Millerstown

Bicycle/Pedestrian Connectivity Master Plan

BOROUGH OF MILLERSTOWN, PERRY COUNTY, PENNSYLVANIA

Draft, May 2024

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LANDSCAPE ARCHITECTURE

DAWOOD

SC#23068.00

Millerstown Borough

Prepared for:

MILLERSTOWN COMMUNITY SUCCESS, INC.

The preparation of the Millerstown Pedestrian and Bicycle Connectivity Master Plan deliverables (reports, maps, documents, etc.) were financed in part through funds made available by a HATS RTP Implementation Grant using federal funds, along with matching funds from MCSI (Millerstown Community Success, Inc.).

HATS
HARRISBURG AREA TRANSPORTATION STUDY

Project Committee

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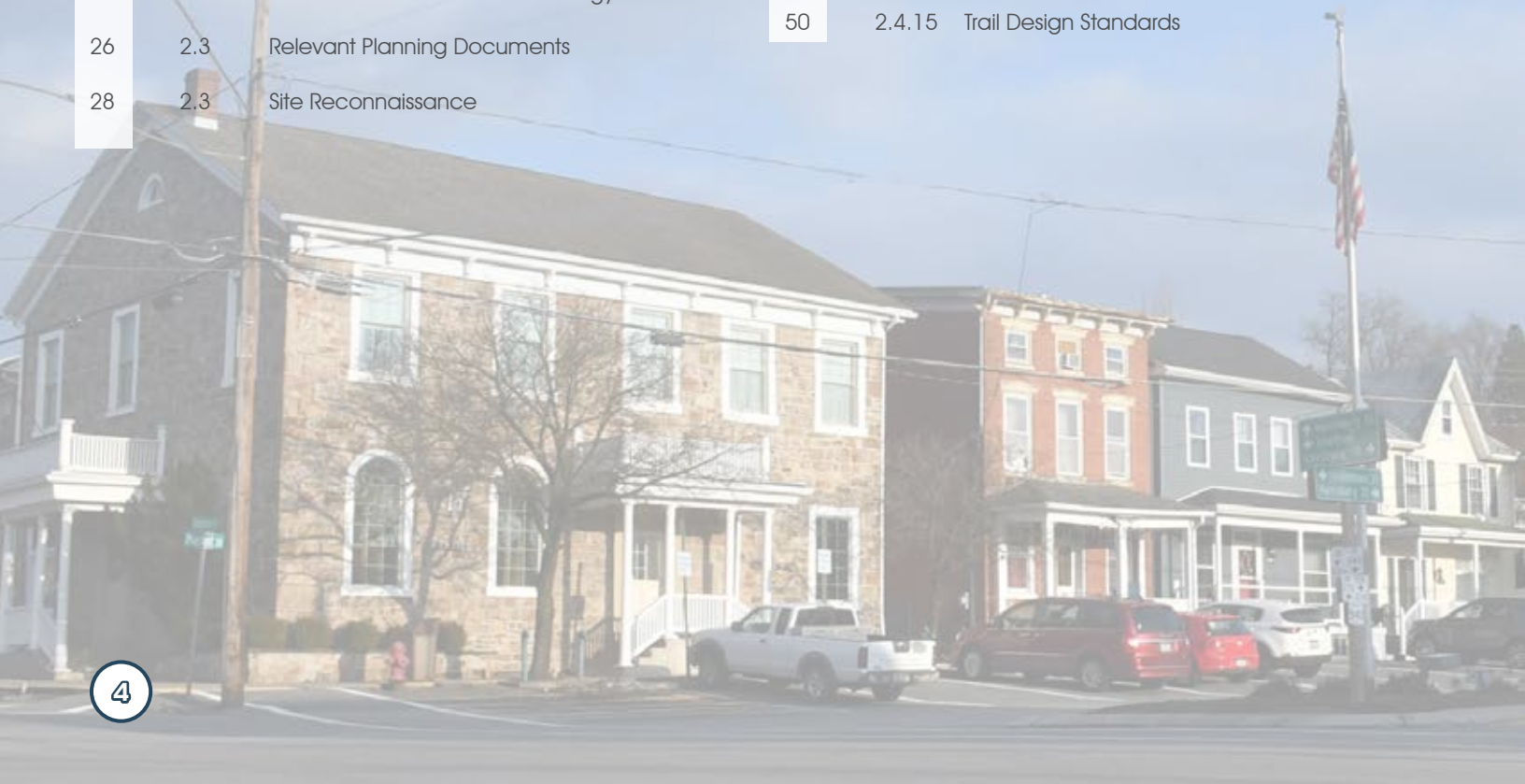

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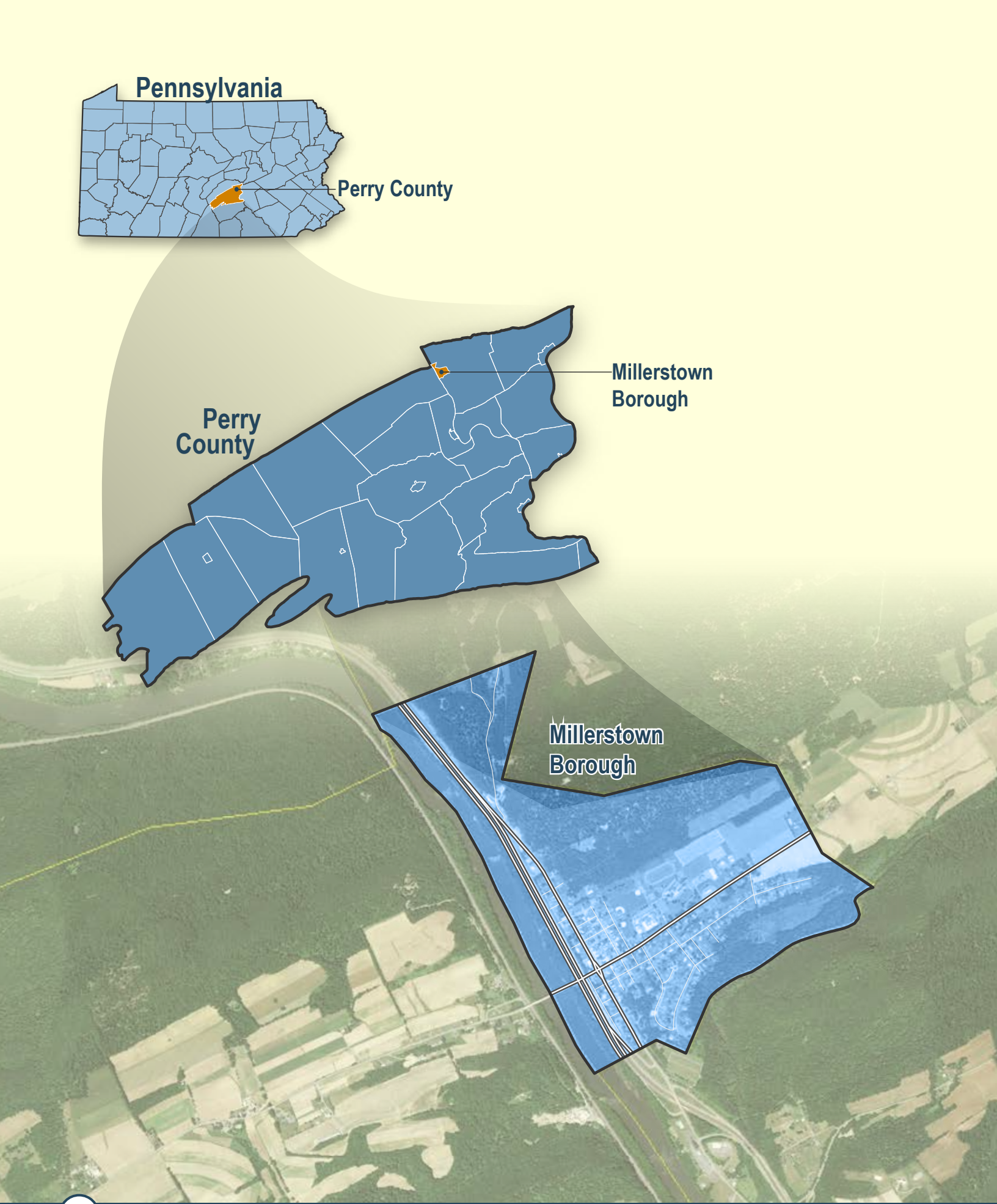
BOROUGH OF MILLERSTOWN, PERRY COUNTY, PENNSYLVANIA

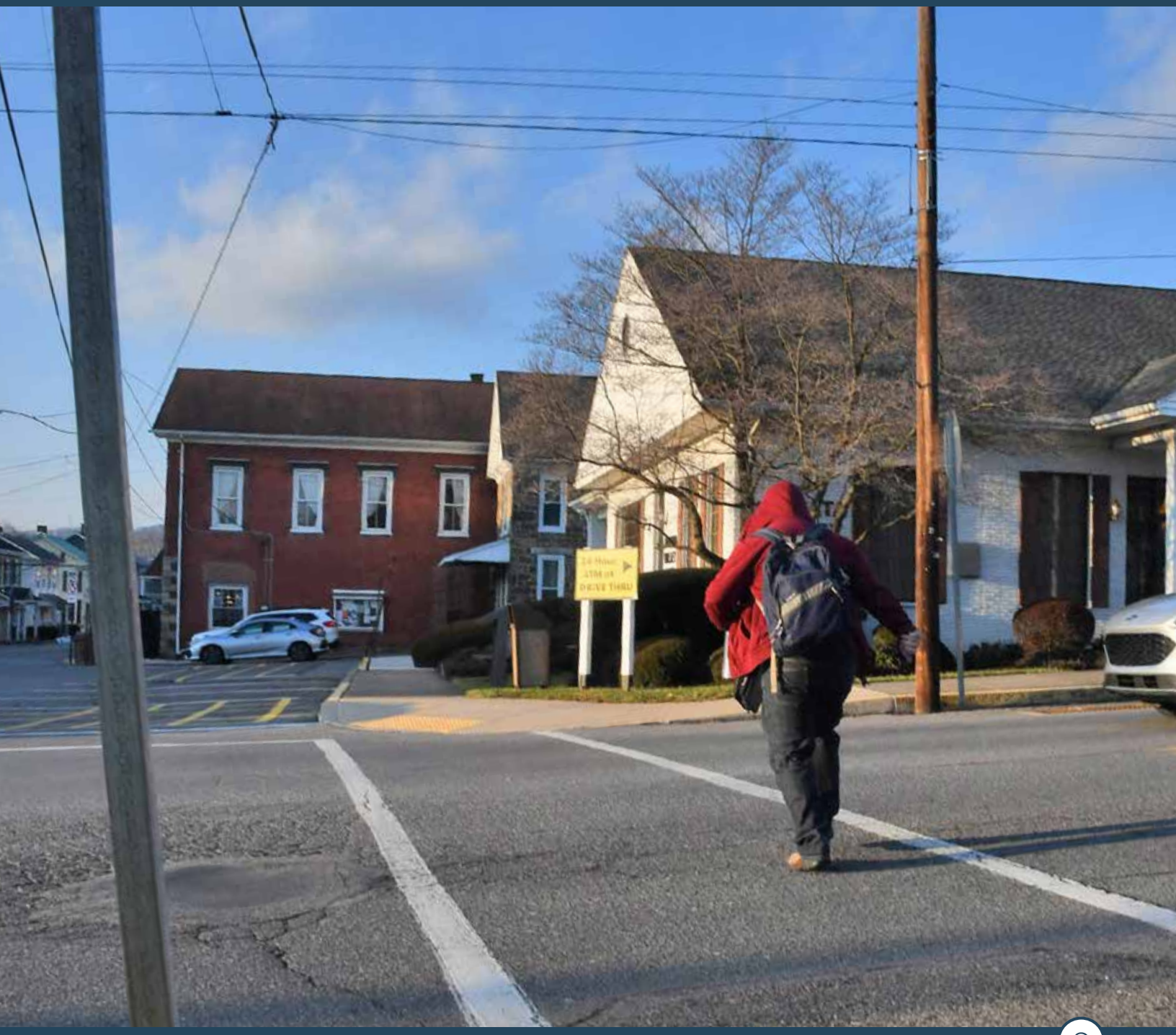
INTRODUCTION


Pennsylvania
Perry County
Perry County
Millerstown Borough
Millerstown Borough

1. Introduction

1.1 Study Purpose

The Millerstown Bicycle and Pedestrian Connectivity Master Plan (the Plan) explores opportunities in this rural village for enhanced multimodal transportation options for cyclists and pedestrians to travel safely in and around Millerstown. The Plan is a comprehensive analysis of existing transportation systems in Millerstown and recommends improvements to create a more connected and safer community through pedestrian and cycling infrastructure that is appropriate to this village setting.



Millerstown, Pennsylvania
Economic Vitality Plan

Perry County
CAREFULLY CULTIVATED.

COMMUNITY CHARACTER
MILLERSTOWN

RECOMMENDATION

Pedestrian Enhancements: Improve existing sidewalks and trail to promote walkability and pedestrian safety between the square, schools and park.

Actions

Sidewalk Extensions-Extend sidewlaks along East Sunbury Street to provide better connections to the schools.

Crosswalks-Provide a highly visible crosswalk at Nace and East Sunbury Streets to connect the neighborhood and schools.

Lighting- Provide pedestrian lighting along the trail connecting the Grave Street underpass with the park.

Pedestrian Underpass-Enhance the Grave Street underpass with public art and lighting.

Street Trees-Work with property owners to secure easements to allow for street tree planting along East Sunbury Street to enhance the gateway to downtown and provide shade and comfort for pedestrians.

COMMUNITY CHARACTER
MILLERSTOWN

RECOMMENDATION

Millerstown Square: Build upon recent investments and continue to enhance the square.

Actions

Crosswalks-Install broad crosswalks at each end and in the middle of the square to delineate to motorists that this is a pedestrian environment.

Paving-Consider stamped asphalt paving within the square to distinquish it from surrounding roadways.

Canopy Trees-Explore opportunities to install upright canopy trees at the four corners of the square to provide shade. This may require re-striping parking spaces or eliminating some parking spaces.

Parklets-Incoporate temporay gathering areas to allow for more outdoor dining and activity on the square.

Juniata Valley Bank Site-Should this use ever change and the site redevelop in the future, replace the building with a building that is more appropriate to the square. The setback should match other buildings, any new structure should be two-three floors, and roof lines and building forms should be compatible with other buildings on the square.

COMMUNITY CHARACTER
MILLERSTOWN

Distinctively located between two mountain ridges on the east banks of the Juniata River, Millerstown is the only borough with significant riverfront access. While Route 322 passes between the river and downtown, two underpasses provide clear and direct river access and a boat ramp. Additionally, Millerstown Community Park, connected to downtown by a riverfront trail, enjoys significant unobstructed river frontage. While 322 bypasses the downtown, Millerstown has excellent visibility from the highway and direct access just to the south. Like other Perry County boroughs, Millerstown Square is the heart of the community and has seen recent public and private investment. Outstanding schools and neighborhoods are located within walking distance of the square. In addition to its river access, the park is an outstanding amenity that includes passive and active recreation-including a pool-and is a valuable resource for all of Perry County.

Millerstown does experience some challenges. These include ongoing maintenance and operations for the pool; breaks in pedestrian connectivity, particularly to the schools; lack of lighting along the trail; constrained growth boundaries; and stormwater runoff. Millerstown also has the opportunity to better capture travelers along Rt. 322 and using the park for revenue-generating events.

RECOMMENDATION

Future Growth: Plan for and manage future growth.

Adjacent farmland may present an opportunity for additional residential development. It will be important that any new development be an extension of the borough's gridded neighborhoods and not developed as a separate gated enclave.

Actions

Future Street Network-Plan for a gridded street network that includes interconnected streets and walkable blocks (ideally about 400' block lengths) that connect into existing streets.

Streetscape-Provide sidewalks and street trees along all new streets to promote walkability, particularly to the schools and square.

Perry County
CAREFULLY CULTIVATED.

1.2 Millerstown Economic Vitality Plan

The Plan has its basis in the Perry County Economic Vitality Plan (PCEVP) prepared by the Perry County Economic Development Authority in 2021. The PCEVP recognized Millerstown as a unique, authentic community in Perry County and a village with a keen sense of place and identity. The PCEVP recommended connectivity improvements to better access the middle school and high school, the riverfront, the Millerstown Area Community Park and Community Pool and also a reexamination of Town Square to create a more pedestrian-oriented space and to create a "place" rather than just a through-traffic intersection. Town Square is a place that is confusing to first-time motorists and any pedestrian. The Sunbury Street crossing is extremely long and currently, Town Square is not a place to linger and definitely not supportive of the current (and future) businesses that are located there. While Town Square has many attractive and historic buildings, the landscape setting is not conducive to enjoying this heritage.

1.3 Project Funding

This project is funded by a Harrisburg Area Transportation Study (HATS) Regional Transportation Program (RTP) Implementation Grant using federal funds, along with matching funds from Millerstown Community Success, Inc. (MCSi) https://millerstown.org/mcsi.htm. HATS funding is $56,000.00 and MCSi funding is $14,000.00 for a total project cost of $70,000.00.

MCSI is 501-c-3 non-profit incorporated membership organization established by volunteer citizens of the greater Millerstown Area encompassing Millerstown Borough, Tuscarora Township, and Greenwood Townships in Perry and Juniata Counties with Millerstown addresses. The organization was incorporated in 2004 with a mission for the enhancement of the physical design and improvement and appearance of the Millerstown Square, encourage and develop community pride, stewardship of cultural assets, preservation and enhancement of the historic character of Millerstown Borough, and to encourage and develop pride in appearance of homes and businesses. Now in its fourteenth year of operation, MCSI has raised and returned thousands of dollars to the Millerstown community to preserve and enhance the town that the organization loves and supports in so many different ways through improvement projects and donations to other organizations' projects to improve the community.

MCSi issued a Request for Proposals (RFP) to consultants to complete this work. Simone Collins Landscape Architecture in collaboration with Dawood Engineering (consultant team) was selected by MCSi to complete this study.

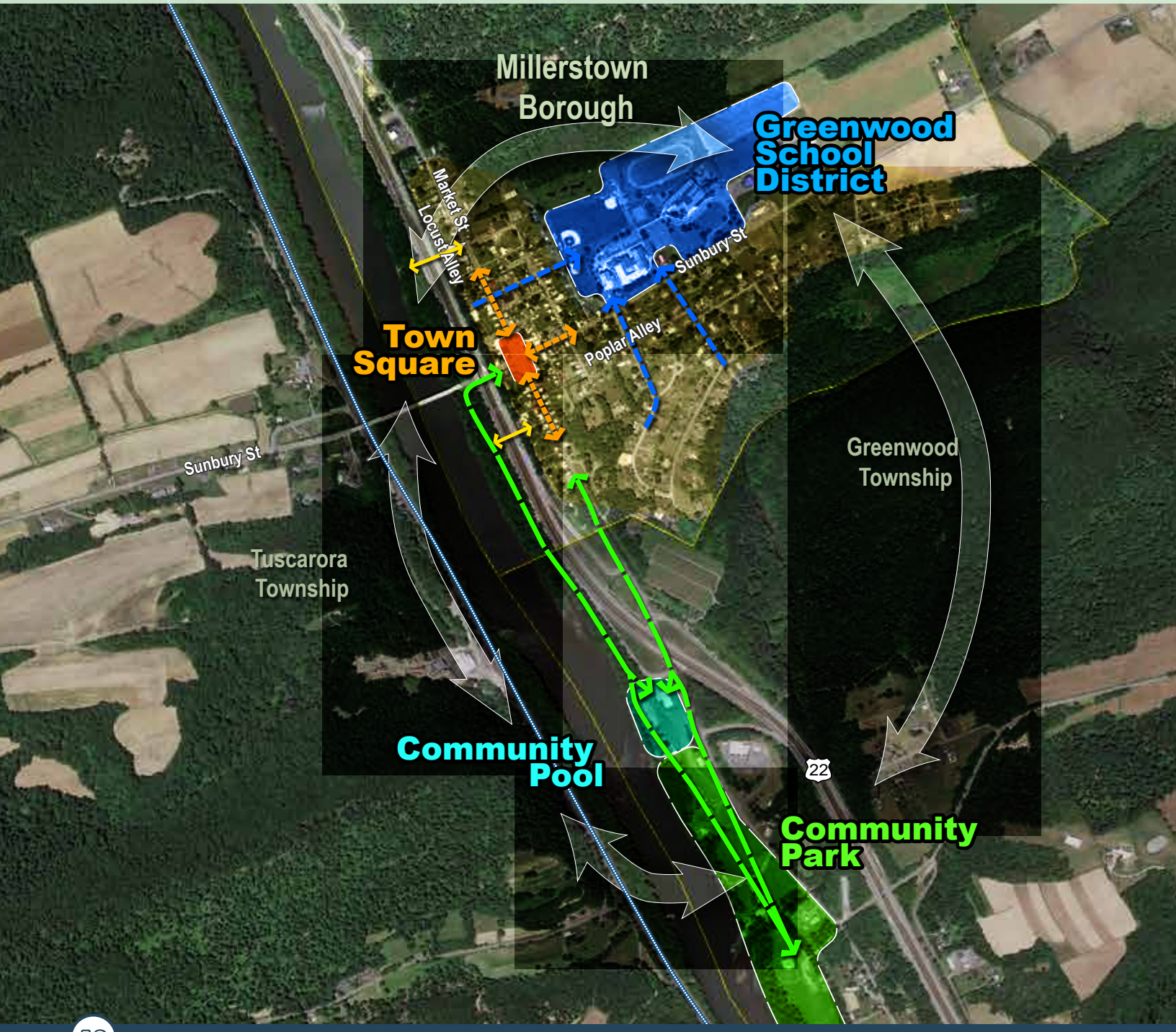
1.4 Safety

The primary reason for planning and implementing multi-modal (pedestrian and bicycle) improvements In Millerstown is safety. There have been vehicular accidents in Town Square including at least one fatality. Residents have expressed concerns at public meetings for this project about students walking to school and crossing Sunbury Street. While many use the existing river pathway to walk between the village and the community park and pool, many walk along Market Street, where no sidewalks exist. Many have shared anecdotes of their first time driving through Town Square, not knowing what to do as either a pedestrian or a motorist. Additionally, the parking spaces on Town Square can create conditions where motorists are backing out into traffic blindly, if their sight lines are blocked by a large vehicle. Both Market Street (SR 1015 and Sunbury Street (SR 17) are state roadways, so any proposed improvements on these routes must be approved by PennDOT and must meet or exceed PennDOT safety standards.

1.5 Multimodal Opportunities

As the consultant team initiated work, a number of opportunities for improved connectivity in Millerstown became apparent. These opportunities were brought to the consultant team's attention by MCSi, public meeting participants and through field views by the consultant team. These areas / locations for possible improvements are generally categorized as follows:

- Connectivity enhancements to the community park and pool
- Improvements to Town Square make it safer, more people-oriented, more attractive and more conducive as a civic space that supports existing and new businesses.
- Safer routes to school for students, faculty and staff including better roadway crossings.
- Improvements to existing highway ramps (including better signage) to limit truck traffic through Town Square.
- Enhanced trails on the school campus for students and the community.
- Development of safe bicycle connections to local destinations
- Create conditions that are conducive to on-road regional bike routes through town.
- Enhanced connectivity to the Juniata River



1.6 Project Schedule

- The study began in January 2024 and will conclude with a report in June of 2024. Specific project meeting dates and other milestones are as follows:
- January & February 2024 – Data Collection & Community Outreach
- January 31, 2024 – Public Meeting #1
- February 20, 2024 – Public Meeting #2
- April 1, 2024 – Meeting with Borough Council
- April 9, 2024 – Meeting with PennDOT District 8-0
- April & May – Key Person /Agency Interview
- May 14, 2024, Public Meeting #3 – Draft Plan Presentation
- May 15 to June 1, 2024 – Draft Plan Review & Comment Period – comments submitted back to the consultant team for incorporation into the final plan.
- June 3, 2024 – Meeting #2 with Borough Council – plan adoption subject to final revisions
- June 3 to June 14 – Final Plan Revisions
- June 14, 2024 – Final Plan Presentation to Harrisburg Area Transportation Study (HATS) and the Tri-County Regional Planning Commission (TCRPC).
- June 14-June 30 – Final revisions and project completion

Task / Event	January	February	March	April	May	June
Review background data and previous studies						
Site Reconnaissance						
Set up base mapping						
Existing Roadway, Sidewalk & Trail inventory & mapping						
Access ADA accessibility issues / locations						
Create proposed connectivity plan						
Streetscape Plan / elements						
Photo-simulations for five (5) proposed improvements						
Cost estimates for proposed improvements						
Prioritize improvements						
Funding Strategy / Implementation Strategy						
Write and Assemble Report						
Revisions to Draft Plan as required						
Public Meetings						
Public Meeting #1 - brainstorming/programming	31					
Public Meeting #2 - preliminary plan concepts		20				
Public Meeting #3 - draft plan						
Public Meeting #4 - final plan				1		
Borough Adoption of Plan					14	
Presentation to TCRPC						3
Plan Completion						
Committee Meetings						
Committee Meeting #1 - information gathering / brainstorming						
Committee Meeting #2 - preliminary plan concepts						
Committee Meeting #3 - pre draft plan						
Project Stakeholders Key Person / Agency Interviews (10) (virtual)						
Meeting with Tri County Planning Commission Staff						
Meeting with PennDOT District 8-0 (virtual)						
Coordination with MCSI and Borough						

1.7 Public Participation

The consulting team actively involved the local community in a thorough public participation process, gathering valuable existing conditions information and feedback on initial ideas. The goal for public participation was to ensure that the final plan reflects the community's interests. There were three (3) special public meeting, two (2) public meetings at Borough Council and opportunities to directly contact the consultant team with comments, suggestions and questions.

1.7.1 Outreach Summary

A brief summary of meetings is as follows:

Public Meeting 1 – Jan. 31, 2024

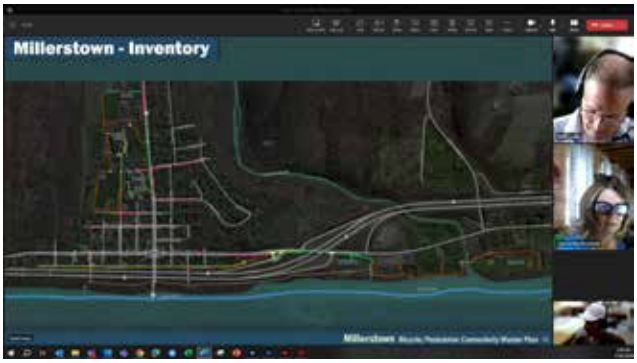
The consulting team presented the project to the community, gave a brief overview of the planning process and reviewed initial inventory, data, and analysis. The consultants then led a brainstorming session to gather community input categorized as goals, facts, concepts, and potential partnerships.

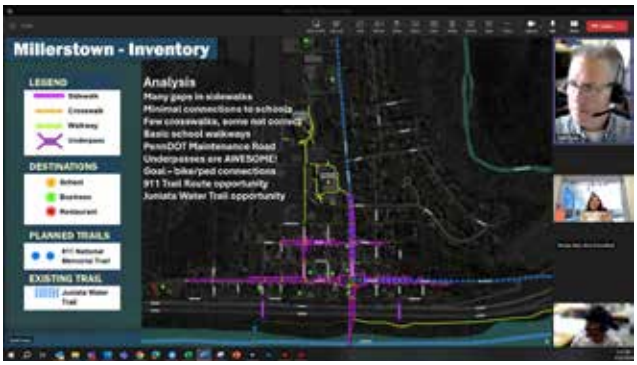
Public Meeting 2 – Feb. 20, 2024

The consulting team presented an overview of the preliminary concepts that included several town square concepts, new crosswalks, new sidewalks, improved river access and ideas for better bicycle connectivity.

Public Meeting 3 – May 17, 2024

The consultant team presented the draft plan including the written report and cost estimates. Attendees provided initial comments on the plan and offered suggestions.





1.7.2 Key Person Interviews (KPI)

Key Person Interviews were held with individuals and agencies who have knowledge and interest that relates to multimodal (bicycle and pedestrian) improvements in Millerstown. Interviewees were:

- Teresa Hunker, Millerstown Community Park and Pool representative.
- Michelle Jones, Executive Director, Perry County Economic Development Agency
- Jason Finnerty, Planning Coordinator Tri-County Regional Planning Commission
- Dr. Mary Murphy-Kahn, Superintendent, Greenwood School District
- Karen Knellinger, Secretary/Treasurer, Millerstown Borough
- Tara Hartley, member MCSi

1.7.3 Meetings with Borough Council

Two (2) meetings were held with Borough Council. The first on April 1, 2024, was a similar presentation to Public Meeting #2 where initial concepts were shown and discussed. The second meeting with Borough Council took place on June 3, 2024. The Draft Plan with comments received was presented and Council was requested to approve the plan pending final revisions.

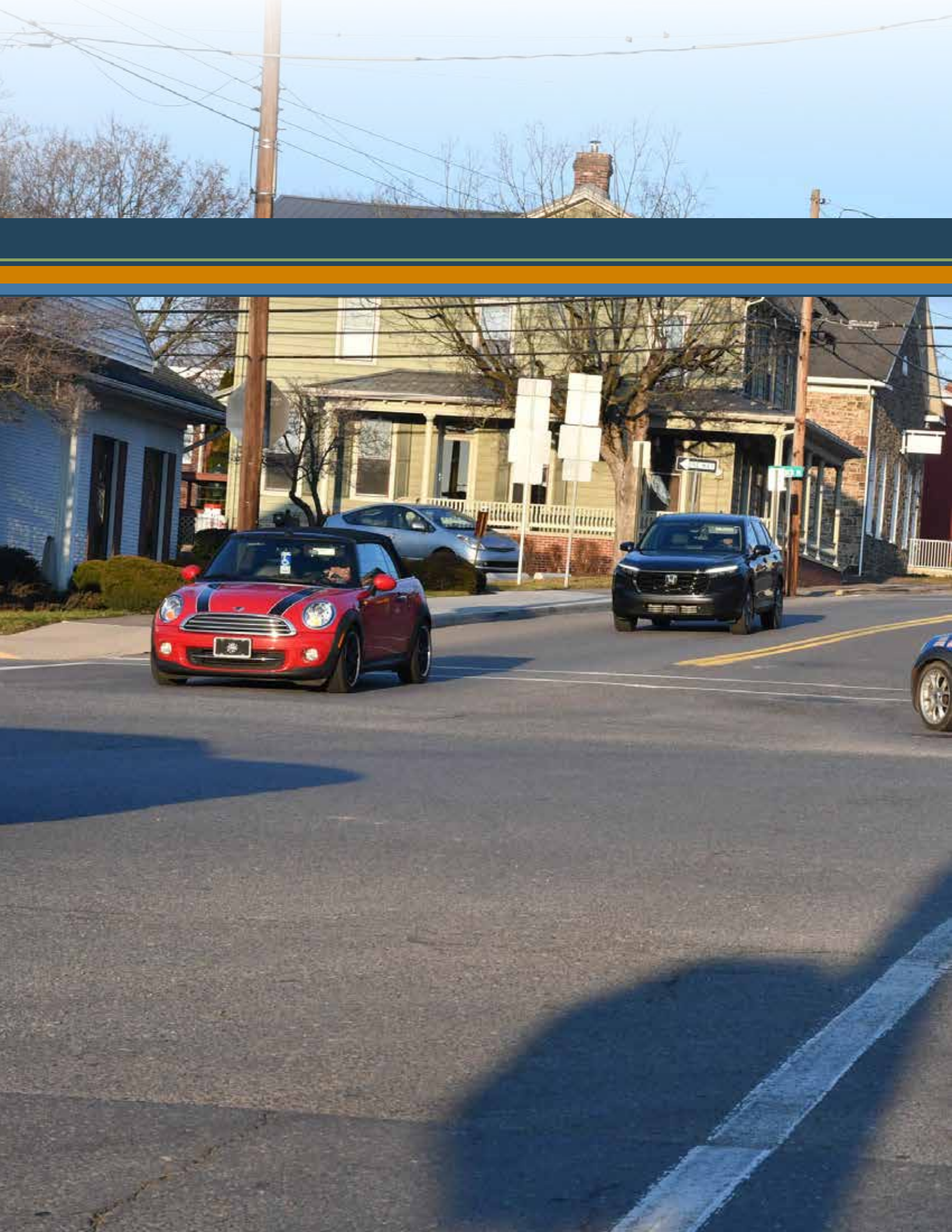
1.7.4 Meeting with PennDOT District 8-0

The consultant team met with PennDOT District 8-0 on April 9, 2024, to present plan concepts that involved possible to present the project for feedback and confirmation on the proposed project concepts.

1.7.5 Meeting/Presentation to HATS

A presentation of the final plan was made to HATS / TCRPC on June 14, 2024.

This section to be completed for the final report.



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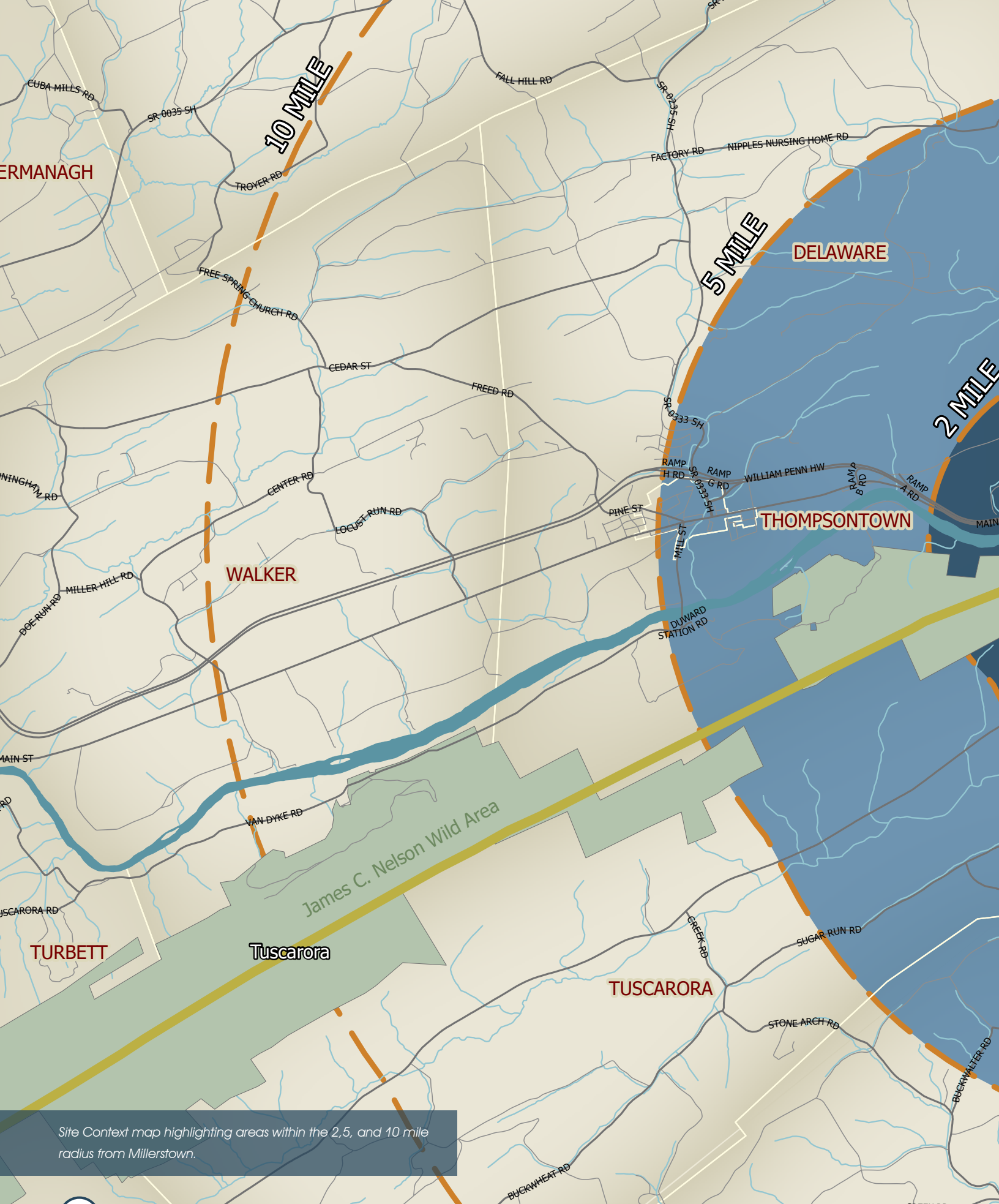
Millerstown

Bicycle/Pedestrian Connectivity Master Plan

BOROUGH OF MILLERSTOWN, PERRY COUNTY, PENNSYLVANIA

INVENTORY & ANALYSIS



Site Context map highlighting areas within the 2,5, and 10 mile radius from Millerstown.

2. Inventory & Analysis

2.1 Data Collection and Methodology

The information in this report was gathered from several sources, including Millerstown Borough, Perry County, STRAVA (Heat Maps), past planning studies, and field reconnaissance data acquired by the consultant team.

Geographic Information System (GIS) base mapping was used to create project maps and planning documents, which were then integrated with aerial photography, municipal boundaries, roadways, sidewalks, tax parcels, and other land use features. The consultant team organized an extensive public involvement process involving the community through Millerstown Community Success, Inc., and the Borough of Millerstown.

LEGEND

- Sidewalk
- Crosswalk
- Walkway
- Underpass
- Paper Street

DESTINATIONS

- School
- Business
- Restaurant
- Other

PLANNED TRAILS

- 911 National Memorial Trail

EXISTING TRAIL

- Juniata Water Trail

0 20' 60' 100' 200' North

GREENWOOD ELEMENTARY SCHOOL

GREENWOOD HIGH SCHOOL

FREEDOM PARK

GREENWOOD TOWNSHIP

COCOLAMUS CREEK

JUNIATA RIVER

E SUNBURY ST

POPLAR ST

STEPHEN ST

WILLIAMS ST

NACE ST

SCHOOL ST

WALNUT ST

CHESTNUT ALLEY

MULBERRY ALLEY

APPLE ST

N HIGH ST

S HIGH ST

GREENWOOD ST

HEMLOCK ALLEY

GRAVE ST

N MARKET ST

S MARKET ST

W JUNIATA PKWY

BEAVER ST

ADAMS ST

SPRING ST

LOCUST ALLEY

US HWY 22

22

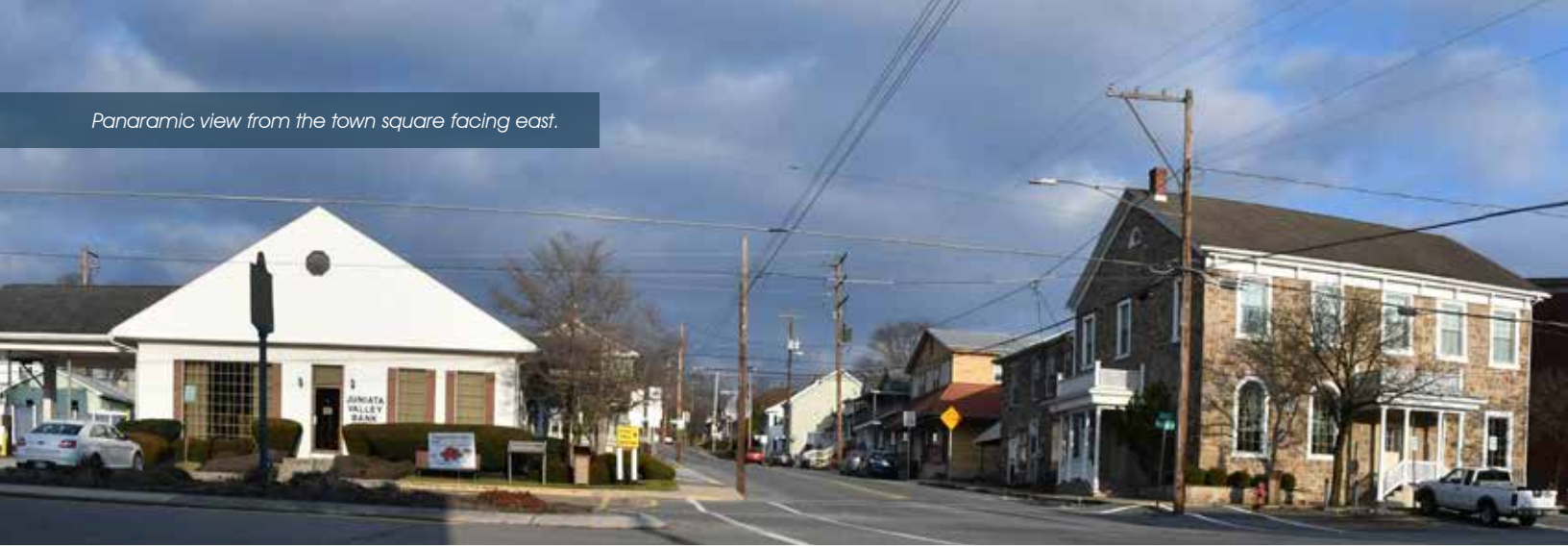
17

Site Analysis map highlighting exisiting conditions and facilities within Millerstown.

DEAD END RD
PERRY VALLEY RD
PINES DR
US HWY 22
US HWY 22
22
US HWY 22
US HWY 22
22
W JUNIATA PKWY
W JUNIATA PKWY
MILLERSTOWN
COMMUNITY POOL
MILLERSTOWN AREA
COMMUNITY PARK
JUNIATA RIVER

Site Analysis map highlighting Millerstown' topography


DEAD END RD
PERRY VALLEY RD
PINES DR
US HWY 2
22
US HWY 2
W JUNIA
MILLERSTOWN AREA
COMMUNITY PARK
JUNIATA RIVER



Panaramic view from the town square facing east.

2.3 Relevant Planning Documents

Perry County Economic Development Authority (PCEDA) and the Economic Vitality Plan (PCEVP) (2021)

This plan recognized Millerstown as a unique, authentic community in Perry County and a village with a keen sense of place and identity. The PCEVP recommended connectivity improvements to better access the middle school and high school campus, the riverfront, the Millerstown Area Community Park, and Community Pool and also a reexamination of Town Square to create a more pedestrian-oriented space and to create a "place" rather than just a through-traffic intersection. Town Square is a place that is confusing to first-time motorists and any pedestrians. The Sunbury Street crossing is extremely long and currently, Town Square is not a place to linger and definitely not supportive of the current (and future) businesses that are located there. While Town Square has many attractive and historic buildings, the landscape setting is not conducive to enjoying this heritage.

https://perrycountyeda.com/downtown-revitalization/

Millerstown Community Park Master Plan (2006)

This plan was prepared by H. Edward Black & Associates P.C.

Millerstown Downtown Streetscape Plan (2006)

This plan was prepared by H. Edward Black & Associates P.C.

Harrisburg Area Transportation Study Regional Bike & Pedestrian Planning (2023/2024)

https://www.tcrpc-pa.org/hats-bike-ped-planning

PennDOT Publication 10C (DM-1C) 2015 Edition, Change #5 – Chapter 4 – Final Design Plan Development – E. Requests for Non-Motorized Trails in Limited Access Right-of-Way.

This publication outlines the process and procedures for establishing or maintaining a trail withing a limited access Right of Way. The request can be submitted by a municipality to PennDOT and includes the municipality agreeing to maintain the trail according to AASHTO and ADA standards. It may include a requirement for fencing, drainage of other work based on the specific conditions in the ROW. Please refer to this report appendix for a complete copy of this publication. There are at least two (2) known trails in Pennsylvania within Limited Access ROWs.

1. College Township, Centre County – College Township Bikeway – Travels parallel to the Mt. Nittany Expressway (US 322) from Puddintown Road to Scenery Drive.

2. Harris/College Township, Centre County - Warner Boulevard/ Boalsburg Road Path - Travels along Warner Boulevard/Boalsburg Road through the Oak Hall Interchange from South Atherton Street to Linden Hall Road.

2.3 Site Reconnaissance

The consultant team conducted initial site reconnaissance both on foot and by car on several occasions in the town square, recreational spaces, and schools to better understand the pedestrian, bicycle, and vehicular challenges in Millerstown.

Important data was recorded on field maps and later used to determine the placement of proposed improvements. Many photographs were taken of existing conditions and provide valuable reference during the refinement of the proposed improvement plan. Site reconnaissance data was supplemented by information obtained from attendees at public meetings.

Image of consultant and client walking together within the town square during a site visit.

Image of local residents wlaking their dogs along Chestnut Alley.

Image of consultant team walking along E Sunbury St going under Rt 22/322 highway during a site visit.

2.4 Study Area Analysis

2.4.1. Town Square

As the physical focal point of the community, Town Square can create (or not) an iconic image of Millerstown that conveys its heritage, richness, community values and economic vitality. Since the days of horses and buggies, the unplanned evolution of historic town square has created a chaotic, and intimidating streetscape. There is a need to reverse the mis-steps of the past in keeping with the spirit of recently passed federal legislation that promotes safe streets and roads for all. Clarity for motorists, pedestrians and cyclists needs to be rediscovered in the square and it should reestablish pedestrians on at least an equal footing with motor vehicles. Today, Town Square is not a comfortable place to be and if the village is to remain vital, Town Square should communicate that vitality. Town Square also needs to be aesthetically pleasing. Lined with attractive and historic structures, the landscape setting of Town Square detracts from the presentation of these buildings. Human comfort should be reestablished in Town Square with street trees, ornamental plantings (reinforcing the magnificent annual plantings in the islands), new street furniture, appropriate lighting, and interpretive signage. These improvements will encourage the private sector to reinvest in Town Square and there should be opportunities for all fresco dining, community events and people watching.

1904 SANBORN MAP

Panaramic view from the town square facing north.

2.4.2 Safe Routes to Schools

Millerstown is fortunate to host the Greenwood School District's Middle School and High School, located just north of Town Square on Sunbury Street. There is concern in the community (as evidenced at public meetings) about pedestrian safety for students, faculty and staff should they wish to walk to and from school. The school campus is the social, athletic, and educational hub of the community. It is critical to make access to the school campus safe day and night. Currently, existing crosswalks on Sunbury Street do not meet any design standards for safety or handicapped accessibility. The addition of strategically located sidewalks, crosswalks, traffic control devices, warning signage and other improvements to enhance pedestrian and bicycle travel routes to and from the school campus is of paramount importance in this community. Pedestrian scale lighting along sidewalks would better allow for after-hours activities as the schools, is also an important consideration. Many residents have moved to Millerstown because of the stellar reputation of the school district. It is very important to make access to these facilities as safe as possible.

Image of E Sunbury passing by Greenwood High School.

View from underpass looking onto the Juniata River

2.4.3 Reconnecting to the Juniata River

The construction of the Rt. 22/322 highway through Millerstown about 1970 destroyed an important part of the fabric of the town. Several large properties and stately homes that overlooked the river were destroyed with the development of this important regional highway link. The highway allows Millerstown residents to be in Harrisburg in 25 minutes and for many, Millerstown is a bedroom community to the state capital. Fortunately, PennDOT engineers brilliantly included two (2) underpasses of the highway in Millerstown which have proven invaluable for residents to remain connected to the river. These underpasses have been in use since the highway was constructed and there is no known history of accidents or mishaps along the limited access highway / ROW. Approximately 30 years ago, Borough residents constructed a privately funded pathway. It is believed that there was an agreement between Millerstown Borough and PennDOT, although it appears those records have been lost. This pathway provides a critical safe route between the village and the community park and community pool that is located downstream. This safe connection needs to be maintained for safety and accessibility to the river and these important community facilities. The underpasses need improvement, lighting, and aesthetic enhancements.

2.4.4 Truck Traffic

While no traffic counts were taken as a part of this master plan, casual site observations and anecdotal first-person accounts all agree that there is a "substantial" number of tractor-trailer trucks that pass through the Town Square. Many proceed west across the river on West Sunbury Street, and some proceed northbound on Rt. 17. There appears to be a number of trucks that go directly north through Town Square to gain access to the Rt. 22/322 highway. It may be that many of these trucks come through Town Square because the northbound, left turn ramp from the Juniata Parkway to the highway is a tight, difficult, left turn to negotiate and it is "easier" just to stay straight through the village to rejoin the highway. An easier to negotiate northbound ramp could mitigate this issue if traffic counts prove these observations to be correct.

Image of truck coming from E Sunbury heading up north

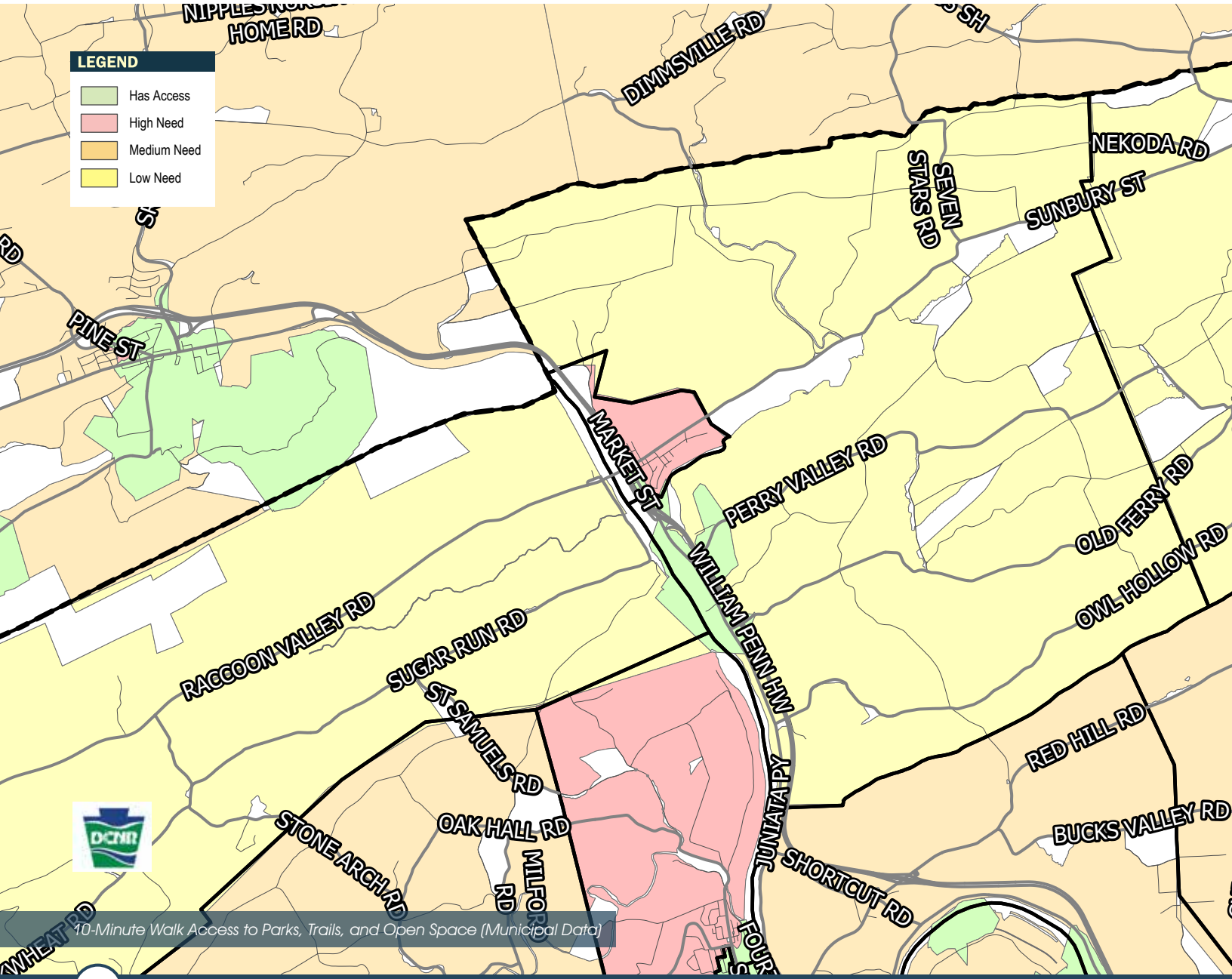
Image of truck coming from E Sunbury turning on to S Market St.

2.4.5 Sidewalks, Bike Routes & the Juniata River Water Trail

While Millerstown has a respectable inventory of sidewalks there are many sidewalk gaps that need to be filled to create a complete system of safe connections. Many of the critical gaps exist along Market Street and to the school campus. In some areas of sidewalk gaps, it is unclear where pedestrians are meant to walk, and this creates an unsafe condition. Similarly, cyclists need and deserve safe accommodations. The nationally prominent September 11th National Memorial Trail is slated to run through Millerstown, coming from the east along Market Street and then heading north on Sunbury Street. The September 11th National Memorial Trail spans 1,300 miles, serving as a multi-use route that connects the World Trade Center, the Pentagon, and the Flight 93 Memorial. Cyclists who follow this route will be introduced to the Millerstown Town Square and will hopefully be enticed to pause for a meal or a snack at a current or future restaurant or general store. Locally, additional accommodations for adult and child cyclists should also be developed. The Juniata River Water Trail is an existing facility that passes by but does not have an official landing in Millerstown. The upriver highway underpass leads to a traditional swimming spot and unofficial boat launch that could be made an official landing for the water trail.

2.4.6 Millerstown Aesthetics and Visual Appeal

All proposed improvements in Millerstown should always consider the aesthetic presentation of what is being built. Designers and planners must go beyond simple utility and

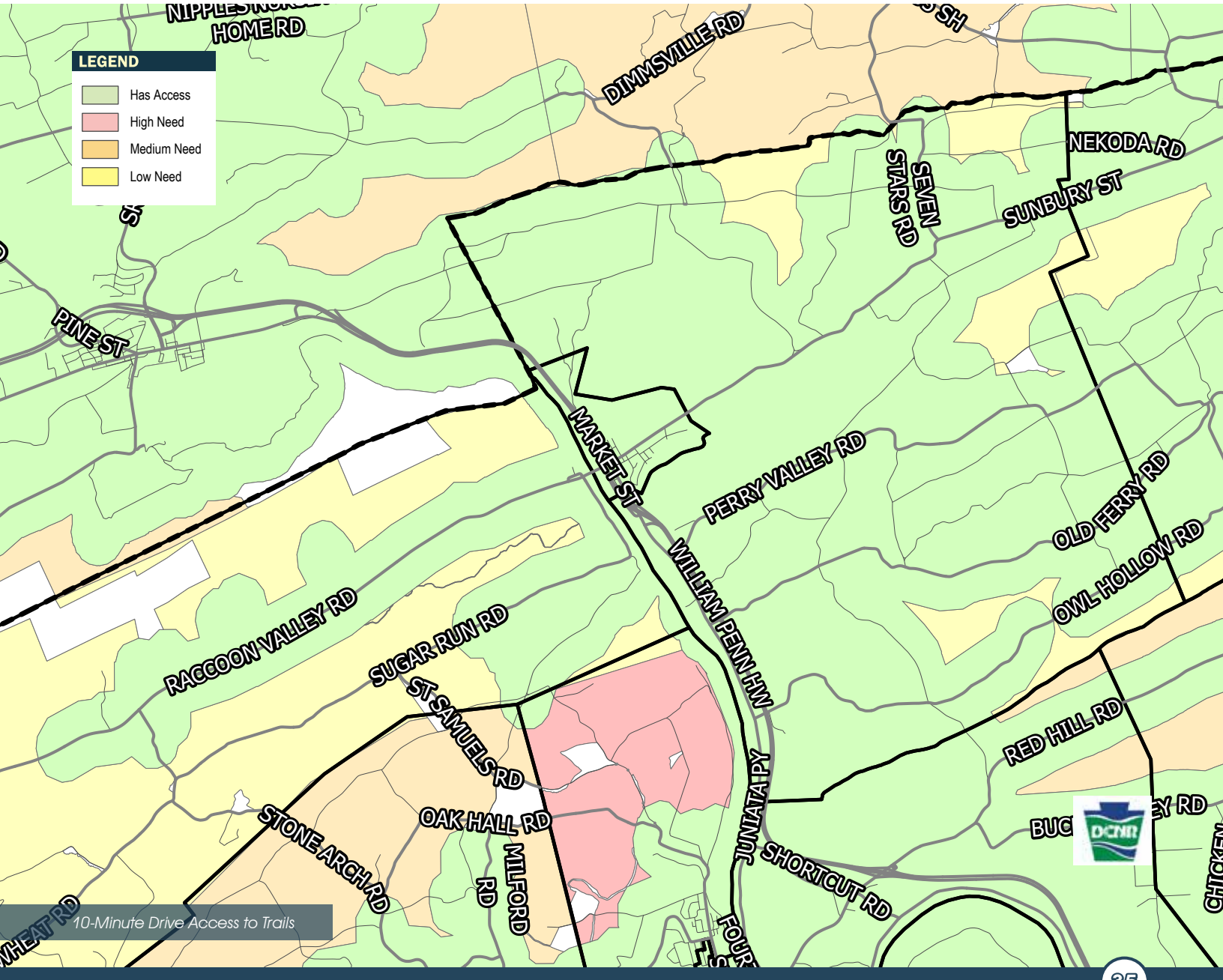


10-Minute Walk Access to Parks, Trails, and Open Space (Municipal Data)

consider appropriateness of materials, textures and colors while encouraging a diversity of artistic expression. One need only to consider some of the magnificent historic buildings in the village to realize town founders gave aesthetic consideration at least equal consideration to the function of buildings. Often, aesthetic considerations can be relatively inexpensive, but they are the first things that both residents and visitors will notice and appreciate in the rich fabric of a town such as Millerstown. Both the public sector and the private sector have a role to play in this regard.

2.4.7 Economic Redevelopment

In addition to the previously mentioned safety considerations and benefits, the economic benefits of these improvements are the next most important result of these proposed improvements. People already want to reside in Millerstown because of its school district, relatively quick access to Harrisburg and because it is beautiful place to live. The Perry County Economic Vitality Plan clearly indicates that disposable dollars from area residents that are spent in restaurants, bars, personal services shops, and one-of-kind businesses are not being spent in Millerstown. People will live in Millerstown and visit the village for one-of-a-kind businesses. The existing Antique Mall on Market Street is a perfect example. Other existing and new businesses can build on Antique Mall visitation and help to create small, incremental economic development opportunities in town. The bank on Town Square and the recently relocated dentist's office just up from the Town Square on Sunbury Street are other examples of establishments that bring people to town on a regular basis. Connectivity, safety, streetscape, and aesthetic improvements can create a more attractive community fabric for these opportunities.



2.4.8 Community Description and Demographics

Population Trends & Forecasts: 2010 – 2040

According to the Census Bureau, Millerstown Borough had an approximate population of 691 residents in 2020. The Borough has not seen any significant growth since 2010 when the population was 673 residents, but the projected population for 2040 is 704 residents.

Age

Between 2011 and 2021, the age range that had the most significant increase in Millerstown Borough are:

- 65 to 69 years (+ 7.60%)
- 60 to 64 years (+ 4.80%)
- 20 to 24 years (+ 3.20%)

The age range that had the most significant decrease in Millerstown Borough are:

- 35 to 39 years (- 6.10%)
- 10 to 14 years (- 4.40%)
- 5 to 9 years (- 3.80%)

Population Trends and Forecasts: 2010 - 2040				
	Millerstown		Perry County	
Year	Population	% Change	Population	% Change
2020	691		45,842	
2010	673		45,969	

Population by Age -			
	2011	2021	
Age Group	%	%	% Change
Under 5 years	4.70%	3.70%	-1.00%
5 to 9 years	9.20%	5.40%	-3.80%
10 to 14 years	11.80%	7.40%	-4.40%
15 to 19 years	5.70%	7.70%	2.00%
20 to 24 years	2.90%	6.10%	3.20%
25 to 29 years	4.70%	3.10%	-1.60%
30 to 34 years	5.20%	6.70%	1.50%
35 to 39 years	11.20%	5.10%	-6.10%
40 to 44 years	3.80%	4.70%	0.90%
45 to 49 years	6.10%	7.10%	1.00%
50 to 54 years	10.90%	8.30%	-2.60%
55 to 59 years	7.70%	4.80%	-2.90%
60 to 64 years	3.60%	8.40%	4.80%
65 to 69 years	3.40%	11.00%	7.60%
70 to 74 years	3.10%	4.00%	0.90%
75 to 79 years	1.80%	2.10%	0.30%
80 to 84 years	3.20%	1.00%	-2.20%
85 years and over	1.20%	3.30%	2.10%

Racial Diversity

In 2010, the demographic composition of Millerstown was predominantly White/Caucasian, comprising 96.29% of the population. By 2020, White/Caucasians still represented the majority at 92.76%. Over this period, the population identified with two or more races saw significant growth, increasing from 0.89% in 2010 to 3.47% in 2020. Additionally, Hispanic/Latino residents accounted for 2.08% of the population in 2010, with a slight decrease to 2.03% in 2020.

Median Household Income and Poverty

From 2011 to 2021, Millerstown saw a substantial increase in median household income, increasing from $66,389 (2011) to $88,125 (2021). Compared to Perry County, Millerstown has a greater median household income with Perry County only increasing from $54,626 (2011) up to $72,922 (2021).

Additionally, between 2012 and 2021, Millerstown had a decrease in percentage of its population being below the poverty level from 4.40% down to 3.30%.

Racial and Ethnic Composition: 2010 - 2020								
	Millerstown				Perry County			
Race/Ethnicity	**2010 Pop.**	**%**	**2020 Pop.**	**%**	**2010 Pop.**	**%**	**2020 Pop.**	**%**
White	648	96.29%	641	92.76%	44,427	96.65%	42,838	93.45%
African American	0	0.00%	7	1.01%	284	0.62%	289	0.63%
Am. Indian/Alaskan Native	0	0.00%	1	0.14%	58	0.13%	50	0.11%
Asian	2	0.30%	4	0.58%	163	0.36%	139	0.30%
Native Hawaiian/Pac. Islander	1	0.15%	0	0.00%	14	0.03%	3	0.01%
Hispanic/Latino	14	2.08%	14	2.03%	588	1.28%	912	1.99%
Some Other Race	2	0.30%	0	0.00%	25	0.05%	139	0.30%
Two or More Races	6	0.89%	24	3.47%	410	0.89%	1,472	3.21%
Total	**673**		**691**		**45,969**		**45,842**	

Median Houshold Income/Poverty Comparison				
	Median Houshold Income		% of Pop. Below Poverty Level	
	2011	2021	2012	2021
Millerstown	$66,389.00	$88,125.00	4.40%	3.30%
Perry County	$54,626.00	$72,922.00	10.00%	8.80%

Educational Attainment

In 2021, 27% of Millerstown's population graduate graduated high school, followed by 22.30% of the population having a bachelor's degree and 16% attended college but did not attain a degree.

Method of Commute

In 2021, the predominant mode of commuting for Millerstown's workforce drove alone, accounting for 81.20% of commuters, followed by carpooling at 8.70% and working from home at 6%. Walking was less common, with only 4% of the workforce choosing this mode of transportation.

Regarding travel time to work, approximately 20.60% of commuters spent 35 to 44 minutes traveling, 19.70% took less than 10 minutes, and 16.50% spent 60 minutes or more on their commute.

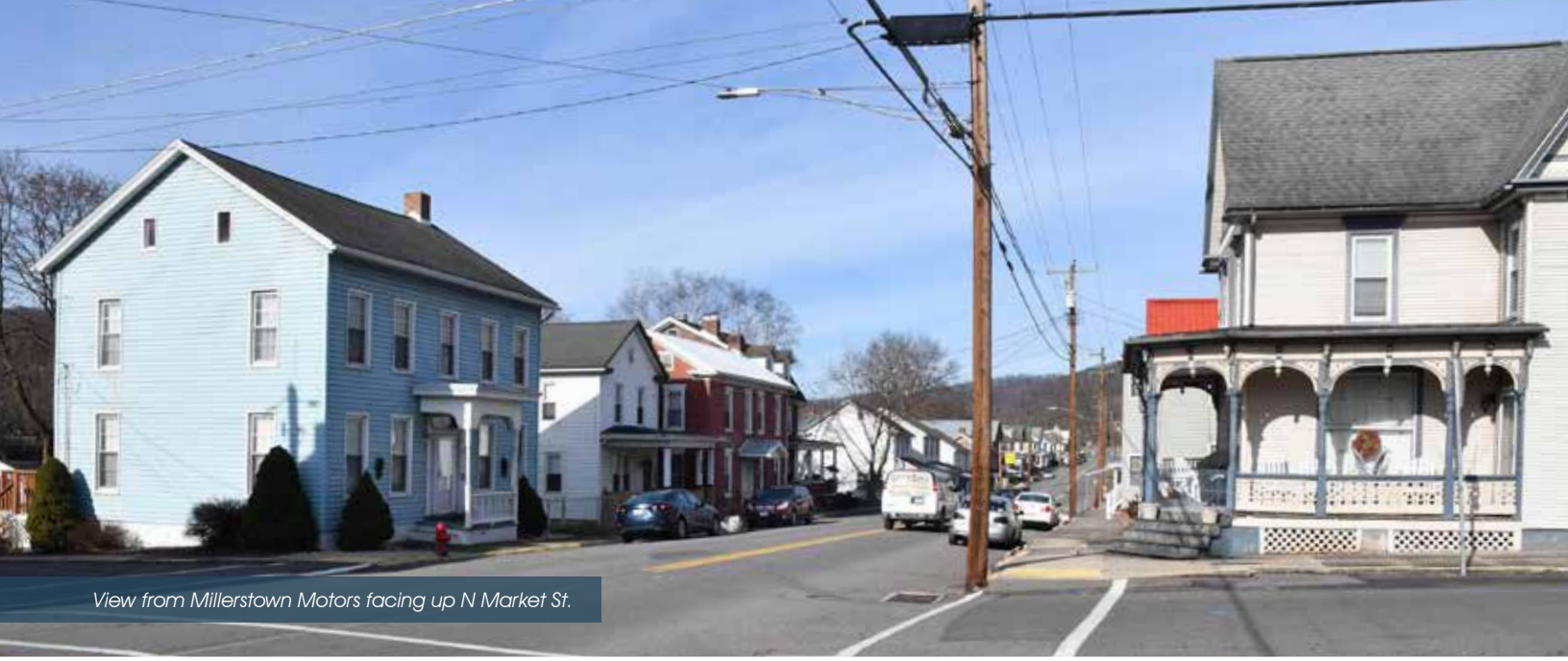
Data Source: https://data.census.gov/all?q=Millerstown%20borough,%20Perry%20County,%20Pennsylvania

Educ
Educational Attainment
No High School Diploma
High School Graduate
Some College, No Degree
Associate's Degree
Bachelor's Degree
Graduate or Prof. Degree

cational Attainment for Residents Over 25 Years of Age (2021)			
Millerstown	Percent	Perry County	Percent
23	4.70%	2,535	7.70%
132	27.00%	15,289	46.50%
78	16.00%	4,804	14.60%
66	13.50%	3,223	9.80%
109	22.30%	3,929	12.00%
76	15.50%	1,957	6.00%

Commuting to Work (2021)		
	Percentage of Workforce	
Transportation Mode	**Millerstown**	**Perry County**
Car, Truck, or Van-drove alone	81.20%	77.90%
Car, Truck, or Van-Carpooled	8.70%	10.90%
Public Transportation	0.00%	0.30%
Worked at Home	6.00%	8.80%
Other means (taxi, bike, motorcycle)	0.00%	0.60%
Walked	4.20%	1.50%

Travel Time to Work (2021)		
	Percentage of Workforce	
Travel Time	**Millerstown**	**Perry County**
Less than 10 minutes	19.70%	9.70%
10-19 minutes	13.70%	16.10%
20-29 minutes	7.70%	16.20%
30-34 minutes	6.30%	16.00%
35-44 minutes	20.60%	14.80%
45-59 minutes	15.60%	17.40%
60+ minutes	16.50%	9.90%
Mean Travel Time (minutes)	**32.3**	**32.3**



View from Millerstown Motors facing up N Market St.

2.4.9 Brief History

Millerstown Borough is situated on the eastern bank of the Juniata River, nestled in the picturesque rolling hills of Perry County. Originating back to when the Lenape Tribe, also known as Delaware Natives, lived throughout the borough of Millerstown along the banks of the Juniata, to then once a bustling town during Canal Days, Millerstown now serves as a tranquil residential community steeped in historical significance.

Located thirty-three miles west of the State Capital, Harrisburg, Pennsylvania, Millerstown is the oldest town in Perry County, originally part of a tract warranted to James Gallagher on September 23, 1766. Evidence suggests that a small town named "Smithfield" was established by Gallagher prior to this date. The land was later sold to David Miller on September 1, 1780. In 1790, a patent was issued for the town's layout, making "Miller's Town" the first town plotted for sale in the territory that would become Perry County. The canal site served as Main Street during this period. In 1811, David Miller sold the tract to Jacob Miller and Abraham Addams. Addams married Miller's daughter, and their daughter, Ann Eliza Addams, married Jacob Beaver, who became the father of James A. Beaver, a governor of Pennsylvania.

Millerstown is renowned for its collection of historic stone houses, a testament to the quality of construction during its formative years. The stone "hotel" building on the west side of the square was constructed by John Wood in 1800.

During the canal construction era, the town boasted 17 hotels. By 1825, Millerstown had sixty houses, growing to eighty by 1832. The town's first storekeepers were Thomas Cochran and Edward Purcell. Among the earliest residents was Anthony Brandt, a blacksmith and innkeeper.

Millerstown Borough was officially incorporated on February 12, 1849, with Abraham Addams serving as the first chief burgess, and John M. Cauffman, Christian Beck, James R. Gilmer, and Jacob Emerick as members of the first Borough Council. Thomas P. Cochran was appointed as the first clerk to the Council .

From there, the borough quickly grew in population size, and with the borough's population growth came many educational facilities being developed. A log-constructed schoolhouse near the cemetery along Grave St became the first of its kind and was built in Millerstown during the 1850s, which then became a meeting place for the borough. Later, in 1856, another schoolhouse was built on High St, being larger than the first schoolhouse, and also constructed out of wood.

However, after World War I, these buildings started to become obsolete. Alongside consolidation was taken action and made many school students transfer to the schoolhouses within Millerstown. By 1925, another school facility was constructed, located near the schoolhouse on High St.

It wasn't until after World War II that the construction of both the existing Greenwood High and Elementary schools was constructed, alongside other schoolhouses. In 1954, the high school was built and drew in many other high school students. The Elementary school, however, was built much later in 1979, which accommodated the number of new students coming into the area that the other schoolhouses could not hold.

Today, Millerstown's population comprises a diverse range of individuals who deeply value the rich history of their 'hometown.'

Source: https://millerstown.org/history.htm

Source: https://millerstown.org/controversial%20past.htm

1938

Millerstown was a central, condensed settlement characterized by vast stretches of farmland, intersected by the tranquil flow of a canal, and anchored by the sturdy presence of the Old Bridge.

1970

Millerstown experienced a transformation with the installation of US Highway 22, displacing the tranquil canal while witnessing minor residential expansion in the northeast region.

1994

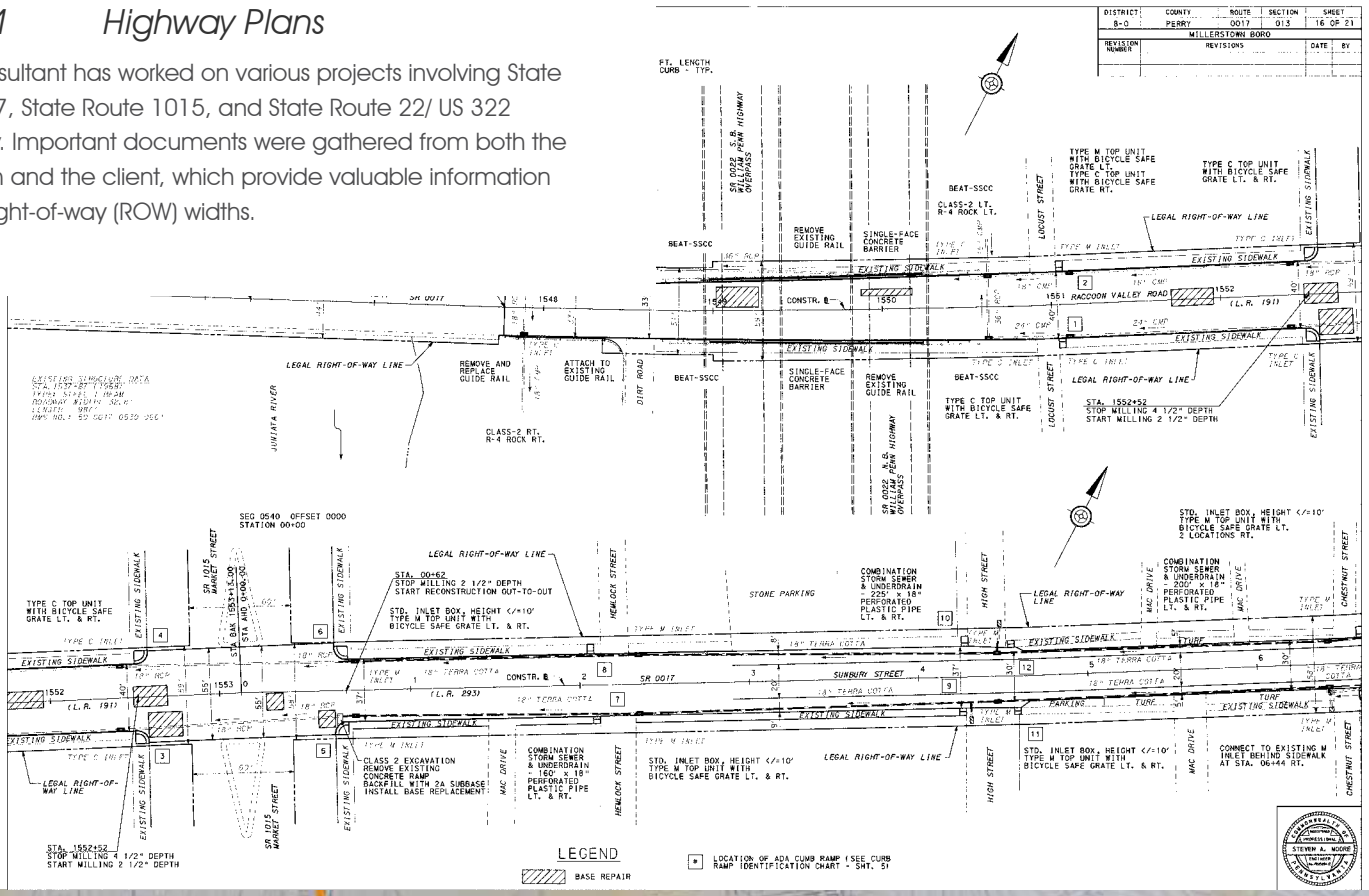
By 1994, Millerstown had undergone notable development, marked by the establishment of Greenwood Elementary and Middle/High Schools, accompanied by continued residential expansion in the northeast area.

2020

Millerstown shows significant residential and community expansion extending northeastward, shaping its present landscape.

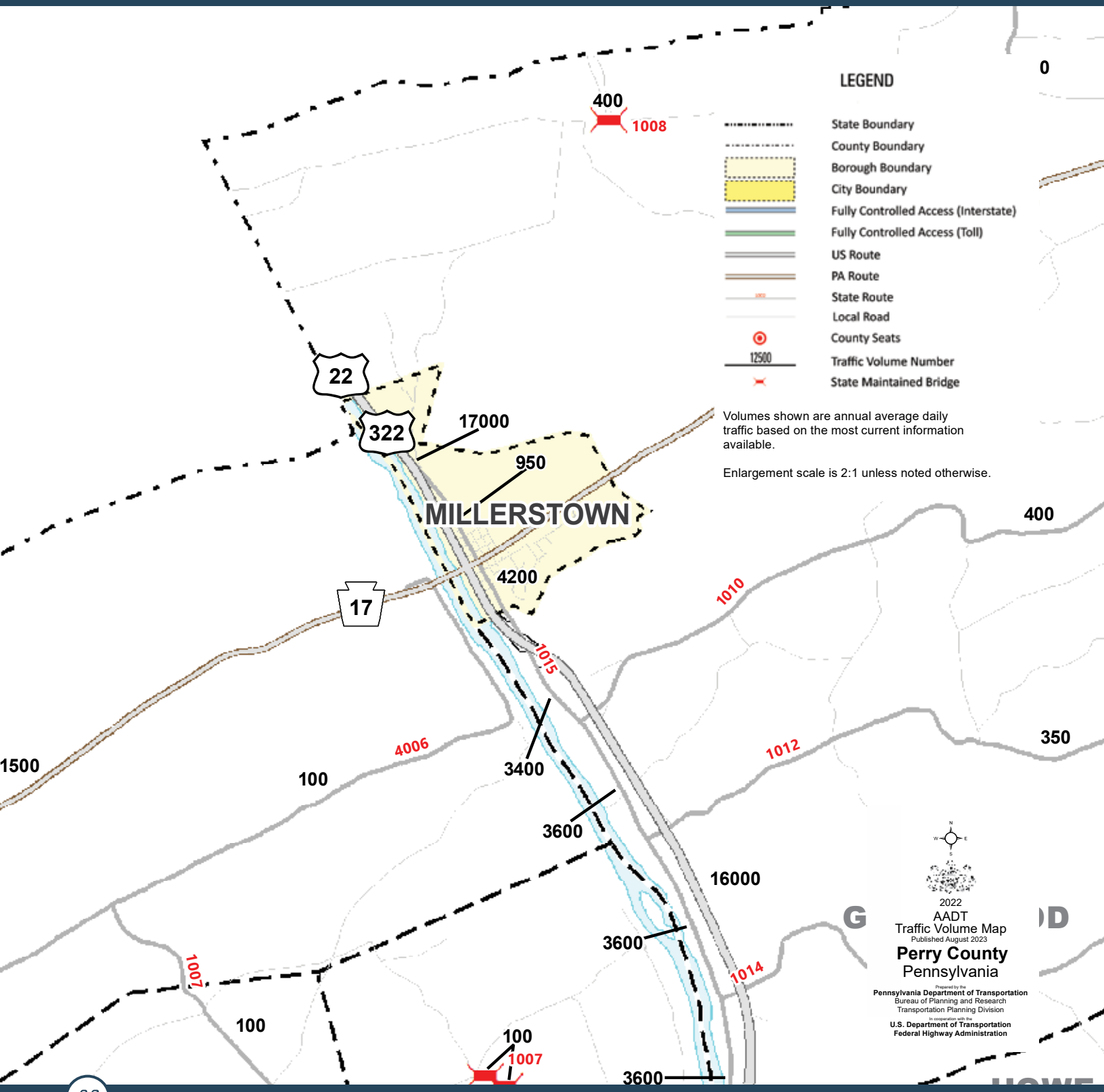
2.4.11 Highway Plans

The consultant has worked on various projects involving State Route 17, State Route 1015, and State Route 22/ US 322 highway. Important documents were gathered from both the borough and the client, which provide valuable information about right-of-way (ROW) widths.



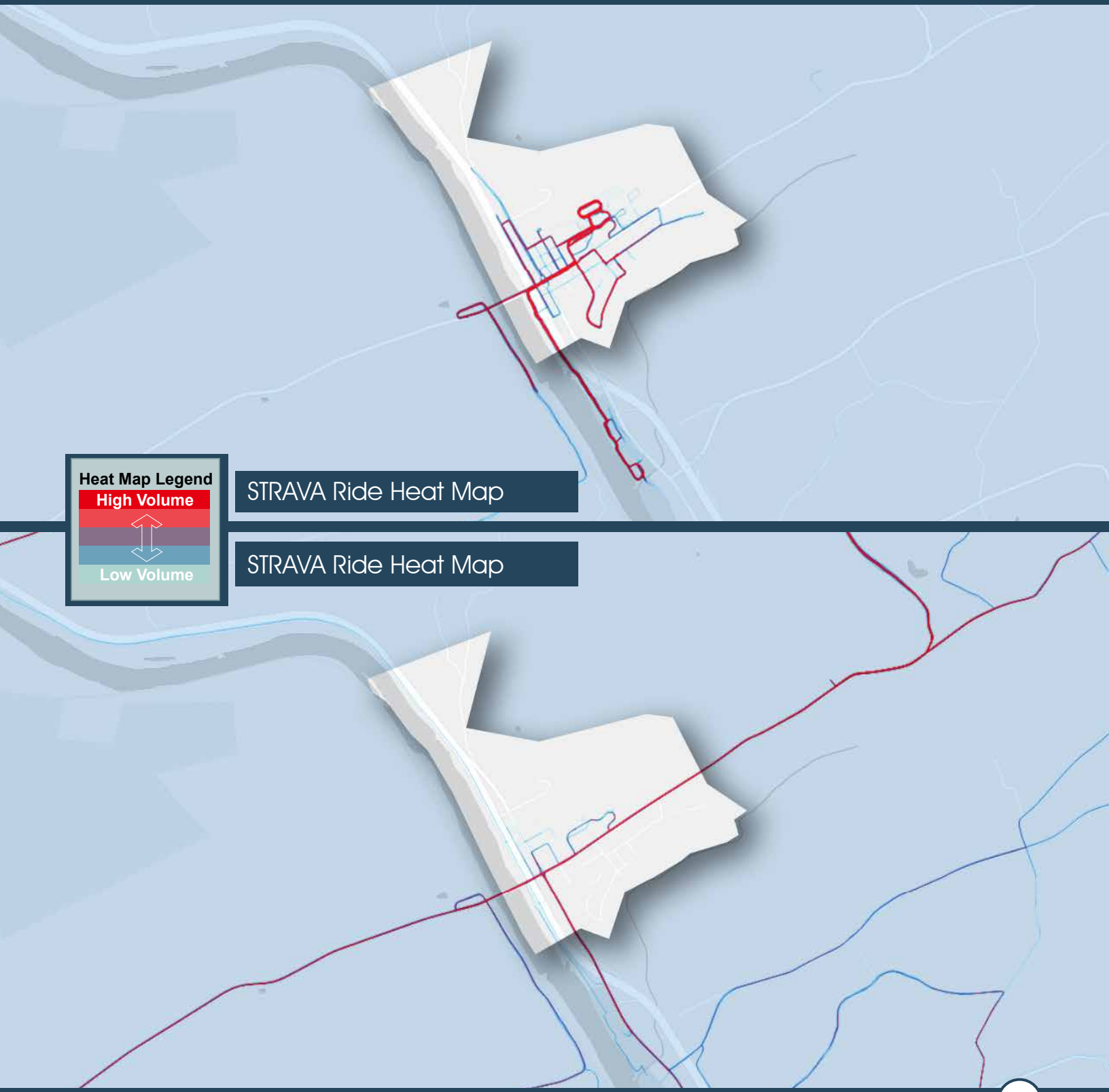
2.4.12 State Roads Traffic AADT

The traffic analysis reveals significant variations in traffic volumes across different highways. State Route 22/US 322 exhibits the highest volume, peaking at 16,000. In contrast, State Route 17 experiences a lower volume of 4,200, while State Route 1035 records a modest volume of 950. These insights are pivotal for strategic planning and resource allocation in transportation management.



2.4.13 STRAVA

STRAVA is a popular APP that utilizes GPS tracking to record routes by walkers, runners, and cyclists. STRAVA heat-mapping was used to locate popular cycling routes in Millerstown. STRAVA data provides insight into the most well-traveled and potentially safest routes for future pedestrian and bicycle improvements.



Asphalt Surfaces

2.4.14 Trail Types

Asphalt

Asphalt surfaces provide for the widest variety of trail users including bicyclists, walkers, joggers, wheelchair users, and in-line skaters. Initial installation costs are relatively high (lower than Portland cement concrete however) compared to other trail surface types. However, long-term maintenance costs will remain lower than others if properly installed and maintained. Asphalt trails are preferred in flood prone areas. Porous asphalt can also be used in situations where stormwater infiltration or a pervious surface is required. Porous asphalt should not be used in flood prone areas where silt will clog the voids in the pavement.

Concrete Surfaces

Concrete

Portland cement concrete pavement is the most durable material for trail surfaces but is the most costly. Concrete trails are commonly used in urban environments. Advantages of concrete include longer service life, reduced susceptibility to cracking and deformation from roots and weeds, and a more consistent riding surface after years of use and exposure to the elements. The joints in concrete trail treads can degrade the experience of using the path for some wheeled users. In addition, users can see pavement markings more easily on asphalt than on concrete, particularly at night. Concrete's light color on a trail reflects the sunlight.

Compacted Aggregate

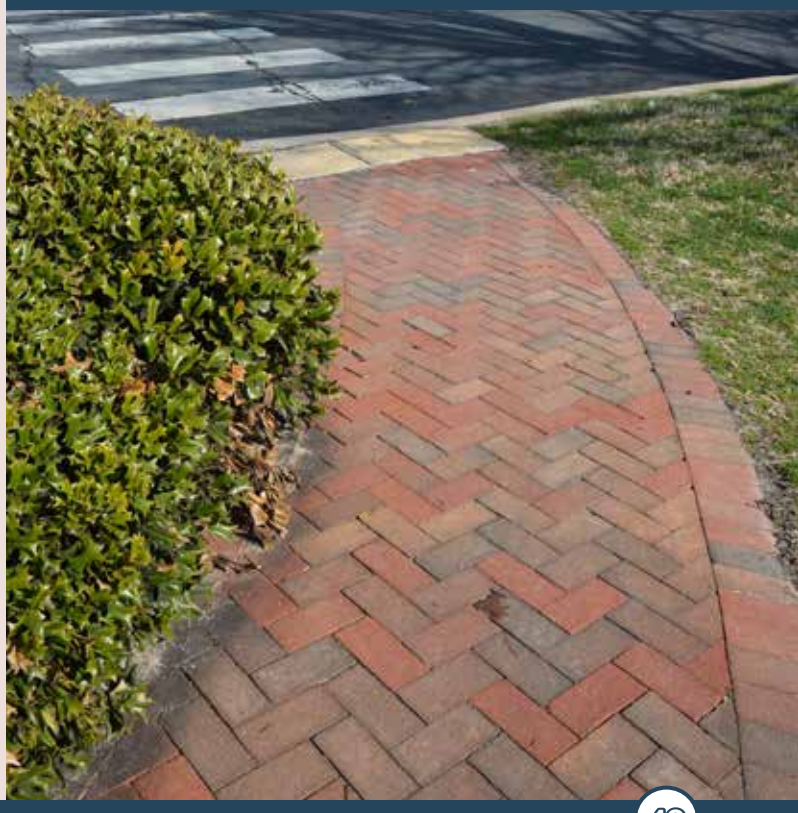
Compacted aggregate surfaces, or stone dust trails, can accommodate all trail user types except for in-line skaters. Initial installation costs for this trail surface are relatively low, however, long-term maintenance costs increase due to this surface's higher susceptibility to erosion, especially if not properly installed with swales and cross drains. Crushed limestone or sandstone or "Trail Surface Aggregate (TSA) Mix" are typical aggregates used in this situation. A compacted aggregate surface can also serve as a base material for an asphalt surface if trail use increases or funds become available for a surfacing upgrade. Compacted aggregate surfaces should be avoided in flood prone areas or on slopes over 3%.

Compacted Aggregate Surfaces

Pavers

Pavers, composed of clay or concrete, may be a suitable pavement material where the context is of a historic nature. This material is highly aesthetically pleasing and durable. However, this material is the most expensive type of trail or sidewalk surface and is typically used only in areas of high visibility or in areas of historic significance.

Pavers



2.4.15 *Trail Design Standards*

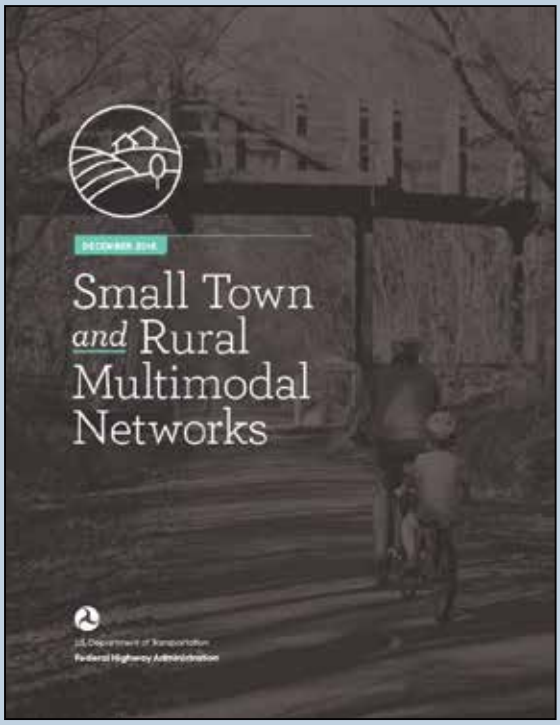
Various national and locally recognized organizations have developed bicycle and pedestrian design standards. The following guides were referenced throughout the design process.

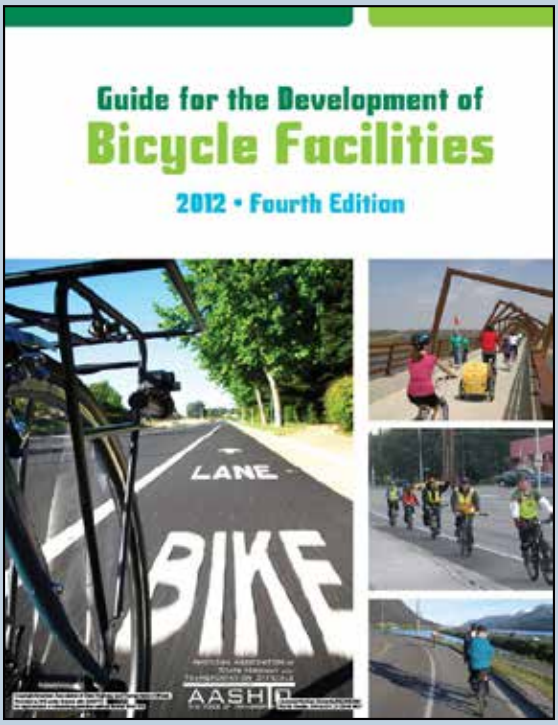
FHWA Small Town and Rural Multimodal Networks

The FHWA - Small Town and Rural Multimodal Networks provides design guidance for pedestrian and bicycle safety in areas of smaller scale. This document focuses on establishing safe multi-modal connections within an automobile-dominated landscape. Illustrations, technical diagrams, and photographs detail proposed improvements to roadways, sidewalks, intersections, and more.

AASHTO Guide for Development of Bicycle Facilities

AASHTO provides federally accepted standards for the development of bicycle facilities including information on: Bicycle Planning, Bicycle Operation and Safety, Design of On-Road Facilities, Design of Shared Use Paths, Bicycle Parking Facilities, and Maintenance and Operations. All improvements should adhere to these standards.



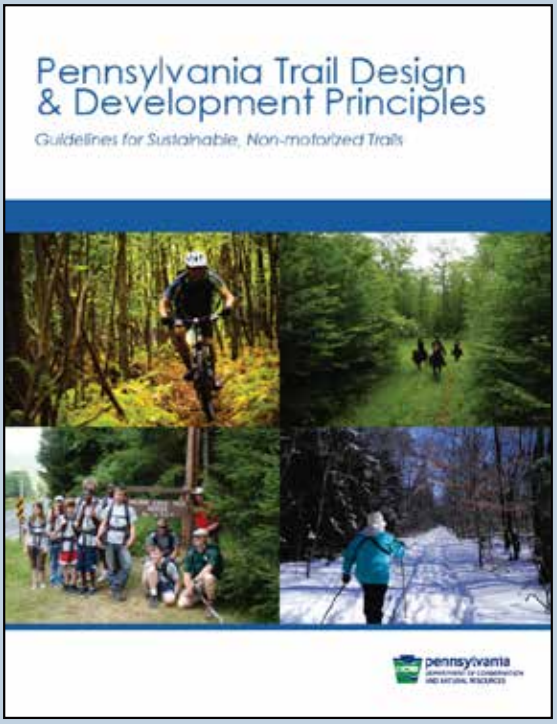


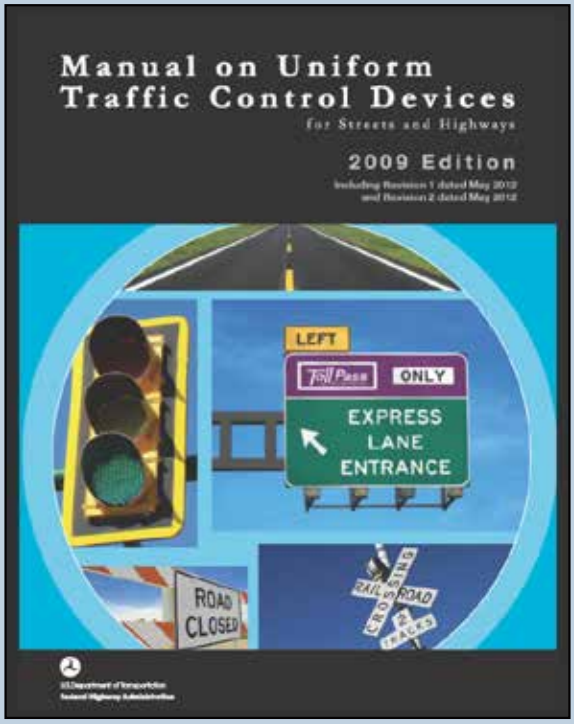
PA DCNR Trail Design & Development Principles

DCNR guidelines are recognized at the state level and provide techniques for sustainable design methods that make use of natural systems. These principles emphasize the importance of designing trails that are accessible, safe, and environmentally sensitive. They also highlight the need to consider the needs of diverse user groups and to integrate trails into the surrounding landscape in a way that enhances the overall recreational experience. The principles promote the development of a well-connected trail network that provides opportunities for recreation, transportation, and environmental education while preserving the natural beauty and ecological integrity of the areas through which the trails pass.

MUTCD Manual on Uniform Traffic Control Devices

The Manual on Uniform Traffic Control Devices provides standards for the design and implementation of traffic control devices that provide for safe and efficient transportation. Part 9 of the manual includes traffic control for bicycle facilities. The section includes signs, pavement markings, and highway traffic signals for both on-road and off-road trail facilities. All guidance in this document should be adhered to when implementing the alignment alternatives.





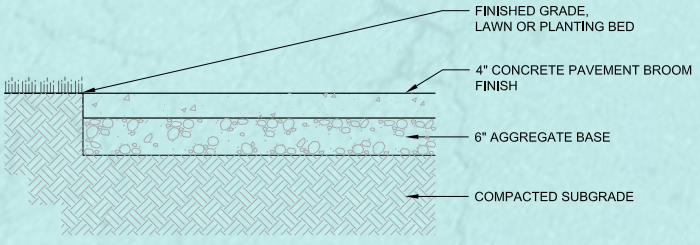
3

Millerstown
Bicycle/Pedestrian Connectivity Master Plan
BOROUGH OF MILLERSTOWN, PERRY COUNTY, PENNSYLVANIA

RECOMMENDATIONS

3.1.1 Sidewalks

Sidewalks serve as the primary pedestrian transportation network and are integral to village infrastructure and pedestrian mobility. Typically, five feet wide and concrete, they run parallel to roadways, providing safe passage to various destinations including homes, workplaces, schools, and recreational areas. Despite a good existing sidewalk network in Millerstown, it lacks interconnection in many locations and creates gaps. These existing deficiencies underscore the need for strategic sidewalk expansions, particularly along north-south and east-west routes. Furthermore, curb cuts, or curb ramps, play a pivotal role in facilitating accessibility for individuals with mobility impairments. These sloped pavement sections, built to meet ADA standards, ensure smooth transitions between sidewalks and streets, enabling wheelchair users, walkers, and stroller pushers to navigate these intersections seamlessly. The incorporation of curb cuts into sidewalk infrastructure is imperative for meeting ADA accessibility requirements and creating inclusivity for people of all abilities in Millerstown.



CONCRETE SIDEWALK 0 2 4 6 10 FT

3. Recommendations

3.1 Connectivity Toolbox

Recommended connectivity improvements in Millerstown are composed of a number of elements or "tools," that when combined, help to create an overall system. This 'toolbox' section details the types of connectivity improvements recommended for Millerstown – which adhere to PennDOT design standards and include both off-road and on-road recommendations. Studies have shown that the inclusion of these tools for multimodal (pedestrian and cyclist) transportation also helps improve safety for all road users, including motorists.

Each improvement is assigned a symbol, which is utilized to denote its location on the improvement recommendations maps contained in this report.

3.1.2 Painted Sidewalk

Painted sidewalks are sidewalk "extensions" that utilize existing roadway and driveway pavements and guide pedestrians across driveway intersections. They are marked by painted lines and are designed to enhance pedestrian safety and comfort by increasing visibility of pedestrians and slowing motor vehicle speeds. These painted extensions can also create a visual "narrowing" of the roadway, which can help calm traffic while adding to the overall streetscape aesthetics. They also serve as wayfinding elements, guiding pedestrians from one point to another along the street.

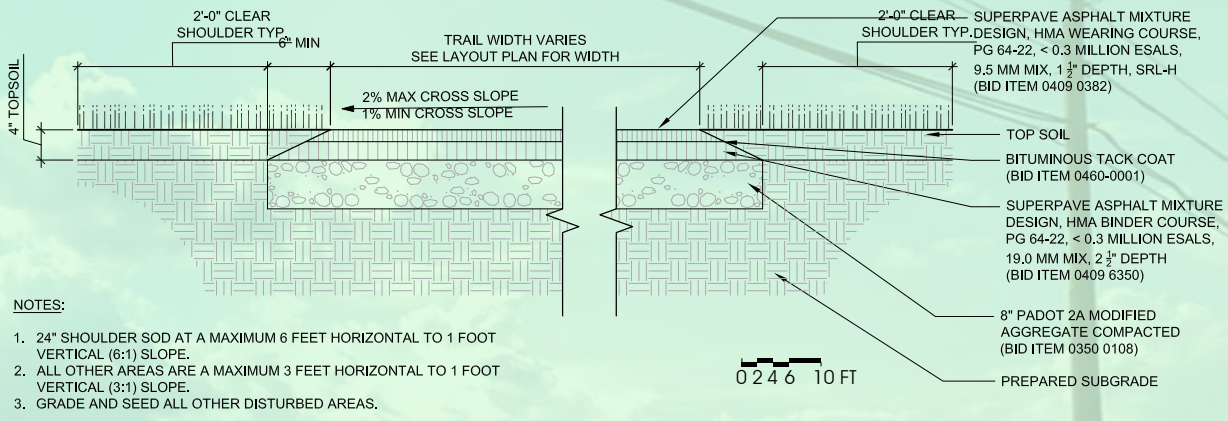

FIVE STAR
MILLERSTOWN
MOTEL

3.1.3 *Multiuse Trail*

Multi-use trails, also known as multi-modal or shared-use trails, are inclusive pathways, offering a safe and pleasant environment for walking, running, biking, rollerblading, or other non-motorized modes of transportation. These trails are typically separated from roads and vehicle traffic, enhancing the overall experience for users. Multiuse trails, since they are separated from motor vehicle traffic, typically serve the greatest number of users of all experience levels and abilities.

Generally, these trails are at least 10 feet wide, with widths of up to 14 feet for high-volume routes. In cases of limited space, trails may be 8 feet wide. They can be surfaced with asphalt or stone dust/stone screenings.

The Millerstown Bicycle and Pedestrian Connectivity Master Plan proposes multi-use trails at various locations including in parks, open spaces, and school areas. These trails are designed to connect with existing trail infrastructure and expand the current transportation network.



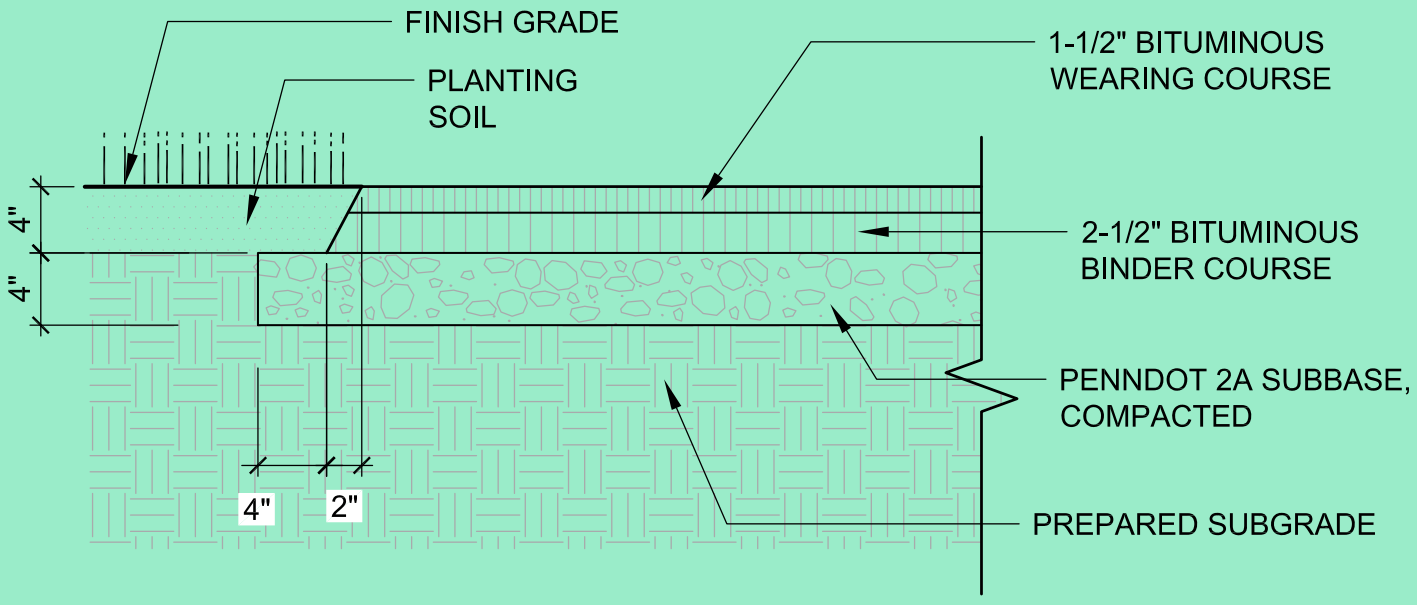
3.1.4 Gateway / Streetscape Plantings

As part of enhancing the aesthetics and reinforcing the unique identity of Millerstown, the consideration of strategic streetscape and gateway plantings is a relatively low-cost method to enhance the environment and also function as traffic calming measures.

These green spaces, carefully curated and positioned at key entry points, serve not only as visual landmarks but also as welcoming gestures to residents and visitors alike. By incorporating a variety of native and indigenous flora and landscape features, such as trees, shrubs, and flower beds, these gateway plantings not only enhance the surroundings but also contribute to environmental sustainability and biodiversity. Moreover, they offer an opportunity to highlight the unique character and spirit of Millerstown, creating an impression that reflects the community's values. Through thoughtful planning and design, these green gateways can instill a sense of pride and belonging while fostering a deeper connection between individuals and their surroundings.

3.1.5 Side Path

A side path is a narrower multi-use trail located immediately adjacent and parallel to a roadway. These trails require a 5' setback from the cartway if no vertical barrier is present. Side paths are anywhere from 6' to 8' in width and are often constructed from asphalt. A side path can encourage bicycling and walking in areas where high-volume traffic and/or high-speed traffic might otherwise discourage such activity.



ASPHALT WALKWAY

0 2 4 6 10 FT

3.1.6 Bike Boulevard

Bicycle boulevards are chosen for streets and alleys with low motor vehicle traffic volumes and speeds. Bike boulevards are designated and designed to give the cyclist at least equal priority with the motor vehicle. Bicycle boulevards use pavement markings, speed tables and/or speed cushions and signage to create safe, convenient bicycle routes. The removal of stop signs along bike boulevard intersections prevents lost bicycle momentum.

3.1.7 Sharrow

Sharrows, short for "shared lane markings," are road markings used to indicate that a particular road or lane is designated as a cyclist route and is intended to be shared by both cyclists and motor vehicles. Sharrows are not exclusive bicycle lanes but rather serve as a visual reminder to motorists that they should expect to encounter cyclists on that road and when they do, cyclists have the right to use the full lane.

The main purpose of sharrows is to improve safety and communication between cyclists and motorists. They help promote a sense of shared responsibility on the road and encourage cooperation and respect between different road users. By indicating that cyclists are allowed and expected to occupy the traffic lane, sharrows can help reduce conflicts and accidents.

Sharrows are often used in situations where dedicated bike lanes are not feasible due to space constraints or road design limitations. They are commonly found on streets with lower traffic volumes and lower speeds, where cyclists and motorists are more likely to interact at lower speeds and in less traffic than on busier roads.

It is important to note that sharrows have their limitations. They are not a substitute for dedicated bike lanes or protected cycling infrastructure. In areas with high traffic volumes and faster vehicle speeds, sharrows may not provide sufficient safety for cyclists. In such cases, communities should consider implementing more comprehensive cycling infrastructure to create a safer environment for all road users.

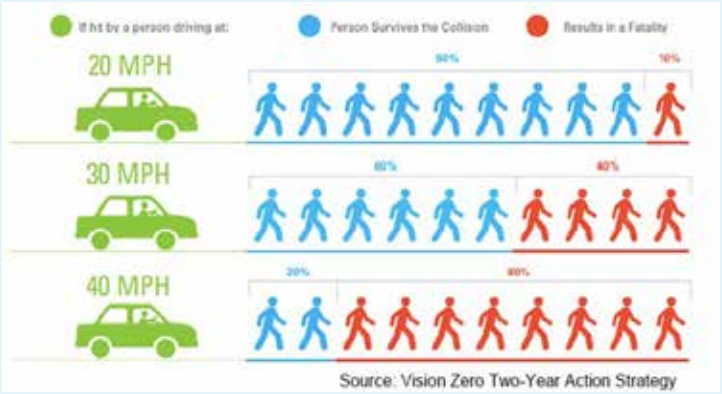

BLVD

3.1.8 Speed Cushion

Speed cushions are speed "humps" that include wheel cutouts to allow large vehicles to pass unaffected while reducing passenger car speeds. They can be offset to allow unimpeded passage by emergency vehicles and are typically used on key emergency response routes. Speed cushions extend across one direction of travel from the centerline, with longitudinal gap provided to allow wide wheel-base vehicles to avoid going over the hump.

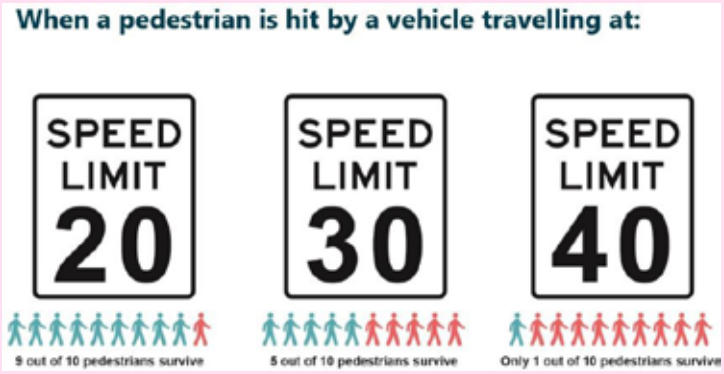
Speed cushions allow cyclists to ride through or around them unimpeded (above) while slowing motor vehicle traffic.

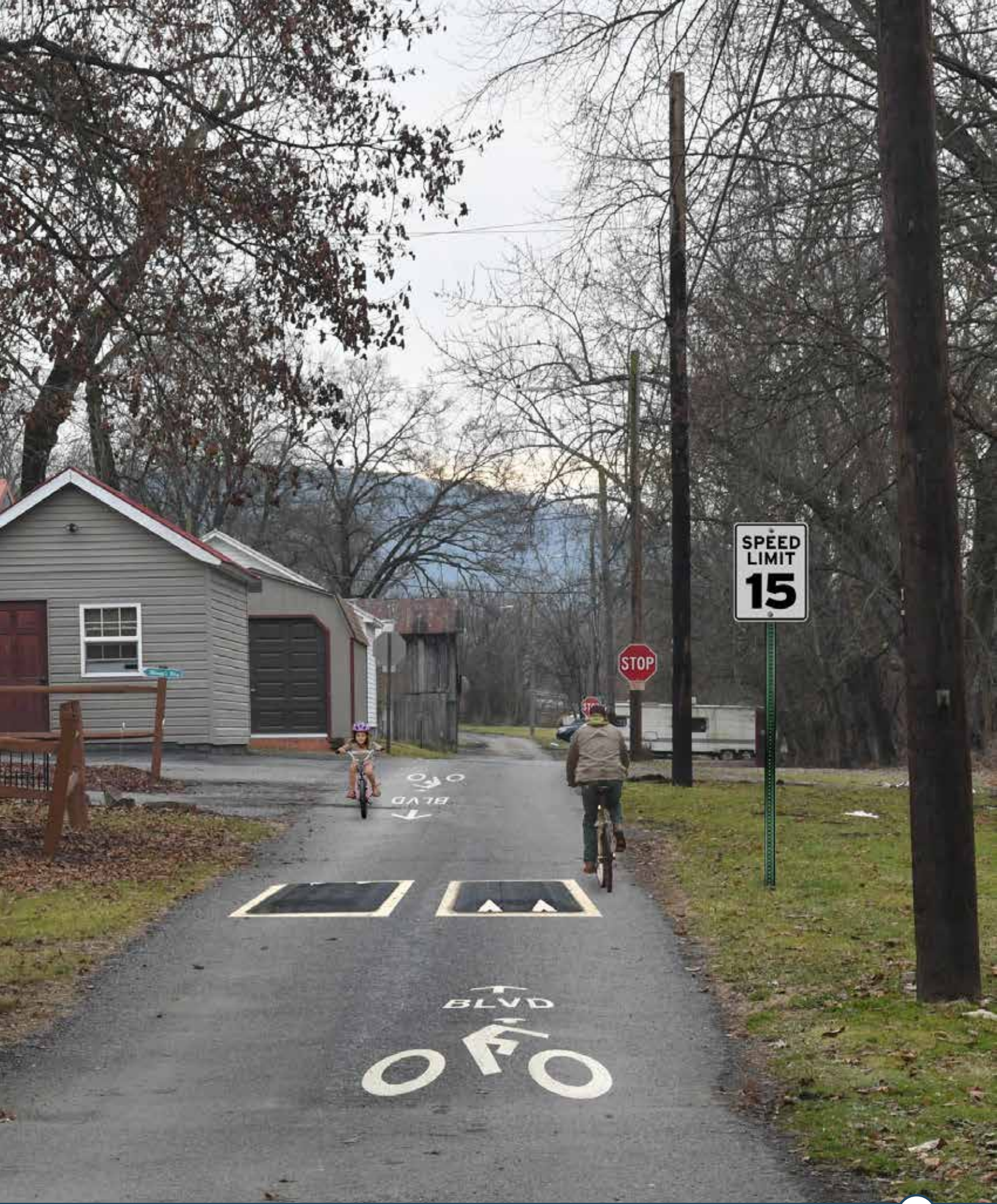
Speed cushions can be built into the roadway or purchased and installed with the option of removing them in the winter to facilitate plowing.



3.1.9 Speed Limit Reduction

In the village of Millerstown, the speed limit through the center of town is 35 mph. Anecdotal information indicates that motorists generally travel at higher speeds. Since the Borough does not have a police force, speed limit enforcement by state police is infrequent. Market Street and Sunbury Street could benefit from a reduction of the speed limit from 35 mph to 25 mph. This adjustment promotes lower traffic speeds and improves safety. Lower speeds around Greenwood Elementary/High School and the town square would be especially beneficial, enhancing the safety of both pedestrians and motorists. Since both Market Street and Sunbury Street are state roadways, a study of current motorist speeds would be required before PennDOT would consider a reduction of speed limits. Additional methods to reduce speeds, especially in Town Square or near the school campus, are design improvements whose intent is to narrow the perception of available roadway travel lane width. These might include pedestrian bump-outs at crosswalks, tree planting along the roadway, and the slight narrowing of painted cartway widths, while still meeting PennDOT standards.




SPEED
LIMIT
15
STOP
BLVD

3.1.10 Crosswalks

Crosswalks can be delineated in several ways, with continental crosswalks (resembling piano keys or zebra stripes) being the most common and highly visible type, typically preferred by PennDOT and most regulatory agencies. However, existing crosswalks in Millerstown are mostly outdated, faded, or not meeting minimum standard specifications. Continental crosswalks are usually constructed using thermoplastic materials applied onto the surface of asphalt paving, providing durability with an effective lifespan of up to ten years (depending on traffic).

In recent years, thermoplastic materials are preferred over pavers for crosswalks due to the risk of pavers becoming dislodged by snowplows and heavy traffic. Pavers or thermoplastic materials can also be used for decorative crosswalks, which may include colors, symbols, logos, or patterns to enhance pedestrian visibility or to reflect the unique identity of a village like Millerstown. The durability of high-visibility, color-contrasted materials should be carefully considered for these applications.

Consultation with PennDOT engineers is required when considering decorative crosswalks on state roads, as some engineers are concerned that they may distract drivers. The decision to allow a decorative crosswalk on a state road depends on factors such as traffic volume, intersection service levels, accident history, posted speed limits, and other contextual considerations.

Similar to sidewalks, crosswalks are proposed to benefit a large number of residents and establish safe travel routes to and from destinations in Millerstown.

3.1.11 Rapid Flashing Beacon (RFB)

A rapid flashing beacon (RFB) is a pedestrian-activated safety device used at crosswalks to improve the visibility of pedestrians to motorists and to alert motorist that pedestrians or cyclists are crossing the roadway. When activated by a pedestrian or cyclists, or by a motion sensor, the rapid flashing beacon provides a highly noticeable and attention-grabbing visual cue to alert drivers that someone is about to cross the road.

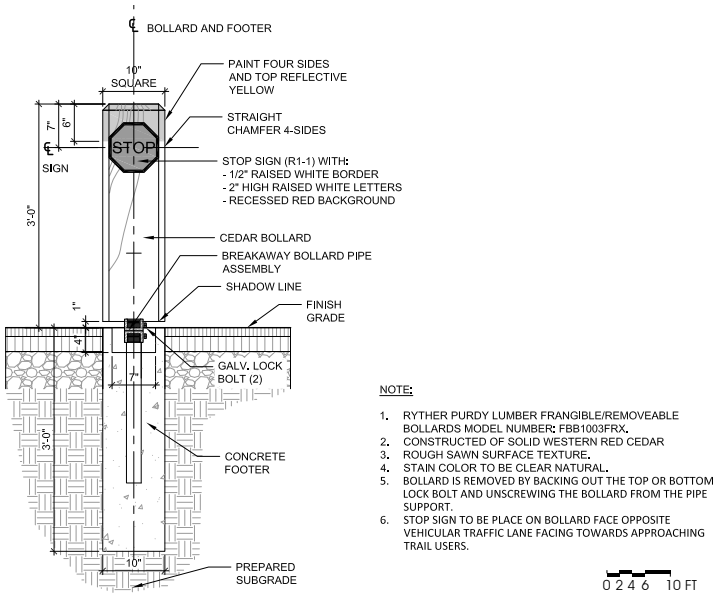
Rapid flashing beacons enhance pedestrian safety, particularly at locations where there may be higher risks of vehicle-pedestrian conflicts, such as busy intersections or mid-block crosswalks. By drawing attention to the presence of pedestrians, especially when visibility is reduced, RFBs encourage drivers to yield and allow pedestrians to cross safely. They are especially useful in areas where other traffic control measures like traffic signals or stop signs may not be justified or practical.

3.1.12 *Bumpouts*

Bumpouts and curb extensions are used extensively in urban and village areas as pedestrian safety enhancements and as traffic calming devices for motor vehicles. A bump out extends the sidewalk area into the cartway. Bumpouts reduce the distance a pedestrian must navigate to cross the street.

Bump outs can be completely paved like a sidewalk or can be partially paved and partially planted. When they are partially planted, they can add to the street's ability to absorb and infiltrate stormwater. When they include green, planted areas, they are sometimes referred to as rain gardens or bioswales. These planted areas allow the soil to cleanse groundwater of oil and gasoline residue before the water infiltrates into groundwater or runs off into nearby creeks.

Bump outs must be considered when plowing for snow and they must accommodate existing drainage patterns.



3.1.13 Bollards

Bollards are sturdy, vertical posts typically made of metal or concrete, installed to control or direct traffic by preventing vehicles from entering specific areas. They are commonly used to protect pedestrians, buildings, and infrastructure from vehicle damage. Bollards can also be made adjustable and can be "lockable" and are easily removed or lowered by municipal officials, emergency responders or maintenance personnel.

Locations such as the Highway underpasses are good candidates for bollard placement, since they can allow emergency vehicles and PennDOT maintenance vehicles to access these areas while preventing public vehicular access. These bollards serve to maintain safety and control traffic flow effectively at select locations.

3.1.14 *Buffer Plantings*

Buffer plantings include the strategic placement of vegetation including trees, shrubs, and groundcovers to create a soft barrier or buffer zone between uses or areas. These plantings can serve various purposed including helping to control pedestrian circulation, enhancing privacy adjacent to private property, controlling erosion, improving air quality, helping to absorb stormwater runoff (in the form or rain gardens or bioswales) and improving aesthetics and visual interest.

3.1.15 *Lighting*

In Millerstown, the borough's approach to street lighting is both functional and aesthetic, blending practicality with a touch of charm. As twilight descends, the streets come alive with the warm glow emanating from a network of meticulously placed lamps. These lights not only illuminate the streets but also lend a sense of security to residents and visitors alike, fostering a welcoming ambiance that encourages evening strolls and community gatherings. The street lighting not only enhances visibility but also contributes to the character of the neighborhood, weaving together modern convenience with a nostalgic nod to tradition.

In addition to the city's street lighting infrastructure, Millerstown takes a pragmatic approach to illuminating its riverfront pathway along the Juniata River. Strategically placed lighting fixtures along the pathway ensure optimal visibility for pedestrians and cyclists during evening hours, enhancing safety and accessibility. These lights serve a dual purpose of not only illuminating the pathway but also highlighting the natural beauty of the river and its surroundings. Consideration of lighting along the riverfront pathway can encourage residents and visitors to enjoy the riverside amenities after dusk, fostering a sense of community and outdoor recreation. Whether it's for evening walks, jogging, or simply enjoying the scenic views, the well-lit pathway along the Juniata River has become an integral part of community life in Millerstown

3.1.16 Bike Furnishing

The infrastructure for cyclists goes beyond just the bikes themselves; it extends to amenities like bike racks and air pump stations, catering to the needs of both residents and visitors. Strategically placed throughout the town, sturdy bike racks offer secure parking for cyclists, encouraging more people to choose biking as a mode of transportation. These racks are not only practical but also blend seamlessly with the town's aesthetic, often crafted from durable materials that withstand the elements while complementing the surroundings.

Moreover, the presence of bike air pump stations reinforces Millerstown's commitment to supporting cyclists. Located at key points such as parks, trailheads, and public squares, these stations provide a convenient solution for cyclists to maintain their tire pressure while on the go. Equipped with easy-to-use pumps and sometimes even basic repair tools, they empower cyclists to tackle minor maintenance tasks themselves, fostering a sense of self-reliance and encouraging more people to embrace cycling as a sustainable means of getting around town. In Millerstown, the provision of such cyclist-friendly amenities reflects a community dedicated to promoting biking as an accessible, healthy, and environmentally conscious transportation option.

3.1.17 *Site Furnishing*

Millerstown's site furnishings are a testament to practicality and thoughtful design, seamlessly integrated into the fabric of the borough's environment. Strategically positioned benches offer respite to weary travelers, while tables provide spots for outdoor eating and socializing. In addition to these amenities, carefully designated outdoor gathering spaces further enrich the town's communal spirit, inviting residents and visitors to come together over shared meals and conversations. Each element, from the well-placed trash receptacles to the inviting seating arrangements, serves a purpose in enhancing the functionality and aesthetics of Millerstown's public spaces, contributing to the town's overall appeal and livability

WAYFINDING SIGNAGE
MILLERSTOWN

The wayfinding system should be introduced as part of the brand because it plays such an important role in the perception and flow of your community.

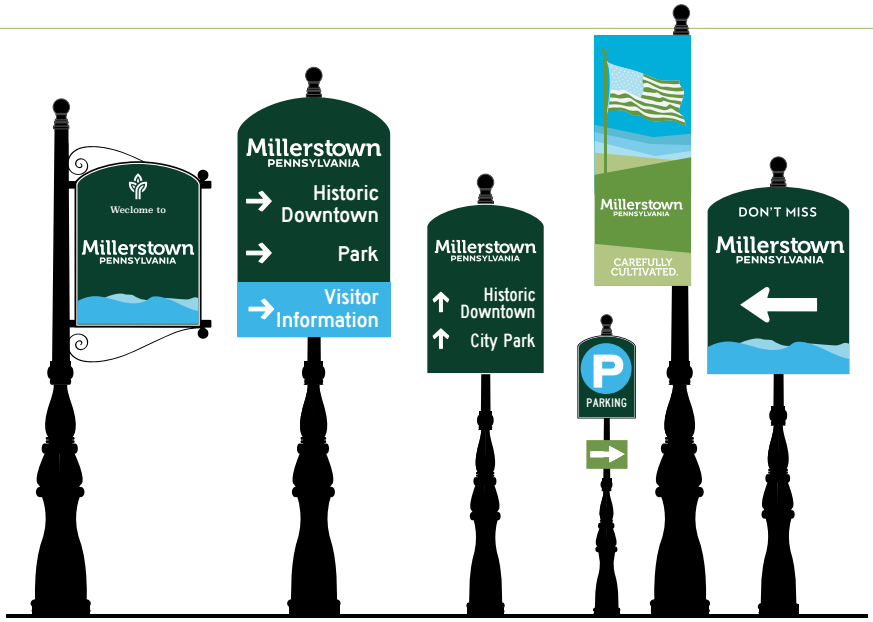
PRIMARY GATEWAYS
These gateways are the primary intersection points and main entry ways to town. They need to be highly visible and introduce the brand.

BUILDING MARKERS
The markers can be either wall mounted or monument style and denote important landmarks in the downtown district

TRAILBLAZERS
Trailblazers are the directing signs leading motorists to the main attractions in the area. These should have a maximum of three locations per sign and carry motorists from gateway to parking lot. Colors can be used to distinguish between different districts and can become smaller as the scale and speed of the roadway narrows.

STREET BANNERS
Banners are very popular and help to add color and movement to the lanes of travel, acting as a speed calming device. They too can be color coded by district and can promote local events, as well as promoting the brand.

PARKING SIGNAGE
Identifying parking is important in creating a parking system in downtown. Visitors are more likely to walk a block or two to shop if the signage system leads them directly to a public parking lot and tell them how to proceed. The parking markers can be by themselves or as attachments to trailblazer signs.



Proposed wayfinding design for county-wide, community specific wayfinding signage system

3.1.18 Signage

Two (2) types of signage are applicable to connectivity improvements in Millerstown. The Manual of Uniform Traffic Control Devises (MUTCD) defined the standards used by road managers nationwide to install and maintain traffic control devices on all streets, highways, pedestrian and bicycle facilities and site roadways open to public travel. The MUTCD is administered by the Federal Highway Administration (FHWA). The latest edition was recently adopted on January 18, 2024. This publication must be consulted when adding traffic control signage in Millerstown.

Wayfinding signage is the second system of signage that is applicable to the connectivity improvements in Millerstown. Wayfinding system is an advanced visual communication framework designed to aid individuals in navigating and understanding their environment. It typically integrates various signage, maps, and visual aids strategically placed in public spaces and along public roads to provide clear and intuitive navigation guidance. These systems are commonly implemented in urban areas, villages, transportation hubs, and at public facilities to assist visitors in navigating their surroundings with efficiency and accuracy.

Wayfinding recommendations were made in the 2021 Perry County Economic Vitality Plan. Initial wayfinding signs in Millerstown are planned for installation in 2024 by the Perry County Economic Development Authority. It is recommended that the Borough, with guidance from the PCEDA, build on this initial installation with additional signage highlighting historic sites, local attractions, and other notable village features – improvements that will significantly enhance the system's functionality and user experience.

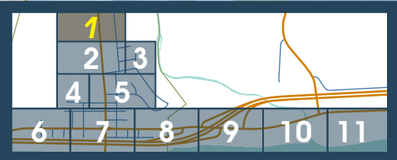
Project Key Map

Sheet 9

Sheet 10

Sheet 11


SPEED LIMIT 25



SHEET 1 OF 11

LEGEND

0 20' 40' 60' 100'

North

EXISTING

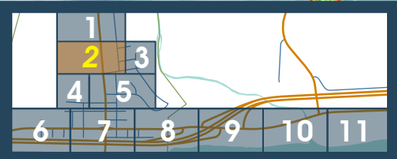
- Parcel
- 2' Contour
- Sidewalk
- Crosswalk
- Walkway
- Underpass
- Juniata Water Trail
- Juniata Water Trail Landing

PROPOSED

- Sidewalk
- Painted Sidewalk
- Crossewalk
- Multiuse Trail
- Sidepath
- Bike Boulevard
- Sharrow
- Speed Cushion
- Rapid Flashing Beacon
- Bump Out
- Bollard
- Buffer Planting
- Gateway

PLANNED

- 911 National Memorial Trail



SHEET 2 OF 11

LEGEND

EXISTING

- Parcel
- 2' Contour
- Sidewalk
- Crosswalk
- Walkway
- Underpass
- Juniata Water Trail
- Juniata Water Trail Landing

PROPOSED

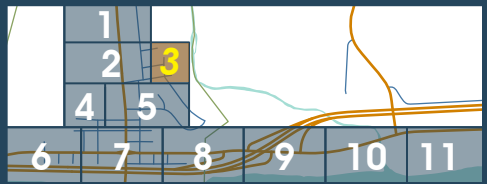
- Sidewalk
- Painted Sidewalk
- Crosswalk
- Multiuse Trail
- Sidepath
- Bike Boulevard
- Sharrow
- Speed Cushion
- Rapid Flashing Beacon
- Bump Out
- Bollard
- Buffer Planting
- Gateway

PLANNED

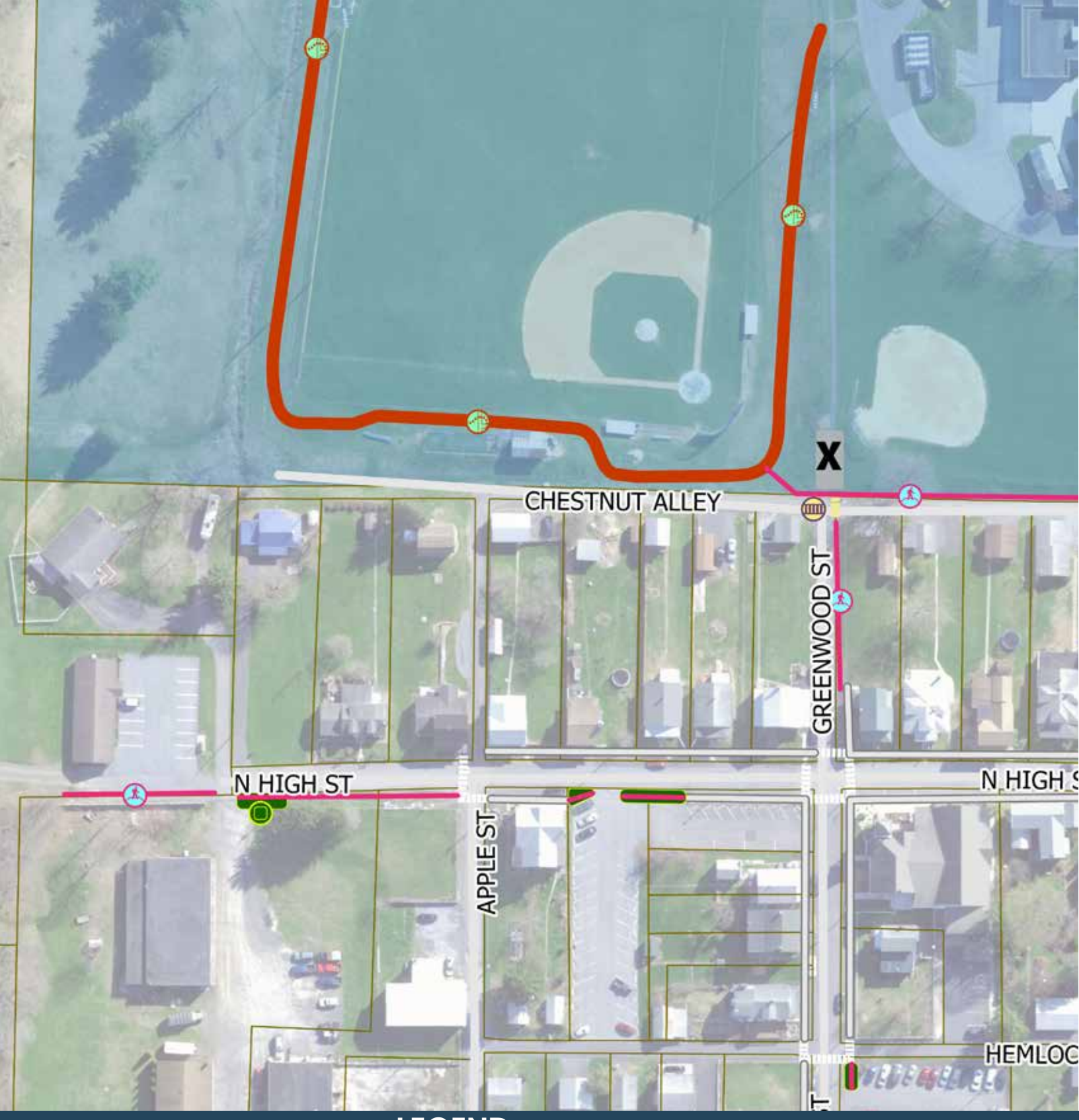
- 911 National Memorial Trail

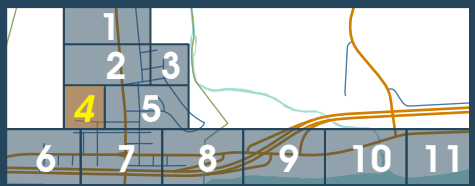
0 20' 40' 60' 100'

North



SHEET 3 OF 11





SHEET 4 OF 11

LEGEND

EXISTING

- Parcel
- 2' Contour
- Sidewalk
- Crosswalk
- Walkway
- Underpass
- Juniata Water Trail
- Juniata Water Trail Landing

SCHOOL ST

SCHOOL ST

POPLAR ALLEY

MULBERRY ALLEY

HIGH ST

S HIGH ST

POPLAR ALLEY

GRAVE ST

EMLOCK ALLEY

LEGEND

0 20' 40' 60' 100'

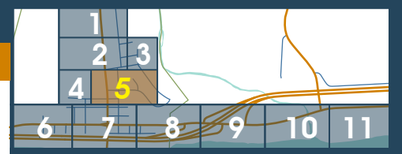
North

PROPOSED

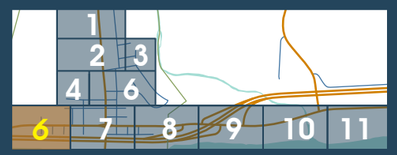
- Sidewalk
- Painted Sidewalk
- Crossewalk
- Multiuse Trail
- Sidepath
- Bike Boulevard
- Sharrow
- Speed Cushion
- Rapid Flashing Beacon
- Bump Out
- Bollard
- Buffer Planting
- Gateway

PLANNED

- 911 National Memorial Trail



SHEET 5 OF 11



SHEET 6 OF 11

LEGEND

0 20' 40' 60' 100'

North

EXISTING

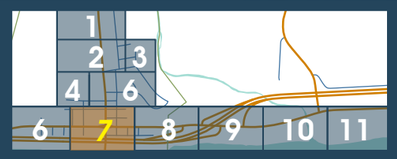
- Parcel
- 2' Contour
- Sidewalk
- Crosswalk
- Walkway
- Underpass
- Juniata Water Trail
- Juniata Water Trail Landing

PROPOSED

- Sidewalk
- Painted Sidewalk
- Crosswalk
- Multiuse Trail
- Sidepath
- Bike Boulevard
- Sharrow
- Speed Cushion
- Rapid Flashing Beacon
- Bump Out
- Bollard
- Buffer Planting
- Gateway

PLANNED

- 911 National Memorial Trail



SHEET 7 OF 11

LEGEND

0 20' 40' 60' 100'

North

EXISTING

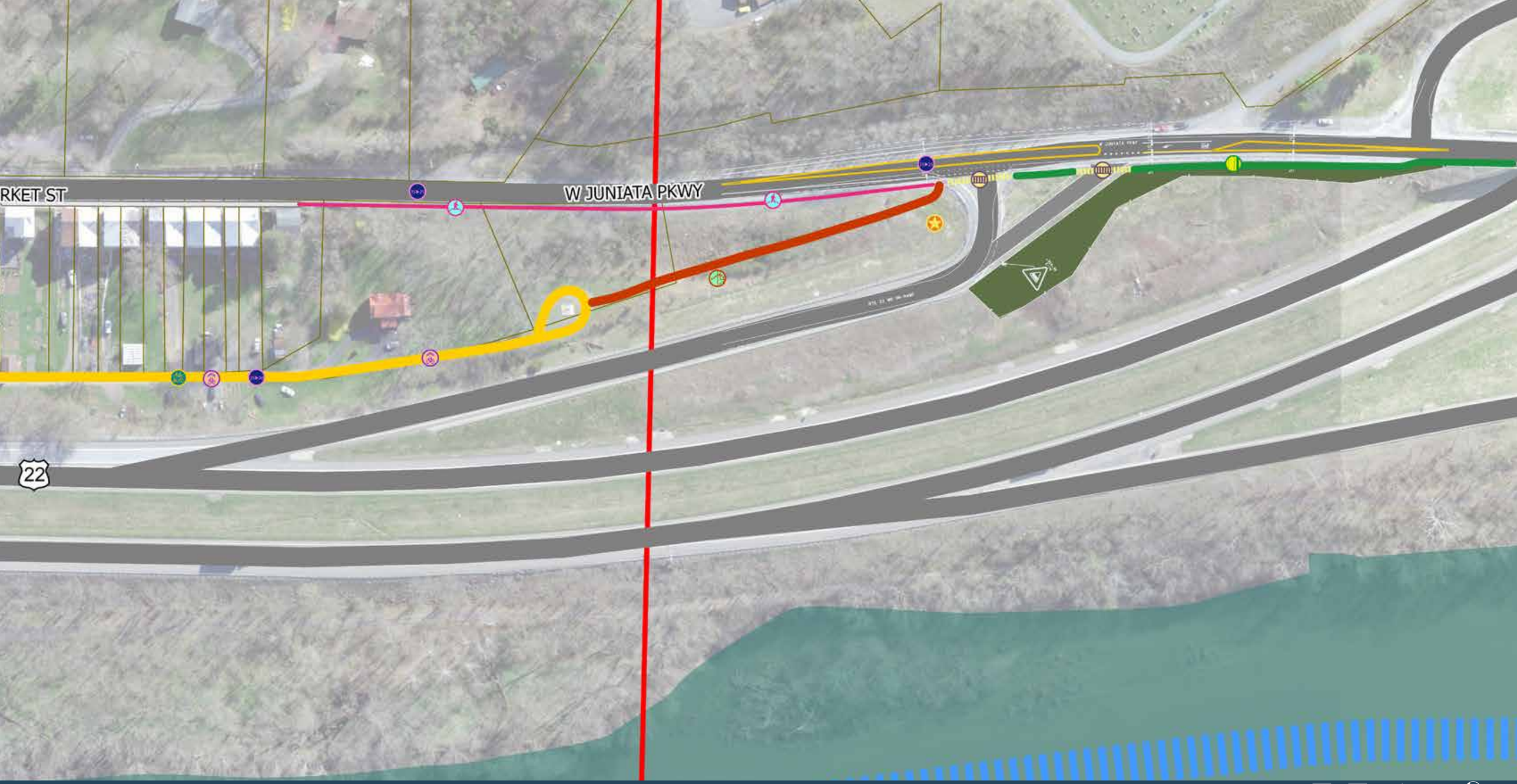
- Parcel
- 2' Contour
- Sidewalk
- Crosswalk
- Walkway
- Underpass
- Juniata Water Trail
- Juniata Water Trail Landing

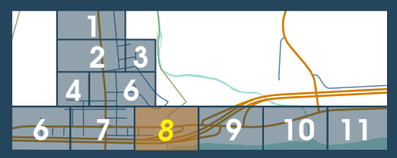
PROPOSED

- Sidewalk
- Painted Sidewalk
- Crossewalk
- Multiuse Trail
- Sidepath
- Bike Boulevard
- Sharrow
- Speed Cushion
- Rapid Flashing Beacon
- Bump Out
- Bollard
- Buffer Planting
- Gateway

PLANNED

- 911 National Memorial Trail





SHEET 8 OF 11

LEGEND

0 20' 40' 60' 100'

North

EXISTING

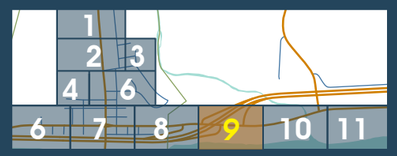
- Parcel
- 2' Contour
- Sidewalk
- Crosswalk
- Walkway
- Underpass
- Juniata Water Trail
- Juniata Water Trail Landing

PROPOSED

- Sidewalk
- Painted Sidewalk
- Crosswalk
- Multiuse Trail
- Sidepath
- Bike Boulevard
- Sharrow
- Speed Cushion
- Rapid Flashing Beacon
- Bump Out
- Bollard
- Buffer Planting
- Gateway

PLANNED

- 911 National Memorial Trail



SHEET 9 OF 11

LEGEND

0 20' 40' 60' 100'

North

EXISTING

- Parcel
- 2' Contour
- Sidewalk
- Crosswalk
- Walkway
- Underpass
- Juniata Water Trail
- Juniata Water Trail Landing

PROPOSED

- Sidewalk
- Painted Sidewalk
- Crossewalk
- Multiuse Trail
- Sidepath
- Bike Boulevard
- Sharrow
- Speed Cushion
- Rapid Flashing Beacon
- Bump Out
- Bollard
- Buffer Planting
- Gateway

PLANNED

- 911 National Memorial Trail

SHEET 10 OF 11

LEGEND

EXISTING			PROPOSED				PLANNED
Parcel	Walkway		Sidewalk	Sidepath	Rapid Flashing Beacon	Gateway	911 National Memorial Trail
2' Contour	Underpass		Painted Sidewalk	Bike Boulevard	Bump Out		
Sidewalk	Juniata Water Trail		Crossewalk	Sharrow	Bollard		
Crosswalk	Juniata Water Trail Landing		Multiuse Trail	Speed Cushion	Buffer Planting		

SHEET 11 OF 11

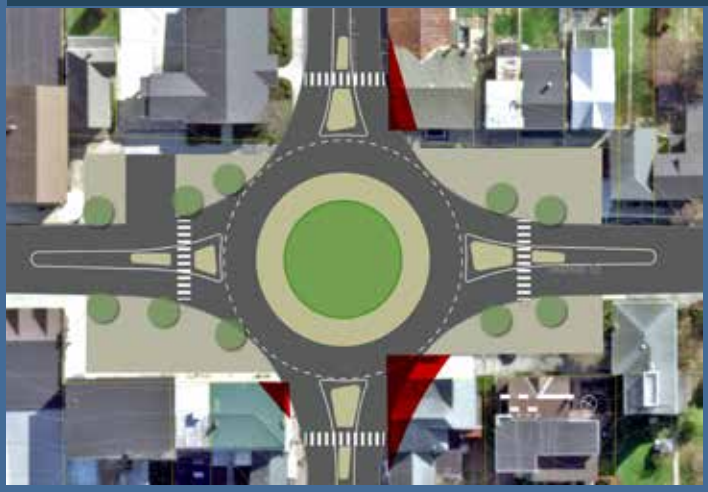
3.2 Town Square Concepts

The consultant team initially created five (5) optional concepts for the redesign of the Town Square. These were developed after public meeting #1 – where attendees expressed their concerns about Town Square existing conditions and following site reconnaissance visits by the consultants.

These conceptual options were created in response to consultant team observation, public comments and existing conditions that included the following:

- Poor sight lines for motorists entering the square from East and West Sunbury Streets. This forces motorists to be in the pedestrian crosswalks to determine if it is safe to enter the intersection.
- Exceptionally long pedestrian crossing of the square, especially on Sunbury Street
- Higher motor vehicle speeds than desirable for vehicles going through the square.
- Anecdotal information that more tractor trailer trucks go through the square (south to north) on Market Street than necessary because of the awkward left-turn ramp onto north-bound Rt. 22/322, located about ½ mile south of the square.
- Existing parking configuration forces motorist to back out (sometimes blindly) into on-coming traffic. There are 28 existing, lined parking spaces on the square (more if cars parked in areas painted as "no parking".
- Anecdotal history of accidents in the square.
- Confusion by first-time motorists through the square about who has the right of way. In essence, there are many opportunities to make "mistakes" when traveling through the square as both a motorist and pedestrian.
- Lack of comfortable or attractive pedestrian space in the square and a streetscape that is not conducive to supporting businesses on the square.
- Streetscape that is inappropriate to the square's historic architecture

OPTION 1



Option 1

Option 1 is a roundabout. It is shown at the smallest size typically allowed by PennDOT, at a 130-foot diameter. Roundabouts have been rediscovered by DOTs across the country since they are generally safter than four-way intersections, accidents – when they occur are less serios since vehicles are traveling in the same direction and minimal maintenance costs (vs. traffic signals). A roundabout was an option suggested at public meeting #1. In this concept the concept of islands parallel to Market Street were maintained (although in slightly different locations). For all four streets, the pedestrian crosswalks were moved farther away from the center of the square, creating shorter crossing distances that included a pedestrian refuge island.

The roundabout concept does not work well in the square. The size of the roundabout would require additional right of way taking and would also destroy part of buildings on three corners. Also, it would be more difficult to accommodate the existing change in elevation (approximately six (6) feet from East to West Sunbury Street. Also, due to truck turning requirements, the roundabout would require a large apron with a mountable curb around the center and very little usable pedestrian space/ streetscape would be created in comparison to the other considered options. This option also either eliminates or severely limits parking on the square, a proposed condition that is not tenable.

Millerstown Town Square Initial Options

OPTION 2

Option 2

Option 2 is similar to option 3 and creates a four-way intersection with full stops for all directions of travel. A four-way stop will require a traffic study and approval by PennDOT on these state roadways. This option also removed the central islands (a concern for many who consider the triangle shaped islands as an eccentric and iconic feature of the square). Parking is maintained as pull-in / back-out at 90 degrees. Pedestrian bump-outs shorten the pedestrian crossing distances in all directions. Travel lanes in all directions are better defined at 11 or 12 feet in width and the Market Street intersection is straight vs. the current skewed alignment. Better defined travel lanes will create wider sidewalks along existing buildings creating better support for existing and future businesses and opportunities such as small events and streetside dining. This option maintains approximately 29 parking spaces, although motorists must still back out into on-coming traffic.

OPTION 3

Option 3

Option 3 replaces the pull-in / back out parking with back-in / pull out angled parking. Back-in / pull-out angled parking has gained favor in Pennsylvania in the last 20 years because it is much safer than the existing parking configuration in the square. It can be found in many other small villages including Linglestown, PA. and Pottstown, PA. Curb lines at intersections are modified in option 3 to accommodate truck turning needs. This option maintains approximately 21 parking spaces.

OPTION 4

Option 4

Option 4 maintains the iconic triangle islands in a slightly different location, maintaining the nostalgia that many residents have for these features. In this option the islands have been lengthened to prevent motorists from making U-turns in the square. Back-in angled parking is included and 21 spaces are maintained. Wider sidewalks, better pedestrian and motorist safety are all included in this option also.

OPTION 5

Option 5

Option 5 is the same as option 4, except that it shortens the length of the islands.

These options were discussed at public meeting #2 and also at Borough Council meeting #1. It was clear that many residents wanted to retain the central islands. Accordingly, two options for the Town Square were included in the draft plan, one with the islands and one without.

Millerstown Town Square - OPTION 3a

P

P

Sunbury St

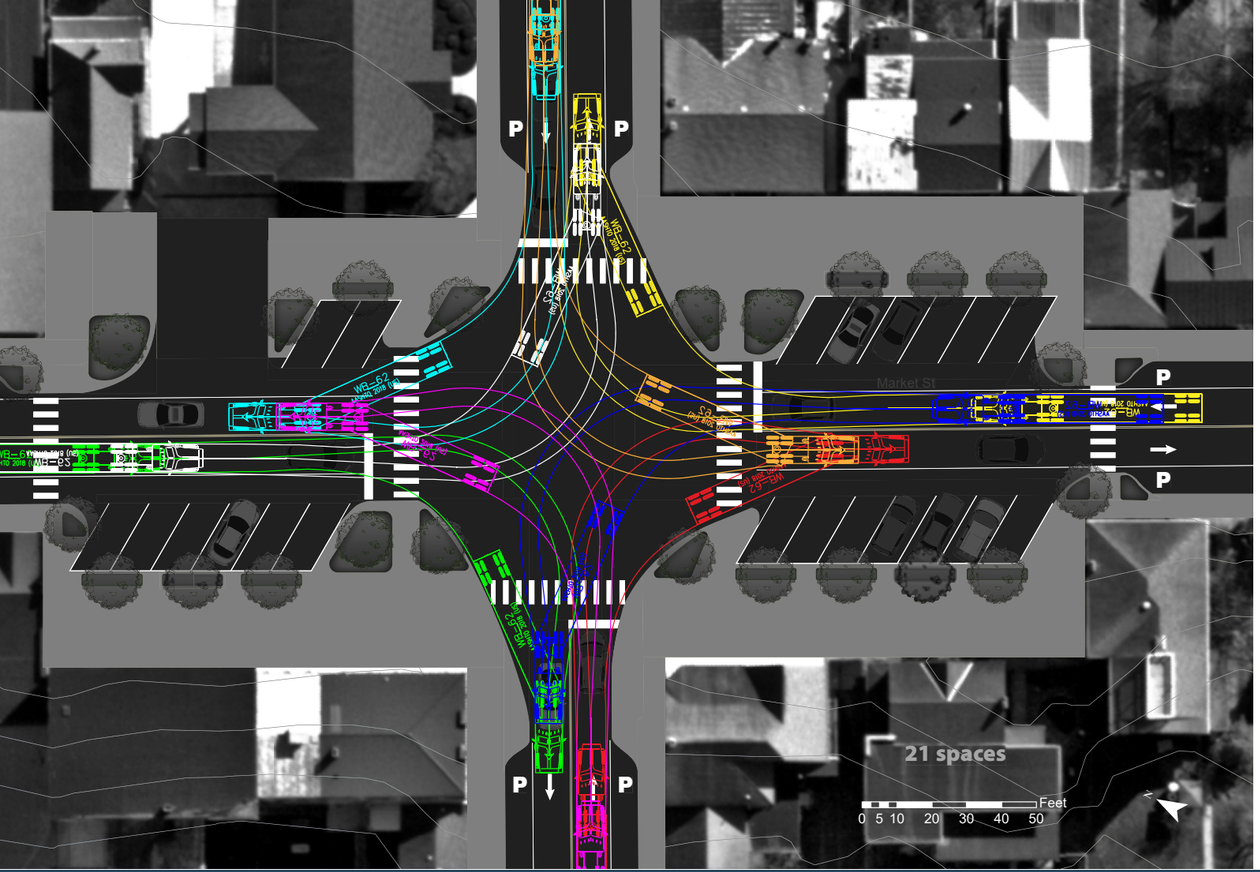
Market St

P

P

21 spaces

Millerstown Town Square - OPTION 5a



3.3 Draft Plan Town Square Concepts

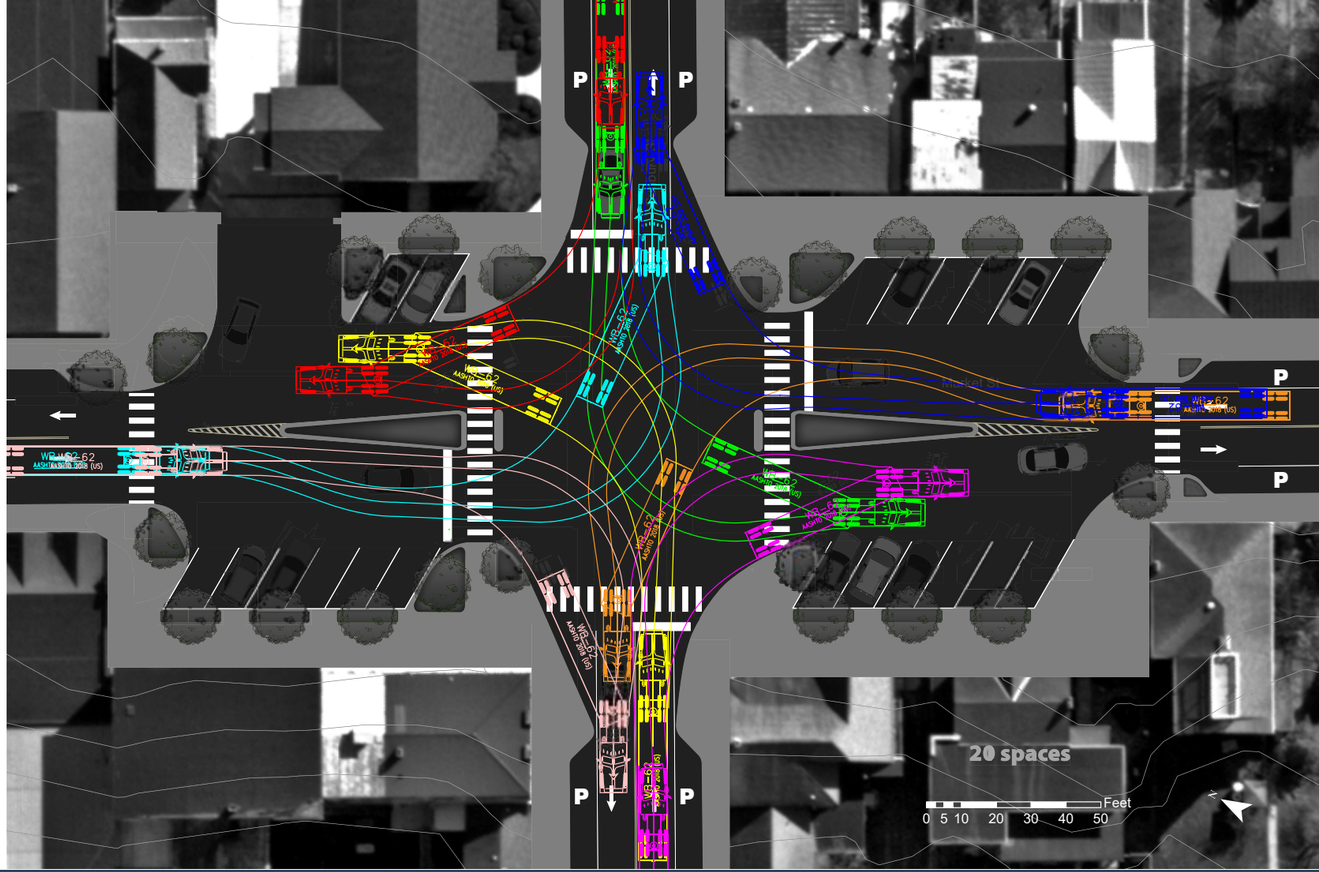
For the Draft Plan, the consultant team developed two (2) alternative plans for the Town Square. One plan shows a redesigned Town Square without the central islands (plan 3a) and one plan shows a redesigned Town Square with the central islands (Plan 5a). Two plans are included since until the Borough works with PennDOT District 8-0 and additional engineering studies are completed, it is not possible to know which approach functions better or which approach may be preferred by PennDOT.

Both plans work well for truck movement through the intersection, each as 21 back-in parking spaces and both create additional sidewalk area for a more attractive streetscape and enhanced pedestrian realm. Both plans show full stops for all four directions of traffic. It is recommended that the Borough include both plans in its future discussions with PennDOT until one plan proves to be superior for reasons to be determined.

Improvements should also include street tree plantings, planting accent areas, pedestrian-scaled lighting and benches and trash receptacles.

While the redesign of the Town Square is the most visible and likely to be the most-discussed improvement that is part of this initiative, it is likely to be a low priority in regard to time-frame due to the additional engineering studies that will be needed and the cost of the project. These studies include a warrant analysis for stop signs for Market Street traffic and also a speed study to assess if the speed limit in the Village might be reduced from 35 mph to 25 mph.

Costs for Town Square improvements are shown in area "E" of the cost estimates.



3.4 Rt. 22/ 322 North-Bound Ramp

It is recommended that PennDOT construct a second entry to the Northbound Rt. 22/322 ramp. This will eliminate the very difficult 90 degree turn for trucks traveling northbound on West Juniata Parkway. It is believed that many large trucks proceed north through the village and the Town Square on "straight: onto the northbound highway after passing through the village rather than negotiating this difficult turn. This improvement should be done in tandem with the Town Square improvements.

Costs for the ramp improvements are shown in area "G" of the cost estimates.

3.5 Safe Connections to Greenwood School District Campus – High School and Middle School

Millerstown is fortunate to host the High School and Middle School which are located in close proximity – within easy walking distance - to the residential areas of the Borough. Despite this proximity many parents feel the need to drive their children to and from school each day due to their specific safety concerns about crossing East Sunbury Street and generally about poor pedestrian connectivity to the school. Additionally, most folks who attended project meetings generally recognized that this parental chauffer service also creates motor vehicle traffic backups each morning and afternoon.

The consultant team has recommended a series of pedestrian connectivity improvements to enhance the ability of students to safely walk to the school campus. The are itemized below as follows:

- New sidewalk along the south side of Nace Street and an improved crosswalk at the intersection of Nace Street and East Sunbury Street
- New sidewalk along the north side of School Street and an improved crosswalk at the intersection of School Street and East Sunbury Street with two rapid flashing beacons.
- From School Street north, new sidewalks / side paths on the west side of East Sunbury Stret along the school campus extending up into and including the New Harvest Church campus. Plan to extend this sidewalk along East Sunbury Street as likely new residential development is built immediately to the north.
- New 3,600 LF, multiuse loop pathway around the school campus.
- New sidewalk from the village along Greenwood Street connecting into the school campus.
- Ancillary improvements include crosswalks, warning and regulatory signage and streetscape and buffer plantings.
- These improvements to create safer routes to the school campus should be a high priority in the overall improvement program.

Costs for Safe Routes to School improvements are shown in areas "A, B & C" of the cost estimates.

3.6 Village Sidewalks, Bike Boulevard, and other Connectivity & Streetscape Improvements

As noted in the analysis of existing circulation systems in Millerstown, while there is a reasonable inventory of sidewalks exist in Millerstown, there are a number of strategic sidewalk gaps that should be filled to create a more complete system. Additionally, opportunities existing in other select locations in the Borough to install new sidewalks (concrete or painted), crosswalks, and other modest improvements. Ancillary improvements include street tree plantings and plant buffers. All of the proposed improvements are shown on the improvement mapping and listed in the cost estimates.

A long (600 feet) of new sidewalk is recommended along the west side of South Market Street to connect existing sidewalks in town to the sidewalks at the north bound highway ramp area on Juniata Parkway, since children walk along this route currently, even though there are no sidewalks.

A bike boulevard is recommended along the length of Locust Alley from Beaver Street to the north to the alley's termination downriver. From this point a new multipurpose trail is recommended that will meet at the side path recommended at the northbound ramp to highway 22/322. The majority of the bike boulevard takes advantage of the existing alley paving and adds simple sharrows, speed cushions and signage. The bike boulevard provides an alternative route to the existing pathway on the river side of the highway.

The existing Freedom Park, located on North Market Street is a unique opportunity to upgrade an existing Borough amenity. Surely magnificent at one time, the park is worn out and in need of an upgrade. Pavements have heaved and do not meet minimum ADA standards. Freedom Park is located opposite the popular Stitch in Time Antique Mall, and it is assumed the park will enjoy good visitation when the mall is busy. As it appears that the private owners are not interested in refurbishing the park, this may be a good opportunity for the Borough to convert this into a public park through a long-term easement or purchase and then apply for public grants to improve the park.

Costs for village improvements are shown in areas "B,C, D and F" of the cost estimates.

3.7 Juniata Parkway / Community Pool Connectivity Improvements

These proposed improvements consist of connecting the village with the Millerstown Area Community Park and Community Pool with the Village. There is an existing sidewalk on the Juniata Parkway bridge over the highway, however it lacks pedestrian cyclist connectivity on both sides. The plan recommends the construction of approximately 1500 linear feet of side paths to help connect this area to the village. These improvements are shown in area G of the cost estimates.

3.8 Community Park Trails

It is recommended that all-weather asphalt trails be constructed on what are now gravel driveways. All weather asphalt trails will reduce park maintenance and provide a more serviceable accessway for park use and events as well as for park maintenance. Costs for these improvements are contained in area H of the cost estimate.

3.9 Underpasses

When the Rt 22/322 highway was constructed, PennDOT had the good insight to include two underpasses of the highway at central locations in the village. Over the past fifty years, these accommodations have been invaluable in allowing the Millerstown community to remain connected to the Juniata River. Adults and children constantly use these connectivity facilities to access the river and the community park and community pool that is located downstream. Connecting along the river is a safer and more aesthetically pleasing alternative to walking along South Market Street /Juniata Parkway to reach these community destinations. These transportation facilities appear to be in excellent structural condition. They need lighting, and some cosmetic painting and minor paving repairs including making them handicapped accessible. Removable bollards at each end are also recommended to control vehicular access to PennDOT and Borough vehicles only. Permission must be obtained from PennDOT before any improvements to these structures are planned and made.

3.10 Riverfront Pathway

Sometime about 30 years ago, Borough residents and the Borough obtained permission from PennDOT to construct the riverfront pathway from Sunbury Street to the location of the community park and pool. Glenn Byers was the Millerstown resident who financed and construction of the pathway that was built in order to keep the village's children safe. All anecdotal accounts from older residents are that there is an agreement in place between the Borough and PennDOT that allowed this pathway. However, the Borough as of yet have been unable to find this agreement. This pathway is an important, off-road connectivity facility that has served the community well for many years. Part of this area was recently utilized by PennDOT as a staging area for a PennDOT construction project on the Sunbury Street bridge. The pathway is in overall good condition and is maintained by the Borough/ community members. Maintenance includes the removal of downed tree limbs and other minor repairs to the pathway surface. Whether or not the original agreement between the Borough and PennDOT can be found, it is recommended that the Borough consult the PennDOT publication 10C (DM-1C) 2015 Edition, Change #5 – Chapter 4 – Final Design Plan Development – E. Requests for Non-Motorized Trails in Limited Access Right-of-Way and work with PennDOT to re-affirm this agreement so that this important connectivity infrastructure is maintained.

3.11 Juniata River Water Trail

Millerstown's location on the Juniata River gives residents access to this body of water and the Juniata River Water Trail. Water trails are recreational waterways on a lake, river of ocean between specific locations, containing access points and sometimes day use or camping sites for the boating public.

Downriver, there is a "primitive" landing (#17) at Millerstown Community Park and a bit further downriver there is a PA Fish and Boat Commission ramp (#16). It is proposed that the Borough create an official primitive landing at the upriver underpass of the highway in Millerstown (at Spring Street) for kayaks and canoes. Carry in boats only is recommended. This is a traditional swimming spot on the river and an access point here would allow easy, family orient floats downriver to access points #17 or #16 and allow a bike or hike back up to town along the river via the riverfront pathway. The Borough should collaborate with PA Department of Conservation and Natural Resources (DCNR) to obtain this official designation and also work with DCNR to obtain funding that can be used to improve this access point.

3.12 Aesthetics

In all proposed improvements in Millerstown, always consider the aesthetic presentation of what is being built. Go beyond simple utility and consider the appropriateness of materials and colors while encouraging a diversity of artistic expression. The following general recommendations relate to all planned improvements in Millerstown.

- Aggressively embark on a tree planting program throughout Millerstown. Seek property owner easements to install street trees.
- Encourage property owners to plant trees on their own properties that are visible from public streets and walkways.
- Encourage small-scale aesthetic improvements such as flowers in window boxes and sidewalk planters. Seek out gardeners to advise interested residents on flower species and planting techniques. Hold an annual end of summer competition for the best flower displays.
- Encourage residents to fly banners along street-fronts. Promote the design and fabrication of one-of-a-kind banners as a local artisanal craft. Hold a banner competition.
- Seek our area / local sculptors who may be interested in displaying their artwork in the Town Square. Rotate artists annually.

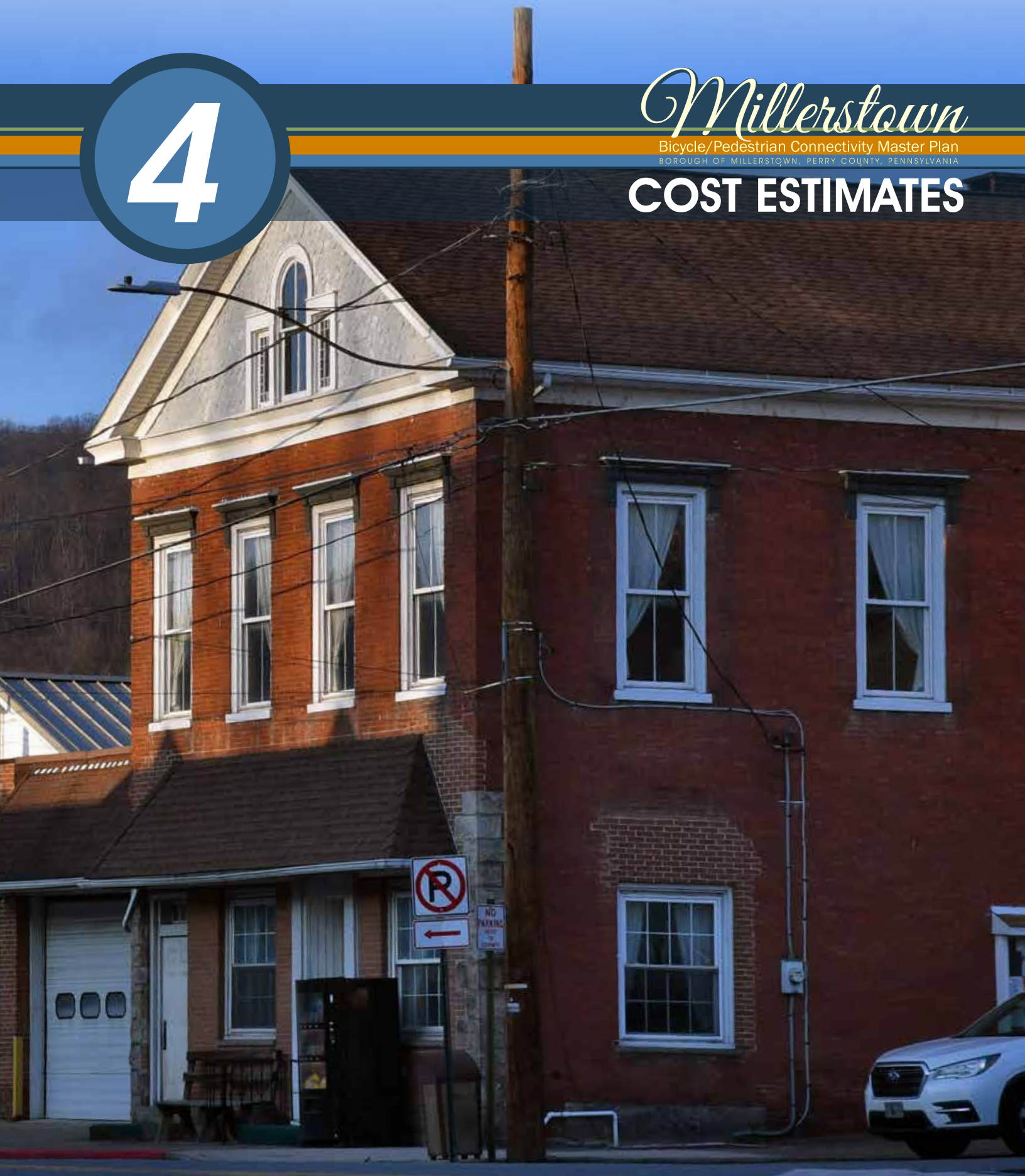
4

Millerstown

Bicycle/Pedestrian Connectivity Master Plan

BOROUGH OF MILLERSTOWN, PERRY COUNTY, PENNSYLVANIA

COST ESTIMATES



Cost Estimate Areas

4. Cost Estimates / Implementation

4.1 Cost Estimates

Based on the draft plan, the overall cost for improvements are estimated at approximately $4.5 million in 2024 dollars. These cost estimates will be more closely scrutinized as the draft plan moves toward finalization and as more detail is added, this estimate is likely to rise by 10% to 15%. A detailed cost estimate follows this page.

It is likely that the majority of these improvement costs will be paid for by grant funds from the agencies listed above. The goal for implementing this program should be to take a long-term perspective toward completing these improvements. These improvements help to address regional connectivity issues such as better and safer access to the school campus and better and safer access to the regional park facilities located in Greenwood Township. Both of these facilities serve a wider area than just Millerstown.

4.2 Implementation & Implementation Priorities

The recommended improvements contained in this master plan study are ambitious and aspirational. The implementation of these recommendations is a major undertaking for any community and is even more so for a small town like Millerstown with a population of less than 800 persons.

One of the main purposes of completing a plan such as this is to communicate to various funding agencies that the Millerstown Community has examined the big picture and understands the importance of the recommended community enhancements and is intent in following a methodical, long-term process to realize the vision of making a great community even better.

There are some recommended improvements that are relatively low cost and can be achieved soon. Others will take several levels of engineering study and will be high-cost and will take many years to accomplish. The plan will require a patient and phased implementation approach. As plan recommendations are addressed, engineered, funded, and built, this plan can serve as a long-term guide to creating a safer and more connected community for all modes of travel.

The following list of recommended priorities addresses of mix of projects that have the most immediate safety concerns and, in many cases, can be readily funded by state or regional agencies with a minimum of local match funds (or where other agency funds can be utilized as the local match). The sequence of implementation can change since funding program priorities often change from year-to-year. The Borough's approach to implementation must remain flexible in this regard.

The recommended order of implementation priorities are as follows. Please note that it will likely be necessary to divide many of priorities into phases of their own as funding dictates.

Area A

Estimated Costs of Development					
Area A: Greenwood Elementary/High School & New Harvest Church Area					
				Total Cost	*$ 781,300*
				Mobilization (3%)	$ 23,439
				Construction Surveying (3%)	$ 23,439
				Erosion and Sedimentation Control (2%)	$ 15,626
				Maintenance of Traffic (2%)	$ 15,626
				Construction Contingency (10%)	$ 78,130
Total Construction Costs					*$ 937,560*
				Design and Engineering (15%)	$ 140,634
Total Estimated Project Costs					**$ 1,078,194**
Work Item	**Quantity**		**Unit Cost**	**Total Item Cost**	**Total Cost**
- Sidewalk			***Sub Total***		***$ 170,400***
West side of E Sunbury St	*400*	*LF*	*$ 71.00*	$ 28,400.00	
Along Greenwood High School Driveway	*1,500*	*LF*	*$ 71.00*	$ 106,500.00	
North side of Chestnut Alley	*500*	*LF*	*$ 71.00*	$ 35,500.00	
- Sidepath *Asphalt Trail 8'-10' Width*			***Sub Total***		***$ 160,000***
West Side of E Sunbury St	*1,000*	*LF*	*$ 100.00*	$ 100,000.00	
New Harvest Driveway	*600*	*LF*	*$ 100.00*	$ 60,000.00	
- Multiuse Trail *Asphalt Trail 10' Width*			***Sub Total***		***$ 360,000***
School Loop Trail	*3,600*	*LF*	*$ 100.00*	$ 360,000.00	
- Crosswalk **ADA Ramps at Each Intersection*			***Sub Total***		***$ 1,900***
Continental with Parallel lines					
Within school campus	*145*	*LF*	*$ 10.00*	$ 1,450.00	
Along E Sunbury St	*45*	*LF*	*$ 10.00*	$ 450.00	
- Buffer Planting			***Sub Total***		***$ 29,000***
Along sidewalk on E Sunbury St	*2,500*	*SF*	*$ 10.00*	$ 25,000.00	
In front of New Harvest Church building entrance	*400*	*SF*	*$ 10.00*	$ 4,000.00	
- Rapid Flashing Beacon					***$ 60,000***
School St and E Sunbury St Intersection	*2*	*EA*	*$ 30,000.00*	$ 60,000.00	

Area B

Estimated Costs of Development					
Area B: East Side of E Sunbury St - Neighborhood Area					
				Total Cost	*$ 203,300*
				Mobilization (3%)	$ 6,099
				Construction Surveying (3%)	$ 6,099
				Erosion and Sedimentation Control (2%)	$ 4,066
				Maintenance of Traffic (2%)	$ 4,066
				Construction Contingency (10%)	$ 20,330
Total Construction Costs					*$ 243,960*
				Design and Engineering (15%)	$ 36,594
Total Estimated Project Costs					**$ 280,554**
Work Item	**Quantity**		**Unit Cost**	**Total Item Cost**	**Total Cost**
- Sidewalk			***Sub Total***		***$ 142,000***
South Side of Nace St	*750*	*LF*	*$ 71.00*	$ 53,250.00	
East side of Sunbury St	*350*	*LF*	*$ 71.00*	$ 24,850.00	
North side of School St	*700*	*LF*	*$ 71.00*	$ 49,700.00	
South Side of S High St	*100*	*LF*	*$ 71.00*	$ 7,100.00	
North side of S Market St	*100*	*LF*	*$ 71.00*	$ 7,100.00	
- Crosswalk **ADA Ramps at Each Intersection*			***Sub Total***		***$ 1,050***
Continental with Parallel lines					
Along Nace St	*25*	*LF*	*$ 10.00*	$ 250.00	
Crossing over E Sunbury St to School St	*40*	*LF*	*$ 10.00*	$ 400.00	
Along School St	*25*	*LF*	*$ 10.00*	$ 250.00	
Along S High St	*15*	*LF*	*$ 10.00*	$ 150.00	
- Rapid Flashing Beacon			***Sub Total***		***$ 60,000***
School St and E Sunbury St Intersection	*2*	*EA*	*$ 30,000.00*	$ 60,000.00	
- Signage			***Sub Total***		***$ 250***
Speed Limit Signage	*1*	*EA*	*$ 250.00*	$ 250.00	

Area C

Estimated Costs of Development					
Area C: West Side of E Sunbury St - Neighborhood Area west of School					
				Total Cost	*$ 178,800*
				Mobilization (3%)	$ 5,364
				Construction Surveying (3%)	$ 5,364
				Erosion and Sedimentation Control (2%)	$ 3,576
				Maintenance of Traffic (2%)	$ 3,576
				Construction Contingency (10%)	$ 17,880
Total Construction Costs					*$ 214,560*
				Design and Engineering (15%)	$ 32,184
Total Estimated Project Costs					**$ 246,744**
Work Item	**Quantity**		**Unit Cost**	**Total Item Cost**	**Total Cost**
- Sidewalk			*Sub Total*		*$ 49,700*
East side of Greenwood Ave	*75*	*LF*	*$ 71.00*	$ 5,325.00	
North side of Market St	*75*	*LF*	*$ 71.00*	$ 5,325.00	
North side of N High St	*150*	*LF*	*$ 71.00*	$ 10,650.00	
South side of N High St	*400*	*LF*	*$ 71.00*	$ 28,400.00	
- Painted Sidewalk			*Sub Total*		*$ 3,500*
East side of Greenwood Ave	*100*	*LF*	*$ 20.00*	$ 2,000.00	
North side of Market St	*75*	*LF*	*$ 20.00*	$ 1,500.00	
- Crosswalk **ADA Ramps at Each Intersection*			*Sub Total*		*$ 150*
Continental with Parallel lines					
Crossover from Greenwood to School	*15*	*LF*	*$ 10.00*	$ 150.00	
- Buffer Planting			*Sub Total*		*$ 12,000*
North side of Market St	*450*	*SF*	*$ 10.00*	$ 4,500.00	
East side of Greenwood St	*250*	*SF*	*$ 10.00*	$ 2,500.00	
South side of N High St	*500*	*SF*	*$ 10.00*	$ 5,000.00	
- Bump Out			*Sub Total*		*$ 13,000*
At Market St and Greenwood St	*1*	*EA*	*$ 13,000.00*	$ 13,000.00	
- Signage			*Sub Total*		*$ 450*
Speed Limit Signage	*3*	*EA*	*$ 150.00*	$ 450.00	
- Freedom Park					*$ 100,000*
Park Renovation		*LS*		$ 100,000.00	

Area D

Estimated Costs of Development

Area D: Upstream of Juniata River - From Town Square & E Sunbury St to Mastracchio's Restaurant

	Total Cost	*$ 152,850*
	Mobilization (3%)	$ 4,586
	Construction Surveying (3%)	$ 4,586
	Erosion and Sedimentation Control (2%)	$ 3,057
	Maintenance of Traffic (2%)	$ 3,057
	Construction Contingency (10%)	$ 15,285
Total Construction Costs		*$ 183,420*
	Design and Engineering (15%)	$ 27,513
Total Estimated Project Costs		**$ 210,933**

Work Item	Quantity		Unit Cost	Total Item Cost	Total Cost
- Sidewalk			*Sub Total*		*$ 21,300*
South side of N Market St	*200*	*LF*	*$ 71.00*	$ 14,200.00	
East side of Spring St	*100*	*LF*	*$ 71.00*	$ 7,100.00	
- Painted Sidewalk			*Sub Total*		*$ 7,500*
South side of N Market St	*200*	*LF*	*$ 25.00*	$ 5,000.00	
East side of Spring St	*100*	*LF*	*$ 25.00*	$ 2,500.00	
- Crosswalk **ADA Ramps at Each Intersection*			*Sub Total*		*$ 450*
Continental with Parallel lines					
Crossover from N Market St to Adams St	*25*	*LF*	*$ 10.00*	$ 250.00	
Crossover from Spring St to Locust Alley	*20*	*LF*	*$ 10.00*	$ 200.00	
- Buffer Planting			*Sub Total*		*$ 24,000*
North side of Locust Alley	*1,200*	*SF*	*$ 10.00*	$ 12,000.00	
South side of N Market St	*1,200*	*SF*	*$ 10.00*	$ 12,000.00	
- Rapid Flashing Beacon			*Sub Total*		*$ 30,000*
Locust Alley and E Sunbury intersection	*1*	*EA*	*$ 30,000.00*	$ 30,000.00	
- Bump Out			*Sub Total*		*$ 13,000*
At Market St and Greenwood St	*1*	*EA*	*$ 13,000.00*	$ 13,000.00	
- Bicycle Boulevard			*Sub Total*		*$ 20,800*
Locust Alley Bicycle Boulevard					
Speed Cushion	*4*	*EA*	*$ 4,000.00*	$ 16,000.00	
Sharrow On-Road Bike Route	*16*	*EA*	*$ 300.00*	$ 4,800.00	
Stop Sign Removal		*EA*	*$ 150.00*	$ -	
- Signage			*Sub Total*		*$ 1,200*
Speed Limit Signage - N Market St	*4*	*EA*	*$ 150.00*	$ 600.00	
Speed Limit Signage - Locust Alley	*4*	*EA*	*$ 150.00*	$ 600.00	
Underpass			*Sub Total*		*$ 34,600*
Accessibility improvements	*1*	*EA*	*$ 15,000.00*	*$ 15,000*	
Painted Sidewalk	*200*	*LF*	*$ 20.00*	*$ 4,000*	
Lighting	*1*	*EA*	*$ 10,000.00*	*$ 10,000*	
Bollards	*1*	*EA*	*$ 600.00*	*$ 600*	
Mural	*1*	*EA*	*$ 5,000.00*	5,000	

Area E

Estimated Costs of Development

Area E: Town Square					
				Total Cost	*$ 675,200*
				Mobilization (3%)	$ 20,256
				Construction Surveying (3%)	$ 20,256
				Erosion and Sedimentation Control (2%)	$ 13,504
				Maintenance of Traffic (2%)	$ 13,504
				Construction Contingency (10%)	$ 67,520
Total Construction Costs					*$ 810,240*
				Design and Engineering (15%)	$ 121,536
Total Estimated Project Costs					**$ 931,776**
Work Item	**Quantity**		**Unit Cost**	**Total Item Cost**	**Total Cost**
- Sidewalk			*Sub Total*		*$ 283,200*
New - Concrete	*20,000*	*SF*	*$ 14.16*	$ 283,200.00	
- Crosswalk **ADA Ramps at Each Intersection*			*Sub Total*		*$ 4,000*
Continental with Parallel lines					
Crossing over Market St	*200*	*LF*	*$ 20.00*	$ 4,000.00	
New - Concrete					
- Planting			*Sub Total*		*$ 34,000*
Ornamental plantings	*1,000*	*SF*	*$ 10.00*	$ 10,000.00	
Street Tree	*20*	*EA*	*$ 1,200.00*	$ 24,000.00	
- Bump Out			*Sub Total*		*$ 104,000*
	8	*EA*	*$ 13,000.00*	$ 104,000.00	
- Signage			*Sub Total*		*$ 12,000*
Interpretive	*2*	*EA*	*$ 5,000.00*	$ 10,000.00	
Wayfinding	*2*	*EA*	*$ 1,000.00*	$ 2,000.00	
- Pedestrian Refuge Island			*Sub Total*		*$ 30,000*
	2	*EA*	*$ 15,000.00*	$ 30,000.00	
Site Furnishings			*Sub Total*		*$ 36,000*
Misc lite furnishings		*IS*	*$ 10,000.00*	*$ 10,000*	
Bench	*8*	*EA*	*$ 2,500.00*	*$ 20,000*	
Trash Receptacle	*4*	*EA*	*$ 1,500.00*	*$ 6,000*	
- Lighting			*Sub Total*		*$ 120,000*
	15	*EA*	*$ 8,000.00*	*$ 120,000*	
- Demolition			*Sub Total*		*$ 52,000*
Concrete	*5,200*	*SF*	*$ 10.00*	*$ 52,000*	
Asphalt	*30,000*	*SF*	*$ 5.00*	*$ 150,000*	

* Note- does not inlcude drainage convenyance

Area F

Estimated Costs of Development

Area F: Eastern Stretch of Market St & Locust Alley - From Town Square & E Sunbury St to Highway 22 On-Ramp

	Total Cost	*$ 195,350*
	Mobilization (3%)	$ 5,861
	Construction Surveying (3%)	$ 5,861
	Erosion and Sedimentation Control (2%)	$ 3,907
	Maintenance of Traffic (2%)	$ 3,907
	Construction Contingency (10%)	$ 19,535
Total Construction Costs		*$ 234,420*
	Design and Engineering (15%)	$ 35,163
Total Estimated Project Costs		**$ 269,583**

Work Item	Quantity		Unit Cost	Total Item Cost	Total Cost
- Sidewalk			*Sub Total*		*$ 63,900*
West side of Grave St	*250*	*LF*	*$ 71.00*	$ 17,750.00	
South Side of W Juniata Parkway	*650*	*LF*	*$ 71.00*	$ 46,150.00	
- Multiuse Trail *Asphalt Trail 10' Width*			*Sub Total*		*$ 40,000*
From end of Locust Alley to W Juniata Parkway	*400*	*LF*	*$ 100.00*	$ 40,000.00	
- Crosswalk **ADA Ramps at Each Intersection*			*Sub Total*		*$ 150*
Continental with Parallel lines					
Crossover from Grave St to Locust Alley	*15*	*LF*	*$ 10.00*	$ 150.00	
- Rapid Flashing Beacon			*Sub Total*		*$ 30,000*
Locust Alley and E Sunbury intersection	*1*	*EA*	*$ 30,000.00*	$ 30,000.00	
- Bicycle Boulevard			*Sub Total*		*$ 24,900*
Locust Alley Bicycle Boulevard					
Speed Cushion	*4*	*EA*	*$ 5,000.00*	$ 20,000.00	
Sharrow On-Road Bike Route	*14*	*EA*	*$ 350.00*	$ 4,900.00	
				$ -	
- Signage			*Sub Total*		*$ 1,800*
Speed Limit Signage	*11*	*EA*	*$ 150.00*	$ 1,800.00	
Underpasses			*Sub Total*		*$ 34,600*
Accessibility improvements	*1*	*EA*	*$ 15,000.00*	*$ 15,000*	
Painted Sidewalk	*200*	*LF*	*$ 20.00*	*$ 4,000*	
Lighting	*1*	*EA*	*$ 10,000.00*	*$ 10,000*	
Bollards	*1*	*EA*	*$ 600.00*	*$ 600*	
Mural	*1*	*EA*	*$ 5,000.00*	*$ 5,000*	

Area G

Estimated Costs of Development					
Area G: W Juniata Parkway - Crossover across US Highway 22 to Millerstown Community Pool					
				Total Cost	*$ 741,050*
				Mobilization (3%)	$ 22,232
				Construction Surveying (3%)	$ 22,232
				Erosion and Sedimentation Control (2%)	$ 14,821
				Maintenance of Traffic (2%)	$ 14,821
				Construction Contingency (10%)	$ 74,105
Total Construction Costs					*$ 889,260*
				Design and Engineering (15%)	$ 133,389
Total Estimated Project Costs					**$ 1,022,649**
Work Item	**Quantity**		**Unit Cost**	**Total Item Cost**	**Total Cost**
- Sidepath *Asphalt Trail 8'-10' Width*			*Sub Total*		*$ 145,000*
South side of W Juniata Parkway	*550*	*LF*	*$ 100.00*	$ 55,000.00	
Connection from W Juniata Parkway to Millerstown Community Pool	*650*	*LF*	*$ 100.00*	$ 65,000.00	
Connection from Community Pool to Community Park	*250*	*LF*	*$ 100.00*	$ 25,000.00	
- Crosswalk **ADA Ramps at Each Intersection*			*Sub Total*		*$ 2,300*
Continental with Parallel lines					
Along Juniata Parkway	*230*	*LF*	*$ 10.00*	$ 2,300.00	
- Buffer Planting			*Sub Total*		*$ 2,750*
Along sidepath from Community Pool connecting to Community Park	*275*	*SF*	*$ 10.00*	$ 2,750.00	
- North Bound Ramp			*Sub Total*		*$ 591,000*
Roadway	*1,000*	*SY*	*$ 200.00*	$ 200,000.00	
Guiderail	*100*	*LF*	*$ 200.00*	$ 20,000.00	
Fill	*9,000*	*CY*	*$ 40.00*	$ 360,000.00	
Signage	*2*	*EA*	*$ 500.00*	$ 1,000.00	
Drainage Improvements		*LS*	*$ 10,000.00*	$ 10,000.00	

Estimated Costs of Development					
Area H: Millerstown Area Community Park					
				Total Cost	*$ 371,500*
				Mobilization (3%)	$ 11,145
				Construction Surveying (3%)	$ 11,145
				Erosion and Sedimentation Control (2%)	$ 7,430
				Maintenance of Traffic (2%)	$ 7,430
				Construction Contingency (10%)	$ 37,150
Total Construction Costs					*$ 445,800*
				Design and Engineering (15%)	$ 66,870
Total Estimated Project Costs					**$ 512,670**
Work Item	Quantity		Unit Cost	Total Item Cost	Total Cost
- Multiuse Trail *Asphalt Trail 10' Width*			*Sub Total*		*$ 370,000*
Ampitheater and main parking lot area	*2,200*	*LF*	*$ 100.00*	$ 220,000.00	
Baseball field area	*1,500*	*LF*	*$ 100.00*	$ 150,000.00	
- Buffer Planting			*Sub Total*		*$ 1,500*
Along sidepath from Community Pool connecting to Community Park	*150*	*SF*	*$ 10.00*	$ 1,500.00	

4.2.1 Safe Routes to School Improvements in Public Roadway Rights of Way

These improvements generally include the new sidewalks along School Street and Nace Street with their respective crossings of East Sunbury Street and filing sidewalk gaps from the village that better connect the school campus to the heart of the village. Possible grant sources include PennDOT Multimodal, DCED multimodal, and TCRPC / HATS RTP.

Ancillary proposed sidewalks and pathways on the school campus (not in public ROWs) and proposed connections to the New Harvest Church Campus should be addressed by the Greenwood School District and church as their internal priorities allow. Possible grant sources include DCNR and DCED GTRP.

4.2.2 Village Sidewalk Connections – Filling the Gaps

The recommended sidewalk connections in the heart of the village are a project that should attract agency funding for implementation. These sidewalk gaps should include those on the southern end of Market Street along the PennDOT ROW. Most of these improvements will require relatively minimal engineering. Ancillary improvements such as street trees and buffer planting should also be addressed in these projects. Possible grant sources include PennDOT Multimodal, PennDOT TASA, DCED multimodal, and TCRPC / HATS RTP.

4.2.3 Bike Boulevard – Enhancing Cycling Connections

The adaptive reuse of Locust Alley as a bike boulevard is a very straightforward and relatively low-cost project. The proposed extension of the bike boulevard with the addition of a multi-purpose trail at its southern end should be pursued at the same time as the Locust Alley Work. Possible grant sources include DCNR, DCED GTRP, PennDOT Multimodal, DCED multimodal, and TCRPC / HATS RTP.

4.2.4 Connections along Juniata Parkway To Community Recreation Facilities

The completion of the bike boulevard can be a catalyst for the extension of multimodal routes across the highway (over the existing bridge) to points downriver. These can be built largely within the PennDOT ROW and on community recreational facility lands. The Borough will need to work with PennDOT to allow these side paths within the state ROW. Possible grant sources include DCNR, DCED GTRP, PennDOT Multimodal, DCED multimodal, and TCRPC / HATS RTP.

Ancillary proposed trails on the community park and community pool lands should be pursued by the organizations who own and operate those facilities in a phased approach. These improvements might be combined with other compatible facility improvements. Possible grant sources include DCNR and DCED GTRP.

4.2.5 Town Square Redesign

The redesign of the Town Square is certainly the largest and most complex project that is a part of this report's recommendations. It is listed toward the end of the priorities list because of its many layers, and not due to lack of importance.

It will be important for the Borough to agree on one of the two design approaches and then engage with an engineer and PennDOT to begin to work through the various engineering steps that will be necessary to realize a new Town Square. It may be possible to implement some of the recommended improvements without major physical changes to Town Square. For example, adding stop signs for the Market Street vehicular movement, a reduction of the speed limit in the heart of the village, may be possible based solely on the required engineering studies. Also, the change from forward pull-in/ back- out parking to angled back-in / pull-out parking could be accomplished through simple restriping and signage.

The construction of new curb lines and new streetscape features is a larger, more complex undertaking and will require more extensive engineering and the acquisition of larger grant funds, likely from several agency sources.

Possible grant sources include PennDOT Multimodal, DCED multimodal, PennDOT TASA, and TCRPC / HATS RTP.

4.2.6 River Pathway Maintenance

The Borough should engage in a collaborative discussion with PennDOT District 8-0 to allow the continued use of the two underpasses and River Pathway as per the agreement between these two parties many years ago. This pathway serves as a vital pedestrian and bicycle link connecting the village with the community park and pool.

4.3 Project Stakeholders and Partners

Local, County, regional, and state partners can help Millerstwown Borough advance the recommendations of the Millerstown Pedestrian & Bicycle Connectivity Master Plan. The following partners can be important advocates and can assist the Borough as it pursues grant funding for specific projects.

It is important that all partners communicate regularly as Millerstown Borough advances the recommendations made in this document. Millerstown should seek to expand and foster existing partnerships as well as establish new partnerships as this project advances. Since Millerstown Community Success Inc. provided matching funds for the Regional Transportation

Project (RTP) from the Harrisburg Area Transportation Study (HATS) through the Tri-County Regional Planning Commission (TCRPC) is likely to be important that MCSi remain involved in this initiative and serve as catalyst to advance the recommendations of this project. The Greenwood School District is also a major stakeholder in this initiative. The planning process revealed many stories about the major reason folks moved to Millerstown and it is an excellent school district. Advancing the safe connections to schools' recommendations contained in this plan should be a major goal of the school district to help ensure the safety of students, faculty, staff, and the entire community that utilizes school district facilities.

The recommendations contained in the plan can only be realized through the participation and cooperation of a wide range of project partners. Each of these partners can play a critical role in supplying technical support, funding, political support, and continued enthusiasm for advancing the recommendations in this plan. These partners include:

- Millerstown Borough
- Greenwood School District
- Millerstown Community Success Inc.
- PennDOT District 8-0
- PA Department of Conservation and Natural Resources (DCNR)
- PA Department of Community and Economic Development (DCED)
- Tri-County Regional Planning Commission / HATS
- Millerstown Community Park
- Millerstown Community Pool
- Millerstown area businesses
- Perry County Economic Development Agency
- Perry County Commissioners
- Perry County Planning Commission (PCPC)

4.4 Plan Adoption

The final plan was presented to the Millerstown Borough Council for adoption on June 3, 2024. Adoption of the plan does not commit the Borough to fund or build any of the recommendations contained in this plan. The plan serves as a guide to enhancing transportation connectivity in the Borough, enhancing safety for all modes of travel, improving the quality of life for residents, and enhancing the local economy. It is understood that implementation of the plan is likely to take many years and will require successfully obtaining grants from a variety of agencies and funding sources.

4.5 Potential Funding Sources

Pennsylvania Department of Transportation (PennDOT)

Transportation Alternatives (TA) Set-Aside

The Transportation Alternatives Set-Aside Program (TA Set-Aside) is a Federal highway and transit funds set-aside under the Surface Transportation Program (STP) for community-based "non-traditional" projects designed to strengthen the cultural, aesthetic, and environmental aspects of the nation's intermodal transportation system. The program seeks to provide funding for projects such as construction, planning, and design of on-road and off-road trail facilities for pedestrians, bicyclists, and other non-motorized forms of transportation.

Non-motorized forms of transportation include sidewalks, bicycle infrastructure, pedestrian and bicycle signals, traffic calming techniques, lighting and other safety-related infrastructure, and transportation projects to achieve compliance with the Americans with Disabilities Act of 1990. There is a minimum award of $50,000 for construction projects. There is typically a maximum award of $1,000,000, although higher awards can be justified for "exceptional" projects. No applicant "match" is required. Grantees must provide separately for design and engineering. For more information, visit https://www.penndot.gov/ProjectAndPrograms/Planning/Pages/Transportation%20Alternatives%20Set-Aside%20-%20Surface%20Trans.%20Block%20Grant%20Program.aspx

PennDOT Multimodal Transportation Fund (MTF)

The Multimodal Transportation Fund (MTF) was created in 2013 when the Pennsylvania State Legislature passed, and the Governor signed Act 89. This dedicated fund can be used for "projects that coordinate local land use with transportation assets to enhance existing communities" as well as "Projects related to streetscape, lighting, sidewalks, and pedestrian safety." Grants are available for projects with a total cost of $100,000 or more. Grants will not normally exceed $3,000,000. Consideration will be given to projects with costs over $3,000,000 should they significantly impact PennDOT's goal of creating jobs and leveraging private investment. A 30% project match is required. Applications are typically due in March. Additional information is available online at: https://www.penndot.gov/ProjectAndPrograms/MultimodalProgram/Pages/default.aspx

Safe Routes to School (SRTS)

Administered through TA Set-Aside, SRTS is a national and international movement to create safe, convenient, and healthy opportunities for children to walk and bicycle to school. The program encourages children to walk and bicycle to school, helping to reverse an alarming decrease in students' physical activity and an associated increase in childhood obesity. Eligible activities include new or reconstructed sidewalks or walkways, pedestrian and bicycle signs or signals, transportation projects that achieve ADA compliance, such as curb ramps, bike parking facilities or bus bike racks, shared use paths, side paths, trails that serve a transportation purpose, crossing improvements, and traffic realignments, road diets, or intersection changes.

While the Bipartisan Infrastructure Law did not provide any dedicated funds for the Safe Routes to School (SRTS) program, changes were made to ways that States can use TA Set-Aside funds (as well as STBG and HSIP funds) for Safe Routes to School projects." Link to PennDOT application webpage.

https://www.penndot.pa.gov/ProjectAndPrograms/Planning/Pages/SRTS/SRTS-Apply.aspx

Pennsylvania Department of Conservation and Natural Resources (PA DCNR)

Community Conservation Partnership Program (C2P2)

The Community Recreation and Conservation Program through the PA DCNR Community Conservation Partnership Program (C2P2) provides funding to municipalities and authorized nonprofit organizations for recreation, park, trail, and conservation projects. These include planning for feasibility studies, trail studies, conservation plans, master site development plans, and comprehensive recreation park and open space and greenway plans. In addition to planning efforts, the program provides funding for land acquisition for active or passive parks, trails, and conservation purposes, and construction and rehabilitation of parks, trails, and recreation facilities. Most of these projects require a 50% match, which can include a combination of cash and/or non-cash values. Applications are typically due in early April.

https://www.dcnr.pa.gov/Communities/Grants/Pages/default.aspx

Recreational Trails Program

The Pennsylvania Recreational Trails Program, also through the C2P2 Program, awards grants to federal and state agencies, local governments, non-profit and for-profit organizations to assist with the construction, renovation, and maintenance of trails and related facilities for both motorized and non-motorized recreational trail use, the purchase or lease of equipment for trail maintenance and construction and the development of educational materials and programs. These grants require a minimum 20% match, which can include a combination of cash and/or non-cash values.

This FHWA grant program was reauthorized for funding by the Bipartisan Infrastructure Law of 2021 through Federal fiscal years 2022 through 2026 as a set-aside from the Transportation Alternatives Set-Aside.

Administrative Instructions and Process Link

Further Guidance Link (see the Recreational Trails Program Section of TASA 2022)

https://www.fhwa.dot.gov/environment/recreational_trails/guidance/rtp9908_toc.cfm

PA Department of Community and Economic Development (DCED) - Commonwealth Financing Agency (CFA)

Greenways, Trails, and Recreation Program (GTRP)

Administered through the DCED, the Greenways, Trails, and Recreation Program (GTRP) provides funding for planning, acquisition, development, rehabilitation, and repair of greenways, recreational trails, open spaces, parks, and beautification projects. The program awards up to $250,000 per project to eligible applicants and requires a local match of 15% of the total project cost. Funding from DCED for "sidewalk" connections will need to be categorized as multi-use trails. Some of the recommended sidewalk gap improvements may fit within a "trail" designation. Applicants must work closely with their state elected officials for serious thought for these grants. Applications are typically due at the end of May. For more information, visit https://dced.pa.gov/programs/greenways-trails-and-recreation-program-gtrp/

DCED Multimodal Transportation Fund (MTF)

Administered through the PA Department of Community and Economic Development (DCED), the Multimodal Transportation Fund provides grants that may be used for the development, rehabilitation, and enhancement of transportation assets to existing communities, streetscape, lighting, sidewalk enhancement, pedestrian safety, connectivity of transportation assets and transit-oriented development. Grants are available for projects with a total cost of $100,000 or more and grants shall not exceed $3,000,000 for any project. The CFA will consider grant requests over $3,000,000 for projects that will significantly impact the Financial assistance under the

Multimodal Transportation Fund shall be matched by local funding in an amount not less than 30% of the non-federal share of the project costs. Applicants must work closely with their state elected officials for sincere consideration for these grants. Applications are typically due in July. For more information, visit https://dced.pa.gov/programs/multimodal-transportation-fund/

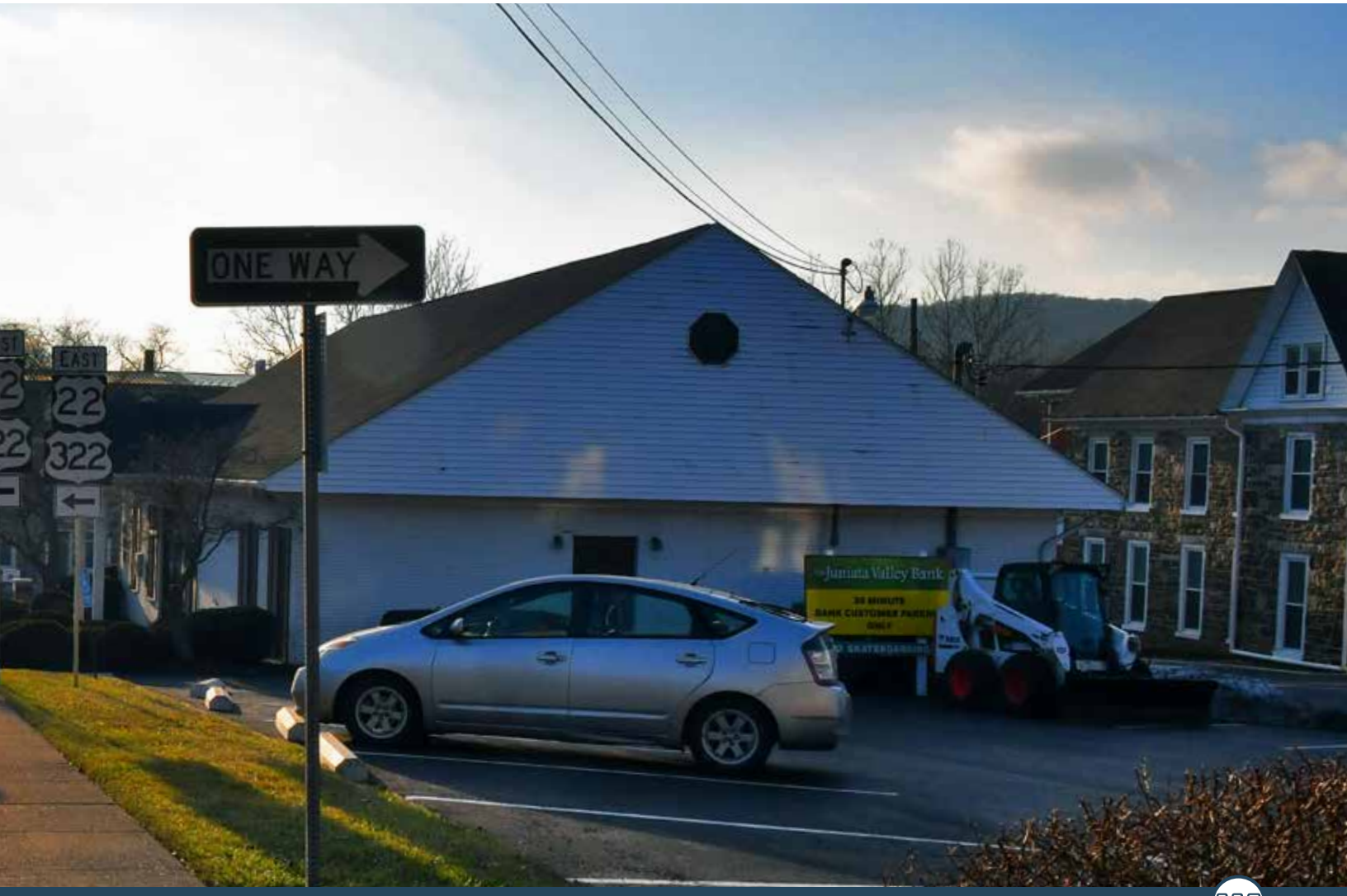
Harrisburg Area Transportation Study (HATS) Regional Transportation Pan (RTP) Implementation Program.

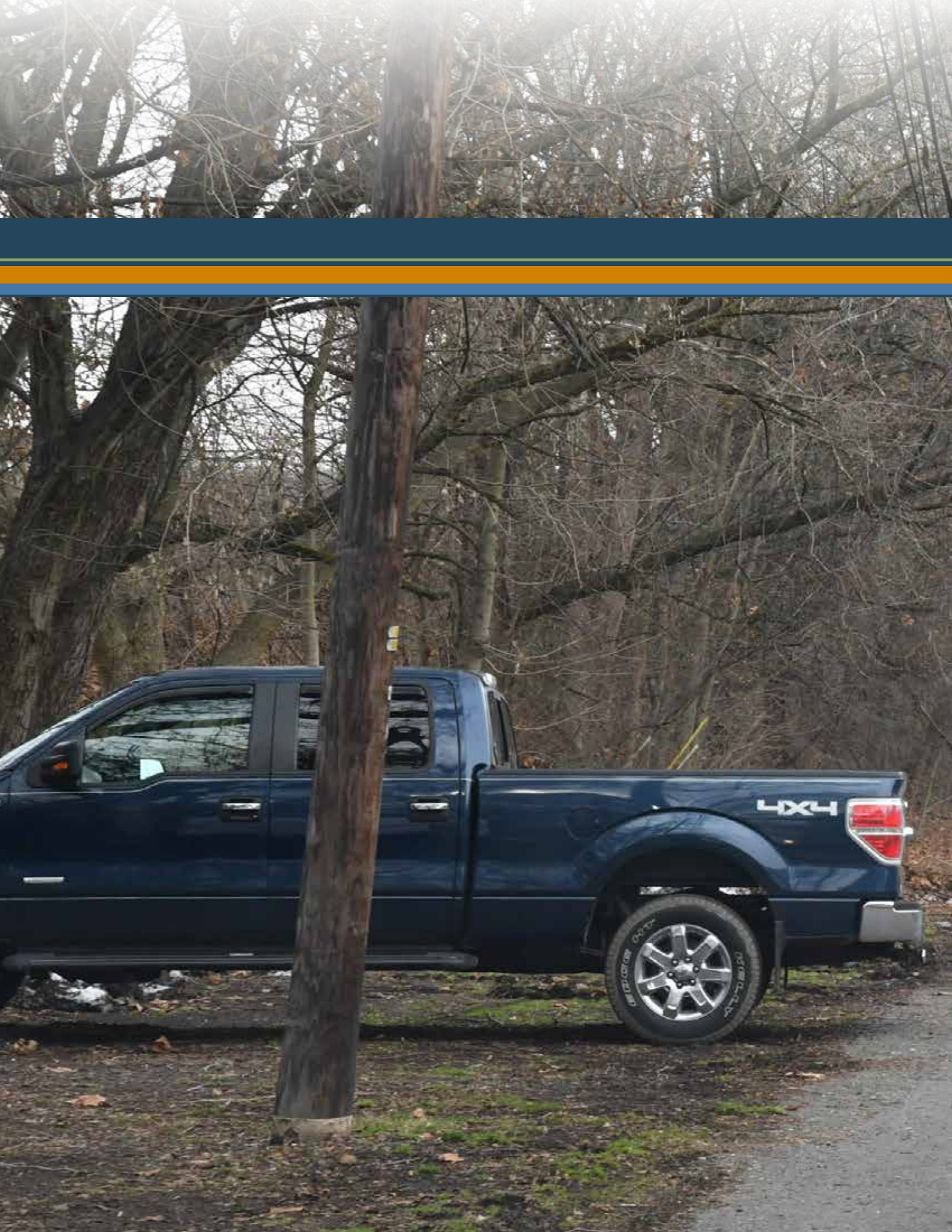
Through grants, the program will fund transportation studies and improvements that meet HATS Regional Transportation Plan and TCRPC Regional Growth Management Plan goals while "providing for safer, more walkable, bikeable and transit-friendly transportation systems. Funds can be utilized for planning, design & engineering, or construction. A minimum local match of 20% of the total project costs must be provided.

Eligible projects include:

- Feasibility plans/studies that integrate land use and transportation system improvements;
- Non-motorized transportation facilities that provide a transportation benefit;
- Investments that make transit service more viable and convenient and/or provide safer connections to access transit;
- Streetscape projects that incorporate traffic calming;
- Roadway improvements that provide a more interconnected, multimodal transportation;
- Redevelopment of existing streets into neighborhood streets (i.e., road diets, etc.);
- Improvements to non-motorized travel safety;
- Low-cost investments to improve safety and/or reduce congestion;
- Roundabouts or other intersection improvements that provide multi-modal benefits;
- Investments designed to improve safety at "high priority" locations;
- Transit system improvements or enhancements.

Additional information can be found at https://www.tcrpc-pa.org/hats-rtp-implementation-program

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Millerstown

Bicycle/Pedestrian Connectivity Master Plan

BOROUGH OF MILLERSTOWN, PERRY COUNTY, PENNSYLVANIA

APPENDIX

Appendix:

Table of Contents

Meeting Notes and Attendance Sheets

Key Person Interview (KPI) Notes

Millerstown Bicycle / Pedestrian
CONNECTIVITY MASTER PLAN

You are invited to Public Meeting #1

On Wednesday, January 31 from 7 PM to 9 PM
At Greenwood Elementary School (entry through main lobby)

This study will examine and recommend options to improve safe bicycle and pedestrian access in and around town. Please plan to attend to offer your insights and suggestions for the plan.

Options to be examined may include:

- Trail improvements to the community park and pool
- Town Square improvements for safety and to make it more people-oriented.
- Safer roadway crossings for school students.
- Improvements to highway ramps including better signage.
- Loop trail around the elementary and high school
- Better pedestrian and bicycle connections to local destinations

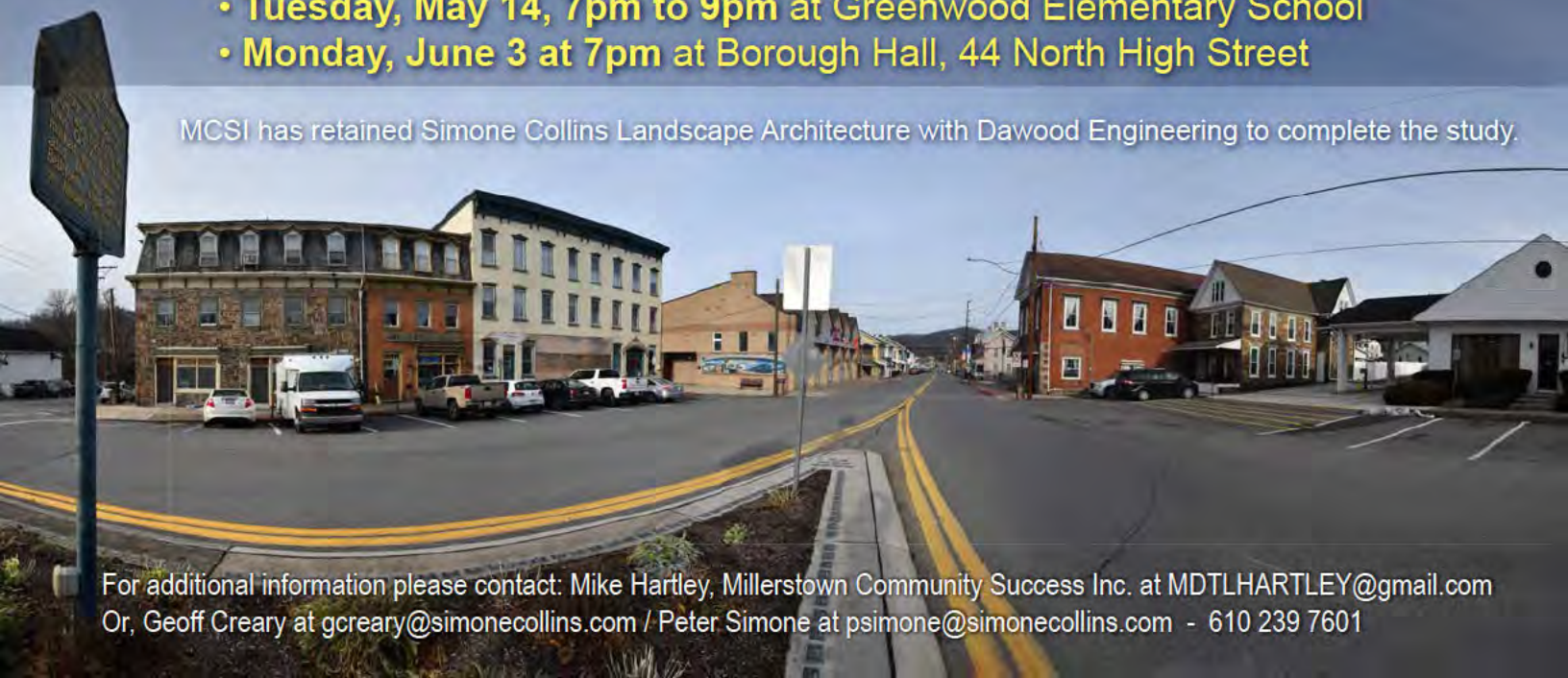
This study is being funded by a grant from the Harrisburg Area Transportation Study (HATS) through their Regional Transportation Project (RTP).

That grant is being matched by Millerstown Community Success Inc. (MCSI) who is also coordinating the study in cooperation with Millerstown Borough.

Please plan to attend future meetings dates for the plan.

- **Tuesday, February 20th, 7pm to 9pm** at Greenwood Elementary School
- **Monday, April 1 at 7pm** at Borough Hall, 44 North High Street
- **Tuesday, May 14, 7pm to 9pm** at Greenwood Elementary School
- **Monday, June 3 at 7pm** at Borough Hall, 44 North High Street

MCSI has retained Simone Collins Landscape Architecture with Dawood Engineering to complete the study.



For additional information please contact: Mike Hartley, Millerstown Community Success Inc. at MDTLHARTLEY@gmail.com
Or, Geoff Creary at gcreary@simonecollins.com / Peter Simone at psimone@simonecollins.com - 610 239 7601

Public Meeting 1

Millerstown Borough - Wednesday, January 31, 2024 – 7:00-9:00 pm

Meeting Agenda

1. Team Introduction
2. Project Scope
3. Project Schedule
4. Study Area
5. Data & Inventory
6. Trails 101 – users, design guidelines,
7. Intro to the Walk Bike Toolbox
8. Next Steps
9. Discussion

Next Meeting:

Public Meeting #2 – Monday, February 19th, 7:00-9:00 PM at Greenwood Elementary School

Borough Council Meeting – Monday, April 1st, 7 PM at Borough Hall, 44 North High Street

Public Meeting #3 – Tuesday, May 14th, 7:00-9:00 PM at Greenwood Elementary School

Borough Council Meeting – Monday, June 3rd at Borough Hall, 44 North High Street

Consultant Team Contacts:

Simone Collins Landscape Architecture
610.239.7601 - *119 E. Lafayette Street, Norristown, PA 19401*
Peter Simone, RLA, FASLA – psimone@simonecollins.com
Geoff Creary, LA – gcreary@simonecollins.com
Leonard Bustos, Staff LA – lbustos@simonecollins.com

Dawood Engineering, Inc.
855-432-9663 X1503 – *610 Freedom Business Center Dr, Suite 108, King of Prussia, PA 19406*
Lori Ware, PE, PTOE – lori.ware@dawood.net

Millerstown

Bicycle/Pedestrian Connectivity Master Plan

BOROUGH OF MILLERSTOWN, PERRY COUNTY, PENNSYLVANIA

Please Sign In

Public Meeting 1 - February 31, 2024

Name	Email
JASON FINNERTY	[redacted]
Tara Hartley	
Mike Hartley	
Mary Murph-Kuh	
Michelle Jones	
Jennifer & David Suarez	
Shelby & William Aldrich	
Lucas & Maggie Maben	
Lisa Warner	
Michele Comp	
Shannon Gay	
Jonas + Destinee Varner	

SIMONE COLLINS
LANDSCAPE ARCHITECTURE
119 EAST LAFAYETTE STREET NORRISTOWN, PA 19401
PHONE: 610.239.7601 FAX: 610.239.7606
WWW. SIMONECOLLINS.COM

MEETING NOTES

Project:	Millerstown Bicycle/Pedestrian Connectivity Master Plan	Project No.:	23068.10
Location:	Millerstown, Greenwood Elementary School Auditorium	Meeting Date/ Time:	January 31st 7:00 PM – 9:00 PM
Re:	Public Meeting #1	Issue Date:	February 12,2024

ATTENDEES:

Simone Collins – Peter Simone, Geoff Creary, Leonard Bustos

Dawood Engineering – Lori Ware

Community:

- Shelby Aldrich
- William Aldrich
- Michele Comp
- Jason Finerty
- Shannon Gay
- Tara Hartley
- Mike Hartley
- Michelle Jones
- Lucas Maben
- Maggie Maben
- Mary Murph-Kah
- David Suarez
- Jennifer Suarez
- Destinee Varnes
- Jonas Varnes
- Lisa Warner

NOTES:

Presentation:

Peter Simone (PS) introduced Geoff Creary (GC), and Leonard Bustos (LB). Peter continued the presentation that included:

1. Project Scope
2. Project Schedule
3. Study Area
    - Historic Aerials
4. Data & Inventory
    - Millerstown Economic Vitality Plan
5. Trail 101
    - User types

- Design Guidelines

6. Intro to the Walk Bike "Toolbox"
7. Next steps
    1. Next Public Meeting – February 20th, 2024, from 7 PM to 9 PM

Discussion Q/A:

1. School / Park / Pool Connectivity & Safety Issues
    a. Strong interest in safely accessing schools via sidewalks; also, a means of exercise.
    b. Importance of ADA consideration for all sidewalks.
    c. Participant noted poor condition of sidewalks to schools; also noted that students have the preferred routes for walking to school.
    d. Some students use the river path to get to community park and the community pool. Many do not use the river path due to isolation of path.
    e. Some students walk along Market Street to park and pool (where there are no sidewalks) and then cross over rt. 22 off-ramp and walk to the park and pool.
    f. School events cause major interference with traffic.
    g. Traffic Issues at School
        - There is only one traffic control person controlling all afternoon traffic at the school's exit intersection. (at 2:30-3pm)
        - A participant stated that only around a total of five families walk their children to school.
        - There are a substantial number of parent car pickups.
        - High school students are driving in at the same time elementary school students are being dropped off.
        - There needs to be a better traffic pattern on the school property.
        - Local families are driving their kids to school due to the perceived long walk commute to school.
        - Is a trail loop around the school possible (exercise / x country team)?
        - A participant noted the cross-country team running routes – through yards, over the bridge (Sunbury St.), along roads, the river path, and 'anywhere they can.'
        - A participant states that buses going uphill on Sunbury St have difficulty turning left.
        - Not a lot of room for sidewalks along Sunbury Street.
        - Questions on how students are picked up from the buses? Do they walk to a pickup point and wait along the streets or does the bus drive to each individual house?
        - Many parents drive their children instead of walking – no matter the distance, due to safety reasons.
        - Students who bike leave their bikes at the bike parking in spring and summer.
        - Participant suggested connection from district office to school trail loop.
        - Painted and decorative sidewalks and crosswalks were discussed as desirable.

2. Town Square

a) Town Square: Crossing roads within Town square is perceived as dangerous.
b) Town Square: Would it be better with stop signs; traffic circles?
c) Town Square change in elevation between NE and SW are 5 to 6 feet.
d) Concerns about the high volume of truck traffic that drives through Town Square; they take Main Street instead of a route with a stop and turn to SR 22; trucks not taking the turn are the ones that are speeding.
e) Discussion on what are valued amenities in Towns Square; e.g., triangle beds?
f) Participant noted dislike for triangles; confusing left-right turning movements; lack of good visual contact with drivers.
g) Participant noted interest in removing the 'sea of asphalt;' more plantings desired.
h) 'Beautification' aspect of Town Square recommended to be done at the corners and connected to triangle beds.
i) Accommodations for dining tables; shade structures; patios for live music.
j) *Non-Local Participation Included*: Bring traffic flow closer to center of Town Square intersection for visibility; need for signage to benefit traffic flow; no parking in front of Juniata Bank
k) Decorative lights in Square?

3. Destination – River Path: Comments & Safety Concerns
   a. Participant noted he would not have known of a river path existing if he were an outsider and would have taken the roads instead.
   b. Participant noted cars are permitted on the river path. Locals take their trucks down the river path for fishing.
   c. It is the park side of the River Path that gets blocked.
   d. Should vehicle access be regulated?
   e. Cars take kayaks through the path.
   f. Participant noted that Fire Dept needs access occasionally.
   g. Lights are desirable on the path.
   h. Recommendation for dusk-to-dawn light for pedestrian underpasses.
   i. Floods frequently
   j. SC noted that river path use is likely a PennDOT ownership issues.

4. Destinations: Comments & Safety Concerns
   a. A participant stated that the Antique Mall's parking lot is not large enough so many drivers park along the streets. Vendors here bring visitors into town.

   b. There is no safe route to get to Mastracchio's restaurant. The sidewalk to there ends before getting to the restaurant, which forces pedestrians to walk on people's property or on the road.

5. Other Ideas/ Comments/ Discussion
   a. A pedestrian bridge over Sunbury Street
   b. Traffic is slow on Sunbury; suggests sidewalks on Sunbury Street and crosswalks on James Street
   c. Connection from the underpasses to the north side of the Town square.

d. Notify the 911 Trail Committee the desire to keep the trail route through Millerstown.

e. When work was done on the bridge last year, traffic lights were put on each end of the bridge, which led people to cut through the riverfront trail to the park to beat traffic.

NEXT STEPS

- Next Public February 20th, 2024, from 7 PM to 9 PM
- At the next public meeting, initial concepts will be presented.
- Scheduling of Key person interviews will take place soon.

This report represents the Professional's summation of the proceedings and is not a transcript. Unless written notice of any correction or clarification is received by the Professional within ten days of issue, the report shall be considered factually correct and shall become part of the official project record.

Sincerely,
SIMONE COLLINS, INC.
LANDSCAPE ARCHITECTURE

Leonard Bustos
Staff Landscape Architect

Millerstown

Bicycle/Pedestrian Connectivity Master Plan

BOROUGH OF MILLERSTOWN, PERRY COUNTY, PENNSYLVANIA

Please Sign In

Public Meeting 1 - February 31, 2024

Name	Email
Jason Finnerty	[redacted]
Tara Hartley	
Mike Hartley	
Mary Murph-Kuh	
Michelle Jones	
Jennifer & David Suarez	
Shelby & William Aldrich	
Lucas & Maggie Maben	
Lisa Warner	
Michele Comp	
Shannon Gay	
Jonas + Destinee Varner	

Millerstown

Bicycle/Pedestrian Connectivity Master Plan

BOROUGH OF MILLERSTOWN, PERRY COUNTY, PENNSYLVANIA

Please Sign In

Public Meeting 2 - February 20, 2024

Name	Email
Mike Hartley	[redacted]
Tara Hursh	
Shelby Aldrich	
William Aldrich	
Brandon Bowersox	
Jenn Fasting Suarez	
Michelle Arnold	
Rachel + Kevin Hertzler	
THOMAS A. SWEGER	
Allan Rapp	
Mary Murphy Kahn	
Jordana + Matthew Clark	
JASON FINNERTY	

Millerstown

Bicycle/Pedestrian Connectivity Master Plan

BOROUGH OF MILLERSTOWN, PERRY COUNTY, PENNSYLVANIA

You are invited to Public Meeting #2

On Tuesday, February 20, from 7 PM to 9 PM

At Greenwood Elementary School (entry through main lobby)

This study will examine and recommend options to improve safe bicycle and pedestrian access in and around town. Please plan to attend to offer your insights and suggestions for the plan.

Options to be examined may include:

- Trail improvements to the community park and pool
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MILLERSTOWN COMMUNITY SUCCESS, INC.

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Please plan to attend future meetings dates for the plan.

- **Monday, April 1 at 7pm** at Borough Hall, 44 North High Street
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- **Monday, June 3 at 7pm** at Borough Hall, 44 North High Street

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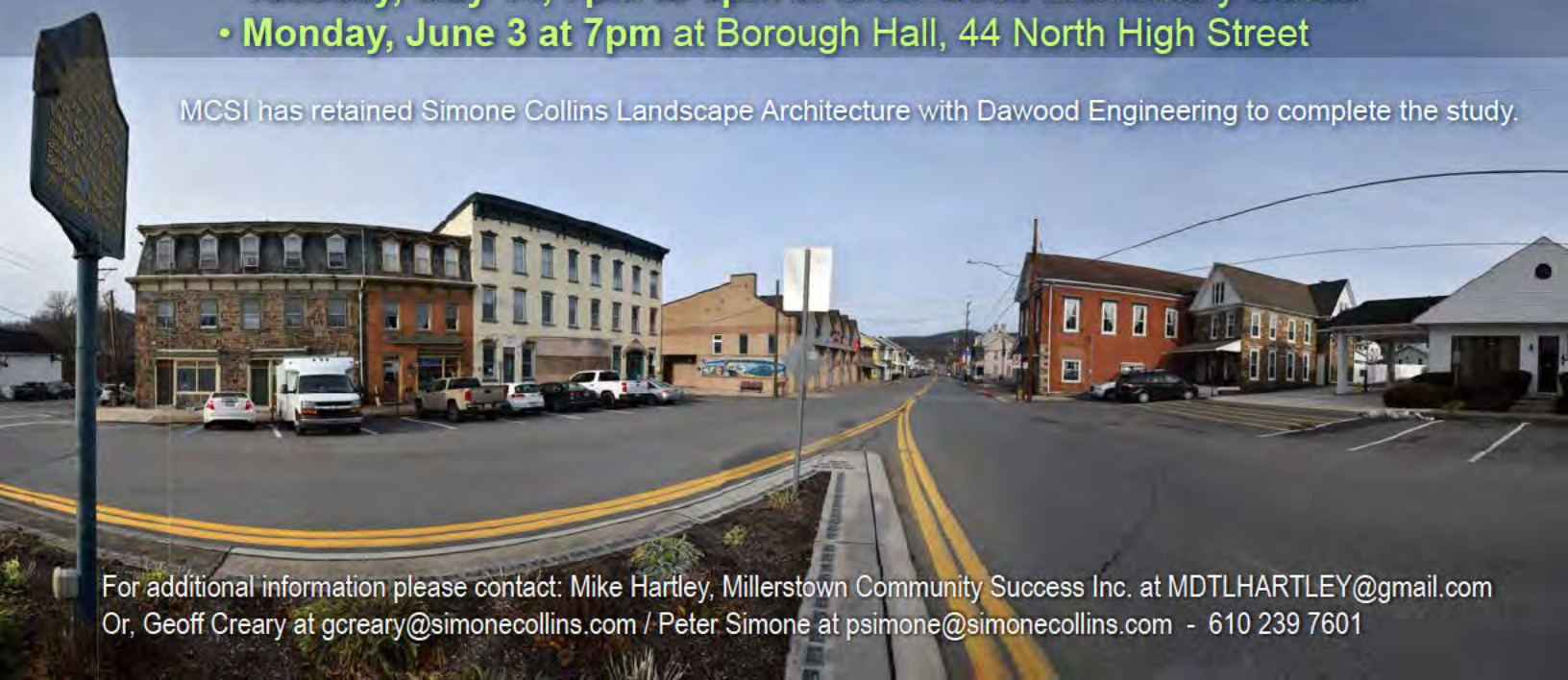

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Or, Geoff Creary at gcreary@simonecollins.com / Peter Simone at psimone@simonecollins.com - 610 239 7601

Public Meeting 2

Millerstown Borough - Tuesday, February 20, 2024 – 7:00-9:00 pm

Meeting Agenda

1. Team Introduction
2. Project Scope
3. Meeting Schedule
4. Public Meeting 1 Recap
5. Inventory
6. Existing Conditions Analysis & Design
7. Next Steps
8. Discussion

Upcoming Meetings:

Borough Council Meeting – Monday, April 1st, 7 PM at Borough Hall, 44 North High Street

Public Meeting #3 – Tuesday, May 14th, 7:00-9:00 PM at Greenwood Elementary School

Borough Council Meeting – Monday, June 3rd at Borough Hall, 44 North High Street

Consultant Team Contacts:

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WWW. SIMONECOLLINS.COM

MEETING NOTES

Project:	Millerstown Bicycle/Pedestrian Connectivity Master Plan	Project No.:	23068.10
Location:	Millerstown, Greenwood Elementary School Auditorium	Meeting Date/ Time:	February 20th 7:00 PM – 9:00 PM
Re:	Public Meeting #2	Issue Date:	February XX,2024

ATTENDEES:

Simone Collins – Peter Simone, Geoff Creary, Leonard Bustos

Community:

- Shelby Aldrich
- William Aldrich
- Brandon Bowersox
- Jordana Clark
- Matthew Clark
- Michele Comp
- Jason Finnerty
- Mike Hartley
- Tara Hartley
- Kevin Hertzler
- Rachel Hertzler
- Michelle Jones
- Mary Murphy-Kahn
- Jenn Fasting Suarez
- Thomas A. Sweger
- Allan Rapp

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1. Team Introduction
2. Project Scope
3. Meeting Schedule
4. Public Meeting 1 Recap
5. Inventory
6. Existing Conditions Analysis & Design
    1. Town Square Concepts
    2. Improvements (Toolbox)

7. Next steps
    1. Next Public Meeting – May 14th, 2024, from 7 PM to 9 PM

Discussion Q/A:

1. Town Square

a. Participant questioned the relation between the existing amount of parking spots with the amount within the town square concepts
    i. Team was unsure of the exact amount -- guessed around 40 existing spots
b. There's a strong concern about the past fatalities along Market St.
c. Participants ~~are eager to have the~~~~wanted~~want to see a speed limit reduction along Market St from 35mph to 25mph
    i. It was mentioned that PennDOT might have reviewed a possible reduction in the 90s
d. Raised crossed walks for intersection was a suggested idea
    i. Can benefit slowing down traffic
e. Attendees were shown the town square concepts
    i. Backed in parking
    ii. Removing Triangle
        1. Some people saw the benefit
f. Yield signs were suggested for intersection, but explained that PennDOT would most likely not approve it for the intersection.

2. Greenwood Elementary/High School

a. Attendees gravitated with the sidewalk connections to and around the school campus
b. It was mentioned that several of the residents allow the children to walk along their driveways~~,~~ and lawns~~,~~ while walking to school.
c. The school traffic ~~guardsaod~~ guard said that he supplies himself with traffic batons and portable stop signs for directing traffic.
d. *Sunbury Street*
    i. School district signs were suggested to be pushed back further to alert traffic earlier before reaching to school
    ii. Some signs are not visible due to obscuring trees and vegetation
    iii. Suggestions for brighter and flashing lights for signs could benefit alerting traffic and visibility
        1. Rapid Flashing ~~Beaconsare~~ beacons are being proposed for the crossing by the consultant.
    iv. Street lighting along Sunbury was suggested to improve nighttime ~~visibility~~visibility.

3. River Trail

a. It was brought to everyone's attention that the river trail might have been made by a former the former Police chief, not PennDOT
b. Participant expressed their concern about loitering at the underpasses to the ~~rivertrail~~River Trail

4. *Additional Comments & Ideas*

a. Participant claims that Grave Street once had a crosswalk across Market St. There might have been steps that were then later removed at that location
b. The consultants told the attendees that the paper streets were evaluated but did not add much value with connecting to existing sidewalks/trail

NEXT STEPS

- Next meeting will be the Borough Council Meeting on April 1st, 2024, at 7 PM
  - Everyone from the previous public meeting is encouraged to attend
- Next Public Meeting will be on May 14th, 2024, from 7 PM to 9 PM
- At the next public meeting, ~~final~~ plan refinements will be presented.
- Scheduling of Key person interviews will take place soon.

This report represents the Professional's summation of the proceedings and is not a transcript. Unless written notice of any correction or clarification is received by the Professional within ten days of issue, the report shall be considered factually correct and shall become part of the official project record.

Sincerely,
SIMONE COLLINS, INC.
LANDSCAPE ARCHITECTURE

Leonard Bustos
Staff Landscape Architect

Millerstown

Sign In

Bicycle/Pedestrian Connectivity Master Plan

PennDOT Disttrict 8-0 Meeting - April 9th, 2024

BOROUGH OF MILLERSTOWN, PERRY COUNTY, PENNSYLVANIA

Name	Email
Michelle Jones	[redacted]
ANDREW BOMBERGER	
Kenana Zejcirovic	
PETE SIMONE	
GREGG GREGORY	
Robert Shi	
Mike Hartley	
CAREY MULLINS	
Ben Singer	
Chris Flad DISTR. TRAFFIC ENGINEER	
Lori Ware	

PennDOT District 8-0 Meeting

Executive Room, PennDOT District 8-0 Office, 2140 Herr St Harrisburg, PA 17103
Tuesday, April 9, 2024 –1:00 PM – 2:30 PM

Meeting Agenda

I. PowerPoint Presentation reviewing

1. Planning Team
2. Project Scope / Project Area
3. Existing Conditions
4. Design concepts in the State right-of-way including:
   - A. The Square – concepts / preferred concept
     - Four-way stop
     - Reduce speed limit – 35 to 25mph
     - Reconfiguration of the town square
   - B. North-bound ramp redesign
     - New ramp entry for trucks
     - Signage directing trucks away from town
   - C. Market Street (south) downriver
     - New sidewalks
     - New sidepath
     - New landscape plantings at interchange
   - D. Market Street (north) upriver
     - New sidewalks
   - E. School related crossings and sidewalks
     - Improved cross walks / rapid flashing beacons at Sunbury Rd. crossings
   - F. Underpass improvements
     - Lighting / access control / landscape
   - G. Riverfront maintenance road
     - Needed repairs / vegetation clearing
     - Limit private/emergency vehicle access
     - Juniata water trail landing
     - Limited lighting
   - H. Locust Alley / bike boulevard / connections to the west
     - Sidepath in ROW to park and pool
     - Multiuse trail from Locust Alley to Juniata Parkway

II. Discussion

(over)

Upcoming Meetings / Next Steps:

- **Public Meeting #3 –** Tuesday, May 14th, 7:00-9:00 PM at Greenwood Elementary School - Draft Plan Presentation
- Forward District 8-0 Draft Master Plan for review and comment
    - Comments requested in thirty (30) days
- Presentation to HATS Technical Committee – Friday, June 14
- Presentation to Borough Council, Monday, June 3

Consultant Team Contacts:

Simone Collins Landscape Architecture
610.239.7601 - *119 E. Lafayette Street, Norristown, PA 19401*
Peter Simone, RLA, FASLA – psimone@simonecollins.com
Geoff Creary, LA – gcreary@simonecollins.com
Leonard Bustos, Staff LA – lbustos@simonecollins.com

Dawood Engineering, Inc.
855-432-9663 X1503 – *610 Freedom Business Center Dr, Suite 108, King of Prussia, PA 19406*
Lori Ware, PE, PTOE – lori.ware@dawood.net

Millerstown Community Success, Inc.
Michael Hartley, P.E., michael.hartley@kci.com
MCSi Board Member
717- 422 7200 (mobile)

SIMONE COLLINS
LANDSCAPE ARCHITECTURE
119 EAST LAFAYETTE STREET NORRISTOWN, PA 19401
PHONE: 610.239.7601 FAX: 610.239.7606
WWW. SIMONECOLLINS.COM

MEETING NOTES

Project:	Millerstown Bicycle/Pedestrian Connectivity Master Plan	Project No.:	23068.10
Location:	PennDOT District 8-0 Office	Meeting Date/ Time:	April 9th, 2024 1:00 PM – 2:30 PM
Re:	PennDOT Meeting – review of initial concepts	Issue Date:	May, 13, 2024

ATTENDEES:

Borough of Millerstown: Council President Robert Shipp rshipp@yahoo.com

Millerstown Community Success Inc. – Michael Hartley, P.E. Michael.hartley@kci.com

Tri County Regional Planning Commission – Andrew Bomberger, AICP Abomgerger@tcrpd-a.org

Perry County Economic Development Agency – Michelle Jones, Exec. Dir. mjones@perrycounteda.com

Simone Collins Landscape Architecture – Peter Simone, psimone@simonecollins.com

Geoff Creary, gcreary@simonecollins.com Leonard Bustos lbustos@simonecollins.com

Dawood Engineering – Lori Ware, P.E. lori.ware@dawood.net

PennDOT District 8-0

Kenana Zejcirovic, District Planner kzejcirovi@pa.gov

Carey Mullins, Transportation Planning Manager. cmullins@pa.gov

Ben Singer, PE. bdinger@pa.gov

Chris Flad, P.E., District Traffic Engineer cflad@pa.gov

NOTES:

Presentation: Simone Collins reviewed the PowerPoint presentation that focused on concepts that might occur within the PennDOT right-of-way. That presentation is attached for everyone's information. The presentation was followed by discussion.

Town Square

1. PennDOT noted that SB Sunbury St. stop bar might be shifted farther into square than is shown on concept.
2. Mike H. is interested in talking with bank. Do they still need very wide exit lanes into Square? Any concerns with coming out of the bank onto Market St.
3. Rob Shipp. expressed some concern about not maintaining existing islands in Town Square.
4. Concerns expressed about losing any parking.
5. Stop sign / stop movement might not be warranted for E/W Market Street traffic. Will require traffic study.
6. Traffic studies / warrant study will need to be completed for Town Square revisions.
7. PennDOT noted that once a vehicle stops on Sunbury at stop bar, the vehicle can creep up over stop bar and even over cross walk and still do this "legally" to get an adequate sight line.
8. Reducing current speed limit from 35 MPH to 25 MPH must be based on study of existing speeds through Town Square. Even if speed limit is not changed, pedestrian crossing bulb outs and other spatial changes to Town Square that reduces width and volume of cartways will have the effect to slow speeds.
9. Back in angled parking – not a major concern. Must be adequate room to stop and back in.

North-Bound Rt. 202 Access Ramp

1. No major comments on proposed ramp revisions to make it easier for large trucks traveling NB to make left turn onto NB Rt. 22 ramp (vs. going through Town Square to access "straight on" ramp to Rt. 22). Rob Shipp noted the desire for PennDOT to complete some basic landscape improvements here also to enhance the appearance of this area.

Sunbury Street Pedestrian Crossings

1. These may be judged to be mid-block crossings. Traffic analysis will be required to determine if rapid flashing beacons can be permitted here. Warning signage will also be needed. These improvements on this PennDOT road will need PennDOT approval.

Riverfront Pathway

1. Simone Collins noted that there exists a riverfront pathway from Sunbury Street down river to the community park and community pool. This was constructed by the community about 30 years ago. Long time residents have stated that there was an agreement between PennDOT and the Borough to allow the construction of this pathway. However, to date, the Borough has not been able to find this agreement. It has been used since that time as an alternative, non-motorized route to safely access the community recreational facilities down river. As far as anyone knows, the community / Borough only has maintained the pathway. About a year ago, the area of the pathway near Sunbury Street was used as a construction staging area for the adjacent bridge construction project. It was stated by SC that this is an important pathway for the community.

2. It was noted that it is a community desire to enhance the appearance and functionality of the two underpasses. The areas around underpasses have been informally maintained by the community for years. Michelle Jones noted that the PCEDA has suggested a community art / mural project be completed at the underpasses. The current connectivity plan proposes mural, underpass lighting, motor vehicle control (removable bollards) and approach paving to ensure handicapped accessibility. PennDOT noted that department approval for these improvements would be needed since this is located in the limited access right of way.
3. PennDOT noted that proposed extension of proposed bike boulevard on Spruce Alley to Juniata Parkway will go through a limited access highway. This will require a process / PennDOT approval.
4. PennDOT cautioned the team about the hurdles of formally allowing a trail in a limited access ROW. PennDOT suggested making any changes to the river pathway a low priority of the plan. This suggestion gained general agreement from meeting participants.

This report represents the Professional's summation of the proceedings and is not a transcript. Unless written notice of any correction or clarification is received by the Professional within ten days of issue, the report shall be considered factually correct and shall become part of the official project record.

Sincerely,
SIMONE COLLINS, INC.
LANDSCAPE ARCHITECTURE

Leonard Bustos
Staff Landscape Architect

E. Requests for Non-Motorized Trails in Limited Access Right-of-Way.

1. Introduction and General Information. This section contains the procedures for newly proposed, or modifications to, existing trails and shared used paths (SUP) in Limited Access Right-of-Way (ROW). These trails can be part of a PennDOT project, or they can be a project sponsored by a local government. Most of this section pertains to trail projects sponsored by a local government. If the trail is part of a PennDOT project, then not all the requirements in this section may apply. For example, for modifications to an existing trail in Limited Access ROW as part of a PennDOT project, the conceptual Request and Approval letters may not apply. When trails in Limited Access ROW are part of PennDOT projects, coordinate with the appropriate Project Development Engineer (PDE) in the Highway Design and Technology Section (HDTS) to determine which requirements apply.

Limited Access ROW restricts the number and types of users in that ROW. Typically, only vehicular traffic is permitted in limited access ROW, although occasionally utilities and some trails have been permitted when there was no other practical alternative alignment, as with a river crossing. An example of this would be the Appalachian Trail across the Susquehanna River in Dauphin County.

For projects where an existing trail may need to be relocated to limited access ROW or where a future trail alignment may need to utilize limited access ROW, PennDOT will consider placement of the trail on limited access ROW following a review conducted per the procedures below.

The primary purpose of the trail must be for non-motorized transportation purposes. The trail would be considered an interim use of ROW until said ROW is required for other transportation related purposes. The trail will not be considered a resource – recreational or otherwise – under the National Environmental Policy Act, 42 U.S.C. §§ 4321, et. al, Section 4(f) of the U.S. Department of Transportation Act, 49 U.S.C. § 303 and 23 C.F.R. § 774.11(h), or the Pennsylvania Administrative Code, 71 P.S. § 512.

Local governments (municipalities or counties) interested in creating a trail within PennDOT's limited access ROW shall contact the District Bicycle & Pedestrian (BP) Coordinator (DBPC) so that PennDOT can advise at the conceptual stage of the project. The DBPC should coordinate with the Statewide BP Coordinator. FHWA must be consulted early in the process for trails proposed in Interstate limited access ROW. PennDOT will not consider trail requests from private entities. As the trail plan develops, it will become necessary for the local government to request approval from the District. The local government entity shall formally request approval for the trail and this request may be made via U.S. Mail or electronically (see Figure 4.2). The local government must agree to sign the appropriate Shared Use Trail Maintenance, Trail Structure or Limited Access Right-of-Way Shared Use Trail Maintenance Agreement. The local government must agree to be solely responsible for the design, construction, and maintenance of the portion of the trail within PennDOT ROW. The local government can have subsequent agreements delegating responsibility to a trail organization. However, PennDOT will not be a party to those agreements.

2. Minimum Requirements for Trails in Limited Access ROW. The request for approval must include a detailed description, including a conceptual sketch plan showing the proposed trail location within the limited access ROW. If the information provided with the request letter is not adequate for PennDOT to make an informed decision, PennDOT will notify the applicant that approval is denied pending submission of additional information. Below are the minimum requirements that must be met before a trail and/or trail structures inside limited access ROW will be considered.

For proposed trails/SUP passing underneath a state-owned bridge or structure:

- The Municipality(ies)/County(ies) must agree to sign a Shared Use Trail Maintenance Agreement.
- Designated kayak or canoe routes under a bridge do not need an agreement.
- No attachments are to be made to a bridge, bridge walls or any PennDOT owned resource.

- The applicant is solely responsible for any mitigation work needed related to drainage issues or impacts to waters of the Commonwealth or any other mitigation required for Act 120/NEPA.

- The trail must meet relevant AASHTO and ADA guidance as appropriate.

For proposed trails/SUP crossing over an existing limited access highway using a new pedestrian overpass:

- The Municipality(ies)/County(ies) must agree to sign a Trail Structure Agreement.

- The Municipality(ies)/County(ies), a.k.a. Trail Owner, may be required to install fencing or other protection as determined by PennDOT.

- New Pedestrian Structure must comply with Publication 15M, Design Manual Part 4, *Structures*. See Publication 13M, Design Manual Part 2, *Highway Design* for minimum vertical clearances.

- PennDOT can eliminate the trail crossing upon proper notice to the other parties.

- The applicant is solely responsible for any mitigation work needed related to drainage issues, impacts to waters of the Commonwealth or any other mitigation required for Act 120/NEPA.

- The trail must meet relevant AASHTO and ADA guidance as appropriate.

For proposed trails/SUP crossing over an existing limited access highway using an existing overpass:

- The Municipality(ies)/County(ies) must agree to sign a Shared Use Trail Maintenance Agreement.

- The Trail Owner may be required to retrofit the bridge barriers and/or install fencing if pedestrian facilities are not on either side of the bridge.

- If the need should arise, PennDOT can remove the trail upon written notification to the other parties.

- The applicant is solely responsible for any mitigation work needed related to drainage issues, impacts to waters of the Commonwealth or any other mitigation required for Act 120/NEPA.

- The trail must meet relevant AASHTO and ADA guidance as appropriate.

For proposed trails/SUP parallel to, and within, limited access ROW:

- The Municipality(ies)/County(ies) must agree to sign the appropriate Limited Access Right-of-Way Shared Use Trail Maintenance Agreement (contact Office of Chief Counsel for the current version).

- There must be adequate protection, as determined by PennDOT, between trail users and the vehicle traffic (guide rail, barrier, embankment, etc.).

- The Municipality(ies)/County(ies) must agree to provide and maintain a fence, retrofit barriers or install other appropriate barrier(s) to provide for the safety of the trail users and prevent access to the highway if necessary.

- If the need should arise, PennDOT can remove the trail upon written notification to the other parties.

- The proposed trail should be outside the clear zone and should generally not be at the same elevation as the highway, unless on a shared bridge.

- The Local MPO/RPO must provide a letter of support.

- The applicant is solely responsible for any mitigation work related to drainage issues, impacts to waters of the Commonwealth or any other mitigation required for Act 120/NEPA.

- The proposed trail must be part of a larger trail network, approved in a Local/Municipal/Regional "Master Plan".
- Motor vehicles (except emergency and maintenance) will not be permitted on the trail.
- All practical alternatives must be evaluated before considering a trail in limited access ROW.
- The trail must meet relevant AASHTO and ADA guidance as appropriate.

All the criteria above must be satisfied before the trail will be considered by PennDOT. If the above criteria have been met, the applicable Municipality(ies)/County(ies) must submit a "Request for Trail in Limited Access ROW Letter" to PennDOT's District Office (see Figure 4.2). Note that submission of the requirements noted above, along with the request letter does not guarantee approval.

3. Conceptual Request Letter Contents. The Request for Trail in Limited Access ROW Letter must outline the major characteristics of the trail, including, but not limited to the following:

- Explain why locating the trail in limited access ROW is the best alternative.
- List and briefly explain the other alternatives considered.
- Provide a map detailing the trail location and other pertinent features.
- Provide a conceptual plan view, drawn to scale, showing the trail and all its features (including any required excavation or embankments) within the limited access ROW. The conceptual sketch must clearly show what effects the trail has on drainage within the ROW and any required mitigation work needed.
- List the approved Local/Municipal/Regional "Master Plans" that identify this proposed trail.
- Describe the elevation of the trail versus the roadway and the existing/proposed protection for trail users from vehicle traffic.
- Discuss proposed trail crossings of any water in limited access ROW.
- Review and address any potential environmental or drainage issues.
- Indicate if the Municipality(ies)/County(ies) is willing to sign a trail maintenance agreement.
- Include letters of support and additional information as needed.

4. Review and Approval of Trail Concept. For both interstate and non-interstates, trails/SUP's parallel to and within limited access ROW and new pedestrian structures crossing over limited access ROW, the District BP Coordinator must work with the Statewide BP Coordinator. The Statewide BP Coordinator will consult with the appropriate PDE to review the request. For trails/SUP's proposed in interstate ROW, HDTS must coordinate with FHWA early in the development of the conceptual plan to ensure all concerns are identified as the plan is developed.

The trail plans must be coordinated, reviewed and approved/denied as follows.

a. Trails crossing limited access using an existing overpass or underpass are approved by the ADE-Design, regardless if they are crossing interstate or non-interstate highways. If the District has any concerns regarding accessibility, mobility, and/or safety on the interstate, they must consult with HDTS and FHWA.

b. Requests for trails/SUP's parallel to and within non-interstate limited access ROW and new pedestrian structures over non-interstate limited access ROW are reviewed and approved, or denied, by the Director of the Bureau of Project Delivery, with concurrence of the ADE-Design.

c. Requests for trails parallel to and within interstate limited access ROW, as well as new pedestrian structures crossing over interstate limited access ROW, are reviewed and concurred by the Director of the Bureau of Project Delivery, with concurrence of the ADE-Design. If PennDOT does not concur with the request, it will be denied. If PennDOT concurs with the request, it will then be reviewed and approved, or denied, by FHWA.

The PennDOT District Office will notify all applicants if the conceptual trail request is approved or denied via an approval letter (see Figure 4.3). If the trail concept is approved, environmental requirements must follow standard procedures.

5. Final Design Drawings and Agreements. Final design drawings must be coordinated, reviewed and approved as described above in Section 4.12.E.4. All trail maintenance agreements must include approved final design drawings.

For trails designed and constructed by the local government, all final design drawings must be attached to the agreement. If the trail is being designed and constructed by PennDOT, only the trail related drawings must be attached to the agreement. When a PennDOT project impacts an existing trail in limited access ROW, the existing trail agreement must be amended to include the new conditions. If there is no current agreement, a trail agreement must be developed and executed prior to construction.

Construction cannot begin until the required agreement(s) is executed. If the trail is incorporated into a PennDOT project, then the agreement(s) must be executed before the project is advertised for construction. Note that HOP's are not applicable for trails in limited access ROW. The trail agreements are for both maintenance and occupancy.

Refer to Section 4.12.E.2 and coordinate with the Office of Chief Counsel to determine the appropriate agreement(s).

INTENTIONALLY BLANK

[DATE]

District Bicycle/Pedestrian Coordinator
PennDOT Engineering District [#]-0
[Street Address]
[City, State Zip Code]

Subject: Conceptual Request for a Trail in Limited Access Right-of-Way

Dear [Bicycle/Pedestrian Coordinator name]:

[Municipality/County name] is requesting a Trail/Shared Use Path (SUP) in Limited Access Right-of-Way (ROW) of SR [Number]. The proposed Trail/SUP facility is described below:

[Provide a description of the Trail/SUP; see Section 4.12.E.3 for minimum requirements.]

The [Municipality/County] will work with PennDOT to submit design drawings and revise as necessary to satisfy PennDOT concerns. If approved, the Final Design Drawings will be an attachment to the appropriate trail maintenance agreement. If unforeseen conditions are discovered during design, the trail may not be allowed to proceed.

Please contact [Municipal/County contact name] at [Email & Phone] to discuss the proposed Trail/SUP. [Municipality/County] understands that if the Trail/SUP is approved and constructed, the Trail/SUP would be considered an interim use of ROW until said ROW is required for other transportation related purposes.

Sincerely,

[Name]
[Title]

FIGURE 4.2
REQUEST FOR TRAIL IN LIMITED ACCESS RIGHT-OF-WAY LETTER

[DATE]

[Municipality/County Contact Person]
[Municipality Name]
[Street Address]
[City, State Zip Code]

Subject: Approval for Conceptual Trail Plan in Limited Access Right-of-Way

Dear [Municipality/County Contact Person]:

The Pennsylvania Department of Transportation (PennDOT) concurs with [Municipality/County name] plan to install a Trail/SUP in Limited Access Right-of-Way (ROW) of SR [Number]. The proposed Trail/SUP is described below:

[Provide a description of the proposed trail. Include location map and relevant conceptual drawings of the route.]

[Municipality/County] will be responsible for all design, permitting, mitigation, construction, and maintenance activities. An approved trail agreement between the Municipality and PennDOT, including final design drawings, if approved, must be executed prior to the start of construction.

This letter authorizes [Municipality/County] to begin the design efforts necessary for implementation of the Trail/SUP. The final design drawing must be submitted by [Municipality/County] and reviewed by PennDOT, and/or FHWA. If approved, the final design drawings will be part of a trail agreement. If unforeseen conditions are discovered during design, the trail may not be allowed to proceed. Construction is not permitted until the agreement is fully executed. PennDOT reserves the right to relocate or remove the trail with proper notice, per the trail agreement, to the affected parties.

Please contact [PennDOT Bicycle/Pedestrian Coordinator name] at [Email and Phone] if you have any questions about this letter.

Sincerely,

[Name]
Assistant District Executive Design

cc: District Bicycle/Pedestrian Coordinator, Traffic Engineer, Planning and Programming

FIGURE 4.3
APPROVAL FOR TRAIL IN LIMITED ACCESS RIGHT-OF-WAY

F. Park-and-Ride Facilities. Park-and-ride lots are fringe-area-parking facilities that can provide a relatively inexpensive contribution to air quality and mobility improvements. The following guidelines address issues affecting the design of park-and-ride facilities. The following factors should be considered during park-and ride lot site selection:

- Proximity to existing informal park-and-ride activity sites, such as parking on shoulders or on leveled areas.
- Access to primary arterials or freeways serving the corridor. Certain interchanges may provide space for park-and-ride lots.
- Security and potential to minimize vandalism and theft.
- Location relative to residential areas and major activity centers that generate a significant number of trips and can provide auxiliary services such as dining, ticket service, etc.
- Ability to alleviate congestion because of location relative to major activity centers and traffic bottlenecks.
- Ability to serve as an intermodal transfer point because of location relative to existing transit service and major activity centers.
- Accessibility and circulation potential of the site for entering and exiting transit vehicles.
- Future expansion potential of the site.

The following criteria should be used to evaluate the suitability of various potential sites.

- Facility development policy
- Development and operating costs
- Transit service availability
- Accessibility to high occupancy vehicle facilities
- Staged construction potential
- Environmentally sensitivity of the site
- Site Availability
- Site Visibility
- Projected Demand
- Site Accessibility
- Available User Benefits

Park-and-ride facilities should be designed for safety and efficiency. The design should be developed in cooperation with local agencies including transit-operating authorities (if applicable). All design features should comply with PennDOT's design standards and specifications. Operating policies and local requirements and zoning regulations should be investigated and incorporated as appropriate. All applicable Federal regulations, including Americans with Disabilities Act (ADA) requirements, must be incorporated as required. Many issues affecting the design of a park-and-ride facility also apply directly to the design of safety rest areas and welcome centers.

For more information on park-and-ride facilities, including design, maintenance and operations procedures, refer to the current version of AASHTO's *Guide for the Design of Park-and-Ride Facilities*; Publication 13M, Design Manual Part 2, *Highway Design*; and Publication 10, Design Manual Part 1, *Transportation Program Development and Project Delivery Process*.

G. Memorandum of Understanding Between PennDOT and DCNR on Footpaths Crossing State Routes. The Highway Occupancy Agreement (HOA) process was developed to establish the responsibilities of PennDOT and recreational trail facility sponsors when a recreational trail crosses a state highway. This process applies to trails that are sponsored by a private entity or by a political subdivision. The process does not differentiate between types

of trails. When dealing with other state agencies, a Memorandum of Understanding rather than the HOA process is applicable.

The Department of Conservation and Natural Resources (DCNR) has numerous pedestrian-only hiking paths, commonly referred to as footpaths, on lands that they own or control. Many of these "footpaths" cross state highways. To address these unique crossings, PennDOT entered into a Memorandum of Understanding (MOU) with DCNR regarding footpath crossings on April 14, 2005. The original MOU covered any crossing where a footpath on DCNR owned or controlled land crossed a state highway. An Amendment to the MOU was signed on September 26, 2005, to include crossings of State Forest Hiking Trails and state highways. There are 18 hiking trails in the State Forest Hiking Trail System, with a total length of nearly 1,000 miles. Almost 800 miles traverse State Forest land with the remainder crossing State Game lands and some private property.

The MOU was created cooperatively with DCNR and addresses concerns regarding the scope and application of the HOA process to at-grade pedestrian-only trails. The HOA process does not apply to recreational trail crossings falling under the MOU. The procedures outlined in the MOU will apply to these crossings. For the convenience of the reader, Publication 10X, Design Manual Part 1X, *Appendices to Design Manuals 1, 1A, 1B, and 1C*, Appendix AF, Memorandum of Understanding (Footpaths on DCNR Lands Crossing State Highways), presents a "merged" copy of the MOU as amended, which merges the original MOU and the amendments into a single document. Copies of the original MOU and Amendment are available upon request from the Bureau of Design and Delivery, Environmental Policy and Development Division.

Also attached in Appendix AF for use by the District Highway/Trail Coordinators are excerpts, explanations and procedures applicable to the implementation of the MOU with DCNR on footpath crossings.

This agreement commits PennDOT to perform 10 traffic studies, if needed, per year.

H. Department Force Box Culverts. The Department provides direction in Publication 23, *Maintenance Manual*, Section 16.9 regarding the use of ECMS to bid the precast reinforced concrete box culverts and appropriate precast concrete products when Department Forces are used for installation (Department Force Box Culvert project). Department Force Box Culverts are those projects where Department Force prepares the site, the box culvert is delivered and placed through a construction contract, and Department Force finalizes the work. For additional guidance, refer to the following publications:

- Publication 10X, Design Manual Part 1X, *Appendices to Design Manuals 1, 1A, 1B, and 1C*, Appendix AE.
- Publication 51, *Plans, Specifications and Estimate Package Delivery Process Policies and Preparation Manual*
- Publication 615, *Scheduling Manual*

4.13 GENERAL DESIGN COORDINATION

A. Constructability Review. The purpose of a constructability review is to refine a project's design and help the District plan project construction. An important product of a constructability review is a realistic Pre-Bid Schedule. Increased constructability and accurate Pre-Bid Schedules reduce the need for change orders and the possibility of cost overruns. Constructability reviews also help avoid disputes and delays. Constructability reviews should be conducted at various points throughout design development by constructability teams assembled by the District Executive and Project Manager. Members of constructability teams should have a wide range of experience, including construction, design, contract management, traffic control, permitting and scheduling.

The extent to which the District Executive and Project Manager use the constructability review team depends on the complexity of the individual projects. The team could be required to be involved only at several points for Minor projects or continually throughout the development of Major projects. The District Executive and Project Manager must determine the level of review effort required for individual projects.

Millerstown

Bicycle/Pedestrian Connectivity Master Plan

BOROUGH OF MILLERSTOWN, PERRY COUNTY, PENNSYLVANIA

You are invited to Public Meeting #3

On Tuesday, May 14, from 7 PM to 9 PM

At Greenwood Elementary School (entry through main lobby)

This study will examine and recommend options to improve safe bicycle and pedestrian access in and around town. Please plan to attend to offer your insights and suggestions for the plan.

Options to be examined may include:

- Trail improvements to the community park and pool
- Town Square improvements for safety and to make it more people-oriented.
- Safer roadway crossings for school students.
- Improvements to highway ramps including better signage.
- Loop trail around the elementary and high school
- Better pedestrian and bicycle connections to local destinations

This study is being funded by a grant from the Harrisburg Area Transportation Study (HATS) through their Regional Transportation Project (RTP).

That grant is being matched by Millerstown Community Success Inc. (MCSI) who is also coordinating the study in cooperation with Millerstown Borough.

Please plan to attend future meetings dates for the plan.

- **Monday, June 3 at 7pm** at Borough Hall, 44 North High Street

MCSI has retained Simone Collins Landscape Architecture with Dawood Engineering to complete the study.

For additional information please contact: Mike Hartley, Millerstown Community Success Inc. at MDTLHARTLEY@gmail.com
Or, Geoff Creary at gcreary@simonecollins.com / Peter Simone at psimone@simonecollins.com - 610 239 7601

Public Meeting 3

Millerstown Borough - Tuesday, May 14, 2024 – 7:00-9:00 pm

Meeting Agenda

1. Introductions
2. Project Scope
3. Meeting Schedule
4. Public Meetings Recap
5. Inventory
6. Draft Plan
7. Draft Report
8. Next Steps
9. Discussion

Upcoming Meetings:

Borough Council Meeting – Monday, June 3rd at Borough Hall, 44 North High Street

Consultant Team Contacts:

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MILLERSTOWN