



BACKGROUND

PURPOSE

Montgomery County owns and maintains 75 miles of roadways throughout the county. These roadways vary dramatically in character across the county, from rural access streets in New Hanover Township to major commuting arterials in Whitemarsh Township. This direct involvement in ownership presents challenges and opportunities that many counties in Pennsylvania do not face. Many of the county-owned roadways date to colonial times and began as private turnpikes. Over time, as vehicles and lifestyles evolved, these roadways were upgraded, but these upgrades were largely uncoordinated and completed as standalone projects. As part of Montgomery County’s capital budget planning, Complete Streets initiatives, and implementation of the county’s comprehensive plan, “Montco 2040”, the Montco Pikes plan will serve as a guiding document for the county-owned roadways and future project development. Montco Pikes focuses on six main corridors to ensure these roadways will support twenty-first century lifestyles. This plan presents a vision for Butler Pike, Easton Road, Germantown Pike, Geryville Pike, Sumneytown Pike, and Swamp Pike.

Montco Pikes directly supports the three plan themes of Montco 2040: Connected Communities, Sustainable Places, and Vibrant Economy. By planning for the future of these six county-owned corridors, Montco Pikes supports the overall transportation vision for Montgomery County.

Montco Pikes fits well into previous planning efforts by Montgomery County, focusing on multimodal transportation and safe access to the roadway system for all users. Bike Montco is organized around six plan themes that provide the framework for the recommended bicycle network in Montgomery County. Montco Pikes takes into account the overall vision presented in Bike Montco: “In Montgomery County, bicycling will be a fundamental part of daily life were all bicyclists can enjoy a safe, convenient ride every time they put their foot on a pedal”. Montco Pikes accounts for the recommended bicycle network in Bike Montco, and where feasible, bicycle accommodations are included in the corridor recommendations.

Montco Pikes is consistent with the core emphasis of Walk Montco—supporting the Montco 2040 goals to improve transportation quality and expand options for county residents and workers; and advocate for more sidewalks and pedestrian-oriented design of developments. Recommendations in Montco Pikes take into account the needs of pedestrians in order to serve the needs of all modes of transportation in the communities that the corridors pass through.

The Vision presented in the Montgomery County Complete Streets Policy states:

“Montgomery County, Pennsylvania, will develop and maintain safe, accessible county-owned roads and facilities that support all users. The Complete Streets policy will guide decision-making during the planning and



Three interrelated themes guiding Montco2040
(Source: MCPC)



Butler Pike,
Plymouth and Whitemarsh Townships

design of capital improvement projects for roads and other county-owned facilities, as well as the projects and initiatives of the county’s partners and other external stakeholders.”

Montco Pikes implements this vision by identifying key improvements for all six corridors that will improve safety and access for all users.

PUBLIC INVOLVEMENT STRATEGY

As with any planning project, public involvement was a key component of the Montco Pikes study. Input from the community helped to identify key issues, develop the future vision and prioritize the identified improvements for all of the Montco Pikes corridors.

The public involvement strategy consisted of four main components that occurred over the entire course of the project from 2020—2022: project website, stakeholder/municipal involvement, online engagement, and project status updates.

Project Webpage

A project webpage was hosted on the Montgomery County website where an overview of the project, project updates, and ways for people to get involved were regularly updated through the duration of the project. The webpage identified that the six corridors included in the plan were studied to establish an overall vision for the future of each roadway. It described the funding source, budget, and consultant team responsible for the project. The project webpage also clearly stated that additional design and engineering would be required before any improvements that would be constructed. Additionally, a project video was posted to the webpage that gave an overview of the project and identified ways for people to get involved.

Stakeholder/Municipal Involvement

At the beginning of the planning process, meetings were held to get input from municipal leaders along each of the six Montco Pikes corridors. The purpose of these corridor kick-off meetings was to introduce the project to the municipalities and gather local knowledge about the project study areas. The municipalities communicated the local vision for the corridors and identified key issues, planned projects, and proposed land developments for the project team to consider when studying existing conditions and identifying recommendations. A detailed summary of each corridor kick-off meeting, including a map and corresponding tables with key issues identified by the municipalities is located in Appendix A.

Online Public Involvement

This project utilized an online public outreach platform called MindMixer. MindMixer enabled a healthy community conversation to gather input about what is important to residents and users of the six Montco Pikes corridors. Various topics were posted to the MindMixer site to gather input on the current issues facing each corridor, the improvements that are most needed on each corridor, feedback on the future vision for each Montco Pikes corridor, and a comment period on the draft study report. The site was linked from the project webpage on Montgomery County’s website and identified in all other public outreach materials. The County promoted topics on MindMixer through its social media channels, press releases, and outreach to municipal managers for promotional support. Summary reports of the completed surveys and public comment can be located in Appendix A.

Project Status Updates

Regular project status update presentations were prepared by the project team. These presentations were used by Montgomery County staff to update local municipalities, stakeholders, and elected officials on the progress of the Montco Pikes project. The presentations included project overview information, current status, key issues, the draft future vision for each Montco Pikes corridor, and opportunities for public input. In all, four PowerPoint presentations and associated talking points were developed during the project. The presentations were developed based on key milestones, such as project kick-off/existing conditions, future conditions, draft strategies, and draft/final report.

PROJECT VIDEO



Montco Pikes Project Website



Butler Pike at Germantown Pike,
Plymouth Township



Geryville Pike— Sumneytown Village,
Marlborough Township



Swamp Pike at Gilbertsville Road

FOCUS CORRIDORS

The focus of Montco Pikes is to provide a vision for six arterial, county-owned roadways. The six “pikes” are: Butler Pike, Easton Road, Germantown Pike, Geryville Pike, Sumneytown Pike, and Swamp Pike. Each of these roadways passes through varied communities ranging from rural to urban with unique opportunities and constraints. Montco Pikes addresses each corridor individually and with an equal amount of attention. This report provides corridor chapters which are organized into two sections to fully explore the existing features, needs, and future vision for each corridor. Each corridor chapter is organized in the following manner:

- **The Corridor Today**—Existing Conditions, Key Issues.
- **The Corridor Tomorrow**—Corridor Cross Sections, Potential Improvements, Priorities.

The characteristics of each study corridor are further described later in this report.

KEY ISSUES

An existing conditions evaluation was completed for each Montco Pikes corridor consisting of a review of recent data, local planning studies, mapping, and stakeholder input. The existing conditions evaluation included five components to identify key issues for each Montco Pikes corridor.

- Compile and review data from municipal, county, and regional planning documents and recent studies.
- Develop base maps for transportation and land use.
- Corridor kick-off meetings with municipal representatives.
- Public input on key issues via online community engagement platform: montcopikes.mindmixer.com.
- Field visits to review input received from municipalities and public.

The key issues serve as the basis for identifying potential transportation improvements. The most commonly discussed issues along all of the corridors were safety (speeding and alignment and geometry at key intersections), congestion (high turning movement volumes, closely spaced intersections, and poor traffic signal coordination), the need for more multimodal transportation connections, and constraints (potential historic resources, geometry and roadside obstructions) to providing transportation improvements.

A key issues map was developed for each corridor that identifies issues for intersections and corridor segments. In addition, corridor-wide issues were identified for items that were identified as issues for multiple locations or prevalent along the entire corridor.

TRANSPORTATION VISION

A future vision has been developed for each corridor to address current deficiencies and serve future needs. The vision considers the corridor evaluations, preferred design criteria, existing constraints, stakeholder/public input, consistency with previous planning efforts, project costs, and potential level of difficulty implementing identified improvements.

Corridor Evaluations

An evaluation of each Montco Pikes corridor was completed to determine the desired characteristics for traffic operations and multimodal connections to develop future cross sections.



*Germantown Pike at Skipack Creek,
Lower Providence Township*



*Wissahickon Trail Crossing of Butler Pike,
Upper Dublin Township*



*Roslyn Train Station on Easton Road,
Abington Township*

Traffic Operations— Existing and estimated future traffic volumes, excessive peak hour delay, cross section consistency, and driveway/intersection spacing were among the factors evaluated to determine the potential need for additional through travel lanes or two-way center left-turn lane for broader segments of the corridor.

Multimodal Connections—Consistency with Bike and Walk Montco, pedestrian generators, intersections with trails, existing transit services, and presence of parallel or alternative routes were among the factors evaluated to determine the potential need and for bike lanes, sidewalk, and trail facilities along segments of the study corridors.

Constraints—A number of geometric, right-of-way, environmental, potential historical, and structure features can impact the practicality and feasibility of constructing significant multimodal transportation improvements and in some instances providing smaller scale improvements such wider shoulders. It is very common along many areas of the study corridors for several types of obstructions to be located close to the paved cartway including areas of trees/heavy vegetation, fences, decorative walls, utility poles, and building structures. A more comprehensive inventory of constraints would be developed when a project enters the conceptual design and preliminary engineering phases.



Germantown Pike at Trooper Road, Worcester and East Norriton Townships

Design Criteria

Design criteria consistent with PennDOT guidelines and smart transportation principles were selected to develop the future cross sections for the Montco Pikes corridors. It is important to identify road types and land use contexts that are consistent with the communities along the corridors to select the most appropriate design criteria. The six Montco Pikes corridors are consistent with the Community Arterial road type. In a traditional roadway functional classification system, this type of road may be classified as a “minor arterial” or “principal arterial”. The Montco Pikes corridors vary in their land use context ranging from Rural to Suburban Corridor to Neighborhood Village. When comparing the PennDOT design criteria for each one of the land use contexts, the recommended design values for transportation features such as lanes, shoulders, bicycle lanes and sidewalks are similar. Although there are some minor differences in the design values for the land use contexts, there is enough commonality to develop one set of standard criteria that can be generally applied to all the Montco Pike corridors.

The following standard design criteria should be used as a guide by the county, municipalities and developers for future improvements to the cross sections for the corridors. The retrofit criteria may be more appropriate when constraints limit the ability to meet the standard criteria. The corridor chapters will provide further direction, if necessary, regarding use of the retrofit criteria or any other deviations from the standard criteria.

Design Criteria	Standard	Retrofit ²
Number of Lanes	2 to 4	2 to 4
Lane Width ¹	11' to 12'	10' to 11'
Center Turn Lane Width	10' to 11'	10' to 11'
Shoulder Width	4' to 8'	2' to 4'
Bike Lane ^{3,4}	5' to 6'	5'
Sidewalk Width	5'	5'
Buffer	5' – 10'	Min 2''

Design Criteria Notes:

- 1 Lane widths for curbed lanes are typically 1-2 feet greater than uncurbed lanes.
- 2 Applicable for resurfacing, restoration/rehabilitation, reconstruction, and new projects where widening is not within the scope and where significant constraints are present.
- 3 For buffered bike lanes, buffers should be a minimum 2-foot wide. Buffers 3-feet or wider should contain gore markings.
- 4 Min. 4' when no curb present and/or when speeds 35 MPH or lower.



Sunnyside Pike near Valley Forge Road, Upper Gwynedd Township

Cross Sections

Typical sections have been developed for broad segments of each corridor that depict the number and type of travel lanes, shoulders, and bicycle and pedestrian facilities. The exact scope of the improvements may vary along the corridor based on an number of factors such as impacts to residential structures, environmental and potential historic features, the presence of above or underground utilities, and right-of-way available for acquisition. The potential improvements identified in Montco Pikes will require dedicated effort and project development to install, especially those improvements requiring significant construction. Given the scope and scale of implementing the cross sections, improvements along the corridor will most likely be implemented in phases and depending upon the availability of funding and other factors. After funding has been secured for engineering and construction, the improvements necessary to construct the recommended cross section will be further defined for smaller segments and specific locations or properties.



*Germantown Pike at Valley Forge Road,
Worcester Township*



Corridor Improvements

The existing conditions evaluation for the corridors identified key issues at locations pertaining to traffic operations and safety considerations at intersections and roadway segments and lack of connectivity for bicyclists, pedestrians, and transit users. Corridor Improvement Maps have been developed for each corridor to identify categories of improvements that may be appropriate for addressing the needs of the intersection/location. The table below provides examples of improvements for each of the categories.

Category	Improvement Types
 Intersection	Modify or Additional Turn Lanes Roadway Approach Realignment
 Roadway	Improve Horizontal and Vertical Geometry Major Roadway Realignment Additional Travel Lane Two-way Center Left Turn Lane
 Pedestrian/Bicycle	Sidewalk, Trail, ADA Ramps, Bicycle Lanes
 Transit	Bus Stop Amenities, Train Station Access, Station Parking
 Parking	Additional On-street or Off-street Parking
 Maintenance	Shoulder Improvements, Drainage, Winter Maintenance

An estimated range of construction costs has been assigned for each intersection and roadway segment on the Corridor Improvements Map that considers the categories of improvements for the location. The range of construction costs is intended for planning purposes only to assist in developing priorities and long range planning. The estimate is based on similar recent projects completed in the county and region and not based on any conceptual plan or engineering studies. The relative costs do not include estimates for engineering/design, right-of-way, or utilities. The cost estimates are subject to change based on further planning studies, project scoping, or preliminary engineering evaluations.

Relative Construction Costs

\$	\$0—\$1,000,000
\$\$	\$1,000,000—\$2,000,000
\$\$\$	\$2,000,000—\$5,000,000
\$\$\$\$	\$5,000,000—\$10,000,000
\$\$\$\$\$	\$10,000,000+

ESTABLISHING PRIORITIES

General priorities have been assigned to each of the improvement locations on the Corridor Improvements Map that will serve as a guide to implement the future cross sections and multimodal improvements. The priorities have been established using the following qualitative criteria:

Impact to Montgomery County—Improvements that will provide a significant improvement to traffic operations and multimodal connectivity and address safety considerations will receive a higher priority. Locations that may address all three impacts will receive a higher priority.

Ease of Implementation—Relative complexity of constraints such as utilities, structures, setbacks, roadside obstructions, and right-of-way acquisition may significantly impact practicality and feasibility of implementation. It is expected that larger corridor-wide improvements will have more significant constraints due to the size of the project which may not negatively impact its priority level. Intersections or short segments of the corridor with multiple and/or complex constraints or potential significant impacts to community resources may receive a lower priority.

Potential Cost and Available Funding Opportunities—Higher cost improvement projects can be more difficult to implement due to limited funding on the Transportation Improvement Program (or TIP) and county capital budget or availability of funds from highly competitive funding programs and may require multiple phases over many years to implement. Locations with a lower cost (categories \$ and \$\$) may receive a higher priority due to more funding options being available to implement a project.

The general priorities identified represented on the Corridor Improvement Map are subject to change over time due to changes in available funding levels, discontinuance of existing or new grant programs, more detailed information becomes available during the project scoping process regarding constraints, cost and impact or changes in policies by the Montgomery County Planning Commission, Montgomery County Assets and Infrastructure, and Board of Commissioners.