goals, objectives and performance metrics an integral part of the planning process. We will use them to develop and prioritize the plan's recommendations, and establish a monitoring program that tracks how well the vision of the plan is being fulfilled through its goals and objectives.

For example:



The strength of our approach is that the goal is clearly articulated and the objective is achievable, measurable and time-specific. The metric identifies how the objective will be derived, and the required data is identified. This approach is carried forward for each goal and objective in the framework report.

See pages 10 – 11 of the framework report.

Issue 4: Recommended Goals

Numerous bicycle master plans from communities as diverse as Fairfax County, Virginia and Portland, Oregon were reviewed for their goals and objectives and considered for inclusion in the Bicycle Master Plan. Most of the goals in these plans fit into eight categories:

1. Increased bicycling
2. Connectivity
3. Equity
4. Safety
5. Economic development
6. Environmental quality
7. Health
8. Livability

Of these, we selected the first four for inclusion in the Bicycle Master Plan. Economic development, environmental quality and health are all relevant to Montgomery County, and are frequently cited by

decision makers, planners and designers as reasons for supporting bicycling. However, we do not believe they should be included as goals because developing effective objectives for them would:

- Require an extensive data collection program.
- Present challenges to prove different bicycling scenarios can significantly change economic, environmental and health conditions in the County.
- Hinder monitoring programs and policy changes by presenting broad, ambitious objectives that cannot be easily measured or funded.

Livability is also relevant to Montgomery County, but is exceedingly difficult to define. In fact, is it likely that all of the preceding goals are a component of livability. So rather than include it as a separate goal, we have included livability in the vision statement.

See pages 13 and 28 – 29 of the framework report.

Issue 5: What are acceptable levels of traffic stress for current and potential cyclists?

To identify those streets that are excessively stressful for the "Interested but Concerned[2]" population, the Bicycle Master Plan team is using a modified version of the Level of Traffic Stress[3], a methodology developed by the Mineta Institute in 2012 to evaluate the amount of traffic stress that bicyclists experience on road segments, intersection approaches, and unsignalized crossings. Using this approach, a street network can be classified into four stress levels, ranging from low stress to high stress. For a bicycle network to attract the broadest segment of the population, it must provide low-stress connectivity, defined as "providing routes between people's origins and destinations that do not require cyclists to use links that exceed their tolerance for traffic stress, and that do not involve an undue level of detour."

The Level of Traffic Stress methodology identifies four stress levels:

- LTS 4 – High stress, suitable for few adults (about 7% of adults)
- LTS 3 – Moderate traffic stress, for some adults (about 12% of adults)
- LTS 2 – Low traffic stress, suitable for most adults (about 63% of adults)
- LTS 1 – Very low traffic stress, suitable for most children

This report recommends a countywide target of a low level of traffic stress (LTS 2), which is suitable for most adults. Around schools it recommends targeting a very low level of traffic stress (LTS 1), which is suitable for most children.

See pages 34 – 35 of the framework report.

[2] The "interested but concerned" group represents about 50 percent of the adult population who indicate that they would be interested in bicycling more but are concerned for their safety.

[3] Mekuria, Maaza, Peter G. Furth, and Hilary Nixon, Low-Stress Bicycling and Network Connectivity, San Jose, CA: Mineta Transportation Institute, 2012.

Issue 6: How should the plan classify bikeway types, such as bike lanes, shared use paths, and separated bike lanes?

A new bikeway facility classification system is proposed for Montgomery County that organizes bikeway facility types into five bikeway facility classifications, based on their level of separation from traffic. It includes bikeway facility types that were not available or commonly used when the County last comprehensively amended its bikeway plan in 2005 and removes classifications using obsolete bikeway facility types.

See pages 36 – 37 of the framework report.

Issue 7: If separated bikeways are needed to create a low-stress bicycling environment, when should they be implemented as separated bike lanes (a bike-only facility) or shared-use paths (a facility shared with pedestrians)?

Pedestrian demand will be the primary consideration for determining whether a separated bikeway should be implemented as a sidepath or a separated bike lane. All other things being equal, sidepaths will be recommended where observed or anticipated pedestrian demand is lower, since conflicts between people walking and bicycling will be infrequent. Separated bike lanes will be recommended where pedestrian volumes are observed or anticipated to be higher.

See pages 39 – 41 of the framework report.

Issue 8: In what contexts are neighborhood greenways appropriate and what are the best practices for design elements?

A typical application for a neighborhood greenway is a residential area with a posted speed limit of 25 mph or less, where through traffic can be diverted to parallel streets and where a continuous route for bicycling is possible.

The Toole Design Group (consultants for the Bicycle Master Plan) is preparing a toolkit of treatments for neighborhood greenways and applying that toolkit to a concept plan for a neighborhood greenway between Silver Spring and Glenmont.

See page 48 of the framework report.

Issue 9: What is the value of signed shared roadways in master plans?

Signed shared roadways have been a bicycle facility classification in Montgomery County since the 1978 Master Plan of Bikeways. Currently, there are over 400 miles of roads recommended as signed shared roadways in the County. The working draft of the Bicycle Master Plan makes the following recommendations for signed shared roadways:

- Eliminate signed shared roadways, including those with wide outside lanes, as a bikeway facility classification.

- Include bikeable shoulders, neighborhood greenway, and shared streets as bikeway facility types.
- Continue use of wayfinding signs, regulatory signs (such as bikes may use full lane) and pavement markings (such as sharrows) as implementation tools for MCDOT and SHA, but not master-planning tools.
- Encourage MCDOT to develop a comprehensive wayfinding plan.
- Encourage MCDOT to develop a sharrow policy.

See page 51 of the framework report.

Issue 10: In what conditions are separated bike lanes a replacement for dual bikeways?

Separated bike lanes are a replacement for dual bikeways in commercial and higher-density mixed use areas and near major transit facilities where pedestrian activity is likely to be greater.

See page 53 – 54 of the framework report.

Issue 11: Where are long-term bicycle storage facilities needed and how much space do they require for bicycle parking and other bicycle-supportive elements (such as showers, lockers, repair facilities and changing rooms)?

The working draft of the Bicycle Master Plan will consider recommendations for bicycle parking stations at all major existing and planned transit lines, including the Red Line, Brunswick Line, Purple Line, and future bus rapid transit stations. Specific locations may be identified for transit stations that are existing (Red Line and Brunswick Line) or in an advanced stage of design (Purple Line and Corridor Cities Transitway), but general locations are more likely for Montgomery County's bus rapid transit stations. Sizing of the stations will be goal-based.[4] For smaller transit stations such as those on the Corridor Cities Transitway, bike stations are likely to serve multiple transit stations.

See pages 55 – 56 of the framework report.

Issue 12: How should the plan classify bikeway recommendations, including a hierarchy of bikeways, such as countywide bikeways and local bikeways?

Each road is currently envisioned to be designated as either a High Priority Bikeway (HPB), Priority Bikeway (PB), or Bikeway (B), though this could be modified to a system of tiers. Unlike the existing approach, which classifies bikeways as either "countywide" or "local", this classification system will have policy implications by assigning each bikeway a level of priority in the bicycling network that is tied to higher quality design, greater weight in trade-offs for space among other transportation modes, and potentially greater levels of funding.

[4] The number of bicycle parking spaces will be based on the percent of boardings that are desired to be made by bicycle. For example, if there is a desire to have five percent of the 1,000 daily boardings at a station accessing that station by bicycle, 50 bicycle parking spaces would need to be provided. This approach was used by WMATA to determine to plan for bicycle parking at each Metrorail station and by the Planning Department in the Bethesda Minor Master Plan Amendment and as part of the Silver Spring Bicycle Parking Station Study.

See page 59 of the framework report.

Issue 13: Monitoring Report

The third part of the Bicycle Master Plan consists of an ongoing monitoring and evaluation program to track how well the vision of the plan is being fulfilled by evaluating our success in meeting the goals and objectives of the plan. This monitoring program supports the implementation of the plan by providing an ongoing assessment of how effective we are in creating the bicycle environment envisioned in the plan.

See pages 60 – 61 and Appendix A of the framework report

Issue 14: Are there any hard surface park trails that should be designated as bikeways and, if so, what does that designation mean for the design, operation and maintenance of the trails?

Staff envisions that the Sligo Creek Trail, Matthew Henson Trail, Rock Creek Trail, and segments of the Capital Crescent Trail will continue to be designated as bikeways, however, this issue will be fleshed out in the coming months.

Issue 15: What are best practices in bicycle parking at residential and commercial locations?

Staff has drafted bicycle parking guidelines for residential and commercial locations as a separate project and intends to seek the Planning Board guidance on the guidelines in the fall.

Issue 16: How can Montgomery County implement on-road bikeways incrementally through a combination of private development and County-funded projects?

The Toole Design Group is preparing recommendations on this issue.

Issue 17: What are the best practices in developing signed bike routes?

This issue is not addressed in the report. While it could be touched on in an appendix to the master plan, it is best answered as a separate project by the Montgomery County Department of Transportation.

Issue 18: How can Montgomery County maintain a "living" Bicycle Master Plan that displays all current master plan recommendations in one location?

This issue will be addressed as part of the Working Draft of the Bicycle Master Plan.

Issue 19: How can space be provided for bicyclists while maintaining and enhancing a safe, active pedestrian and urban environment?

The Toole Design Group is preparing recommendations on this issue.