

A. Priorities

The purpose of the UMT Vision Zero Action Plan and its accompanying Multimodal Safety Improvements Plan has been stated clearly: safe and equitable transportation options for the residents and workers that call Upper Macungie Township home. The implementation of the recommendations made in Chapter 7 will be evaluated regularly on an annual basis to determine which locations within the Township will become the priorities for implementation activities, easements, access agreements, design/engineering, and construction.

As shown and discussed in Chapter 7.B, the highest number of crashes in Upper Macungie involve five main corridors: Tilghman, Schantz, Grim/ Cetronia, Hamilton Boulevard, and SR 100.

These corridors and the safe transport of pedestrians in and through these corridors to important destinations (retail, parks, schools) in the Township are the priority areas of the Township. Attention to multimodal safety improvements in these corridors is an important way of reducing the amount of cars on the road.

The improvements proposed in the Multimodal Safety Improvements Plan are direct responses to the challenges and barriers of existing conditions. The improvements shown are based on public input, existing unconnected infrastructure locations, future development potential, and property ownership status.

On-Road improvements are the least expensive (no acquisition of property required) and should be implemented early in the first phases of VZAP design/construction. Re-paving and maintenance operations of Township roads represents an optimal time for considering these improvements. Yearly capital budgets should assess the priorities in the VZAP and adjust roadway projects accordingly. These improvements include painted sharrow routes, bike lanes, speed tables, and speed cushions.

More expensive improvements such as large pedestrian bridges and tunnels will require further feasibility studies before being implemented. As other improvements noted in the plan are constructed, the demand for the completion of these more expensive items will become more pronounced.

Development Opportunities

The priorities of implementation should be opportunistic. If circumstances arise which allow for the implementation of a specific improvement, those improvements should be accomplished. For instance, if a property owner is interested in beginning specific improvements, they should take priority. In addition, if a funding opportunity aligning with a portion of the project is available, it should take priority.

Using these general guidelines, a diagram was developed which suggests potential routes of effective implementation. These routes aim to serve large or under served populations and utilize available funding opportunities. These routes should work in conjunction with one another when possible.

B. Priority Improvements Plan

Like the cost estimates developed in Chapter 7 for the Multimodal Safety Improvements Plan, the Priority Improvements Plan was developed as a way to group improvements along corridors and key areas. These priority areas represent a logical geographical grouping of improvements that accomplish a significant connection or safety improvement such as:

- Addressing key crash areas
- Linking residential areas with desired destinations such as school or parks
- Providing complementary pedestrian accommodations to established transit routes

Since each priority area has a definable 'achievement', they represent a more desirable funding application for the funding opportunities described below. The design and construction costs for these priorities range from \$5M to \$10M and are estimated below:

• Priority Corridor A: \$7,109,500

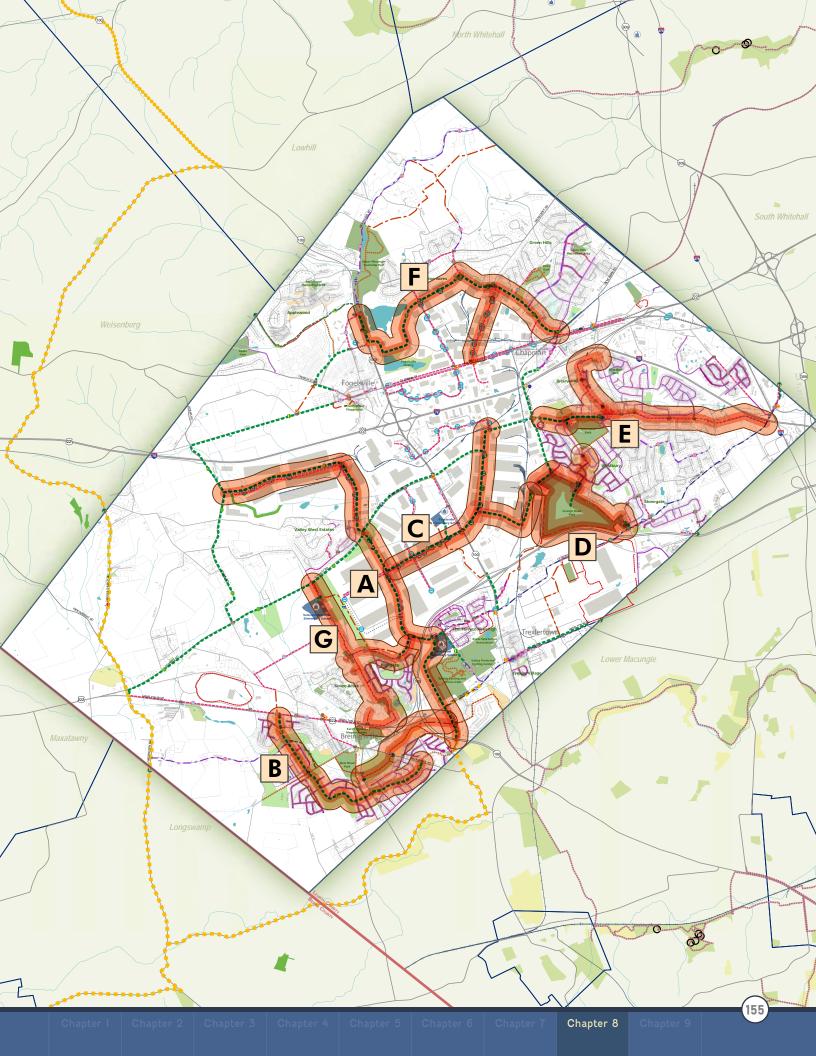
• Priority Corridor B: \$2,409,600

• Priority Corridor C: \$5,673,900

• Priority Corridor D: \$3,024,900

• Priority Corridor E: \$844,350

• Priority Corridor F: \$2,749,600



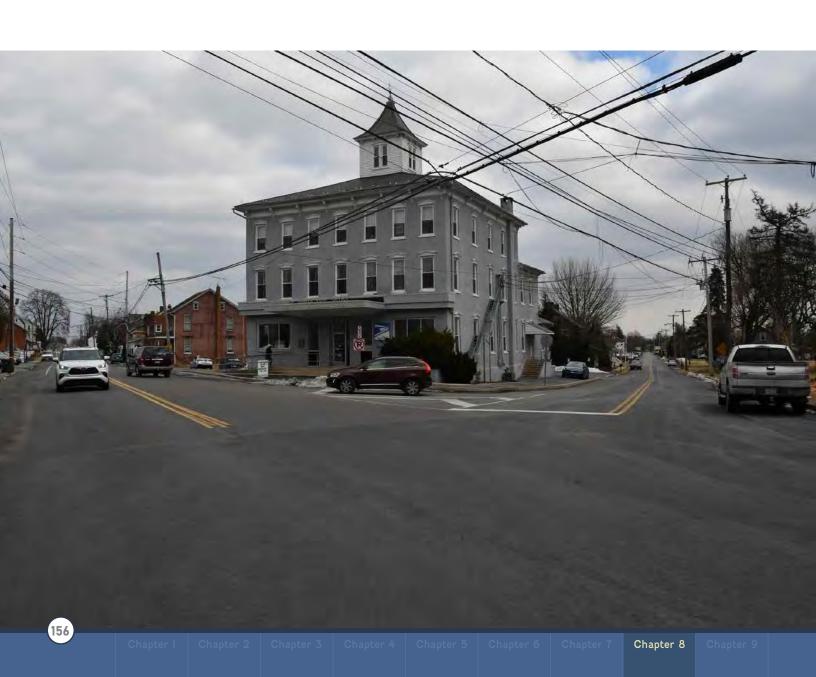
C. Vision Zero Action Plan Matrix: Metrics for Tracking Progress

To accomplish the goals of the VZAP, a comprehensive and coordinated approach to a Vision Zero and Complete Streets culture will be required by all components of the Township government.

The final recommendation of Chapter 7 was an annual review of the elements of the VZAP to track progress toward the goal through the use of a verifiable VZAP Matrix.

The *Safe Systems* approach to Vision Zero involves policy makers, designers, enforcers, residents, and workers alike.

The figure to the right represents the VZAP Matrix.



LEADERSHIP & COMMITMENT					
Action Item	2023	2024	2025	2026	2027
1. Draft and adopt a Township Vision Zero Policy.					
2. Draft and adopt a Township Complete Streets Policy.					
3. Draft and adopt revisions to Township ordinances that support Vision Zero and Complete Streets policies.					
4. Adopt the Upper Macungie Township <i>Vision Zero</i> Action Plan (VZAP)					
5. Adopt the Upper Macungie Township <i>Multimodal</i> Safety Improvements Plan					
6. Board of Supervisors to report annually on progress of UMT <i>Vision Zero Action Plan</i> using the data/performance MATRIX					
7.Adopt an official map that includes all proposed improvements					

Action Item	2023	2024	2025	2026	2027
1. Establish the UMT Planning Commission as the lead Township agency for <i>VZAP</i> updates and implementation oversight.					
2. Create <i>VZAP</i> subcommittee composed of volunteer residents, Township staff and corporate representation. UMT Planning Commission to meet annually with subcimmittee on <i>VZAP progress</i> .					
3. Update the VZAP Priority Improvements Plan annually based on 'Data' below.					
4. Submit grant applications annually to implement recommended improvements contained in the VZAP and Multimodal Improvements Plan					
5. Review VZ and CS policies and related ordinances bi-annually to consider appropriate revisions.					

DATA					
Action Item	2023	2024	2025	2026	2027
Update all Township vehicle crash data to <i>VZAP</i> (<i>UMT Crash Data Map</i>) annually. Coordinate UMT Police Department data with Township GIS data.					
2. Review crash data and review <i>Multimodal Improvements Plan</i> for needed revisions.					
3. Update UMT Proposed/Under Construction Land Development Map semi-annually					
4. Update <i>VZAP Priority Improvements Plan</i> annually. (See 'Priority Projects' Section below).					

COLLABORATION/ EDUCATION/ ENGAGEMENT

Action Item	2023	2024	2025	2026	2027
1. Coordinate Public Works and Streets Department roadway paving projects to incorporate recommended from the <i>VZAP</i> such as: road diets; bike lane applications; crosswalk installations; traffic calming or safe speed tools at recommended locations.					
2. Create UMT splash page on Township website for <i>Vision Zero Action Plan</i> .					
3. Publicize VZ and CS policy adoption through Twp. social media, website, newsletters, etc.					
4. Establish a yearly date for the Planning Commission to review the <i>VZAP</i> 'matrix' from the previous year and announce metric numbers and priorities addressed. Advertise as a public meeting.)					
5. Coordinate with UMT Police Department to incorporate a <i>VZAP</i> presentation/ table at 'Night Out' Event annually.					

6. Collaborate with Parkland School District to encourage bicycle and pedestrian safety education by sponsoring a 'Safe Travel' day at Grange Parkillustrating basics of bike and pedestrian safety. Solicit corporate involvement.			
7. Form a Corporate/Facilities Managers Coalition Retreat in UMT to foster dialog between Township and corporate residents to address <i>VZAP</i> and multimodal initiatives for employees. Maintain regular conversations for public-private advancement of VZ and CS goals.			
8. Solicit corporate involvement in <i>VZAP</i> goals. Draft suggestions on 'how' corporations can enact VZAP-supportive policies. Distribute. Advertise corporate involvement. Invite corporate participation in annual report on <i>VZAP</i> and 'Night Out' event.			
9. Evaluate the re-start of the past efforts entitled 'Good Neighbor Coalition' sponsored by the UMT Police department as a way to continue efforts at communicating important safety issues within the Township			

PRIORITY PROJECTS					
Action Item	2023	2024	2025	2026	2027
1. Annually review and update <i>Priority</i> Improvements Plan					
Corridor A					
Corridor B					
Corridor C					
Corridor D					
Corridor E					
Corridor F					
Corridor G					
Corridor H					

METRICS						
Category	Metric	2023	2024	2025	2026	2027
Ordinances	Percentage of ordinances updated to comply with Complete Streets and Vision Zero policies.					
Engagement	Number of staff/ Twp. consultant staff trainings completed.					
	Number of community engagement activities planned and/or completed.					
Funding Applications	Number and type of funding applications toward acquisition/design/construction of VZAP Improvements.					

	Toolbox Items Constructed			
	Sidewalks (new): LF			
	Sidewalk Gaps Completed: LF			
	Crosswalks: EA/ SF			
	Pedestrian Signals: EA			
	8'-10' Side Paths: LF			
Multimodal Infrastructure	Sharrow: LF			
	Bike Lane: LF			
	Pedestrian Bridge: EA			
	Speed Table: EA			
	Speed Cushion: EA			
	Pedestrian Refuge Island: EA			
	Hiking Trail: LA			
	Special Crossing (e.g. Rail tracks): EA			
	Connections between existing infrastructure items: EA			

D. Partnerships & **Funding Opportunities**

Project Stakeholders and Partners

Various relationships need to be developed to promote, fund, and/or implement the Upper Macungie Township Vision Zero Actio Plan. Partners can help to advocate for completion of projects and assist in acquiring funding.

Local partners may include:

- Lehigh and Northampton Transportation Authority
- Local Businesses (ULine, Nestle, FedEx, Amazon)
- Local Bicycling Groups
- Landowners
- Schools and Institutions

County/Regional partners may include:

- Adjacent Municipalities (Lower Macungie and South Whitehall)
- Lehigh Valley Planning Commission

State partners may include:

- PennDOT
- Department of Community and Economic Development (DCED)
- Pennsylvania Infrastructure Reinvestment Authority (PennVEST)
- Department of Conservation & Natural Resources (DCNR)



Funding Opportunities

U.S. DOT/ Infrastructure Investment and Jobs Act (Bipartisan Infrastructure Law-BIL)- Safe Streets for All (SS4A)

The recently enacted BIL has appropriated monies over five years (estimated at \$5B) for the Safe Streets for All program. The purpose of the program is to improve roadway safety by significantly reducing or eliminating roadway fatalities through the development and implementation of safety actions plans. The program focuses on all users, including pedestrians, bicyclists, public transit userts, motorists, micromobility users, and commercial vehicle operators. Qualifying Action Plans allow for application for 'Implementation Grants'. Implementation allows for design and construction of identified priorities. Successful grant applications will demonstrate engagement with public and private stakeholders and seek to save lives and reduce roadway fatalities and serious injuries; incorporate equity, engagement, and collaboration into how projects and strategies are executed; use effective practices and strategies; consider climate change, sustainability, and economic competitiveness in project and strategy implementation; and will be able to complete the full scope of funded projects and strategies within five years after the establishment of a grant agreement.

Applications for the FY 2023 SS4A are due on July 10, 2023. Schedule, information and webinars are available on DOT's website: https://www.transportation.gov/SS4A.

Federal Highway Administration: Transportation Alternatives Set-Aside

The Transportation Alternatives Set-Aside (TASA) provides funding for projects and activities defined as transportation alternatives, including on- and off-road pedestrian and bicycle facilities, infrastructure projects for improving non-driver access to public transportation and enhanced mobility, community improvement activities, and environmental mitigation, trails that serve a transportation

purpose, and safe routes to school projects. Eligible projects may include the following:

- bicycle and pedestrian facilities
- bicycle and pedestrian education (grades K-8 only)
- conversion of abandoned railway corridors to trails
- construction of turnouts, overlooks, and viewing areas
- · outdoor advertising management
- historic preservation and rehab of historic transportation facilities
- vegetation management
- · archaeological activities
- vulnerable road user safety assessment activities
- stormwater management; and
- wildlife mortality mitigation

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. For trails, DCNR prefers to fund off-road trail facilities. Additionally, applicants must show either ownership or have a trail easement in place to qualify for an implementation (construction) grant. 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. These projects require a 50% match, which can include a combination of cash and/or noncash values

 The Grange Park Trail would be an ideal candidate for this application, as the 'connectivity' value of the trail complements the recreational value of the trail within this dynamic community space in Upper Macungie.

Grant applications for the C2P2 program are accepted annually—usually in April. More information on this program can be found at the DCNR website:

• http://www.dcnr.state.pa.us/brc/grants/indexgrantsinstruct.aspx.

Transportation Alternatives Program (TAP)

The Transportation Alternatives Program (TAP) was started in 2012 by Congress as part of the Moving Ahead for Progress in the 21st Century Act (MAP-21). The program funds a range of alternative transportation projects that include pedestrian and bicycle facilities, public transportation, safe routes to school, historic transportation structures, environmental mitigation, and trail projects. All funding money is administered by PennDOT and strictly used for the construction of projects, but not the planning or design.

Recently Transportation Enhancements (TE), Safe Routes to School (SRTS), Scenic Byways (Byways), and the Recreational Trails Program (RTP) have all been consolidated into the Transportation Alternatives Program (TAP). Projects must have a construction cost of at least \$50,000, but generally no more than \$1,000,000.

 Additional information is available online at: http:// www.penndot.gov/ProjectAndPrograms/Planning/ Pages/Transportation-Alternatives-Program.aspx

Commonwealth Financing Agency (CFA) Greenways, Trails, and Recreation Program (CTRP)

The Greenways, Trails, and Recreation Program (GTRP) provides funding for: public park and recreation area projects, greenway and trail projects, and river conservation projects. The program requires a 15% local cash match of the total project cost and projects must not exceed \$250,000.

 More information can be found at: http://www.newpa. com/programs/greenways-trails-and-recreationprogram-gtrp/. The Multimodal Transportation Fund provides grants to encourage economic development and ensure that a safe and reliable system of transportation is available to the residents of the Commonwealth. Funds 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.

 For more information, please visit http://www.newpa. com/find-and-apply-for-funding/funding-andprogram-finder/multimodal-transportation-fund

PennDOT Multimodal Fund

- PennDOT's multimodal program seeks to improve freight and passenger mobility options, maximize benefits of capital investment in all modes of transportation, promote safety on all modes of transportation, use transportation improvements to spur economic development, and improve the effectiveness and efficiency of the transportation network. Projects eligible for funding include:
- Projects related to streetscape, sidewalk enhancement, pedestrian safety
- Transit oriented development projects
- Projects related to connectivity improvements
- Projects that coordinate local land use with transportation assets to enhance existing communities

(The PennDOT Multimodal fund is separate from the Multimodal Transportation Fund administered by the Pennsylvania DCED noted below). A local match of at least 30% of the non-federal project costs is required. More information on the program can be found at:

 http://www.penndot.gov/ProjectAndPrograms/ MultimodalProgram/Pages/default.aspx

Department of Community and Economic Development (DCED) Multimodal Transportation Fund

The DCED Multimodal Transportation Fund provides grants to encourage economic development and ensure that a safe and reliable system of transportation is available to the residents of the commonwealth.

Applications for the Multimodal Transportation Fund are accepted annually between March 1 and July 31. All applications and all required supplemental information must be electronically submitted by close of business on July 31st for hopeful consideration at the November CFA board meeting. Please note that technical assistance will not be available after 5pm on July 29th.

Funds 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. Grants shall not exceed \$3,000,000 for any project.

• https://dced.pa.gov/programs/multimodaltransportation-fund/

PennVEST (Pennsylvania Infrastructure Investment Authority)

PennVEST offers both grants and low interest loans for projects that help to manage stormwater and improve water quality. Several of the proposed recommendations for the greenways will be of interest to PennVEST since they include stormwater BMPs.

• More information on the grants and loans available through PennVEST can be found at: http://www. pennvest.pa.gov/Information/Funding-Programs/ Pages/default.aspx



Chapter 8

