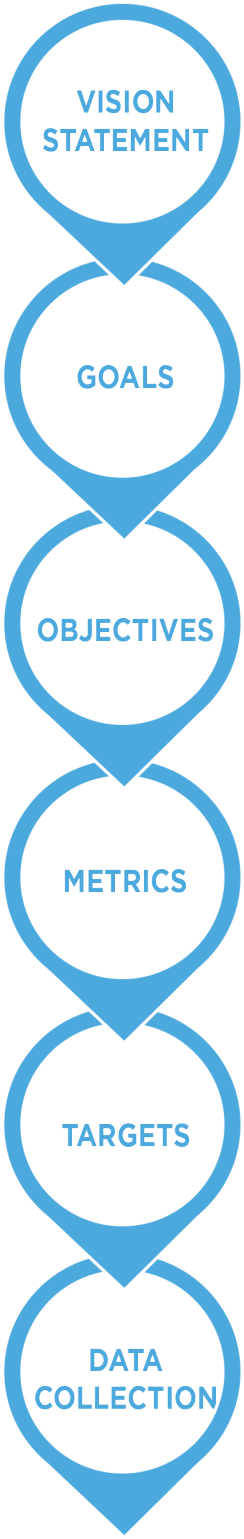
DEFINING THE VISION

The Bicycle Master Plan begins by envisioning a future where all residents have access to a comfortable, safe and connected bicycle network, and expressing that vision through the goals and objectives of this plan.

Defining a vision for the Bicycle Master Plan does not simply mean stating the goals on paper. It also lays the foundation for a comprehensive monitoring program, which supports the implementation of the plan by providing an ongoing assessment of how effective Montgomery County is in meeting the plan's goals and objectives over the next 25 years. The components of the Bicycle Master Plan vision are clear and measurable.



The **vision statement** paints a clear picture of what the plan is intended to achieve. It is further explained through goals that identify the conditions needed to achieve the vision statement.

Goals are broad conditions that must be met to achieve the plan's vision. They are general and brief, and can always be improved. Goals do not prejudge a solution, but rather articulate the conditions that might lead to a particular solution. Each goal is described by one or more objectives that indicate the steps that need to be taken to advance that goal. Goals are only as effective as the objectives that shape them.

Objectives are specific conditions that must be met to advance a goal. They are achievable, measurable and time-specific. Objectives are effective when they show a meaningful change among different scenarios. They do not prejudge a solution, but rather articulate the conditions that might lead to a particular solution. Objectives are more likely to be assessed when they are carefully defined, avoid subjective interpretation and do not require substantial new data collection.

Metrics are the standards of measurement applied to objectives. They determine the data needed to assess how well the objectives are being met.

Targets are specific numbers in the objectives that are to be achieved.

Data Collection is the gathering of specific information required to assess each metric. It indicates the source of the data and whether the data is currently available, could be available with modifications to existing survey instruments or needs to be collected through a new survey.

THE VISION

Montgomery County will become a world-class bicycling community. Everyone in Montgomery County will be able to travel by bicycle on a comfortable, safe and connected bicycle network. Bicycling will become a viable transportation option and will elevate the quality of life in the county.




GOALS, OBJECTIVES, METRICS AND TARGETS

The vision is defined by four goals.

GOAL 1

Increase bicycling rates in Montgomery County.

GOAL 2

Create a highly-connected, convenient and low-stress bicycling network.

GOAL 3

Provide equal access to low-stress bicycling for all members of the community.

GOAL 4

Improve the safety of bicycling.

Photo: Michael Tercha/Chicago Tribune

GOAL 1

INCREASE BICYCLING RATES IN MONTGOMERY COUNTY

The most important measure of success for the Bicycle Master Plan is the extent to which the amount of bicycling increases in Montgomery County. Goal 1 evaluates how bicycling increases over time among different groups of people, destinations and trip types. Success in advancing this goal is largely driven by success in advancing the other three goals of the plan and, therefore, the recommendations for bikeways, bicycle parking, policies and programs.

1.1 OBJECTIVE

By 2043, 8 percent of commuter trips by Montgomery County residents will be by bicycle, up from 0.6 percent in 2016.

METRIC

Percentage of residents who commute by bicycle.

DATA REQUIREMENT (SOURCE)

- Method of transportation that people use for the longest distance segment of their trip to work (American Community Survey).

Note: A county-led data collection effort may be needed if the American Community Survey fails to meet the data needs of this objective.

1.2 OBJECTIVE

By 2043, the percentage of people who commute by bicycle to a Montgomery County Transportation Management District (TMD) will be:

- TBD percent in the Silver Spring TMD.
- TBD percent in the Bethesda TMD.
- TBD percent in the Friendship Heights TMD.
- TBD percent in the North Bethesda TMD.
- TBD percent in the Greater Shady Grove TMD.
- TBD percent in the White Oak TMD.

METRIC

Percentage of commuters who bicycle to a Transportation Management District.

DATA REQUIREMENT (SOURCE)

- Number of respondents who bicycle to work by Transportation Management District (requires changes to the existing commuter survey).
- Number of respondents by Transportation Management District (commuter surveys).

Note: Montgomery County Commuter Services will be modifying the annual commuter survey to capture this information. Targets for the objective can be established once the baseline data is available.

1.3 OBJECTIVE

By 2043, the percentage of people who access a transit station by bicycle during the AM peak period will be:

- 10 percent for Red Line stations, up from 1.5 percent in 2016.
- TBD percent for Brunswick Line stations, up from TBD percent in 2016.
- TBD percent for Purple Line stations.
- TBD percent for Corridor Cities Transitway stations.

METRIC

Percentage of transit boardings during the AM peak period where the transportation mode of access is bicycle for the Metro Red Line, MARC Brunswick Line, Purple Line and Corridor Cities Transitway.

DATA REQUIREMENT (SOURCE)

- Number of boardings at each Red Line, Brunswick Line, Purple Line and Corridor Cities Transitway station by mode of transportation.

1.4 OBJECTIVE

By 2043, the percentage of public school students who bicycle to school will be:

- TBD percent for elementary schools.
- TBD percent for middle schools.
- TBD percent for high schools.

METRIC

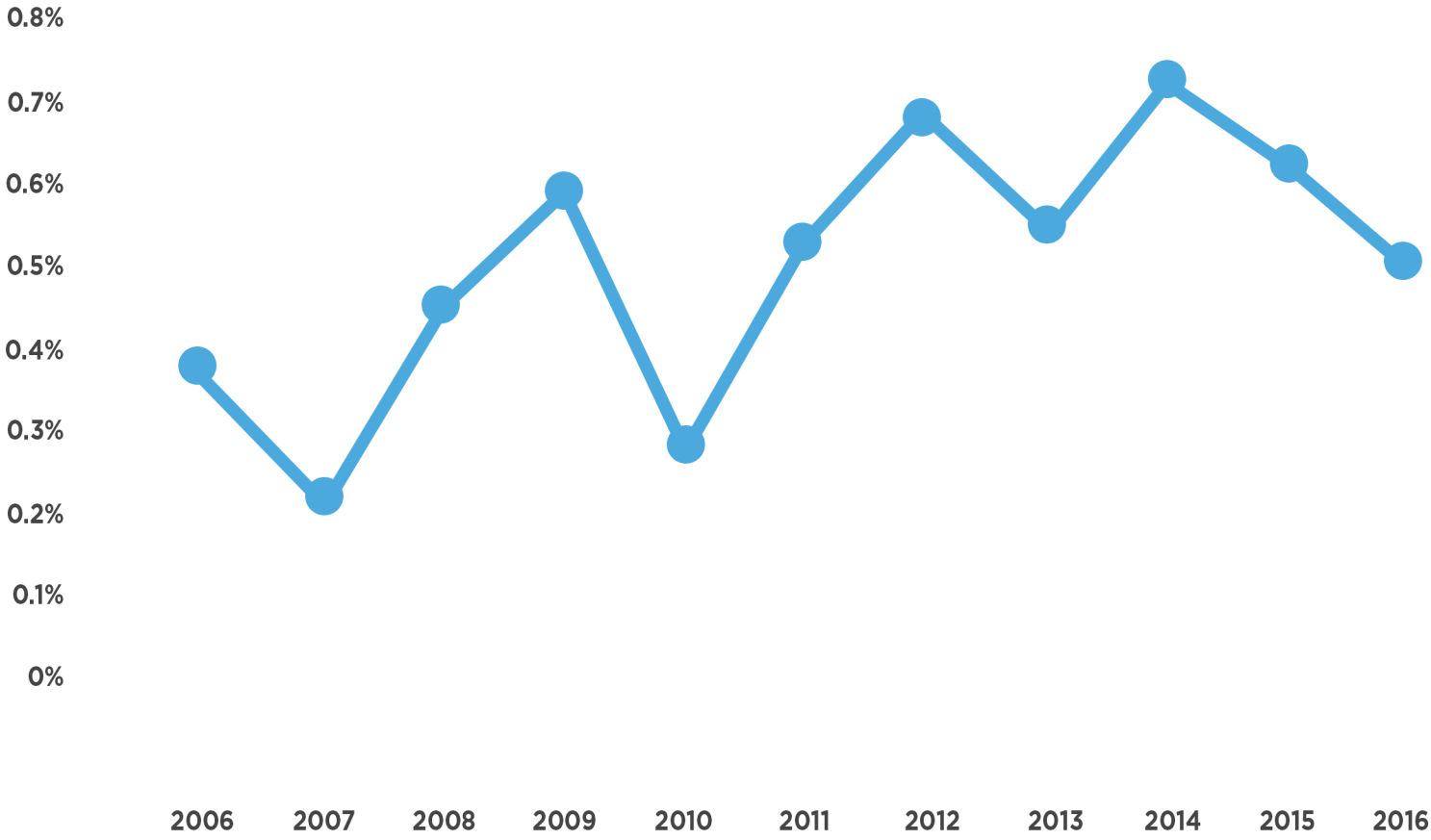
Percentage of public school students who bicycle to elementary, middle and high schools.

DATA REQUIREMENT (SOURCE)

- The number of elementary, middle and high school students who bicycle to schools (requires new survey conducted by Montgomery County Public Schools).

Note: Montgomery County Public Schools does not yet collect data on bicycling to school. Targets for this objective can be established once the baseline data is available.

OBJECTIVE 1.1: EXISTING PERCENTAGE OF RESIDENTS WHO COMMUTE TO WORK VIA BIKE IN MONTGOMERY COUNTY



Source: American Community Survey, Means of Transportation to Work (1-Year Estimates)

While bicycling represents only a small share of the trips to work by Montgomery County residents, it is growing. With the emergence of a robust bicycling network connecting people to jobs and transit, this number will continue to increase.

Montgomery County Planning Department Bicycle Stress Map

GOAL 2
CREATE A HIGHLY CONNECTED, CONVENIENT AND LOW-STRESS BICYCLING NETWORK

Bicycling can become a mainstream mode of transportation in Montgomery County if a low-stress network is developed that enables people to travel by bicycle to the places they want to go. While about 75 percent[1] of the roads in the county are already low-stress, they are often surrounded by high speed and high volume roads or difficult intersections, effectively creating islands of connectivity. Where feasible, reductions in traffic lanes and speeds can link these islands; where infeasible, bicycle infrastructure, such as sidepaths, separated bike lanes and conventional bike lanes, are needed to connect the network.

Simply providing a comfortable bicycling network is insufficient if people do not have a secure place to leave their bicycles when they get to their destinations. This goal also considers bicycle parking at major destinations, such as transit stations, commercial areas and public facilities, including schools, libraries and recreation centers.

[1] Based on a Level of Traffic Stress evaluation of all roads where it is legal to bicycle in Montgomery County.

2.1 OBJECTIVE

By 2043, 55 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-NCPPC).
- 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.

2.2 OBJECTIVE

By 2043, the level of low-stress connectivity to each transit service, defined as the percentage of dwelling units within two miles of each transit station that are connected to the transit station on a low-stress bicycling network, will be:

- 65 percent for Red Line stations, up from 9 percent in 2018.
- 55 percent for Brunswick Line stations, up from 12 percent in 2018.
- 70 percent for Purple Line stations, up from 4 percent in 2018.
- 40 percent for Corridor Cities Transitway stations, up from 0 percent in 2018.

METRIC

Percentage of dwelling units within 2 miles of each Red Line, Brunswick Line, Purple Line and Corridor Cities Transitway station that are connected to the transit station on a low-stress bicycling network.

DATA REQUIREMENT (SOURCE)

- Level of Traffic Stress Network (M-NCPPC).
- Location of existing and planned Metrorail, MARC and Purple Line stations (M-NCPPC).
- Location of dwelling units (M-NCPPC).

Note: Analysis evaluates connectivity based on a "network" distance of two-miles from the transit station.

2.3 OBJECTIVE

By 2043, the level of very low-stress connectivity to each public school, defined as the percentage of dwelling units within one mile of elementary schools, 1.5 miles of middle schools and 2 miles of high schools that are connected to the school on a very low-stress bicycling network, will be:

- 45 percent for elementary schools, up from 39 percent in 2018.
- 35 percent for middle schools, up from 25 percent in 2018.
- 25 percent for high schools, up from 13 percent in 2018.

METRIC

Percentage of dwelling units within one mile of elementary schools, 1.5 miles of middle schools and 2 miles of high schools that are connected to the schools on a very low-stress bicycling network.

DATA REQUIREMENT (SOURCE)

- Level of Traffic Stress Network (M-NCPPC).
- Location of Montgomery County public schools (M-NCPPC).
- School service areas (M-NCPPC).
- Location of dwelling units (M-NCPPC).

Note: Analysis evaluates connectivity based on an "as the crow files" distance of from each school, as that is how Montgomery County Public Schools determines their busing zones.

2.4 OBJECTIVE

By 2043, the level of low-stress connectivity to public libraries, recreation centers and regional / recreational parks, defined as the percentage of dwelling units within two miles of these public facilities that are connected to the public facility on a low-stress bicycling network, will be:

- 50 percent for public libraries, up from 8 percent in 2018.
- 35 percent for recreation centers, up from 13 percent in 2018.
- 50 percent for regional / recreational parks, up from 27 percent in 2018.

METRIC

Percentage of dwelling units within 2 miles of public libraries, recreation centers and regional / recreational parks that are connected to the public facility on a low-stress bicycling network.

DATA REQUIREMENT (SOURCE)

- Level of Traffic Stress Network (M-NCPPC).
- Location of public libraries (M-NCPPC).
- Location of recreation centers (M-NCPPC).
- Location of regional and recreational parks (M-NCPPC).
- Location of dwelling units (M-NCPPC).

Note: Analysis evaluates connectivity based on a "network" distance of two-miles from the public facility.

2.5 OBJECTIVE

By 2043, 11 Red Line stations, 5 Brunswick Line stations, 7 Purple Line stations and 3 Corridor Cities Transitway stations will have bicycle parking stations in Montgomery County.

METRIC

Number of rail stations in Montgomery County with a bicycle parking station.

DATA REQUIREMENT (SOURCE)

- Location of bicycling parking stations (M-NCPPC).

2.6 OBJECTIVE

By 2043, 100 percent of Montgomery County public schools will have one short-term bicycle parking space for every 20 students of planned capacity, with bicycle parking styles that are acceptable per the Association of Pedestrian and Bicycle Professionals *Bicycle Parking Guidelines, 2nd Edition*.

METRIC

Percentage of Montgomery County public schools that have at least one short-term bicycle parking space for every 20 students of planned capacity, with bicycle parking styles that are acceptable per established guidelines, such as the Association of Pedestrian and Bicycle Professionals *Bicycle Parking Guidelines, 2nd Edition.*

DATA REQUIREMENT (SOURCE)

- Number of bike racks at each Montgomery County public school (RackSpotter, www.rackspotter.com).
- Planned capacity at each Montgomery County public school (MCPS).

2.7 OBJECTIVE

By 2043, 40 percent of blocks in 19 Bicycle Pedestrian Priority Areas will have the number of short-term bicycle parking spaces required by the zoning code.

METRIC

Percentage of blocks in 19 bicycle pedestrian priority areas that have the number of short-term bicycle parking spaces required by the current zoning code.

DATA REQUIREMENT (SOURCE)

- Number and locations of bike racks in Montgomery County (RackSpotter, www.rackspotter.com).
- Short-term bicycle parking requirements by zoning category (Montgomery County Planning Department).
- Existing land use in commercial areas (Montgomery County Planning Department).

2.8 OBJECTIVE

By 2043, 100 percent of Montgomery County public libraries and recreation centers will have one short-term bicycle parking space per 8,000 square feet of floor area, with bicycle parking styles that are acceptable per the Association of Pedestrian and Bicycle Professionals *Bicycle Parking Guidelines, 2nd Edition*.

METRIC

Percentage of Montgomery County public libraries and recreation centers with at least one short-term bicycle parking space per 8,000 square feet of floor area, with bicycle parking styles that are acceptable per established guidelines, such as the Association of Pedestrian and Bicycle Professionals' *Bicycle Parking Guidelines, 2nd Edition*.

DATA REQUIREMENT (SOURCE)

- Number and locations of bike racks in Montgomery County (RackSpotter, www.rackspotter.com).
- Number and location of libraries and recreation centers (M-NCPPC).
- Square feet of floor area per library and recreation center (Montgomery County Department of General Services).


FREE

Bike Lane on Carroll Avenue, Takoma Park

GOAL 3

PROVIDE EQUAL ACCESS TO LOW-STRESS BICYCLING FOR ALL MEMBERS OF THE COMMUNITY

Equal access to low-stress bicycling for all members of the community, including people with incomes below the average median income for Montgomery County, is a critical aspect of a world-class bicycling network.

3.1 OBJECTIVE

By 2043, the percentage of bicycle trips that can be made on a low-stress bicycling network in US census tracts where the median income is below 60 percent of the county average median income will be the same as or greater than the county overall.

METRIC

Ratio of potential bicycle trips that can be made on a low-stress bicycling network in US census tracts where the median income is below 60 percent of the county average median income compared to the rest of the county.

DATA REQUIREMENT (SOURCE)

- Level of Traffic Stress Network (M-NCPPC).
- Regional Travel Demand Model Trip table (M-NCPPC).
- Bicycle trip length decay function (MWCOG Household Travel Survey).
- Location of dwelling units (M-NCPPC).
- Census tracts where the median income is below 60 percent of the county average median income (US Census).

GOAL 4

IMPROVE THE SAFETY OF BICYCLING

The intent of this goal is to make bicycling safe by eliminating serious injuries and fatalities. While safety can be improved by taking active measures to reduce travel speeds and providing separation from traffic, this goal will be evaluated by reactive metrics based on crash reports.

4.1 OBJECTIVE

By 2030, eliminate bicycling fatalities and serious injuries.

METRIC

The number of bicycling fatalities and serious injuries per year.

DATA REQUIREMENT (SOURCE)

- Bicycle crash reports (Montgomery County CountyStat).

Photo: Toole Design Group