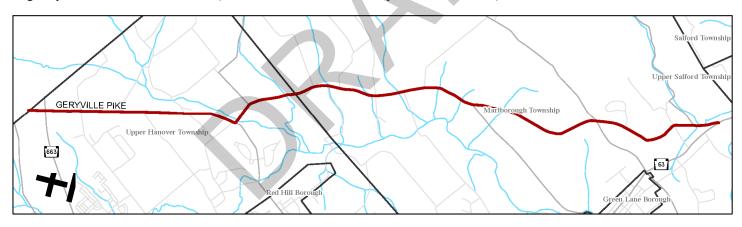




GERYVILLE PIKE TODAY

STUDY AREA

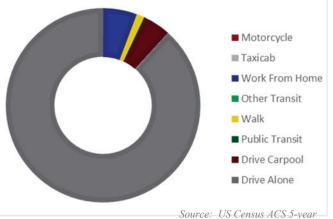
This study focuses on a six mile long segment of Geryville Pike from the intersection with Sumneytown Road to the Montgomery County border with Berks County. The project study area passes through two municipalities: Marlborough Township and Upper Hanover Township. Geryville Pike has a north-south orientation and functions as a minor arterial; providing regional mobility for the villages of Sumneytown and Geryville. It also serves as a parallel alternative to PA 29, which passes through Green Lane Borough, Red Hill Borough, Pennsburg Borough, and East Greenville Borough. It provides access to other regional highways such as PA 63 and PA 663 (which connects to the PA Turnpike—Interstate 476).



Geryville Pike passes through varying communities with specific transportation needs. The demographics within one mile of Geryville Pike are as follows:

With limited access to public transit or active transportation options

Demographic Indicator	Geryville Pike	Montgomery County Average
Commute Mean Travel Time	30.16 minutes	28.99 minutes
Housing Units without Access to a Vehicle	1.67%	5.51%



people are more likely to have access to a vehicle, and individuals drive as their primary mode of transportation in this part of Montgomery County. Distance from regional employment centers in Montgomery County, Bucks County, and the Lehigh Valley likely result in a longer than average commute travel time and the low rate of housing units without access to a vehicle.

PREVIOUS PLANS AND ONGOING PROJECTS

Marlborough Township and Upper Hanover Township participated in the 2011 Upper Perkiomen Valley Comprehensive Plan, and do not have individual comprehensive plans. Furthermore, they both participated in the Upper Perkiomen Valley Regional Roadway Sufficiency Analysis (2007). These plans identify safety, capacity, and multimodal deficiencies along Geryville Pike.

The Upper Perkiomen Valley Regional Roadway Sufficiency Analysis identifies the intersections of Sumneytown Pike (PA 63) and PA 663 as operating below a satisfactory level of service in either the AM or PM peak hour (or both). The regional comprehensive plan identifies capacity deficiencies at these intersections, and notes the need to realign the intersection of James Road/Church Road with Geryville Pike. Additionally, the Upper Perkiomen Valley Comprehensive Plan identifies the desire for additional sidewalk and trail facilities corridor wide.

Geryville Pike is not included in any DVRPC Congestion Mitigation Process (CMP) corridors. At the time of this report, there were no projects listed on the DVRPC Transportation Improvement Program (TIP) that impact Geryville Pike. Montgomery County recently completed a resurfacing project for Geryville Pike from Sumneytown Pike to PA 663.

LAND USE CONTEXT

Most of the surrounding land uses along Geryville Pike are categorized as residential or agricultural. However, there are a few large commercial and industrial sites located along the corridor. In particular, there are a number of large auto salvage yards, which contribute to truck traffic along the corridor. There have not been any recent large residential or commercial developments along Geryville Pike, and no current plans to extend public utilities.

The following structures located along Geryville Pike are listed on the National Register of historic Places:

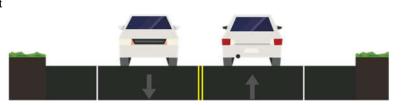
- Bauern Freund Print Shop—Sumneytown Village
- Andreas Rieth Homestead—Near Campbell Road intersection

Existing and Future Land Use maps can be found in Appendix B of this report.

TRANSPORTATION CONTEXT

Typical Sections

The typical cross-section of Geryville Pike is fairly consistent along the entire corridor. The roadway consists of one travel lane in each direction. However, the width of available shoulder varies significantly along the corridor. The graphic depicts the typical cross-section that can be found along Geryville Pike.



Transportation Features

Geryville Pike can be described as a narrow corridor that winds through a bucolic setting in Montgomery County. However, the winding and hilly nature of the roadway which give it character also contributes to maintenance and safety concerns along the corridor.

The only traffic signal along Geryville Pike is located at the intersection with PA 663. Montgomery County owns and maintains nine bridge structures along Geryville Pike. These structures are listed below; none have a posted weight restriction.

- Geryville Pike over Stony Run—Upper Hanover Township
- Gervville Pike over Undercuffler Run—Marlborough Township
- Geryville Pike over Berman Run—Upper Hanover Township
- Geryville Pike over Swamp Creek—Marlborough Township
- Five Stormwater Structures—Marlborough Township

These transportation features are depicted on the Corridor Overview Map.

Multimodal Connections

Pedestrian, bicycle, and public transportation infrastructure does not currently exist along Geryville Pike. However, there is interest from the local communities in providing multimodal connections in specific locations along the corridor particularly within Sumneytown Village and in the area of Unami Creek Park. Geryville Pike is identified on the Planned Bicycle Network map in Bike Montco.

A multimodal transportation map is included in Appendix B.



Sumneytown Village—Intersection of Geryville Pike with Sumneytown Pike

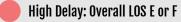
Traffic Volumes and Congestion

Traffic volumes along Geryville Pike are below 4,500 vehicles per day. Two intersections have been identified in past plans and studies that operate with moderate or high delay. At the unsignalized intersection with Sumneytown Pike (PA 63), turning movements from Geryville Pike to Sumneytown Pike experience a high level of delay. The signalized intersection with PA 663 experiences moderate delay. High delay is characterized as intersections operating at an overall level of service E or F. Moderate delay is characterized as intersections operating at an overall level of service D. Intersections operating at a level of service A, B, or C are considered to have low delay.

A Traffic and Intersection Operations Map containing additional information about traffic volumes and intersection operations can be found in Appendix B.

Low Delay: Overall LOS A, B, or C





Safety

A higher than average concentration of vehicle crashes are documented at the intersections of Geryville Pike with Hiffletrayer Road and James Road/St Pauls Church Road. The intersection with Hiffletrayer Road experienced five crashes between 2015-2019. The most common crash type at Hiffletrayer Road was related to vehicles hitting a fixed object adjacent to the roadway. There is a stone wall for a drainage structure and utility pole close to the roadway edge at this intersection. The geometry of James Road/St Pauls Church Road creates two T-intersections which are offset by only approximately 130 feet. The closely spaced intersections combined with the local topography and heavy turning movements in the area, likely contribute to the safety concerns at this intersection.

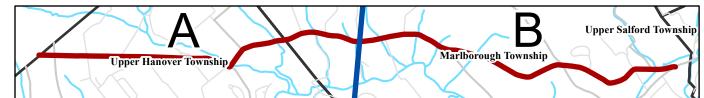
A Safety Map depicting crash densities along Geryville Pike can be found in Appendix B.

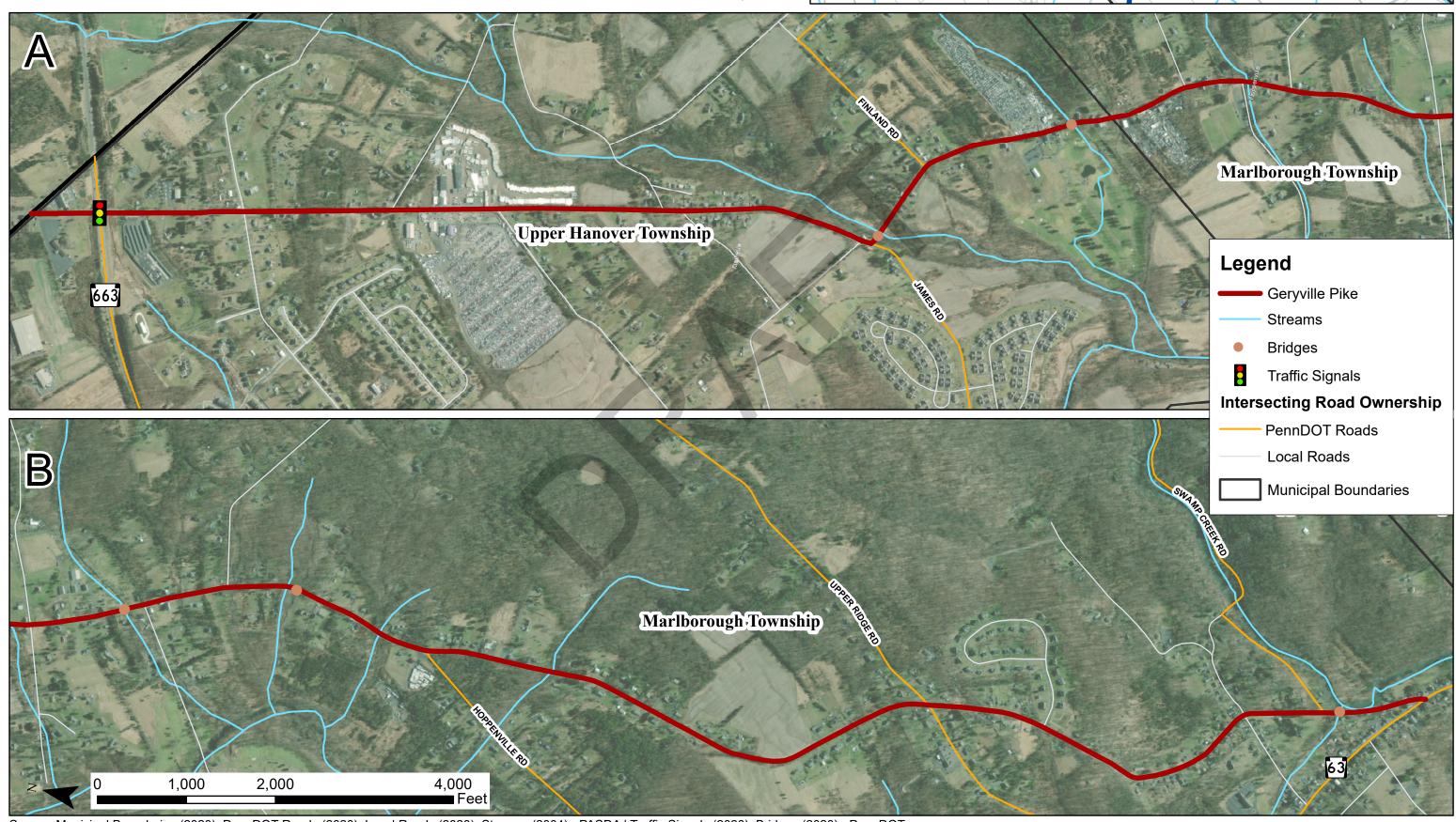


Intersection of Geryville Pike with James Road/St Pauls Church Road

Geryville Pike, Corridor Overview







KEY ISSUES

Safety and operational issues at key intersections

There are several key intersections along Geryville Pike that have a skewed alignment, or horizontal or vertical curve on the approaches to the intersections such as Sumneytown Pike (PA 63), Hendricks Road, Old School Road and Buck Road. Poor intersection geometry can impact the efficiency and safety of turning movements and reduce sight distances. Some intersections also have large vegetation close to the roadways that reduce sight distances. In addition to poor alignment and visibility in the village of Sumneytown, PA 63 lacks separate turn lanes at Geryville Pike to remove vehicles from high speed through traffic. Open access driveways near the intersection also contribute to safety concerns in the village.

The signalized intersection with PA 663 is a safety concern due to high speeds. Each approach of the intersection has dedicated left-turn lanes, however, right turning vehicles on PA 663 do not have dedicated lanes.

The off-set intersection of Geryville Pike with James Road and St. Pauls Church Road creates confusing and conflicting turning movements. There are a large building structures located close to the roadways and Stony Run parallels Geryville Pike near the intersection. This impacts the feasibility of realignment options to improve the safety of traffic movements.



Intersection of Geryville Pike with PA 663

High vehicular travel speeds create safety concerns

Representatives from police forces and other community members noted that speeding is a safety concern along Geryville Pike, including documentation of average speeds 10 MPH over the posted speed limit and observations of drivers passing within no passing zones. Additionally, the high speeds impact sight distance and the safety of vehicles turning on or off of Geryville Pike. High vehicular speeds also impact the safety and comfort of bicyclists and pedestrians along the corridor. Given the north-south orientation and connections to other regional arterials, Geryville Pike serves as an alternative to the nearby PA 29 and Pennsylvania Turnpike Northeast Extension corridors. Based on anecdotal reports from public and stakeholder input, drivers sometimes divert from the Northeast Extension at the Lansdale or Quakertown interchanges and utilize the Geryville Pike corridor to avoid congestion.

Narrow, winding, and hilly nature of the corridor poses safety concerns and impacts feasibility of improvements

Geryville Pike has narrow shoulders, sharp curves, and steep topography in some locations that can make it challenging to navigate, particularly given truck traffic and higher vehicular speeds These safety issues are exacerbated during inclement weather, which heightens the need for responsive winter maintenance. Additionally, the roadway width and geometry impacts the feasibility of providing dedicated facilities for bicyclists and pedestrians.

Flooding and maintenance issues due to the lack of drainage features, topography, and nearby creeks

There is limited stormwater management infrastructure on Geryville Pike. Today, most stormwater runs off the roadway into roadside ditches, which require routine maintenance. In addition, there are approximately nine locations where Geryville Pike crosses a creek or stream. In some of these locations, roadway flooding can occur during storm events. In particular, the segment of Geryville Pike parallel to Unami Creek to the north of Sumneytown village and south of Swamp Creek Road floods during extreme weather events.



Looking North from the Intersection of Geryville Pike with Hendricks Road

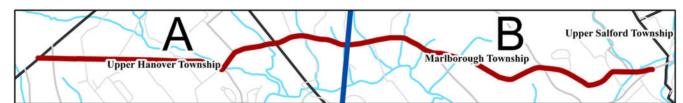
Interest and support for bicycle and pedestrian accommodations, but constraints to providing dedicated infrastructure along the corridor

Community members noted that it is a popular bike route, but may not be safe for biking given the lack of dedicated facilities and high vehicle speeds. In addition to biking, stakeholders highlighted the interest and need for pedestrian connections and crossings in specific locations, such as the Sumneytown Village area and Unami Creek Park. The horizontal and vertical geometry, as well as structures, utility poles, residential fences/decorative walls and heavily wooded and vegetated areas close to the roadway impact the feasibility of providing dedicated bicycle and pedestrian facilities along Geryville Pike.



Geryville Pike | Key Issues





Corridor-Wide Issues

- Several skewed intersections with cross-streets
- Constrained right-of-way with structures close to roadway
- Through-traffic diverting from Lansdale and Quakertown PA Turnpike interchanges
 Desire for increased pedestrian and bicycle
- Desire for increased pedestrian and bicycle connections and crossings
- Roadway geometry and drainage issues require increased winter maintenance

Intersection with Old School Road

Skewed intersection

Between Brinkman Road and Campbell Road

Poor drainage leads to water pooling and icy winter conditions

Intersection with Hendricks Road

• Limited sight distance due to vertical curve



Intersection with PA 663

- Safety concerns
- Need for additional capacity

Intersection with Buck Road

• Limited sight distance, particularly from Buck Road

Intersection with James Road

- Sharp horizontal curve and unusual configuration at the closely spaced intersections with James Road and St Pauls Church Road
- Crash density higher than corridor average

Legend

Geryville Pike

Bridges

Traffic Signals

Intersecting Road Ownership

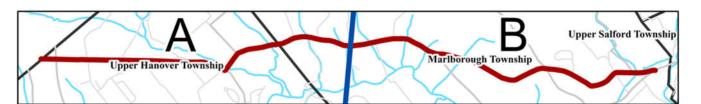
PennDOT

Local Roads

Municipal Boundaries

Geryville Pike | Key Issues





Corridor-Wide Issues

- Several skewed intersections with cross-streets
- Constrained right-of-way with structures close to roadway
- Through-traffic diverting from Lansdale and Quakertown PA Turnpike interchanges
- Desire for increased pedestrian and bicycle connections and crossings
- Roadway geometry and drainage issues require increased winter maintenance

Intersection with Swamp Creek Road

- Poor drainage leads to water pooling in the roadway
- Roadway flooding occurs due to nearby Unami Creek
- Lack of pedestrian connections between Sumneytown Village and Unami Creek

Intersection with Sumneytown Pike

- Cross-traffic vehicle speeds on Sumneytown Pike
- Lack of access management at Sumneytown Hotel
- Sumneytown Village is a desirable destination and place for walking
- Limited space for expanded infrastructure due to historic nature and buildings close to the roadway



Intersection with Hiffletrayer Road

• Crash density higher than corridor average

Woodridge Drive to Magazine Road

 Safety concerns due to steep grades and sharp curves, particularly with winter weather conditions

Legend Geryville Pike Bridges Traffic Signals Intersecting Road Ownership PennDOT Local Roads Municipal Boundaries





GERYVILLE PIKE TOMORROW

CORRIDOR EVALUTION

Geryville Pike provides access to less densely populated suburban residential areas in northwestern Montgomery County and recreational opportunities such as Unami Creek Park. The corridor evaluation focused on improvements to roadway geometry, stormwater management, maintenance, and the addition of bicycle and pedestrian facilities in select areas. A more detailed evaluation of Geryville Pike can be found in Appendix C.

Traffic Operations

Lower traffic volumes and a lack of heavily congested intersections preclude the need for additional through travel lanes for the corridor. The low number of commercial driveways and the density and spacing of intersections with local roads do not necessitate the need for a two-way center left-turn lane for the entire length of Geryville Pike.

Turn lanes exist at the signalized intersection of Geryville Pike and PA 663. Other intersections throughout the corridor do not need turning lanes based on turning movements.

Multimodal Connections

Pedestrian facilities may be appropriate and should be considered for smaller segments based on clusters of pedestrian trip generators and proximity to trail systems, such as in the village of Sumneytown and in the area of the Unami Creek Park.

Bike Montco identifies Geryville Pike, from Sumneytown Pike to PA 663, as a minor arterial in the proposed bike network. Due to the constraints that exist along the corridor, it is impractical to add dedicated bike lanes to Geryville Pike without a significant widening project. Therefore, a consistent shoulder width that can accommodate bicycles may be a more appropriate design treatment for the entire length of Geryville Pike.

Constraints

Geometric, right-of-way, environmental, potential historical, roadside obstructions, and structure features were reviewed and constraints were identified and taken into consideration for the development potential improvements for Geryville Pike.

Utilities are predominantly above-ground throughout the corridor and are located on both sides of the roadway.

It is very common along Geryville Pike for several types of obstructions to be located close to the paved cartway including areas of trees/heavy vegetation, fences, decorative walls, utility poles, drainage swales and building structures.



Geryville Pike and John Fries Highway, Upper Hanover Township



Aboveground Utilities, Marlborough Township

Historical property constraints exist at the intersection of Sumneytown Pike (Bauern Freund Print Shop) in the village of Sumneytown, and in the vicinity of Campbell Road (Andreas Rieth Homestead).

The table below highlights some of key geometric, environmental and historical features along Geryville Pike.

Type	Corridor Constraint			
Geometry	●Horizontal curve at Magazine Road			
	●Horizontal curve north of Magazine Road			
	 Horizontal curve north of Upper Ridge Road 			
	 Horizontal curve south of Hiffletrayer Road 			
	●Horizontal curve at Finland Road			
Environmental	 Drainage swales located near edge of roadway in many locations Unami Creek near Sumneytown Village Stony Run crosses Geryville Pike at several locations on northern end of corridor 			
Potential Historical	•Bauern Freund Print Shop •Andreas Rieth Homestead			



Drainage swale along edge of roadway, Marlborough Township

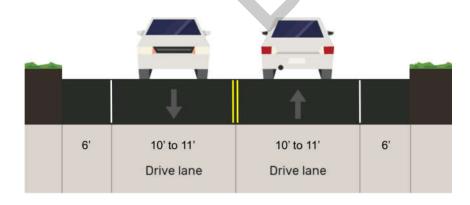
FUTURE VISION

Cross Sections

Geryville Pike is a Community Arterial with a Rural land use context. The standard design criteria should be generally followed with the exception of travel lane widths. Due to roadside constraints, the retrofit criteria should be used for the travel lanes to enable the widening of shoulders for the entire corridor for bicycle use and to add sidewalk in the southern end of the corridor.

PA 663 to Magazine Road

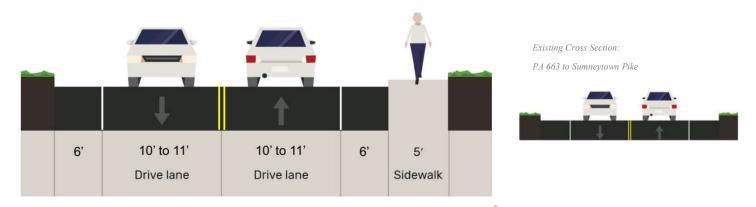
The existing cross section of Geryville Pike from PA 663 to Magazine Road will generally remain the same as existing conditions. Bicycle accessibility will be improved by providing consistent shoulder widths along both sides of the roadway.





Magazine Road to Sumneytown Pike

Bicycle accessibility will be improved by providing consistent shoulder widths along both sides of the roadway. Pedestrian accessibility will be improved by providing sidewalk along one side of the roadway.



Corridor Improvements

The Corridor Improvement Map on the following pages for Geryville Pike identifies improvements at a total of 10 intersections and corridor segments to address issues for traffic operations, safety considerations, bicycle and pedestrian travel, and maintenance. The Corridor Improvement Map identifies the improvement categories to address future needs, an estimated ranges of construction costs, and general priority levels.

The following general corridor-wide improvement strategies apply to Geryville Pike:

Improve intersection alignments and geometry

Several intersections along Geryville Pike have been identified on the corridor improvements map for alignment improvements. In many instances, the side streets intersect the corridor at less than the preferred 90 degrees. These side streets should be realigned where possible.

Add bicycle and pedestrian facilities

The corridor lacks bicycle and pedestrian facilities for its entire length. As indicated in the future cross sections and corridor improvements map, sidewalk should be added on the southern end of the corridor. Consistent six-foot shoulders should be provided to accommodate bicycle traffic.

Add shoulders and widen existing shoulders to preferred width

Some segments of Geryville Pike may be constrained from the preferred shoulder width due to obstructions located close to the roadway. In these areas, the retrofit criteria of 2 to 4 foot shoulders may be more practical and feasible but should be utilized for the shortest segments possible in order to better accommodate bicycle traffic.

Improve stormwater management facilities

Although stormwater management was a common general issue identified by the municipalities, the segment between Brinkman Road and Magazine Road was identified as having more extensive problems and should be a focus. The county should continue to look for opportunities for further improvements with future maintenance projects and land development applications.

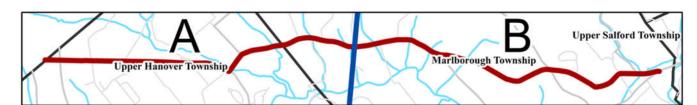
Target winter maintenance activities in areas with changing horizontal and vertical geometry

Local stakeholders identified winter storm event maintenance and treatment as a high priority for the segment between Woodbridge Drive and Magazine Road due to the vertical and horizontal geometry of the roadway. The county has identified the Geryville Pike corridor has a top priority in the response to winter storm events.

Location	Improvement Potential		Relative	Relative
LUCALIUII	Categories	Improvements	Priority	Cost
PA 663	+	Add turning lanesTraffic signal upgrades	High	\$\$
Sumneytown Pike		 Streetscape improvements Traffic calming measures on Sumneytown Pike Reduce the number of driving areas and curb parking areas Add pedestrian facilities and crossings 	High	\$\$\$
Buck Road		Realign intersection approachesImprove vertical geometry	Medium	\$\$\$
James Road	-	 Eliminate off-set intersection by realigning approaches to create 4-way intersection 	Medium	\$\$\$
Brinkman Road to Campbell Road		 Improve stormwater management facilities Priority location for winter maintenance activity 	Medium	\$\$\$\$
Woodbridge Road to Magazine Road		 Improve horizontal and vertical geometry Improve stormwater management facilities Priority location for winter maintenance activity 	Medium	\$\$\$\$
Swamp Creek Road		 Improve stormwater management facilities along corridor and at Unami Creek crossing Add pedestrian facilities connecting Sumneytown village to Unami Creek Park 	Medium	\$\$
Old School Road		Realign intersection approachesImprove vertical geometry	Low	\$\$\$
Hendricks Road	+1	Realign intersection approaches Improve vertical geometry	Low	\$\$\$
Hiffletrayer Road	+1	 Realign intersection approaches Improve vertical geometry 	Low	\$\$\$

Geryville Pike | Corridor Improvements





Corridor-Wide Improvement Strategies

- Improve intersection alignments and geometry
- Add shoulders and widen existing shoulders to preferred width
- Add bicycle and pedestrian facilities
- Improve stormwater management facilities
- Target winter maintenance activities in areas with changing horizontal and vertical geometry

Intersection with Old School Road





Priority: Low Cost: \$\$\$

- Realign intersection approaches
- Improve vertical geometry

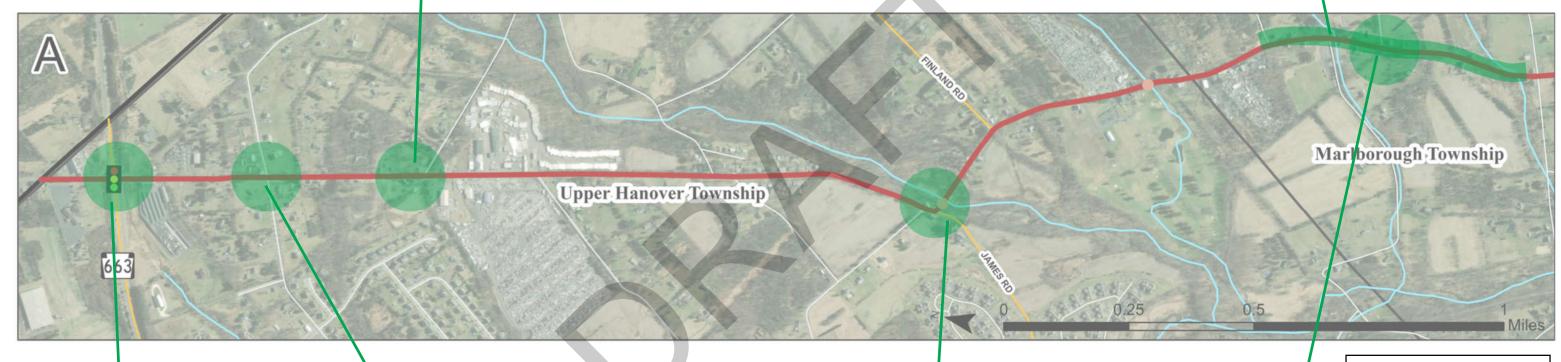
Between Brinkman Road and Campbell Road





Priority: Medium Cost: \$\$\$\$

- Improve stormwater management facilities
- Priority location for winter maintenance activity



Intersection with PA 663



Priority: High Cost: \$\$

- Add turning lanes
- Traffic signal upgrades

Intersection with Buck Road





Priority: Medium Cost: \$\$\$

- Realign intersection approaches
- Improve vertical geometry

Intersection with James Road





Priority: Medium Cost: \$\$\$

Eliminate off-set intersection by realigning approaches to create 4-way intersection

Intersection with Hendricks Road





Priority: Low Cost: \$\$\$

- Realign intersection approaches
- Improve vertical geometry

Legend

Geryville Pike

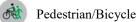
Bridges

Traffic Signals

Improvement Type









Parking



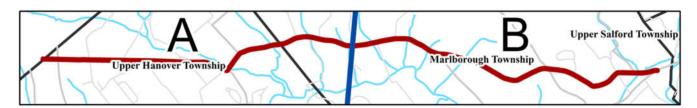
Relative Project Costs

\$0—\$1,000,000 \$\$

\$1,000,000—\$2,000,000 \$\$\$

Geryville Pike | Corridor Improvements





Corridor-Wide Improvement Strategies

- Improve intersection alignments and geometry
- Add shoulders and widen existing shoulders to preferred width
- Add bicycle and pedestrian facilities
- Improve stormwater management facilities
- Target winter maintenance activities in areas with changing horizontal and vertical geometry

Intersection with Swamp Creek Road





Priority: Medium Cost: \$\$

- Improve stormwater management facilities along corridor and Umami Creek crossing
- Add pedestrian facilities connecting Sumneytown Village and Unami Creek Park

Intersection with Sumneytown Pike













- Streetscape improvements
- Traffic calming measures on Sumneytown Pike
- Reduce the number of driveways and curb parking areas
- Add pedestrian facilities and crossings



Intersection with Hiffletrayer Road





Priority: Low Cost: \$\$\$

- Realign intersection approaches
- Improve vertical geometry

Woodridge Drive to Magazine Road





Priority: Medium Cost: \$\$\$\$

- Improve horizontal and vertical geometry
- Improve stormwater management facilities
- Priority location for winter maintenance activity

Legend

Geryville Pike



Traffic Signals

