



CITY OF
SHAMOKIN
SAFETY
ACTION
PLAN
JUNE 2025



KITTELSON
& ASSOCIATES

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City of Shamokin **Comprehensive Safety Action Plan** Shamokin, Pennsylvania

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ACKNOWLEDGEMENTS

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INTRODUCTION

In 2024, SEDA-COG received a Safe Streets and Roads for All (SS4A) grant from the United States Department of Transportation (USDOT) to prepare a Comprehensive Safety Action Plan for the City of Shamokin. The purpose of this Safety Action Plan is to reduce and eliminate fatal and serious injury crashes in Shamokin.

A Safety Working Group made up of stakeholders and community representatives was engaged at key milestones throughout planning process to review and provide input on draft results, recommendations, and deliverables.

Over the past 5 years, the total number of crashes increased in Shamokin, from 18 in 2019 to 38 in 2023.

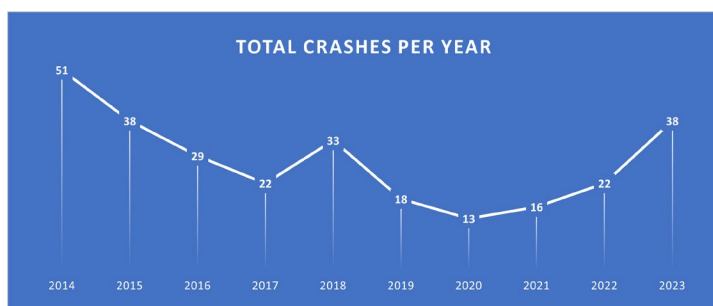
Crashes are concentrated on state routes (PA 61 and PA 125) and throughout the downtown area. Shamokin ranks third in the total number of crashes and first for pedestrian and bicyclist crashes compared to neighboring communities of similar size and character. While crashes involving a pedestrian or bicyclist are less common than car crashes, they are more likely to result in an injury or loss of life. Importantly, Shamokin had multiple years that achieved Vision Zero, where the city had no crashes that resulted in fatality. However, there remain opportunities to reduce the occurrence of serious injuries and other crashes.

Downtown Shamokin and the surrounding area are a designated Opportunity Zone, which provide federal and state tax incentives to spur economic development through developing underutilized land for community revitalization.

Safe Streets and Roads for All (SS4A)

The Safe Streets and Roads for All (SS4A) program is a federal discretionary program with \$5 billion in appropriated funds over five years from 2022-2026. The program is overseen by Federal Highway Administration (FHWA) and funds regional, local, and Tribal initiatives through grants to prevent roadway deaths and serious injuries. SS4A supports the U.S. Department of Transportation's National Roadway Safety Strategy and the goal of zero roadway deaths using a Safe System Approach. SS4A grants are available for safety planning, implementation, and demonstration activities.

FIGURE 1 CRASH TREND IN SHAMOKIN

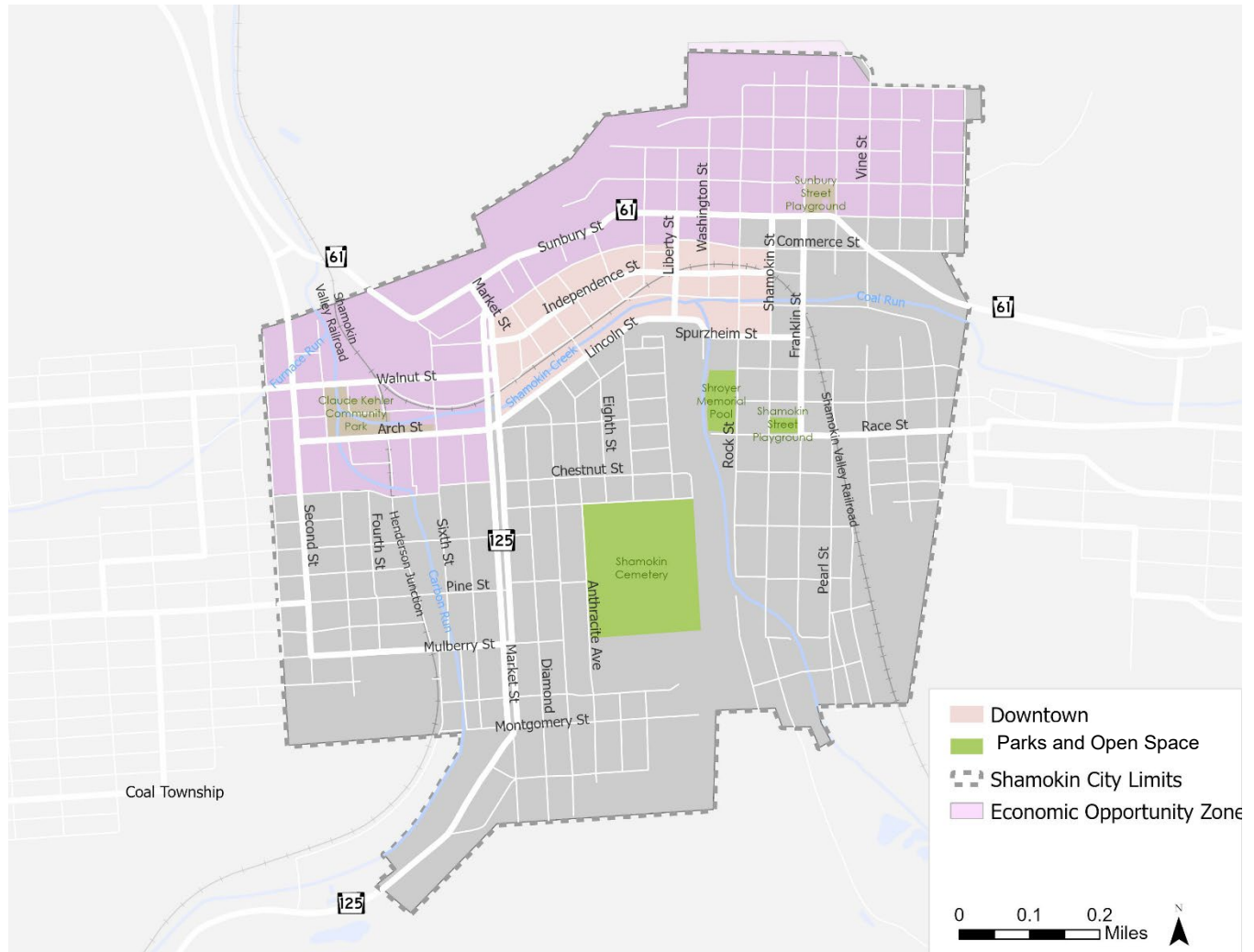


The Safety Action Plan provides an opportunity to improve safety and multimodal connections in Shamokin and spur economic development.

SHAMOKIN CONTEXT

Shamokin is a small city of just under 1 square mile in Northumberland County, Pennsylvania. It is situated in a rural context in central Pennsylvania's Susquehanna River Valley, approximately 40 miles southwest, as the closest city of over 50,000 residents.

MAP 1 SHAMOKIN CITY LIMITS



Shamokin has a rich history as a mining and textile town, experiencing rapid population growth in the late 19th century due to the discovery of anthracite coal in the area and the establishment of the large Eagle Silk Mill. After the decline of these industries, Shamokin has experienced steady population decline since its peak of over 21,000 residents in 1920, reaching a total population of just under 7,000 in 2020. As of 2020, the median household income of Shamokin residents was \$32,753, with a total of 35.9% of the population living below the poverty level.

Currently, tourism is a substantial part of Shamokin's economic activity, providing visitors the opportunity to enjoy historic architecture that reflects the city's coal mining heritage and early 20th-century industrial prominence. Shamokin's downtown area also occasionally hosts community events like farmers' markets, craft fairs, and holiday celebrations.

The area surrounding Shamokin offers opportunities for outdoor activities such as hiking and exploring nearby parks and natural attractions. The Anthracite Outdoor Adventure Area (AOAA) in Coal Township, just south of Shamokin, is a popular destination for off-road enthusiasts, particularly those who enjoy all-terrain vehicles (ATVs). The AOAA offers over 8,000 acres of diverse terrain, including trails for ATVs, dirt bikes, and other off-road vehicles, attracting visitors from across the region.

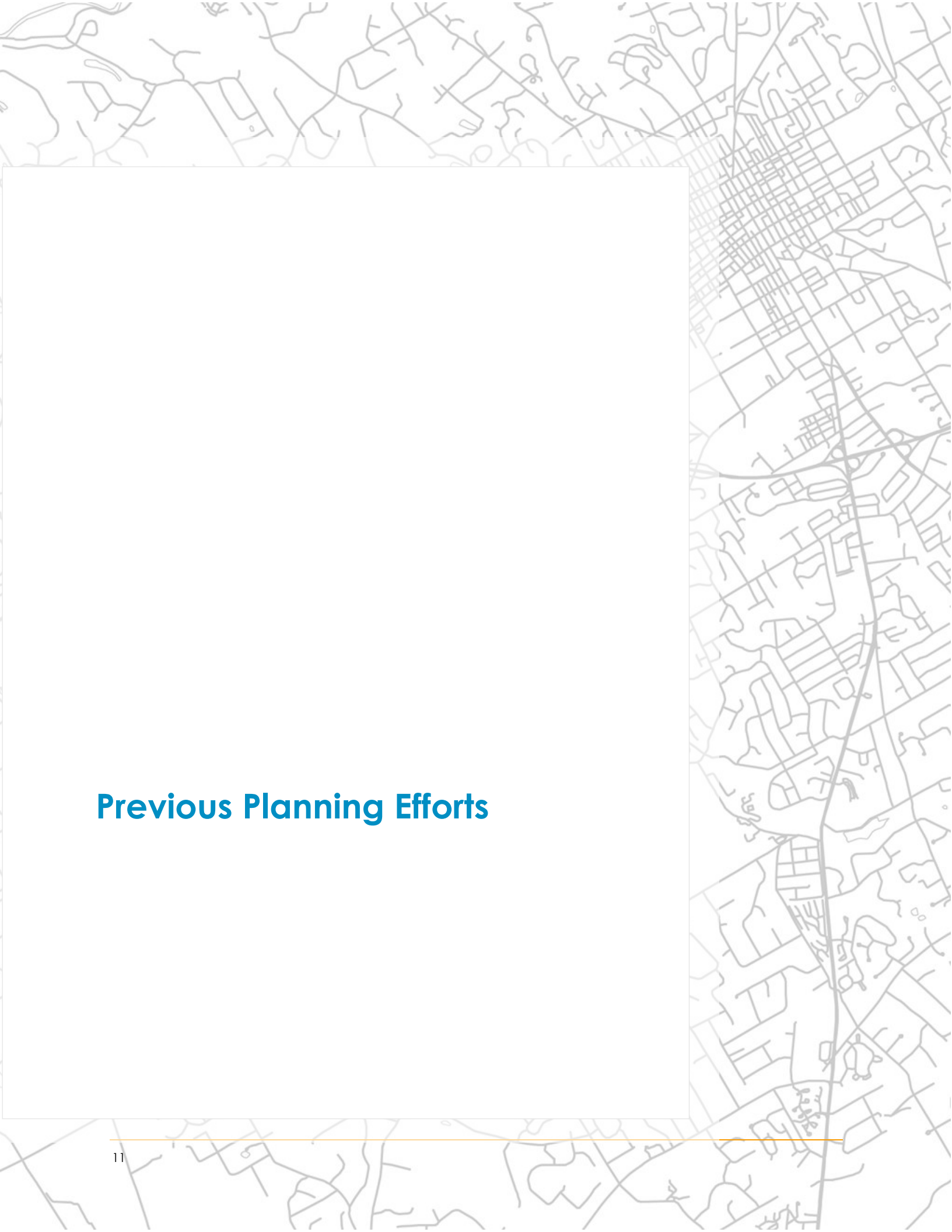
FIGURE 2 ANTHRACITE OUTDOOR ADVENTURE AREA (AOAA)



The AOAA has become a significant economic driver for Shamokin and surrounding areas, drawing tourists and contributing to the local economy through tourism-related businesses like lodging, dining, and equipment rentals. ATVs can only ride on designated routes in downtown Shamokin to balance economic development and the safety of residents.

FIGURE 3 STREET CORNER IN SHAMOKIN



The background of the slide is a light gray map of a city street grid. The grid is composed of numerous thin, dark gray lines representing streets. The pattern is dense in some areas, particularly on the right side of the slide, and more sparse in others. The lines vary in thickness, possibly indicating different types of roads or highways.

Previous Planning Efforts

PREVIOUS PLANNING EFFORTS

Several plans have been created in recent years at the local and regional level that relate to safety and opportunities for infrastructure improvements in the City of Shamokin. The most extensive of these efforts is the [Go Shamokin!](#) Plan, published in October 2020. This plan primarily focuses on Shamokin residents' desire for economic revitalization, and the broader goal for the city to reinvent itself as a welcoming and vibrant tourist destination. The plan outlines six Key Recommendations to promote patronage of local businesses and improvement of public infrastructure.

FIGURE 4 COVER IMAGE OF GO SHAMOKIN! PLAN AND RENDERING OF INDEPENDENCE STREETSCAPE DESIGN FROM THE FOLLOW-UP EPA COMMUNITY-WIDE BROWNFIELDS ASSESSMENT



While the plan's primary goal is to bolster the local economy and improve public perception of the city, safety improvements are highlighted as a key way to achieve this goal. Plans to improve the multi-modal accessibility of Independence Street and increase pedestrian comfort include ADA intersection improvements, sidewalk repairs, and the realignment of the curb to narrow part of the street. Pedestrian-scale comfort and aesthetic improvements include the installation of street trees, landscape planters, seating, banners, and trash receptacles. As a result of the Go Shamokin! Plan, The City received a congressional earmark for design and construction of the Independence Street Streetscape Improvements, which are currently in preliminary design.

The Go Shamokin! Plan also identifies several other locations as opportunities for transportation safety improvements, including transforming Commerce Street into a greenway for cyclists and pedestrians and installing traffic calming and infrastructure improvements on PA 61/Sunbury Street.

A continuation of the Go Shamokin! Plan effort was initiated through a US EPA Brownfields Community-Wide Assessment Grant, completed in 2022, which identified a series of target sites to foster redevelopment throughout downtown Shamokin and advanced an area-wide plan for the downtown core. The area-wide plan from the report includes further development of the palette of improvements proposed for Independence Street and advanced the concept of Commerce Street as a future multi-use trail connection through downtown Shamokin along the

former Pennsylvania Railroad right-of-way. Commerce Street was also identified as a location for more parking to serve downtown Shamokin on the lower-volume Commerce Street corridor.

The Go Shamokin! Plan and the follow-up EPA Brownfields Assessment project specifically call out Independence Street as the center of downtown Shamokin and a hub for tourist and economic activity. Engineering design for the Independence Streetscape project is currently underway and construction is projected to begin on Phase 1 of the improvements in late 2025.

Several other transportation safety related plans applicable to Shamokin have been developed recently.

- The Northumberland County Non-Motorized Rail Trail Master Plan presented plans to connect many of the cities and townships within Northumberland County through a network of walking/cycling trails. These trails would utilize the abandoned Philadelphia and Reading Railroad right-of-way in the region, a portion of which runs through downtown Shamokin.
- SEDA-COG published its Long-Range Transportation Plan in 2021, that provides a vision for the transportation network in the area for the next 25 years. Because this document applies to all eight counties that SEDA-COG plans for, it does not address the City of Shamokin specifically, but rather highlights general goals, performance metrics, and improvements to pursue
- The upcoming Shamokin 2035 Comprehensive Plan will lay out the city's strategy for community and economic development over the next 10 years. The plan, currently in draft form but expected to be presented for adoption in the coming months, targets improved transportation facilities as one of the areas in need of attention for the city. The lack of safe bicycle and pedestrian facilities as well as a need for improved parking facilities and upgraded signage are currently identified as key elements needing to be addressed.
- A summary of the previous plans and their relevant safety recommendations reviewed as part of the Shamokin Safety Action Plan is provided below.

Go Shamokin Plan (2020)

This plan was developed to revitalize Shamokin's economy after the decline of the textile and mining industries. Much of the plan focuses on transforming Shamokin into an attractive destination for visitors to increase patronage of local businesses. Key Recommendation 3 focuses on complete street improvements to Independence Street, increasing safety and comfort for pedestrians.

Projects:

- Ensure that sidewalk facilities and intersection crossings are ADA compliant
- Upgrade heavily trafficked intersections with PennDOT Continental style "piano key" crosswalks
- Consider converting the newly acquired former PRR railroad right-of-way along Commerce Street into a multi-use path / bicycle route
- Add sharrows to key bicycle routes
- Redesign of Sunbury St/Route 61 for multi-modal and streetscape enhancements and traffic calming measures
- Advance a Shamokin Creek Greenway project to connect 5th Street across the creek and prevent pedestrian use of active railroad trestle

Go Shamokin Plan (2020)

Policies:

- Advocate for the funding for the Sunbury St/Route 61 corridor improvement projects listed in PennDOT's Long-Range Transportation Plan
- Adopt a Complete Street approach to Independence Street improvements

Programs:

- Perform a trail feasibility study for a multi-use recreational trail through Shamokin
- Work with PennDOT to address intersection circulation issues with Route 61 and direct more motorists down 6th Street to Independence Street.

U.S. EPA Community-Wide Brownfields Assessment (2022)

A follow up to the 2020 Go Shamokin! Plan, this plan advanced concepts for improvements in the downtown core and identified a series of target sites for reuse planning to catalyze economic development.

Projects:

- Targeted site reuse planning
- Advanced design concept for Independence Street safety and complete street improvements for improved accessibility and economic revitalization.
- Commerce Street multi-use trail improvements and upgraded adjacent parking facilities.

Independence Street Streetscape Improvements (2024-present)

This is a plan to improve the infrastructure along Independence Street from 6th Street to Shamokin Street, particularly for pedestrians. Some improvements also include upgrades along intersecting streets or along the paralleling Commerce Street.

Projects:

- Improvements to intersections including curb bump-outs, ADA accessible ramps, and increased crosswalk visibility
- New concrete sidewalks with street trees, pedestrian-scale lighting, and seating.
- Concept plans that were released in 2023 are currently being developed as preliminary designs for the corridor

Northumberland County Non-Motorized Rail Trail Master Plan (2022)

This plan provides an overview of the potential to transform the abandoned Philadelphia and Reading Railroad (PRR) right-of-way into a trail for pedestrians and cyclists, connecting the Borough of Sunbury to the Borough of Mount Carmel, running through Shamokin. This trail would provide a space for pedestrians and cyclists entirely separate from motorized vehicles.

Projects:

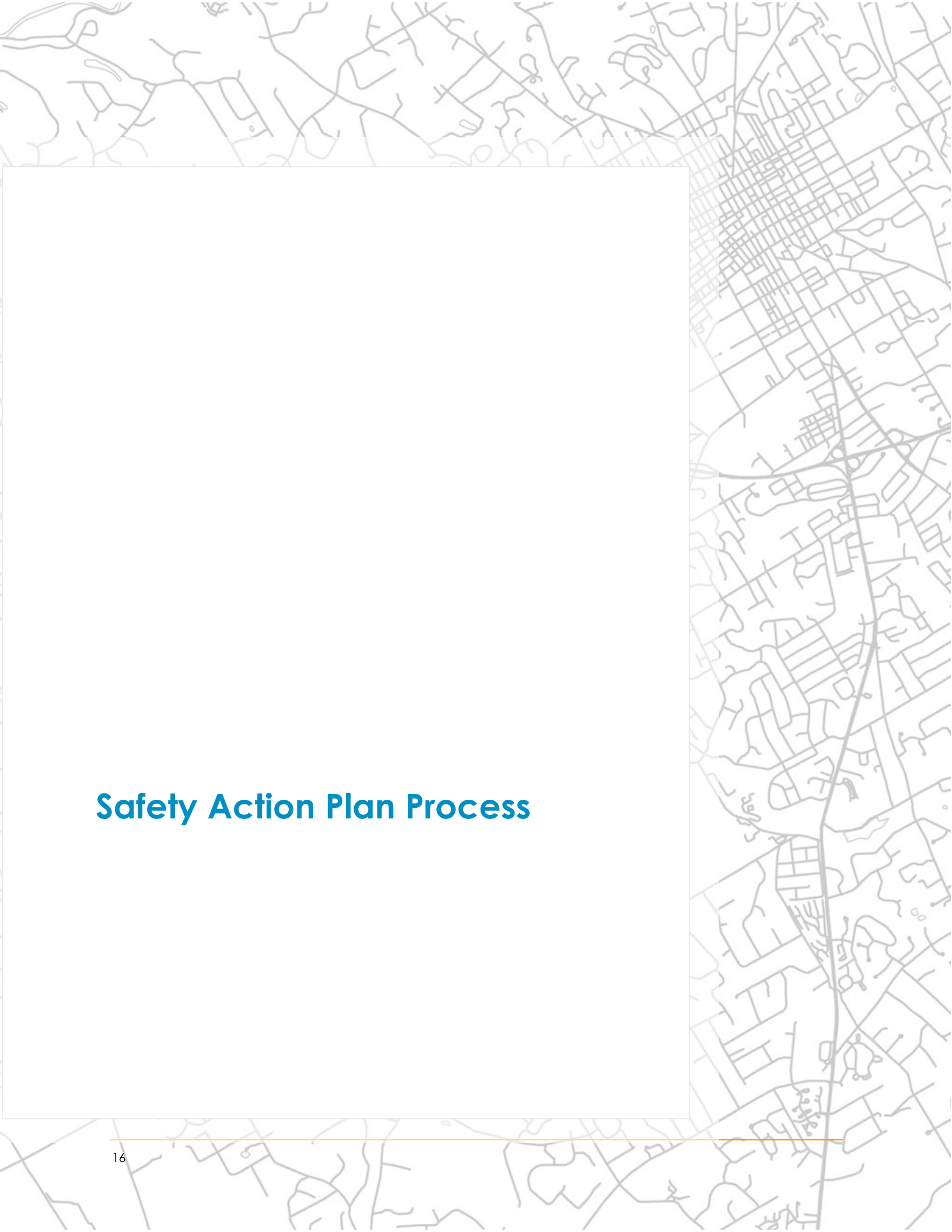
- Planned trail consisting mostly of on-road facilities through the City of Shamokin on Commerce Street
- Opportunity for a pocket park at Independence Street
- Goals include increasing trail visibility and providing physical separation from vehicle traffic to protect trail users.

SEDA-COG Long-Range Transportation Plan (2021)

This plan provides a vision for the transportation network in the area for the next 25 years. SEDA-COG plans for eight counties, including Northumberland, so the plan addresses transportation in the area very generally. The plan establishes transportation goals, corridors of opportunity, and various performance metrics.

Recommendations

- Intersection treatments including curb bump-outs, ADA accessible ramps, and increased crosswalk visibility
- PennDOT's Local Technical Assistance Program should be used when designing and implementing walk and biking facilities.



Safety Action Plan Process

SAFETY ACTION PLAN PROCESS

The Shamokin Comprehensive Safety Action Plan was developed over the course of ten months using a collaborative process that included a detailed evaluation of historic crash data and resulting High Injury Network and safety recommendations, guidance and input from the Safety Working Group, and online and in-person feedback from members of the public.



SAFETY WORKING GROUP

To guide the development of the plan, a group of stakeholders convened to form the Safety Working Group. The Safety Working Group included members from emergency services, local government, and business leaders among others. The group met four times during plan development to discuss issues including:

- Federal Safety Action Plan requirements and guidance
- Goals and objectives
- Safety countermeasures
- Crash data summary by emphasis area
- Safety Action Plan recommendations
- Public engagement ideas

PUBLIC OUTREACH ACTIVITIES

The project team hosted several public engagement activities while the plan was being developed to gather feedback on key issues and concerns and draft recommendations.

PUBLIC ENGAGEMENT ROUND 1

The first round of public engagement raised awareness about the Safety Action Plan. There were 15 attendees at the first open house, which was held on October 3rd, 2024 at the Shamokin-Coal Township Public Library. At the open house, the public learned about the existing conditions and emphasis areas of the plan. Content for the open house included an overview of the SS4A program, goals, and objectives for the plan, key safety issues, and how the plan interacts with existing initiatives such as the Independence Streetscape project. Attendees gave feedback using post-it notes or marked specific areas of concern within Shamokin using stickers on maps of the city. Prior to and after the public meeting, an online survey gathered feedback to help

establish areas of need. The survey was advertised on social media and at different meetings. Over the course of public engagement, the online survey received 117 responses.

As a result of the engagement activities, one topic of concern identified was the need for more signage along streets in Shamokin, both street names for navigation and instructional signs such as yield signs, stop signs, and even radar speed signs. Also expressed was a desire for lane demarcation, sidewalk improvements for ADA accessibility, and lighting, particularly at intersections. Speeds on Sunbury Street (PA-61) were noted among the concerns and narrow and unorthodox geometries in certain sections contribute to cars clipping parked vehicles. ATVs and e-bikes were also noted as a concern, as those vehicles are often observed being operated in ways that conflict with or disregard posted signs and traffic patterns.

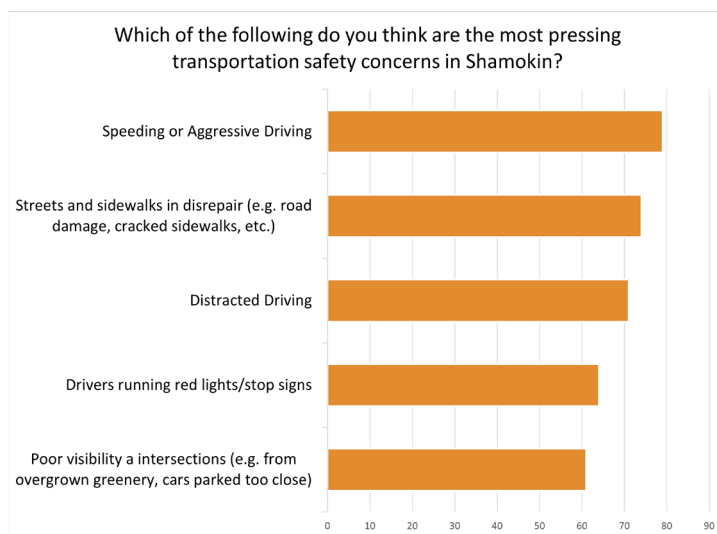
Participants at the public meeting noted intersections of concern along Chestnut Street, and intersections downtown along Eighth Street, Liberty Street, and Lincoln/Spurzheim Street. The only intersection perceived to be well-designed by participants was Rock Street & Race Street, which is also adjacent to Shroyer Memorial Pool and the Shamokin Street Playground.

MAP 2 INTERSECTIONS OF CONCERN FROM OPEN HOUSE 1



Among the 117 survey respondents, over 80% indicated they 'most often' drive a personal vehicle and a large majority of those surveyed indicated they feel 'somewhat safe' (55%) or 'very safe' (23%) while driving. Critically, close to 70% of respondents indicated that they walk with some regularity, but of the respondents, more indicated they feel very or somewhat unsafe (41%) than very or somewhat safe (38%). A much smaller percentage indicated regular bike use but those responses indicating they did also had concerns about the safety of the roads for cyclists. The responses indicated that a focus on safety for non-vehicular modes of transport are needed to improve the multimodal connectivity of the city.

FIGURE 5 ONLINE SURVEY RESPONSE SUMMARY



PUBLIC ENGAGEMENT ROUND 2

The second round of public engagement included a combined open house for the Safety Action Plan and the Independence Street Streetscape project. The open house had 28 logged attendees and was held at the Shamokin-Coal Township Public Library on January 30th, 2025. During the open house, the project team provided an overview of the draft recommendations and the public reviewed display boards with the draft recommendations and provided feedback on intersection concepts, priority safety countermeasures, and priority locations for safety countermeasures. The content of the second open housing included an overview of the SS4A program, infrastructure and non-infrastructure countermeasures, and systemic improvements. The workshop also presented the specific improvements proposed for Independence Street from Market Street to Shamokin Street.

The public was able to offer feedback in the form of direct comments to project team members and via a survey for the Independence Street Streetscape project that was distributed at sign-in. The survey generated 16 responses overall. Some of the specific concerns raised at the meeting were related to parking and maintenance on Independence Street. Survey responses included concerns including illegal parking issues, ATV use on non-designated roads, and lack of signage. Specifically for Independence Street, safety, sidewalk conditions, aesthetics, and parking were among the most frequently selected top concerns in the responses.

SAFE SYSTEM APPROACH

This plan applies the principles of the Safe System Approach. The Safe System is the U.S. Department of Transportation's adopted framework for roadway safety. It prioritizes eliminating crashes that cause death and serious injury.

A core principle of the Safe System Approach is that humans are vulnerable during collisions. This vulnerability is considered when designing and operating a transportation network to minimize serious injuries and fatalities. Therefore, it is crucial that the responsibility is shared by those who

design and operate the transportation system. In a Safe System, all stakeholders work together and include, but are not limited to, road users, transportation system managers, law enforcement, emergency responders, and vehicle manufacturers.

Roadway system managers in the Safe System Approach (see Figure 5) use a proactive approach to safety to try and address safety concerns before crashes occur, contrasting with traditional road safety practices that are reactive after crashes occur. This involves using crash data and roadway design characteristics, employing a data-driven approach to identify crash patterns and trends associated with crash risk. Transportation system managers then systemically implement proven safety countermeasures at all locations matching those crash risk factors to mitigate against future crashes.

Finally, redundancy is key in reducing crash occurrences in a transportation system. All parts of the system should be strengthened so that if one part fails, other parts of the system still protect roadway users. A simple implementation of this would be rumble strips that protect people when their own ability to be safe road users is compromised by distractions or drowsiness.

FIGURE 6 THE SAFE SYSTEM APPROACH (USDOT, FHWA)



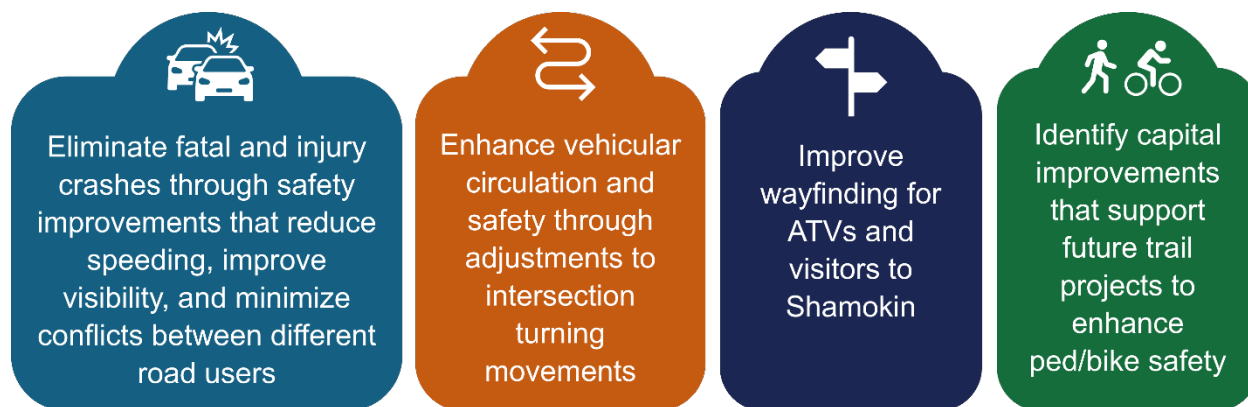
GOAL AND OBJECTIVES

Safety trends and analysis, along with public engagement in Shamokin, guided the development of the plan's goals. Working with the Safety Working Group, the project team aligned the City's economic development goals with creating safer streets for all users. Over the past ten years, there have been multiple periods of time when the city achieved Vision Zero, where there were no traffic fatalities. This plan seeks to maintain an ongoing commitment to Vision Zero and create safe streets for all Shamokin residents and visitors. An additional goal of this plan is to position the City of Shamokin with identified projects to be eligible for future SS4A implementation funding.

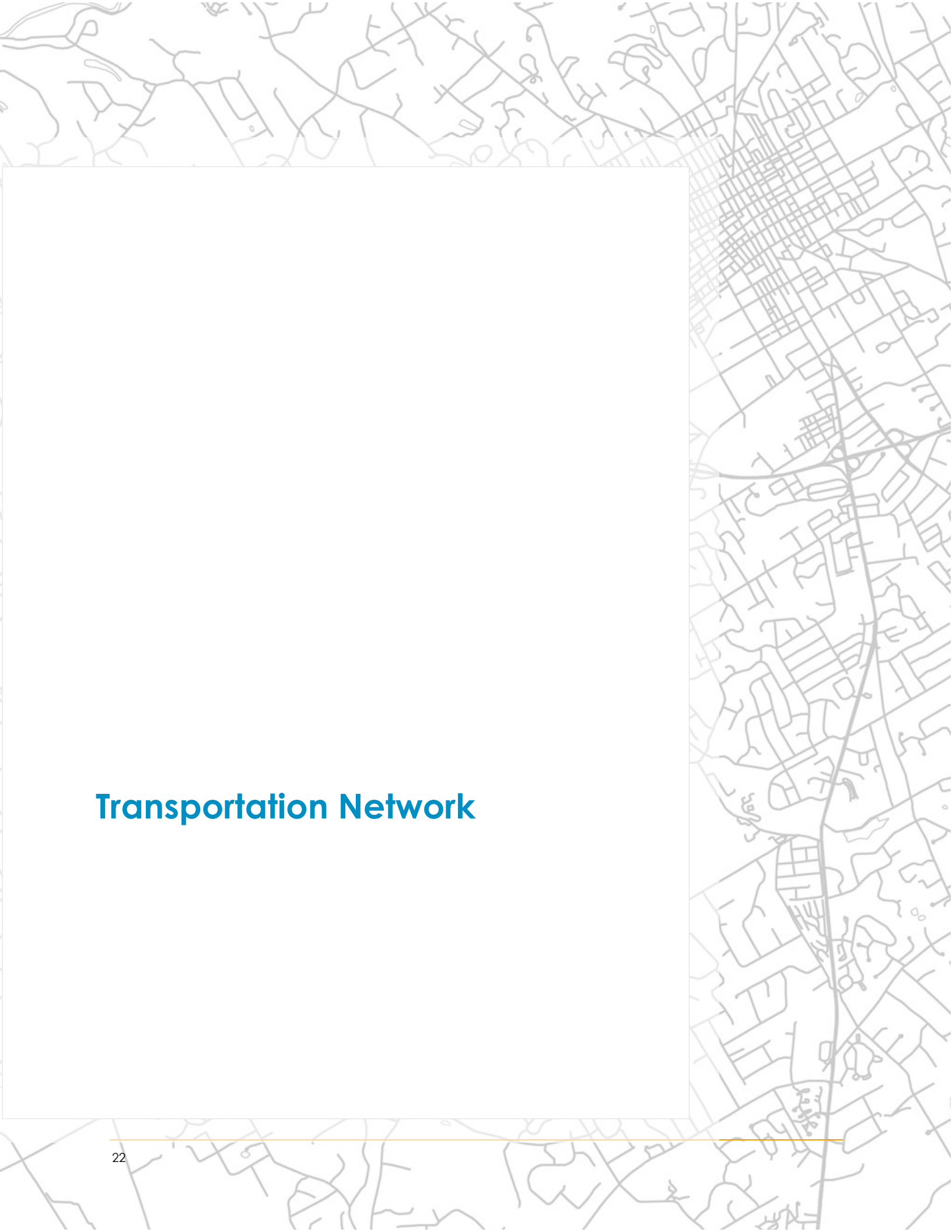
PLAN GOAL: Create safe, accessible streets for all people – walking, biking, driving – to encourage economic vitality in Shamokin.

PLAN OBJECTIVES

The project team sourced feedback from the Safety Working Group on the plan objectives. Collaborating with these stakeholders provided necessary local context to safety trends and historical crash data. Each objective creates actionable steps for achieving the overarching plan goal.



Over the last 10 years, the City of Shamokin achieved Vision Zero in 2016 and 2018. The City is committed to maintaining Vision Zero during the next 10+ years while minimizing injury and serious injury crashes.

The background of the page is a light gray map of a city street grid. The grid is composed of numerous thin, dark gray lines representing streets. The layout is irregular, with a denser grid in the upper right quadrant and more sparse, winding lines in the lower left. A large, solid white rectangular area is positioned on the left side of the page, partially obscuring the map.

Transportation Network

TRANSPORTATION NETWORK

Shamokin, located in Pennsylvania's Coal Region, has mostly local roads, with just two state routes, PA 61 and PA 125, passing through the city. PA 61, classified as a 'Principal Arterial,' is a key route in the City. 14% of Shamokin's Road mileage is classified as 'Minor Arterial' and approximately 80% of the roadways are categorized as 'Local Roads' under the FHWA functional classification system. Notably, none of the state roads in Shamokin have access control, so frequent side streets and driveways can adversely impact traffic flow and safety.

The entire network has a speed limit of 25 mph. Low speed limits generally reduce crashes related to poor vehicle maneuvering; they also make it easier for drivers to exceed the speed limit. Any speeding that occurs in Shamokin is particularly dangerous considering the city's narrow streets.

The annual average daily traffic (AADT) on PA 61 and PA 125 are 12,000 and 7,400 respectively. Currently, AADT data for local roads is not available, but most traffic volume is concentrated on the state roads.

Shamokin's road network reflects its origins as a 19th-century coal mining town. The roads were originally designed to accommodate horse-drawn vehicles, pedestrians, and early automobiles. As a result, the local roads are very narrow, with many segments featuring street parking on one or both sides. Modern vehicles, which are significantly wider than those from the early 20th century, often face challenges navigating these narrow streets. Residents remarked that trucks pose a challenge, particularly on narrow streets with on-street parking. Shamokin Creek, railroad lines, and steep topography bisect the City and create challenges at intersections related to sight lines, skewed geometry, and confusing traffic patterns.

Throughout the city, roads are either missing street signs or have small historic ones that are hard to read. Roads without street signs are hard to navigate for residents and especially difficult for travelers who are unfamiliar with Shamokin. In addition to missing street signs, the city has multiple

**FIGURE 7 RETAINING WALL BELOW WATER STREET
ADJACENT TO SHAMOKIN CREEK**



FIGURE 8 EXISTING STREET SIGNS



intersections that would benefit from better maintenance of pavement, pavement markings, and sidewalks.

Intersections without proper, well-maintained crosswalk and lane markings may also lead to safety concerns for drivers and pedestrians. The intersection at Commerce Street and Independence Street pictured to the right is one example. Missing street signs and unclear intersections are particularly difficult to cross at night and in inclement weather. The low level of street lighting on many Shamokin streets provides an additional layer of safety concerns for pedestrians and drivers.

Additionally, many of Shamokin's roads are in poor condition due to years of wear and tear and limited maintenance. Potholes, cracks, and uneven surfaces are common, leading to vehicle damage and posing potential safety risks for both drivers and pedestrians.

Downtown Shamokin features a grid-like road network that contributes to its small-town charm. However, the surrounding terrain limits connectivity to larger regional transportation networks and major highways. While Shamokin is not a major tourist destination, there are several notable attractions in the downtown area, including Claude Kehler Park, the Covered Bridge Brewhaus, Artisan Alley Fine Arts Gallery, and the Shamokin-Coal Township Public Library. These destinations attract visitors, particularly during holidays and weekends, adding to the downtown traffic.

FIGURE 9 INTERSECTION OF COMMERCE ST AND INDEPENDENCE ST

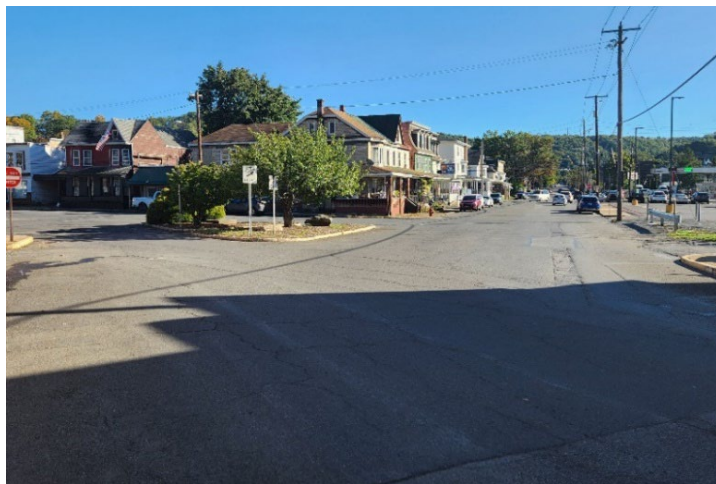


FIGURE 10 POOR ROAD SURFACE CONDITION



MULTIMODAL NETWORKS

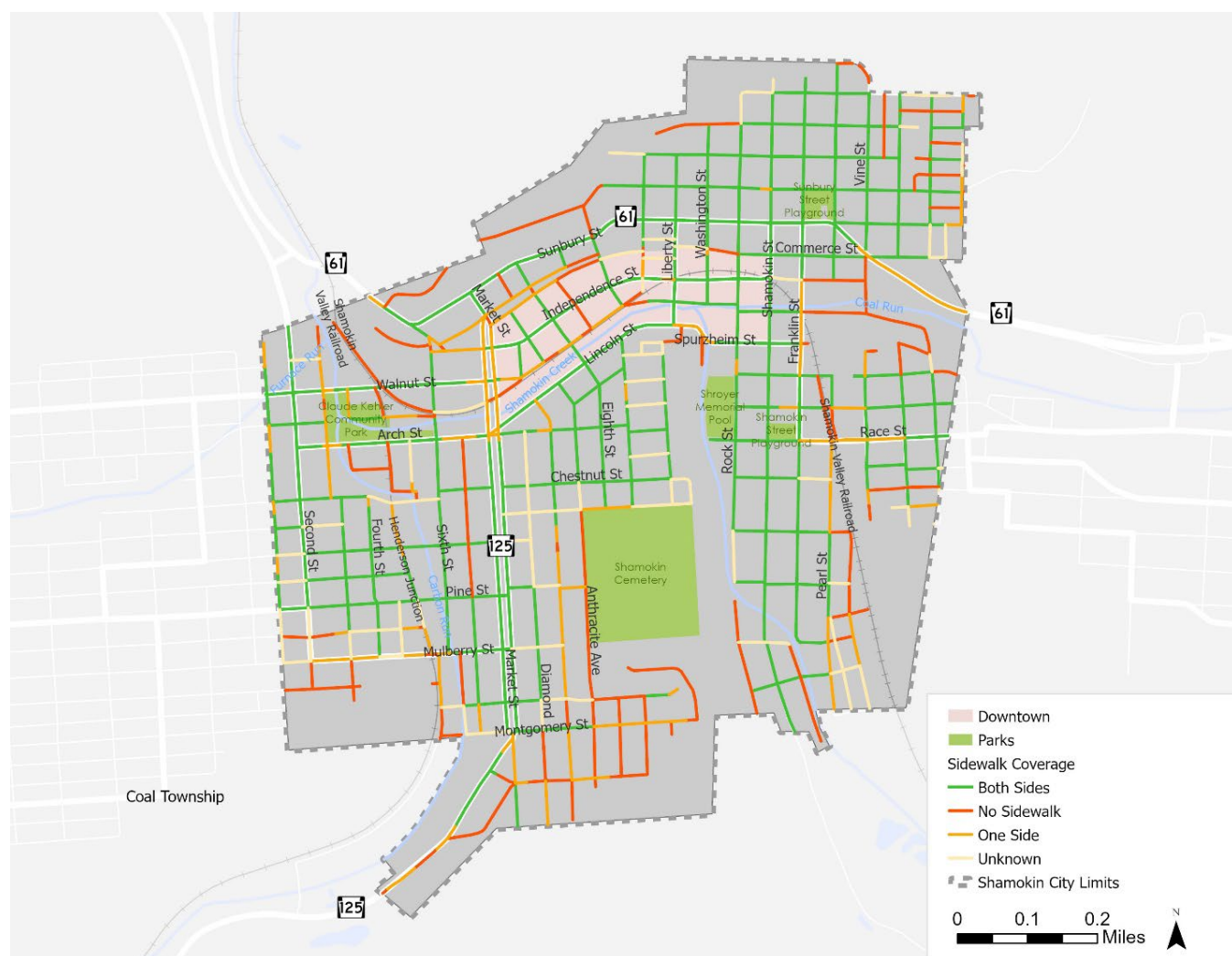
In some parts of the city, the lack of sidewalks and pedestrian crossings adds to transportation safety concerns. Investments by the City in better sidewalk infrastructure are a capital improvement that supports the plan's objective of improving bicyclist and Pedestrian safety. The sidewalk network in Shamokin is relatively connected, but large portions of the street network do not have any sidewalks.

Missing sidewalks force pedestrians to share the road with vehicles, increasing the potential for crashes. Increased pedestrian foot traffic on local streets also creates the potential for conflicts with bicyclists, who may already be sharing the road with vehicular traffic. Pedestrian infrastructure creates safer streets and is important for the city to maintain. Map 3 shows which streets in Shamokin have sidewalks on both sides, one side, no sides, or if it is unknown whether a sidewalk exists.

FIGURE 11 MISSING SIDEWALK



MAP 3 SHAMOKIN SIDEWALK NETWORK AND GAPS



Market Street, from Commerce Street to Montgomery Street, has a segmented walking path through the grassy median that is separated by each intersection. Though incomplete, this walking path is an example of the existing multimodal infrastructure that can be connected to the proposed trails in Map 4 to improve pedestrian and bicyclist safety.

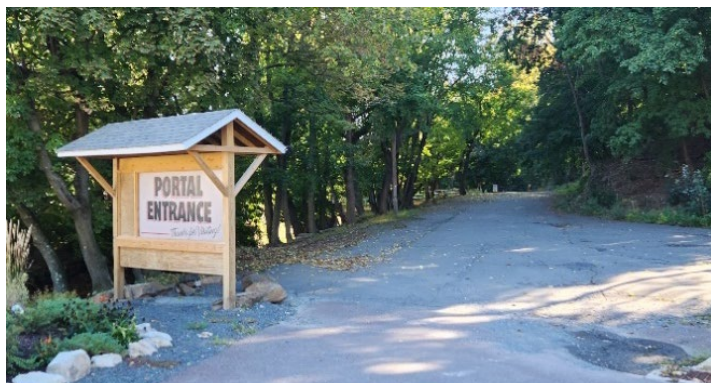
ATVs are another user of Shamokin's streets. The Anthracite Outdoor Adventure Area (AOAA), a popular off-road vehicle park near Shamokin, provides dedicated ATV access between the facility and Shamokin via the Portal at Terrace Avenue and Spurzheim Street. In 2018, the city passed an ordinance allowing ATVs to travel exclusively on designated downtown streets on weekends. There is a perception that traffic has since increased due to cars, trucks, and trailers transporting ATVs. The influx of visitors, particularly on narrow roads, raises the risk of traffic crashes. In response, local authorities and organizations have promoted ATV safety, emphasizing wearing helmets, respecting trail limits, and avoiding alcohol while riding.

Future multimodal connections throughout Shamokin include a portion of the proposed Northumberland County Non-Motorized Rail Trail on Commerce Street and the Shamokin Creek Greenway on Arch and Lincoln Streets. Multimodal improvements are also currently being designed on Independence Street as part of the streetscape project. Map 4 highlights proposed walking and biking trails with a green dashed line and the designated ATV routes in a solid pink line. Lincoln Street is where ATV routes and proposed walking trails will intersect and could potentially lead to increased conflicts with pedestrians. The Portal is the ATV access point into Shamokin for riders traveling from the AOAA.

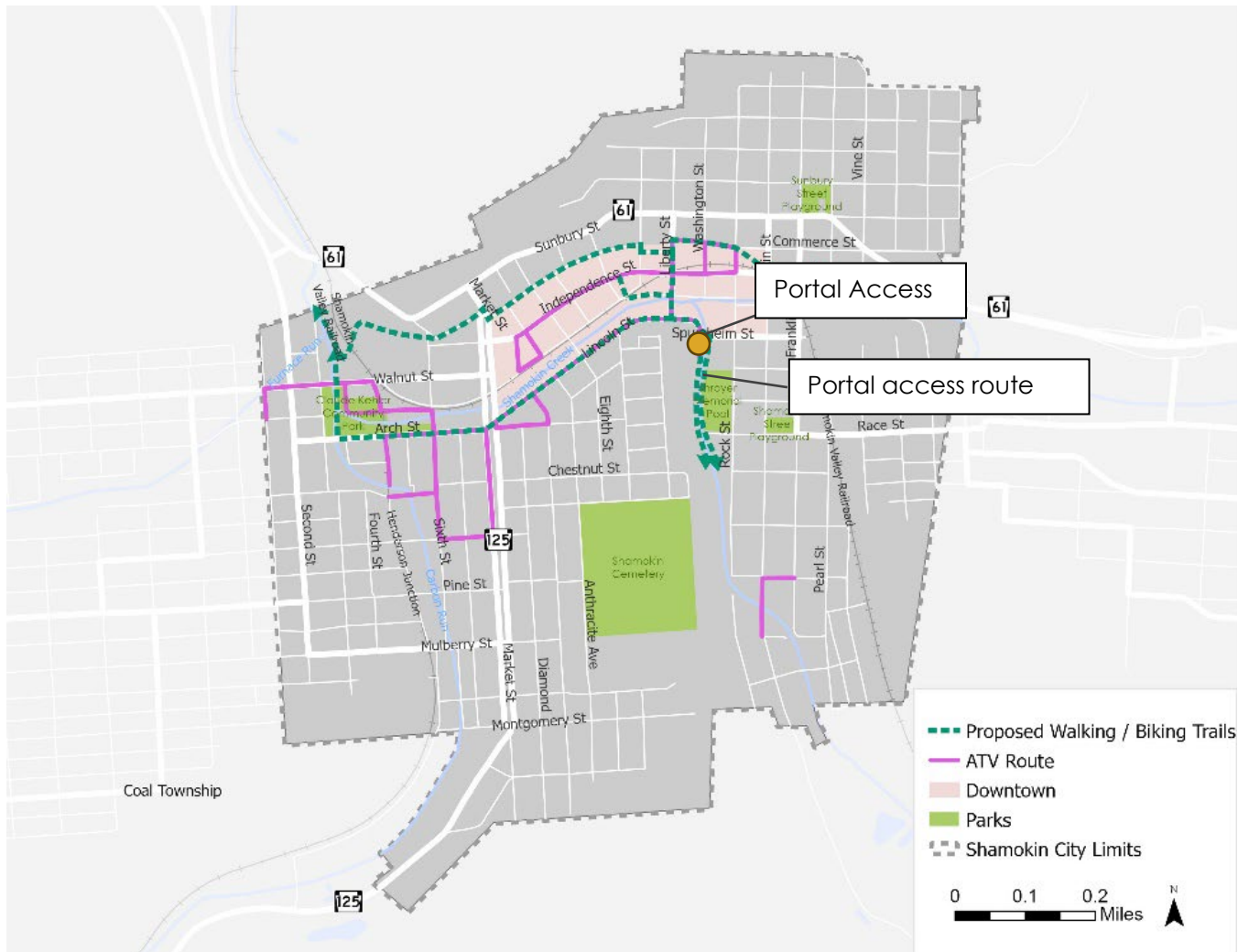
FIGURE 12 MARKET STREET WALKWAY



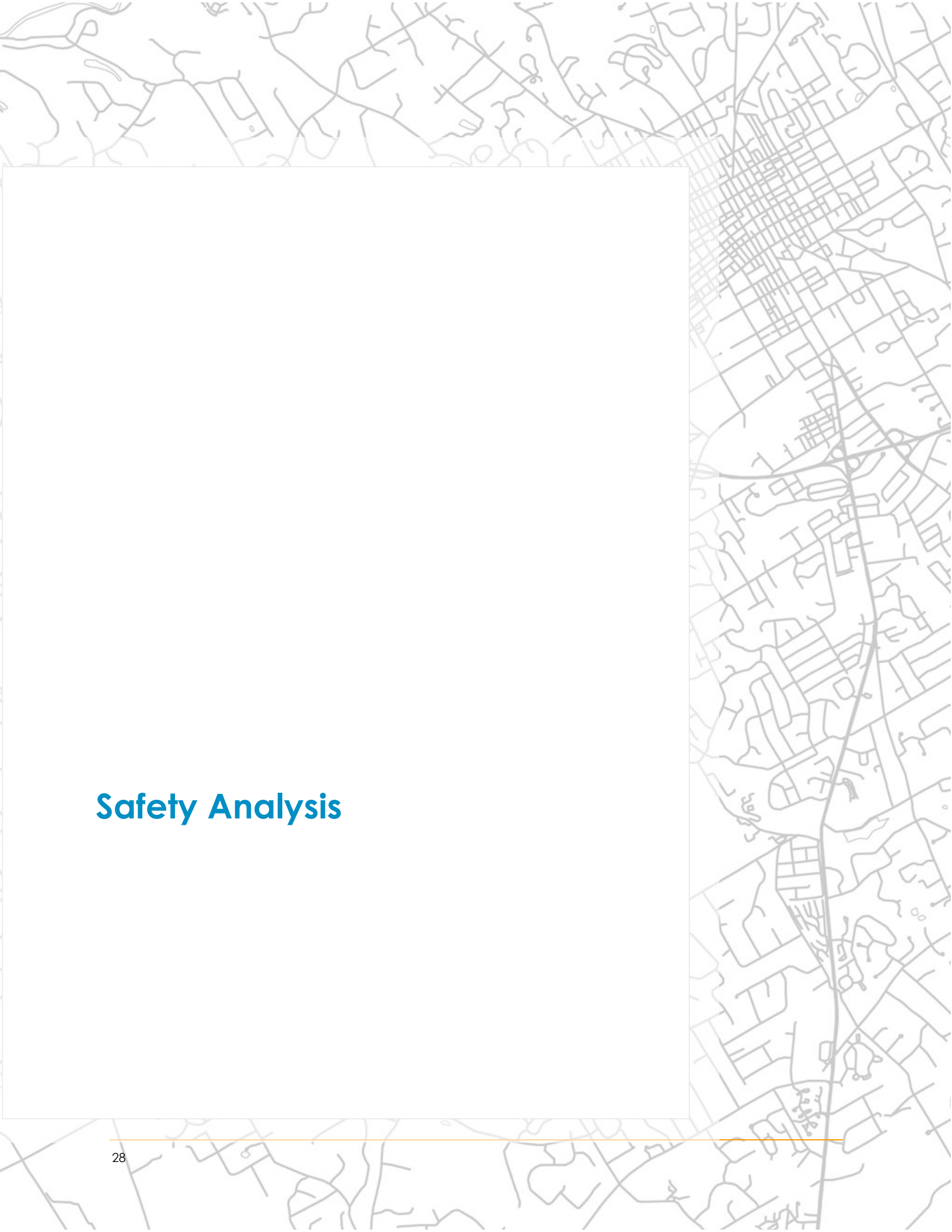
FIGURE 13 AOAA PORTAL ENTRANCE



MAP 4 SHAMOKIN EXISTING AND FUTURE MULTIMODAL NETWORK



Overall, Shamokin's transportation challenges are shaped by its urban setting within a largely rural area, aging infrastructure, narrow roads, and increasing traffic from both local and tourist activity. The narrow roads and proposed multimodal trails also present the opportunity for targeted safety countermeasures to improve bicycle and pedestrian safety. Addressing these issues requires a focus on infrastructure improvements, traffic management, and pedestrian safety initiatives.

The background of the slide is a light gray map of a city street grid. The grid is composed of thin, dark gray lines representing streets. The streets are arranged in a complex pattern, with some areas showing a more regular grid and others showing more irregular, winding paths. The map is oriented with the top of the page as the top of the map.

Safety Analysis

SAFETY ANALYSIS

This section describes the analysis methods and results for crash patterns, trends, and systemic safety evaluation for Shamokin. The crash patterns and trends analysis were conducted to identify behavioral and roadway patterns associated with fatal and injury crashes. The systemic evaluation was conducted to identify locations for systemic safety improvements related to fatal and injury crashes. Findings from these analyses inform the countermeasures and strategies to be developed in the next phase of this project.

SAFETY DATA ANALYZED

CRASH DATA

Through coordination with PennDOT and the Shamokin Police, crash data was assembled for analysis. Much of the safety data was adopted from analyses recently conducted for PennDOT. Crash data includes:

- **2014-2023 Crashes:** PennDOT dataset was retrieved from the Pennsylvania Crash Information Tool (PCIT) including ten complete years of reported crashes, representing January 1, 2014 through December 31, 2023. While it is standard practice to analyze the recent five years of crash data, the small sample size suggested review of additional years of data.
- **2023 PennDOT Vulnerable Road User (VRU) Safety Assessment:** PennDOT dataset including the top locations in the state that are high risk areas (HRAs) for vulnerable road users, defined as a non-motorist such as a pedestrian, bicyclists, other cyclist, person on personal conveyance, or an injured person that is a pedestrian or pedalcyclist.

Crash Data

Crash data was collected from PCIT database. This data was compared with crash reports available to the city staff, which resulted in some slight variations between the two datasets.

Crashes reported to PCIT were used for analysis, as they represented a more complete picture of total crashes in the Shamokin region.

OTHER DATA

Additional data was assembled with the help of SEDA-COG staff for the existing conditions analysis, including:

- **ATV Routes:** With the popularity of ATVs and other off-highway vehicles (OHVs) in the area given the number of visitors from the AOAA, the City of Shamokin has designated some corridors as OHV Routes, along which visitors can legally ride their OHVs on Friday, Saturday, and Sunday. The route includes Lincoln Street from Liberty Street to Market Street and Independence Street from Rock Street to Diamond Street, providing OHV users with access to downtown Shamokin. The path also connects south to the AOAA, allowing OHV users easy access to and from the city.
- **Proposed Bicycle/Pedestrian Facilities:** As discussed above, Northumberland County has created a rails-to-trails initiative to convert abandoned railroad right-of-way into

pedestrian and cycling facilities, connecting many of the municipalities in the area. The planned Northumberland County Rail Trail would parallel Commerce Street in downtown Shamokin, extending to Mount Carmel to the east and to Sunbury to the west. This trail would connect to existing and proposed pedestrian and bicycle facilities in Shamokin, increasing the overall connectivity of the multi-modal network.

CRASH PATTERNS AND TRENDS

This section presents crash patterns and trends for Shamokin. The analysis focuses on identifying behavioral and roadway patterns associated with fatal and injury crashes. The project team analyzed reported crashes together to identify systemic trends across locations. Findings from this analysis helped inform the systemic evaluation and countermeasure considerations to be determined in later phases of the project.

Reported crashes were analyzed across motor vehicles, pedestrians, and bicyclists. Trends and findings are organized into three sections:

- Crash analysis findings,
- Overall high injury network
- VRU safety

Reported Crashes

Traffic crashes that are included in PennDOT's PCIT database. Since some crash types like bicycle and pedestrian crashes are underreported, reported crashes do not necessarily represent total crashes. All crash data in this section is based on reported crashes.

Overrepresented Crash Type

Crash attribute (e.g., crash type, driver contributing circumstances) that has a higher proportion of crashes in Shamokin than statewide.

CRASH ANALYSIS FINDINGS

General Trends

The project team conducted a regionwide historical trends analysis to identify characteristics associated with more frequent crashes and more severe outcomes and provide a contextual understanding of roadway safety in Shamokin. Analyzing crashes at the regionwide level provides sufficient observations to identify trends and allows for identification of issues that occur frequently across the network in similar locations but may not have occurred repeatedly at the same locations.

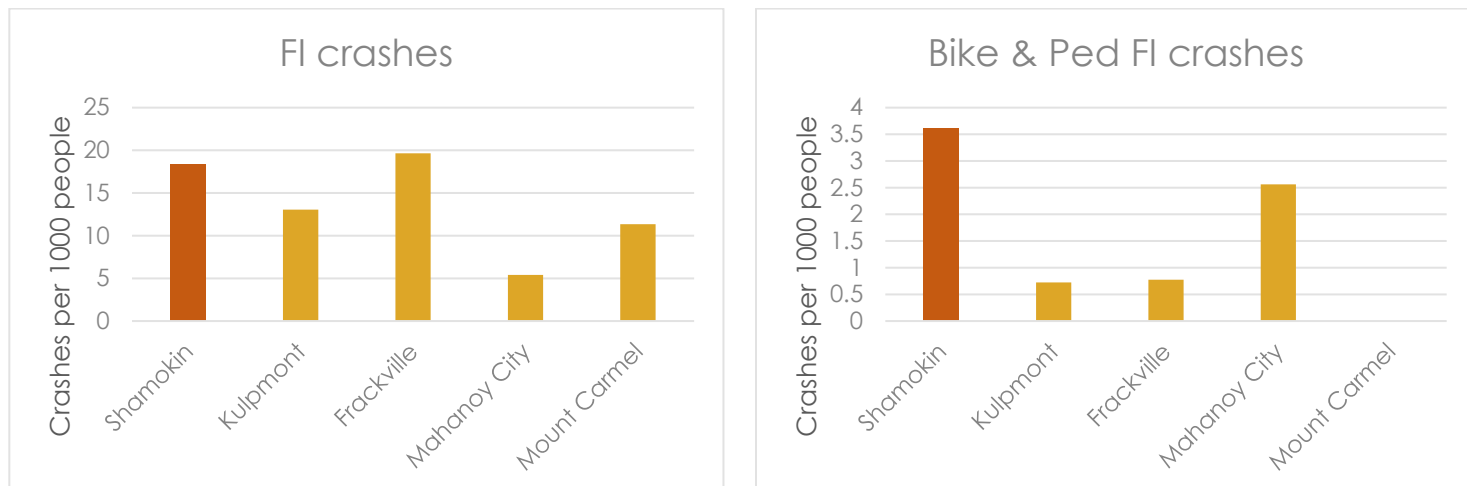
Shamokin's crash statistics, when compared to similar small cities or peer communities, indicate a notable trend in terms of crash frequency (see Figure 14). Among its peer

Key takeaways

- Fatal and injury crashes increased notably between 2020 and 2023
- High crash concentrations occur at intersections with ATV routes and bike/pedestrian trails
- Afternoon peak hours show a higher concentration of severe crashes
- Stop-controlled intersections and local roads experience most crashes
- Pedestrian crashes disproportionately contribute to severe outcomes
- Speeding and impaired driving significantly elevate crash severity

cities, Shamokin ranks second in total crashes and fatal/injury (FI) crashes per capita. In terms of vulnerable road user (VRU) crashes, Shamokin stands out with the highest rate of bicycle and pedestrian-related crashes, both total and fatal/injury, per capita.

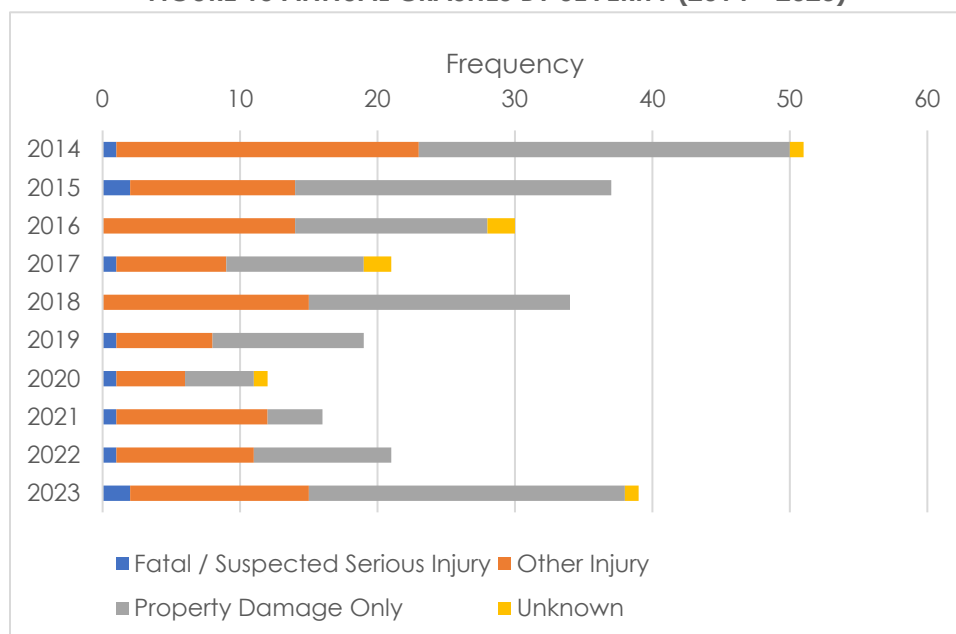
FIGURE 14 BENCHMARK DATA FOR PEER COMMUNITIES



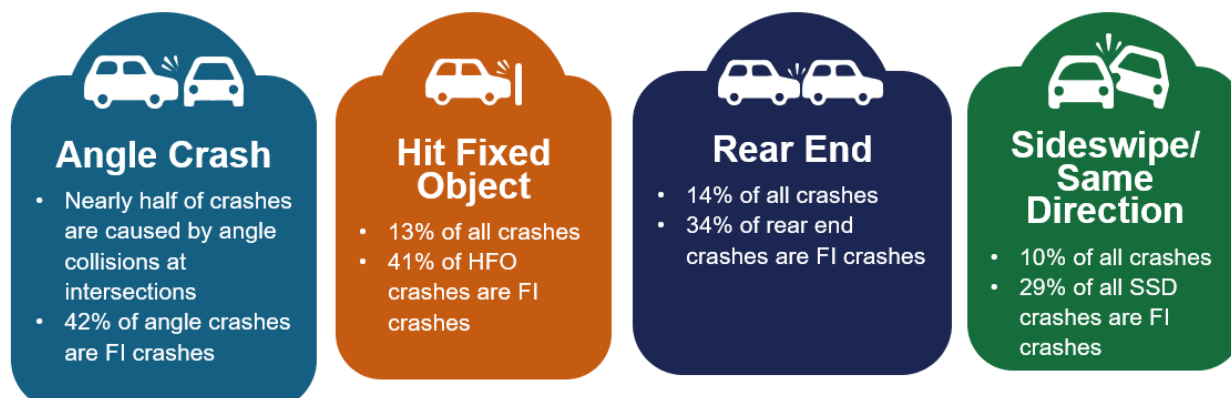
(FI denotes fatal + injury crashes)

Over the past decade, Shamokin has experienced fluctuations in crash frequency, with a notable decline in 2020 during the COVID-19 pandemic. However, crashes have risen in subsequent years, aligning with broader national trends. During this 10-year period, there was an average of 28 reported crashes per year, 45% of which resulted in a fatality or injury. Figure 15 presents reported crashes by year and severity level. Between 2020 and 2023, the percentage of crashes with a reported fatal or injury increased from 5% of reported crashes to 12% of reported crashes. This trend corresponded to an increase in reported fatal and injuries from 8 reported crashes in 2020 to 15 crashes in 2023.

FIGURE 15 ANNUAL CRASHES BY SEVERITY (2014 – 2023)

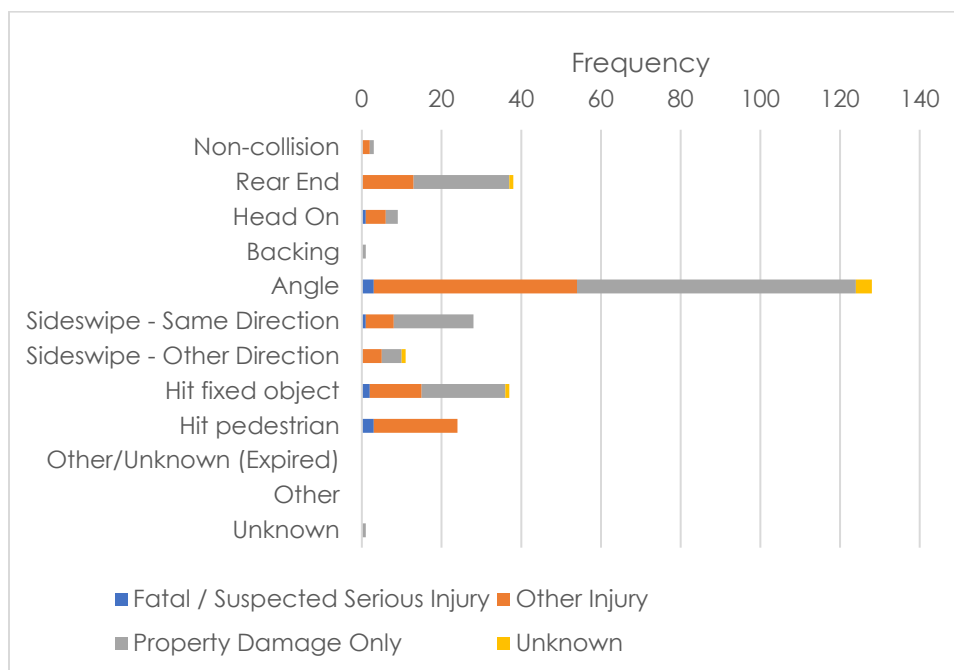


In Shamokin, characterized by a grid-like network predominantly comprised of local roads, a notable proportion of crashes occur at local intersections. Specifically, approximately half of these incidents involve angle collisions, reflecting a significant safety concern at intersections. In addition to angle crashes, crashes involving hitting fixed objects, rear-end collisions, and same-direction sideswipes are prevalent. Of particular concern is the high rate of fatalities and injuries associated with these crash types.



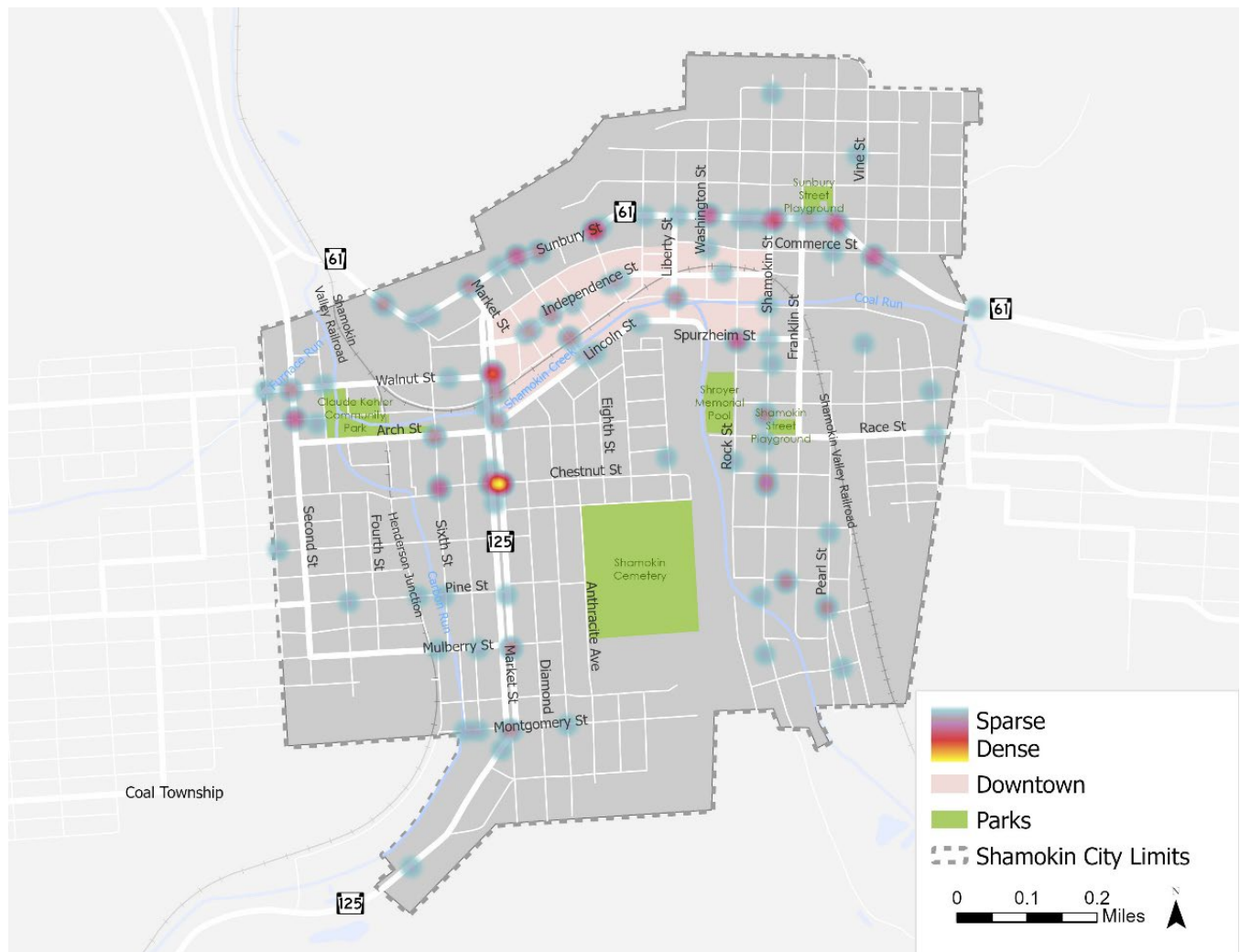
These four crash types account for 71% of reported fatal and injury crashes. Angle crashes were found to be the most critical crash type for Shamokin city. 42% of all angle crashes resulted in FI and in this study region angle crashes are responsible for 43% of all FI crashes. Figure 16 describes reported crashes by type and reported severity.

FIGURE 16 TOTAL REPORTED CRASHES BY TYPE AND SEVERITY (2014 – 2023)



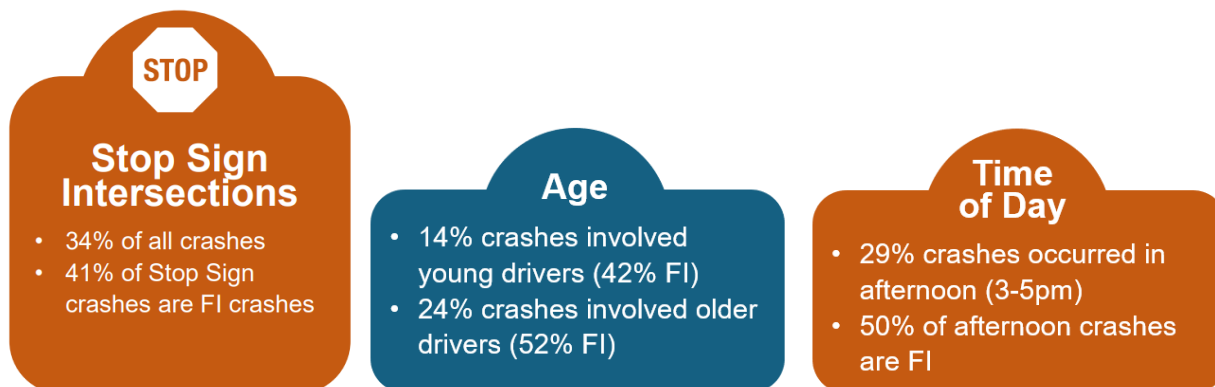
Map 5 shows a heatmap of the most severe crashes in Shamokin. Brighter spots on the map indicate denser clusters of fatal and injury crashes. These denser clusters follow Shamokin's High Injury Network and concentrated along Market Street and Sunbury Street.

MAP 5 FREQUENCY OF FATAL AND INJURY CRASHES

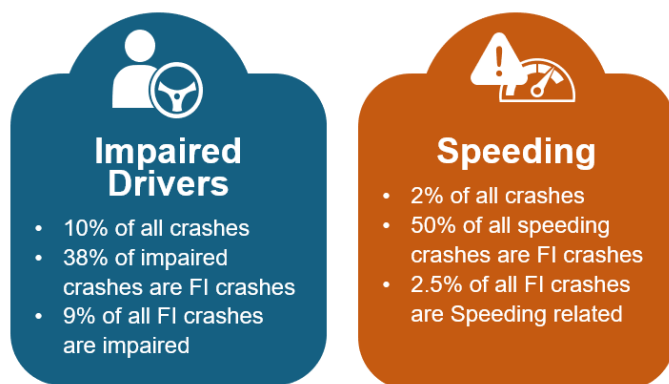


Although pedestrians related crashes didn't show up in our analysis considering total number of crashes, they pose a great threat to the overall safety of the Shamokin City. Although hit-pedestrian crashes account for only 9% of all crashes and 19% of all FI crashes, 100% of these crashes resulted in FI.

In Shamokin, most intersections are unsignalized, resulting in a significant number of crashes at stop-controlled intersections. These intersections also experience a high number of pedestrian-related crashes. Notably, of all fatal and injury (FI) crashes in Shamokin, one-fifth involve pedestrians, highlighting a critical VRU safety concern.



Approximately one-third of all crashes involve either young or older drivers, both of whom are particularly vulnerable to FI crashes. In terms of temporal patterns, about one-third of the crashes occur during the afternoon peak hours, a time when traffic volumes are typically higher. Notably, half of the crashes during this afternoon result in fatality or injury, suggesting that the combination of increased traffic density and potential driver fatigue or distraction may exacerbate the severity of the crashes.



Furthermore, speeding and impaired driving are prominent issues in Shamokin. While neither factor resulted in a large number of overall crashes, these factors contribute significantly to the occurrence of fatal and injury crashes.

Roadway and Intersection Classification

Figure 17 presents the reported crashes by roadway classification as reported in the crash data. The great majority of the road network of Shamokin is local, so the crash frequency is higher on local roads. Although state roads (PA 61 and PA 125) make up only 35% of Shamokin's street mileage, they are responsible for 44% of all crashes and 50% of all FSSI crashes.

FIGURE 17 CRASHES BY ROADWAY CLASS (2014 – 2023)

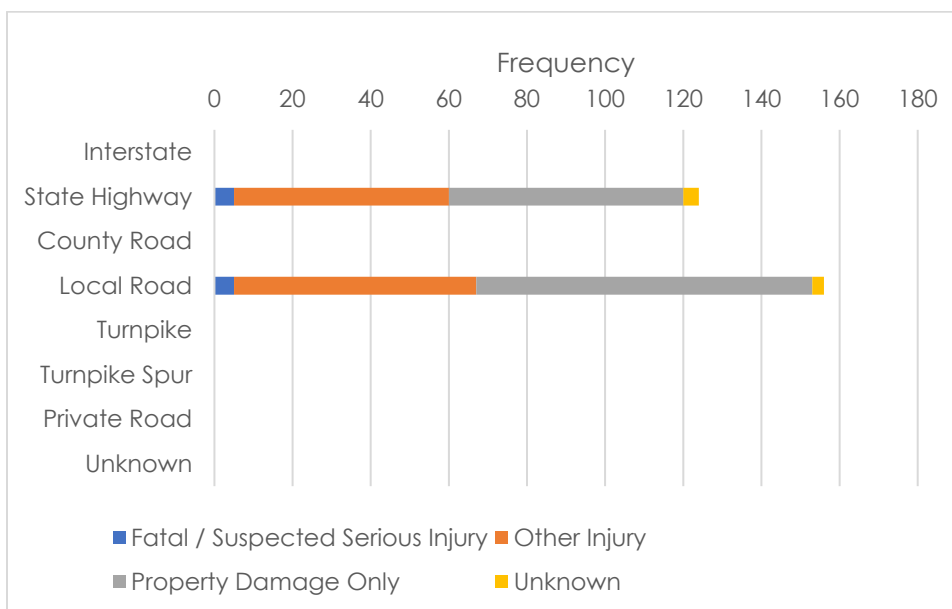
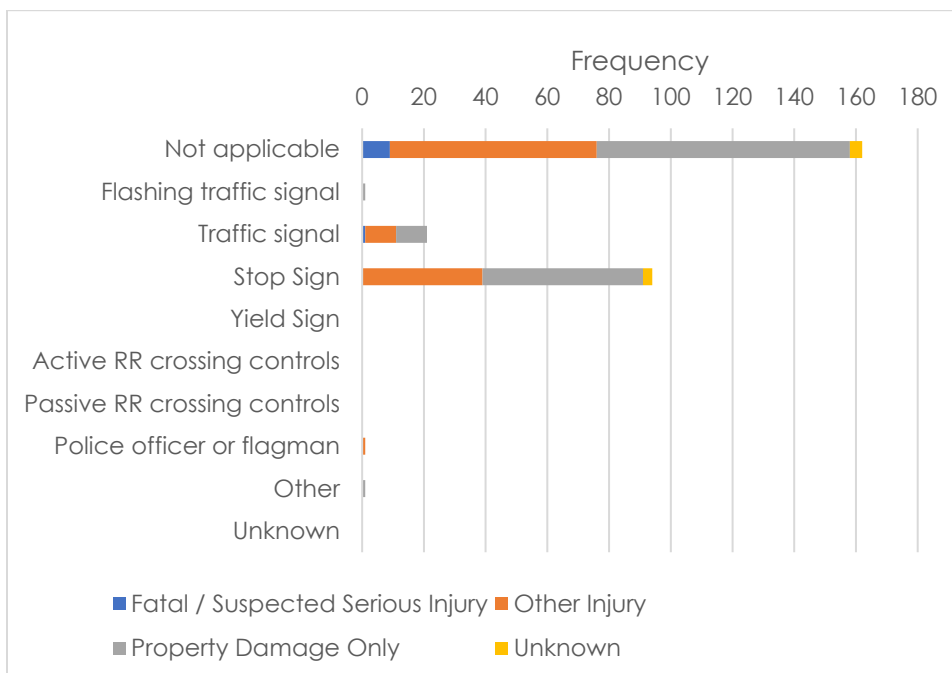


Figure 18 presents the reported intersection traffic control device for crashes identified as being intersections related. The category 'Not applicable' refers to road segment related crashes. Among the intersection related crashes, stop controlled intersections are found to have higher crash frequency.

FIGURE 18 CRASHES BY REPORTED TRAFFIC CONTROL DEVICE (2014 – 2023)



Crashes by Mode

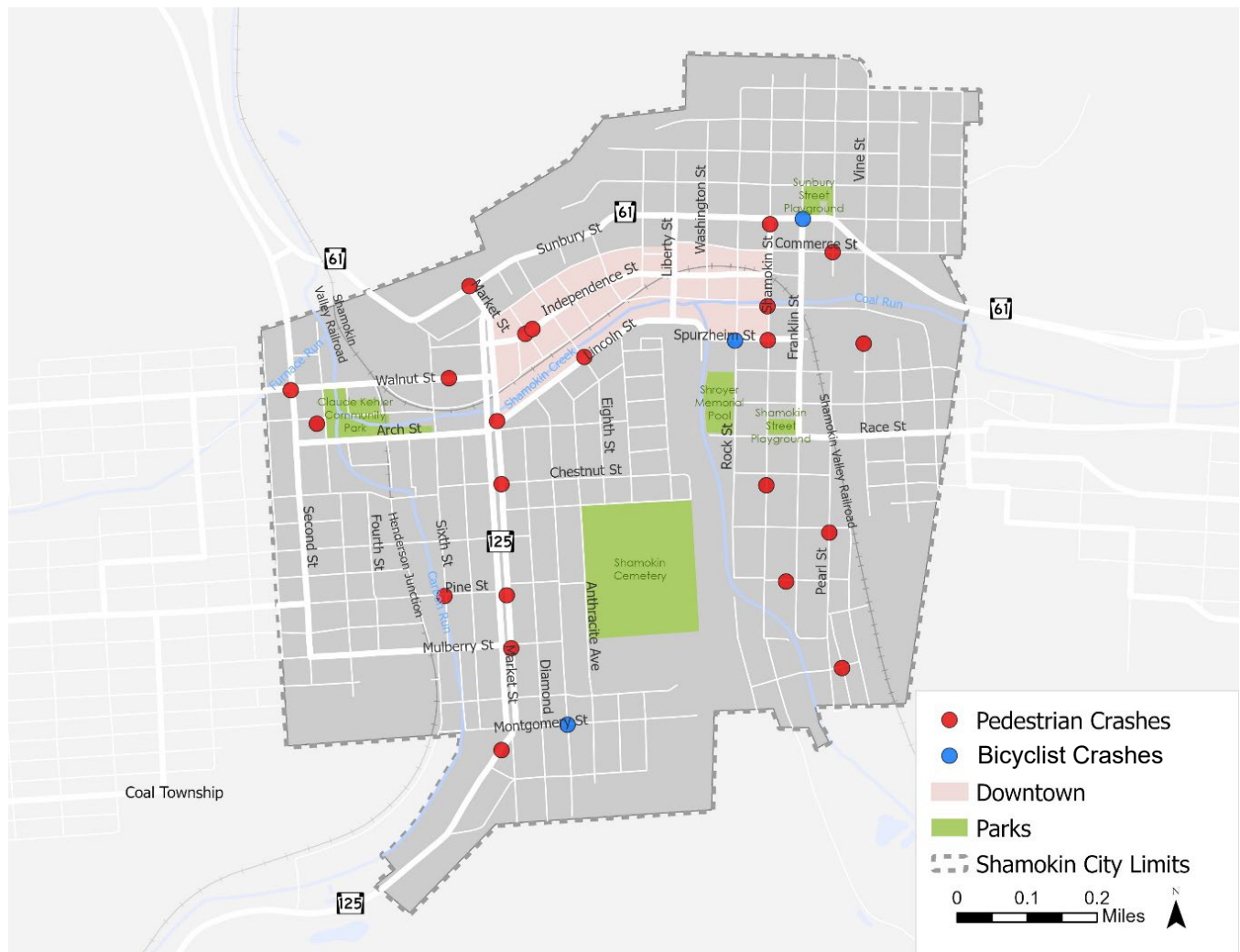
Table 1 describes the severity of crashes based on the road users involved. 91% of crashes involved only motor vehicles. Crashes involving people walking accounted for only 8% of all reported crashes; however, these crashes accounted for 17% of all reported fatal and injury crashes.

TABLE 1: TOTAL REPORTED CRASHES BY SEVERITY AND MODE (2014 – 2023)

	Fatal / Suspected Serious Injury	Other Injury	Property Damage Only	Unknown	Total
Pedestrian	3	19	0	0	22
Bicycle	0	3	0	0	3
Vehicle	7	95	146	7	255
Total	10	117	146	7	280

Pedestrian-involved crashes were slightly more likely to be reported at an intersection (60% of reported crashes respectively) than motor-vehicle-only crashes (57% of crashes). There were 3 bicycle-involved crashes in Shamokin in the analysis period and all of them were reported at an intersection. Many of the intersections where these VRU crashes occurred were featured on the high injury intersection list, indicating that VRU crashes play a role in elevating the overall risk at these locations.

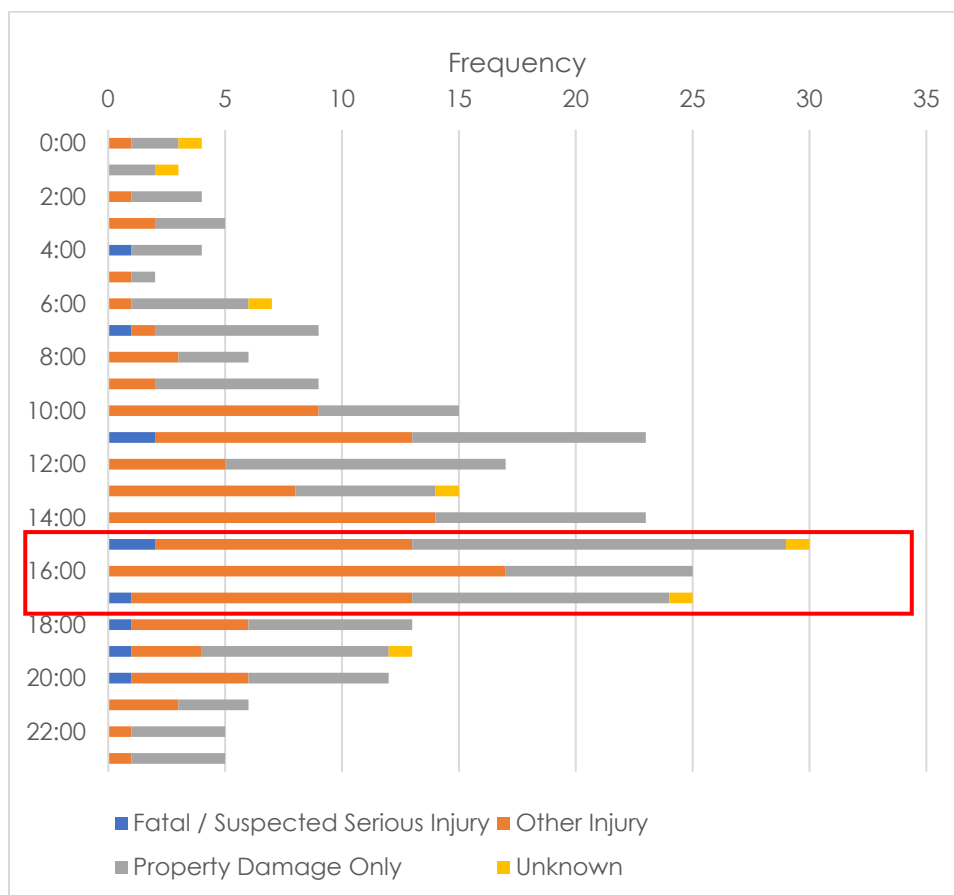
MAP 6 PEDESTRIAN AND BICYCLIST CRASHES (2014 – 2023)



Temporal Patterns

The existence of any temporal pattern in crash data was also investigated. Figure 19 presents the distribution of crashes by hour for the whole week. Higher vehicle volumes tend to increase the probability of crashes. Along this line, it was found that 29% of the crashes occurred during the afternoon peak period (3:00 P.M. - 5:00 P.M.). Moreover, among these afternoon peak period crashes, 50% resulted in FI crashes.

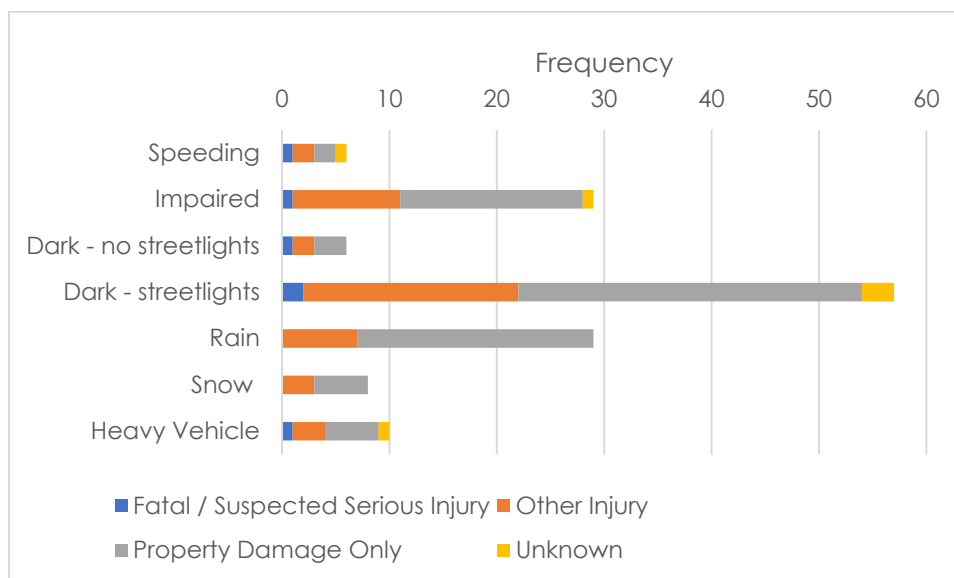
FIGURE 19 CRASHES BY TIME OF DAY (2014 – 2023)



Contributing Factors

A contributing factor identifies the activity or event that contributed to the occurrence of a crash. Note that multiple factors may be cited for a single crash. Figure 20 shows some of the primary contributing factors of crashes in Shamokin. Some of the most common issues cited were dark illumination with streetlights (20%), impaired driving (10%), and rainy conditions (10%). Unsafe speeds (2%) reflect a crash where the office could document that a driver exceeded the posted speed limit or exceeded appropriate speed based on the existing conditions, such as rain or snow. Although the percentage of crashes involving speeding is very low, 50% of the speeding related crashes resulted in fatality or injury.

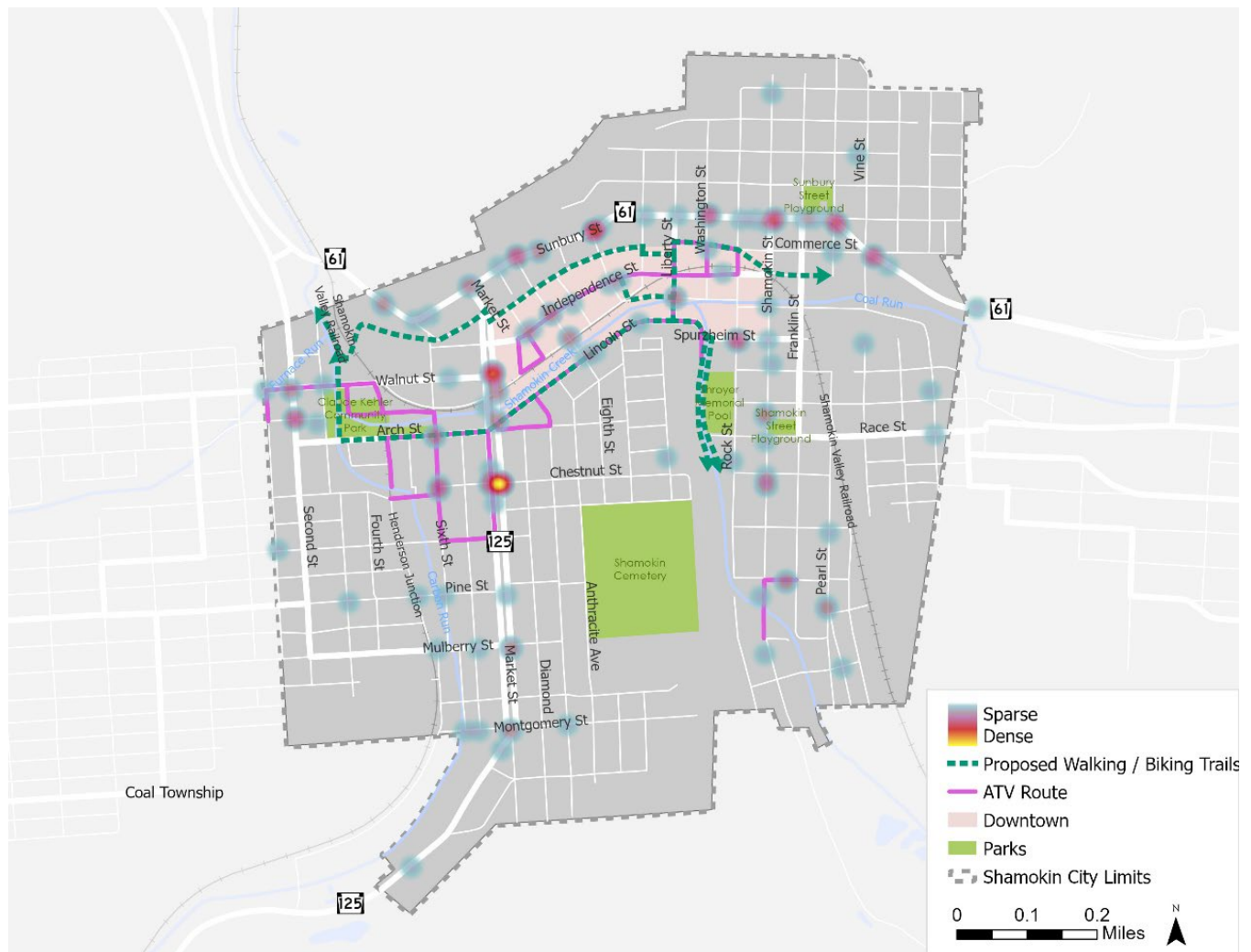
FIGURE 20 PERCENT SEVERITY BY PRIMARY CONTRIBUTING FACTOR (2014 – 2023)



Crashes and Multimodal routes

Shamokin permits ATVs to share the road with other motor vehicles, which introduces safety concerns, particularly at intersections along designated ATV routes. For example, on Market Street, where the ATV route intersects Chestnut Street, there is a notable concentration of crashes (see Map 7). Additionally, the entire stretch of Independence Street is designated as an ATV route, and multiple intersections along this corridor show a high frequency of crashes. Another area of concern is near the Portal, the entry point for ATVs coming from the Anthracite Outdoor Adventure Area (AOAA), where crash concentrations are evident. Furthermore, certain intersections, such as Arch Street and Sixth Street, as well as Lincoln Street and Eighth Street, experience crash concentrations at locations where bike/pedestrian trails overlap with road routes. These intersections represent areas of potential concern due to interactions among different roadway users.

MAP 7 ATV ROUTE AND PEDESTRIAN/ BIKING TRAILS

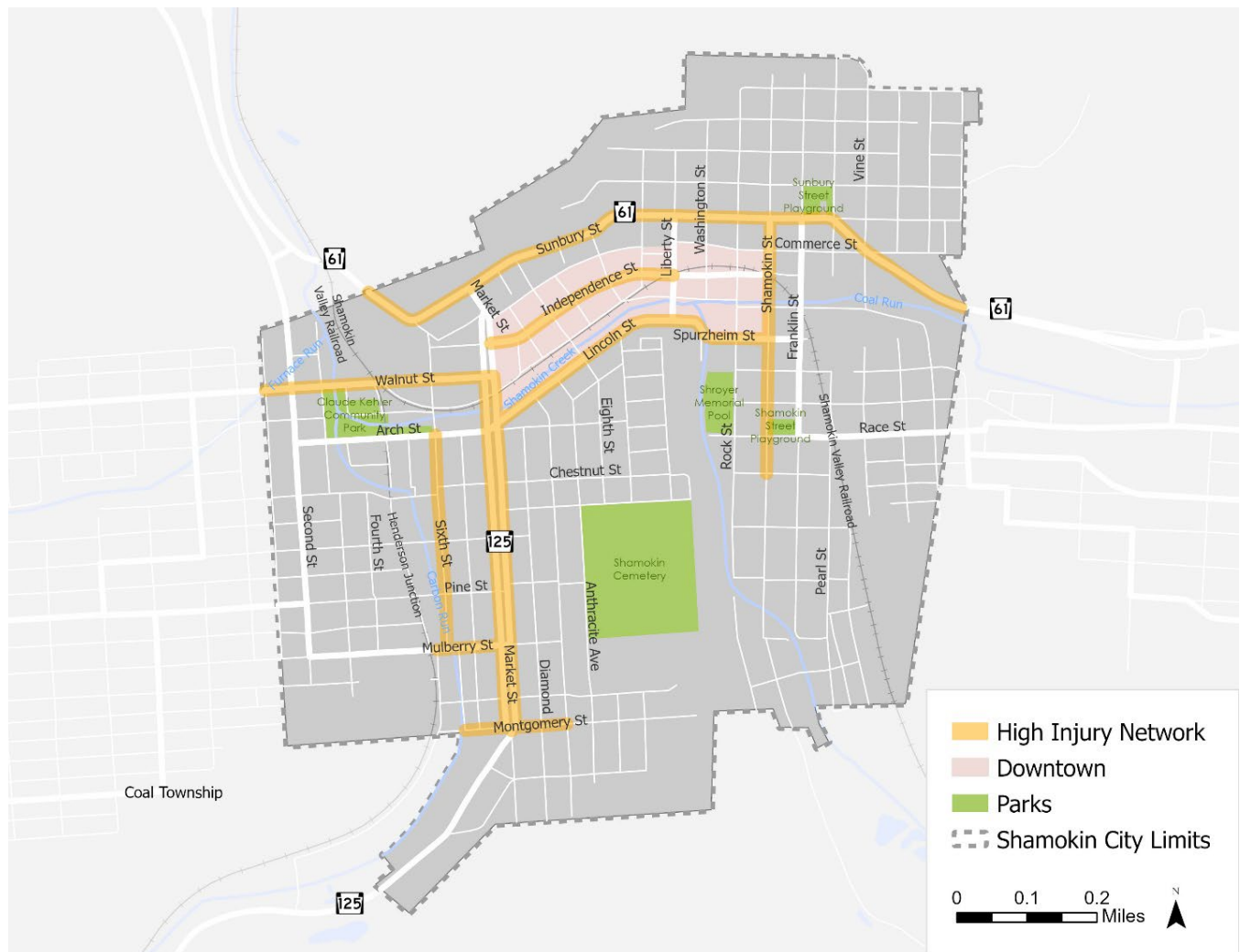


HIGH INJURY NETWORK

In general, a high injury network (HIN) consists of showing which streets have a history of more frequent and more severe crashes. The identification of the high injury network (HIN) within Shamokin focused on an evaluation of crash hotspots. Nine corridors in Shamokin are on the HIN based on the frequency of fatal and injury crashes. They include all or part of:

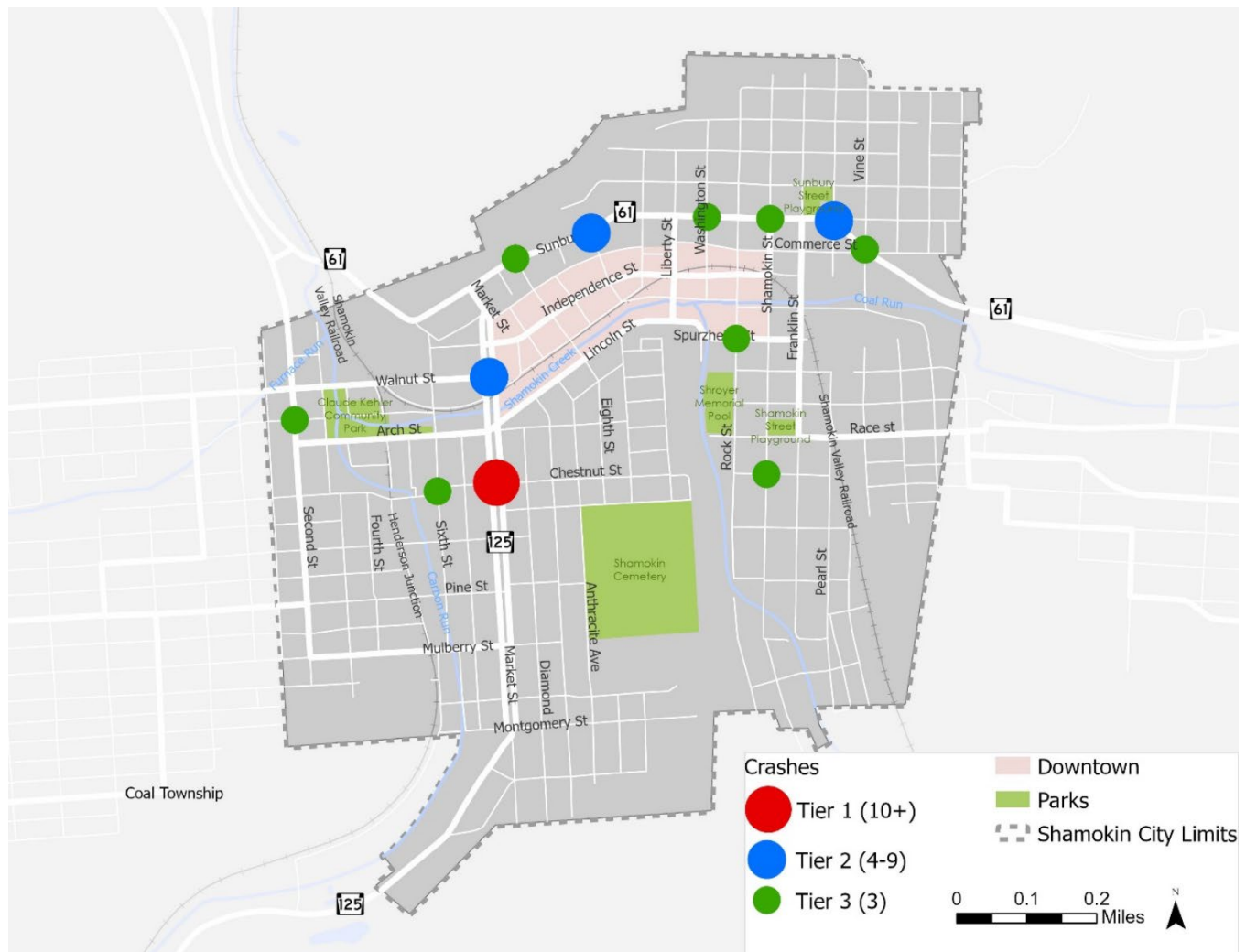
- PA 61
- Independence Street
- Lincoln Street / Spurzheim Street
- Shamokin Street
- Walnut Street
- Sixth Street
- Mulberry Street
- Market Street
- Montgomery Street

MAP 8 HIGH INJURY NETWORK (HIN)



In addition to analyzing high-injury corridors, the project team developed a High Injury Intersection list by considering all crashes within the influence zone (50 ft) of each intersection. The intersections were then categorized into three tiers based on the frequency of fatal and injury crashes, with Tier 1 intersections having the highest scores as shown in Map 9. The Tier 1 intersections are considered the highest priority to address.

MAP 9 HIGH INJURY INTERSECTIONS



The resulting list of priority intersections is as follows:

- **Tier 1 (10 or more crashes):**
 - Market Street/Chestnut Street
- **Tier 2 (4-9 crashes):**
 - Market Street/Walnut Street
 - Sunbury Street/9th Street
 - Sunbury Street/Pearl Street
- **Tier 3 (3 crashes):**
 - Water Street/2nd Street
 - Sunbury Street/Shamokin Street
 - Mt. Carmel Street/Vine Street
 - Spurzheim Street/Rock Street
 - Chestnut/6th Street
 - Sunbury Street/8th Street
 - Sunbury Street/Washington Street

TRANSPORTATION ACCESS

This section provides a summary of the status and efforts of various municipal authorities in and around the City of Shamokin regarding the current state of transportation access for all ages and abilities. This review includes information gathered from the Northumberland County, Pennsylvania Comprehensive Plan (2000), the North Central Pennsylvania Regional Public Transportation Needs Assessment - Analysis of Potential Transit Needs (2011), the Plan Go Shamokin – Shamokin Area Implementation Plan (2020), the Northumberland County Non-Motorized Rail Trail Master Plan (2022), the SEDA-COG Metropolitan Planning Organization Title VI Program Draft (2022), the SEDA-COG Metropolitan Planning Organization Complete Streets Policy (2024), and the draft Shamokin 2035 Comprehensive Plan (2025).

The SEDA-COG Metropolitan Planning Organization Complete Streets Policy (2024) provides an established process for municipalities to follow to assure safe and efficient transportation options for projects utilizing state or federal funds through the SEDA-COG Transportation Improvement Program (TIP). Building on the framework provided by the SEDA COG MPO Title VI Program Appendix S.3(2022), this policy specifically describes seven underserved population groups for whom effort should be made to ensure reliable transportation options are available:

- Minority populations (Hispanic/Latino and/or non-white)
- Low-income populations (in-poverty)
- Senior populations (65 years and older)
- Disabled populations
- Populations with limited English proficiency (LEP)
- Populations with no personal vehicle available (zero-vehicle households)
- Populations of female-headed households with children

According to The MPO Title VI Program, taking additional consideration into these vulnerable populations is to guarantee adequate public participation per Federal Regulation 23 C.F.R. § 450.316 and compliance the Americans with Disabilities Act (ADA).

DEMOGRAPHICS AND POPULATIONS

Since at least 1950, both Northumberland County and the City of Shamokin had seen decreases in population. While the county had remained relatively steady since the 1990s, Shamokin had seen year after year of losses, with its 2020 population of 6,942 residents less than half of that in 1950. According to the current version of the Shamokin 2035 Comprehensive Plan, some of the most significant losses in recent years had been in seniors (with an overall percentage of 15.3% in 2022), while there had also been nominal increases in youth under 18 (with an overall percentage of 25.8% in 2022). This resulted in a median age of 38.1 in 2022, roughly five years younger than the surrounding county. Despite this, 32.6% of households in Shamokin were still home to residents 65 and older, 59% of which were seniors living alone. The ramifications of such a prevalent senior population are further supplemented by the fact that one in four residents in the city lived with a disability. These largely consisted of those with ambulatory disabilities (11%) and independent living difficulties (11.9%), rates were even higher among seniors.

In addition to a trend towards younger residents, between 2010 and 2022, both census and ACS data supported an increase in racial and ethnic diversity, particularly for Hispanic and Latino residents (11.4% ACS 2022) and residents of two or more races (14.6% ACS 2022). Census data

(2010) and ACS data (2022) further indicated that white residents had decreased in proportion from 96.8% to 80.8%.

In terms of economic conditions, 35.9% of residents lived below the poverty line in 2022. This is particularly concerning for a city trending younger, as ACS data from the same year indicated that younger residents were more likely to experience higher rates of poverty. At the same time, poverty rates were significantly lower in the county (12.4%) and state (11.8%). In the same year, the City's unemployment rate of 5% was higher than that of the county (2.7%) and the state (3.4%), while the median earnings of \$34,577 were nearly \$10,000 below that of the county and \$16,000 below that of the state.

The city's percentage of workers that walk to work is 7.5%, more than double the rates of the county and the state, while the percentage of workers that use public transportation is .5%, roughly the same for the county and lower than the state. This high proportion of walkers is supported by the fact that parts of Shamokin have a disproportionately high percentage of residents without access to a vehicle (>16.9%), according to data available from the Title VI Program. Interestingly, the SEDA-COG MPO Complete Streets Policy also names users of horse and buggies as those potentially impacted by the Complete Streets Policy, likely due to the Amish and Mennonite communities located throughout the SEDA-COG region. However, 2024 statistics from Elizabethtown College estimate that Northumberland County has low amounts of Amish residents.

While there is a relatively high rate of residents who walk to work, only 8.1% of the workers live in the city, and commuter times are significantly higher than that of the county and state. County and regional employment forecasts estimate an increase in jobs in the city, which may lead to more residents working locally. While not specifically in the forecasts, planning efforts have identified hospitality and tourism as a potential employment generator.

STREETS AND ACTIVE TRANSPORTATION

Active travel is a recurring priority of the City of Shamokin. The 2035 Comprehensive Plan's vision statement explicitly mentions multimodal transportation as a community asset for all residents, and the adoption of Complete Streets is also one of the listed goals of the plan. The high proportion of regular walkers in the city suggests that pedestrian comfort is a need.

However, while the city's street layout is generally walkable and bikeable, new development, when permitted, is often highly automobile dependent. This has led to conflicts with the city's existing pedestrian street layout, particularly with drive-thru lanes and large parking areas in densely developed areas. Additionally, many sidewalks in Shamokin are narrow, poorly maintained, obstructed by utility poles and signposts, or are steeply sloped. This leads to these sidewalks being uncomfortable, inaccessible to those with a wheeled device such as a stroller, and potentially non-compliant with the Americans with Disabilities Act. (ADA). Many streets also require new signage, lighting improvements, and street trees. Similar sentiments for streetscape improvement can be found in the GoShamokin Plan (2020), which specifically points out that many of the intersections along Independence Street do not meet ADA standards for accessibility, despite efforts to retrofit intersections throughout downtown with bar-type crossings. The plan recommended that larger intersections upgrade to PennDOT Continental style "piano key" crosswalks.

In terms of cycling infrastructure, bike racks are lacking at key destinations such as libraries and grocery stores. The 2035 Plan specified that cycling infrastructure should be implemented in select areas where pedestrians, cyclists, and transit riders are likely to travel. Implementing these improvements would also show support for the Northumberland County Non-Motorized Rail Trail, a 35-mile trail linking Sunbury to Mt. Carmel. This trail would pass through Shamokin as a major junction point along existing sidewalks. To fully capitalize on this potential tourism asset, the city would likely need to add attractions such as bike rentals while improving overall street conditions to encourage visitors to stay in Shamokin. This project represents an opportunity to improve non-motorized transportation infrastructure not only for tourists, but also for residents and incoming workers. Specific actions that the city has undertaken for street improvement are the Independence Street Improvement Project, the Adoption of the SEDA-COG Complete Streets Policy, a city-wide signage update, and an evaluation of all pedestrian and cycling facilities in anticipation of the Northumberland County Rail Trail.

The results of undertaking these infrastructure changes would improve pedestrian/cyclist comfort and potentially increase the number of residents on the streets, ultimately providing a greater sense of safety for visitors and residents alike.

PARKING

The 2035 Comprehensive Plan emphasizes that more parking is needed to support new proposed new business, but it is recommended that any new parking does not conflict with existing pedestrian-oriented development. Parking efforts should reflect realistic parking demand, while also adopting creative solutions such as shared use lots, parking structures, and way-finding elements to existing lots. The city should not encourage building demolition for new parking lots. Both the 2035 Comprehensive Plan and the Northumberland County 2000 Comprehensive Plan propose that the zoning ordinance be updated to balance parking requirements with housing demand and the existing parking/transit availability.

PUBLIC TRANSIT

Shamokin and surrounding communities are served by two public transit services, the Lower Anthracite Transit System (LATS), which operates two fixed bus routes, and a paratransit service operated by the Northumberland County Transportation Department (NCTD) and the Susquehanna Regional Transportation Authority, also known as rabbittransit.

LATS provides a service on weekdays 8:00 am to 4:00 pm and Saturdays 9:00 am to 2:00 pm. The 2019-2020 PennDOT Performance Review for LATS reported 26,800 passenger trips, more than half of which were for seniors who, along with children five and under, ride for free. LATS has two routes, one serving Mt. Carmel and surroundings communities, and one serving Shamokin, several smaller communities, and community facilities such as the Geisinger Shamokin Hospital, the Shamokin Senior Center, Coal Township High Rise, and the Career Center. The routes meet at a transfer station at the Wal-Mart in Coal Township. A third route operates seasonally to connect to the Knoebel's Amusement Park in Elysburg ten miles north. While the 2000 Comprehensive Plan says that the lack of ADA accessibility on buses may be an issue, the 2035 Comprehensive Plan (2025) reports that all buses are equipped with wheelchair lifts, suggesting that new vehicles were made available in the previous decades. Just like street signs in Shamokin, transit stops are not signed, and the City and LATS are seeking funding to add more signage, as well as site a bus stop in downtown and shelters at 9th and Independence Streets.

LATS is the only fixed route public transit service accessible to the city of Shamokin. The closest intercity rail service is the Fullington Auto Bus Company serving Sunbury to the west and Danville to the north. While a county-wide fixed route transit service is not recommended due to projected low ridership and thus low revenue for operating costs (according to a 1997 Transit Feasibility Study conducted by the County cited in the 200 Comprehensive Plan), it has been recommended by the Public Transportation Needs Assessment that transit service be expanded to major shopping areas, large employers, and medical centers. The Public Transportation Needs Assessment also recommended that rural areas should be served by smaller buses, and during stakeholder interviews with Shamokin residents, there was favor for longer hours, a wider service coverage area, and greater promotion of the service, either through a website or bus passes.

The paratransit service offered by the NCTD provides directly operated door-to-door, demand responsive transit services for residents within Northumberland County, specifically seniors and those with disabilities, for whom fares are subsidized. It operates within the county Monday-Saturday 6:00 am to 6:00 pm and offers medical and group trips up to 20 miles past the county line. Frequent destinations are the Geisinger Medical Center, Shamokin Hospital, Evangelical Hospital, Sunbury Hospital, Wal-Mart, Weis Market, and Susquehanna Valley Mall. Users must schedule rides in advance. A quantitative analysis of the demand responsive transit services in Northumberland County found that

The Public Transportation Needs Assessment identified several specific issues with both fixed route and demand responsive transit service options available in Northumberland County. These included:

- Affordability for persons ineligible for subsidized transportation options
- A lack of awareness of the services due to insufficient marketing
- Limited hours of operation
- Restrictive eligibility requirements for same-day service for demand responsive transportation
- A need for coordination between different local governments, transit providers, and medical providers.
- A need to train drivers to handle riders with special needs
- An aging population that is remaining at home instead of senior care facilities and also driving later in life
- An increasing number of residents commuting to jobs in Harrisburg
- A general reluctance to ride public transportation due to longer travel times compared to driving, as well as the abundance of free parking.

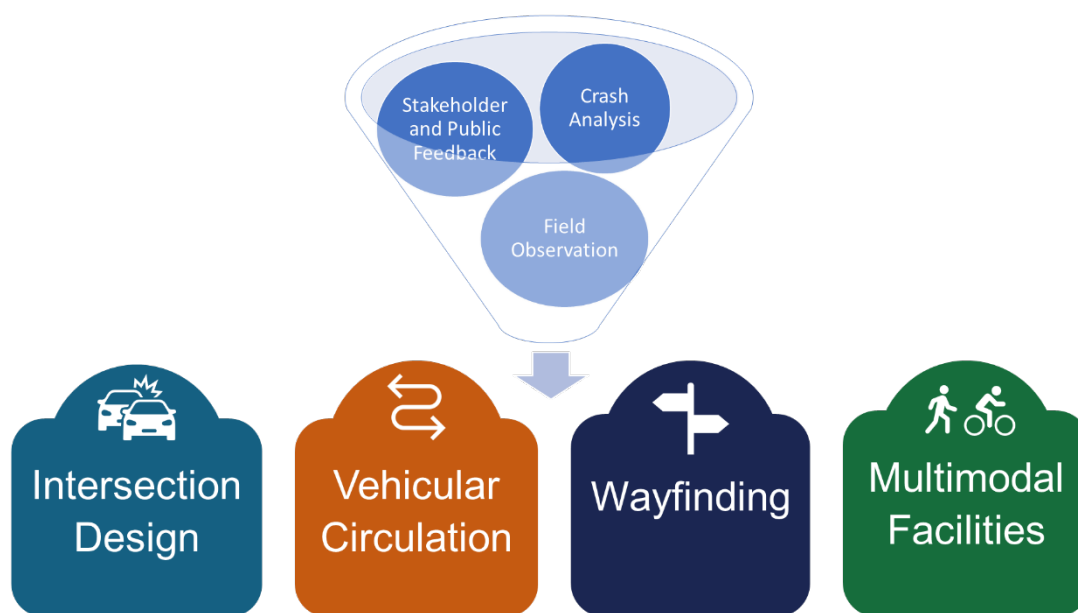
Additional recommendations in the Northumberland County Comprehensive Plan 2000 include:

- Provisions for financial support to expand transit in underserved areas, particularly elderly and low-income neighborhoods
- Policies that treat the usage of private vehicles as equal to the use of transit
- Establishing a program to encourage employers to promote the transportation service to employees
- Promoting densities needed for public transit through zoning (a sentiment repeated in the 2035 comprehensive Plan)
- Designing the built environment to accommodate buses, including bus turnouts, bus shelters, and lot configurations to allow direct pedestrian access to bus stops

- Ensuring suitable funding for operation and fare subsidies for vulnerable communities

SUMMARY OF KEY ISSUES

The identification of key traffic safety issues in Shamokin was achieved through a combination of crash analysis, field observations, and public engagement with stakeholders and the general public. These findings highlighted four critical areas requiring attention: Intersection Design, Vehicular Circulation, Wayfinding, and Multimodal Facilities. Each of these categories represents a fundamental component of the City's transportation system that must be addressed to improve safety and functionality.



INTERSECTION DESIGN

One of the primary issues related to intersection design in Shamokin is the lack of adequate pavement markings. Critical road features such as crosswalks, parking lanes, and turn lanes are not clearly defined, which can confuse and impede road users. Additionally, the non-traditional intersection geometry in some areas contributes to confusing vehicle movements. Visibility at intersections is also poor at some locations, particularly with parked cars obstructing views and medians on Market Street further complicating sightlines. Furthermore, several intersections suffer from missing or confusing traffic control measures, such as stop signs or signals, and there is a general need for improved lighting to enhance safety at night.

VEHICULAR CIRCULATION

Vehicular circulation within Shamokin presents several challenges, including difficulty for vehicles attempting to turn left onto Independence Street from Market Street. Speeding has been reported by the community as a widespread concern, particularly on state routes, with excessive speeds observed across the city. In addition to speeding, aggressive and distracted driving are perceived as common, further exacerbating safety risks. The city's angle parking arrangements on Independence Street and Market Street lead to traffic congestion and confusion, while the narrow streets, coupled with parallel parking, make it difficult for vehicles to

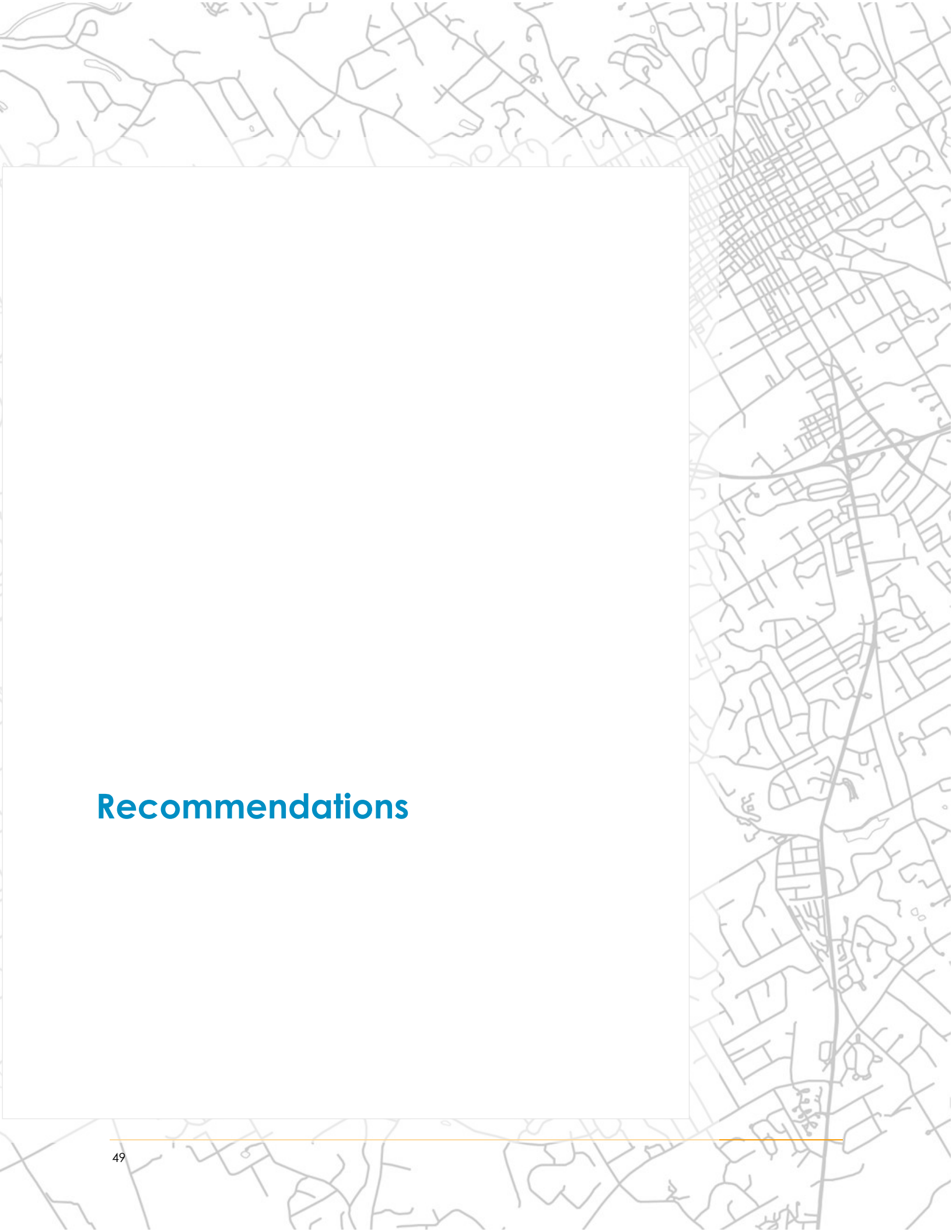
navigate. Cut-through traffic on back streets adds to congestion and poses risks to local residents.

WAYFINDING

Wayfinding issues in Shamokin are compounded by the lack of street signage. Many intersections do not have street name signs, or the existing signs are too small to be easily read. GPS navigation systems also present challenges, particularly for trucks that are being routed through narrow streets, which may not be suitable for large vehicles. There is also confusion regarding where ATVs are allowed to operate and the appropriate routes for accessing and departing from the Anthracite Outdoor Adventure Area (AOAA).

MULTIMODAL FACILITIES

The city's multimodal facilities were also stated as a significant concern. Pedestrians and cyclists feel unsafe due to missing or poorly maintained sidewalks and the lack of accessible facilities for individuals with disabilities (ADA-compliant infrastructure). Furthermore, there are conflicts between different types of vehicles, such as e-bikes and scooters, as well as between ATVs and other road users outside of the designated areas. As Shamokin plans for future development of pedestrian and bicycle trails, such as the Northumberland County Non-Motorized Rail Trail Master Plan, it is essential to address how to best accommodate these users to enhance safety and accessibility.

The background of the page is a light gray line-art map of a city street grid. The grid is denser on the right side of the page and more sparse on the left. A large, empty white rectangular box is positioned on the left side of the page, partially overlapping the map.

Recommendations

RECOMMENDATIONS

The project team chose recommendations based on national best practices in safety countermeasures, input from the Safety Working Group, feedback from public engagement phases, and the guiding goal to create safe and accessible streets for all in Shamokin.

Recommendations are grouped into:

1. Spot specific improvements along the High Injury Network (HIN)
 - Intersections
 - Corridors
2. Systemic safety improvements across the city
3. Non-infrastructure solutions

FHWA has a collection of **28 Proven Safety Countermeasures** focused on reducing fatalities and serious injuries. These countermeasures were reviewed by the project team to be included in the spot specific and systemic safety improvements across the city.

SAFETY COUNTERMEASURE TOOLBOX

The project team organized potential safety measures for the City of Shamokin into a Safety Countermeasure Toolbox organized by corridors and intersections safety. Each recommendation in the toolbox is designed to make drivers more aware of their surroundings and encourage them to slow down. For example, in the corridor safety section, speed humps reduce vehicle speeds along major roads.

FIGURE 21 CORRIDOR SAFETY TOOLKIT

Countermeasure Toolkit



Shamokin Safety Action Plan:
Making Shamokin's Streets Safer for All



CORRIDOR SAFETY

Traffic calming measures make motorists aware of their surroundings and encourage them to slow down. Speed humps and cushions use vertical deflection to slow speeds. Painting edge lines, installing lighting, and adding street and wayfinding signs raises driver awareness along the corridor.

Speed humps/speed cushions



Enhanced Delineation for curves



Back-In Angle Parking



Sidewalk Improvements



Refresh pavement markings



Lighting



Signage



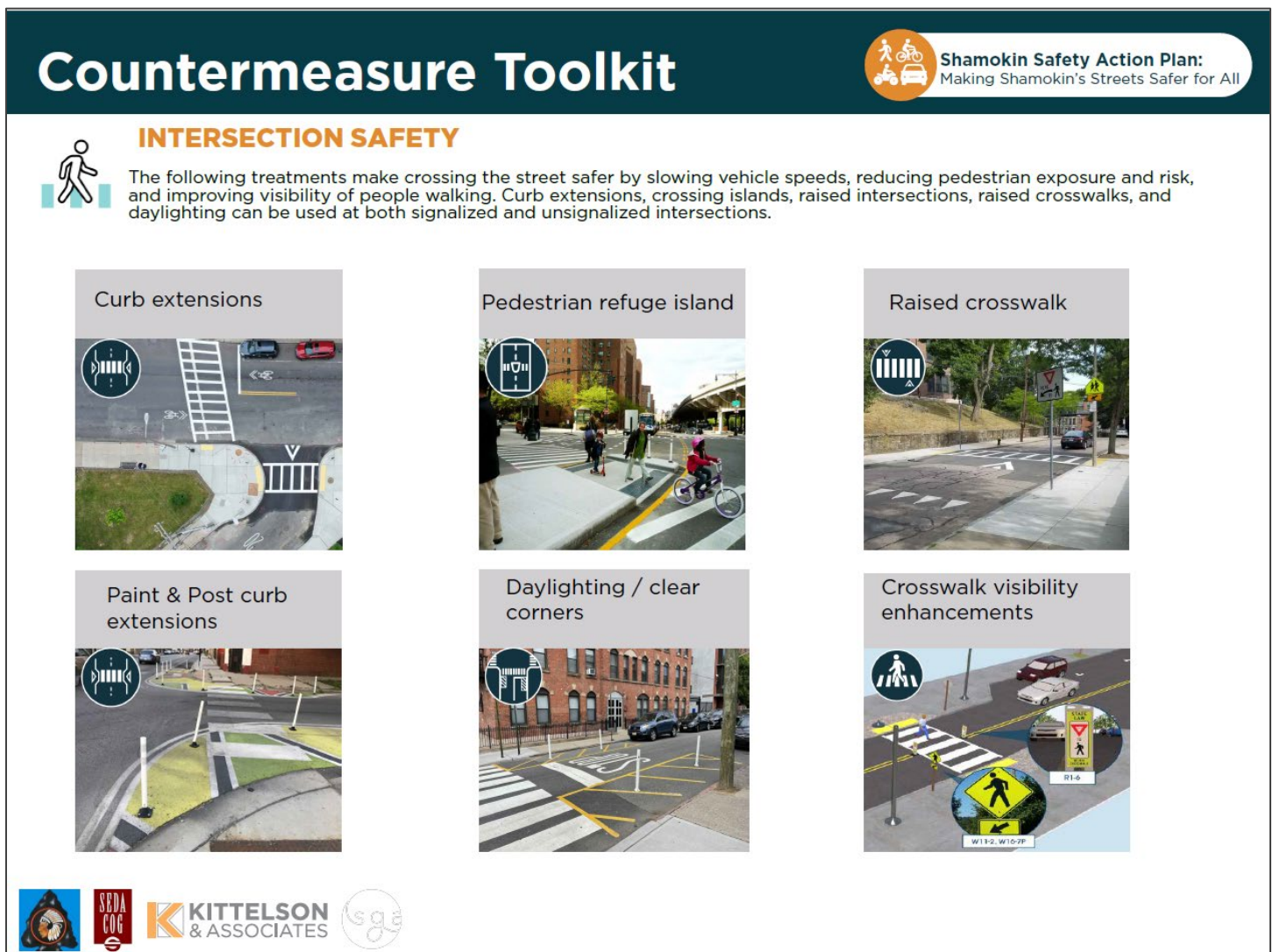
Speed Feedback Sign







FIGURE 22 INTERSECTION SAFETY TOOLKIT



INTERSECTION IMPROVEMENT TYPES

The project team categorized safety toolbox recommendations to develop intersection safety countermeasures. Most intersection improvements in Shamokin fall under the category of standard improvements. Specific intersections along Market Street and other locations have a unique geometry which warrants an expanded selection of recommendations. Below are the intersection improvement categories:

- Standard
- Curb Extension
- Market Street
- Unique Geometry

More detailed information on the intersection improvement categories are provided on the following pages.

Standard Intersection Improvement

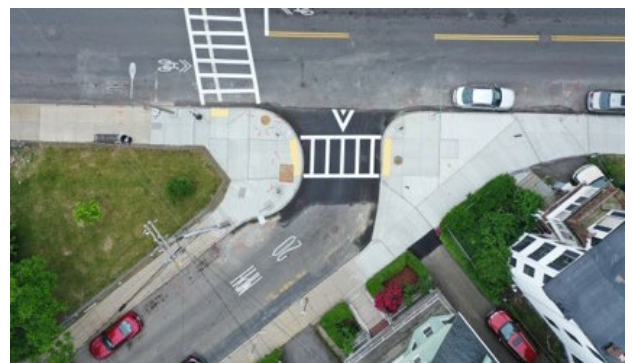
The standard intersection improvement type uses the following safety countermeasures:

- High visibility crosswalks
- ADA ramps
- In-street pedestrian crossing sign
- Pedestrian crossing warning signs at uncontrolled crossings
- Parking restrictions when applicable
- Enhanced lighting



Curb Extension Intersection Improvement

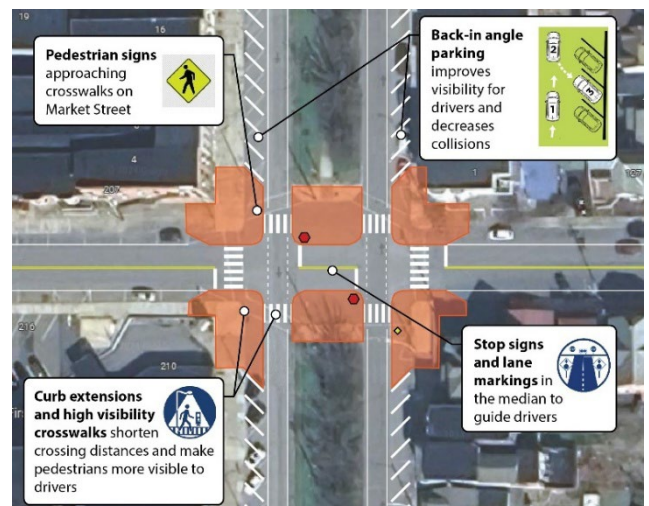
The curb extension intersection improvement type includes all of the standard intersection safety countermeasures with the addition of curb extensions.



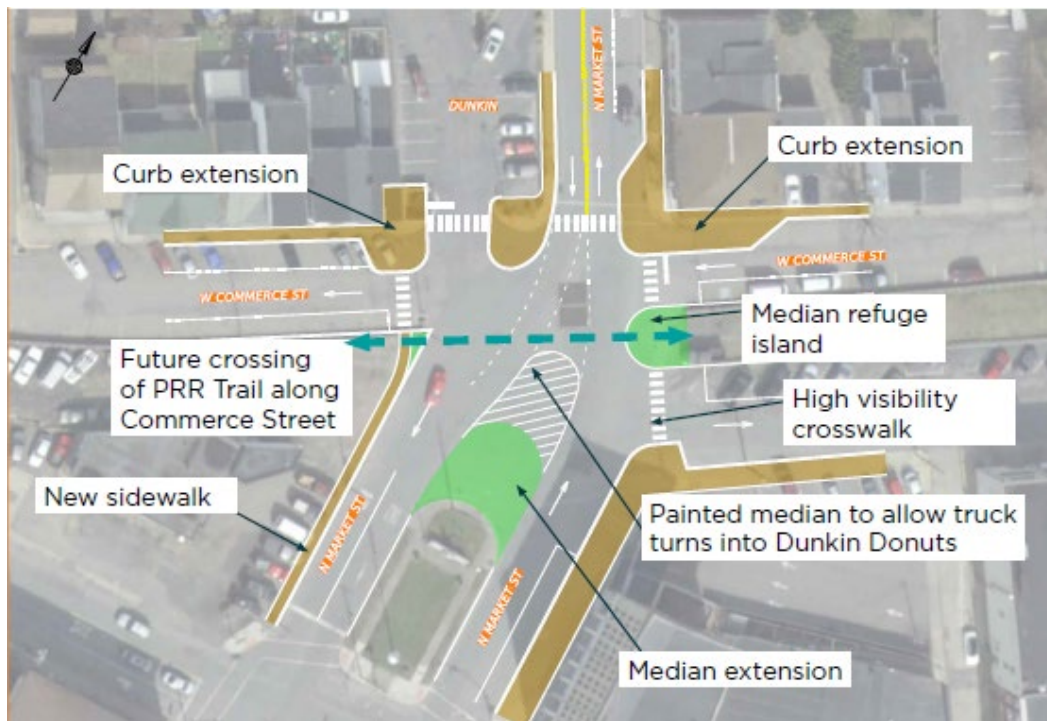
Market Street Improvement

The large median along Market Street results in a challenging two-stage crossing for drivers and pedestrians. Residents noted that intersections along Market Street are confusing for drivers due to faded pavement markings and excess pavement. The image to the right shows potential improvements at Market Street and Chestnut Street, but these are applicable along the corridor.

- High visibility crosswalks
- Curb extensions at the median and cross street corners to reduce the crossing distance
- Stop signs and lane markings where cross streets intersect with the median
- Pedestrian crossing signs
- Back-in angle parking near businesses along Market Street



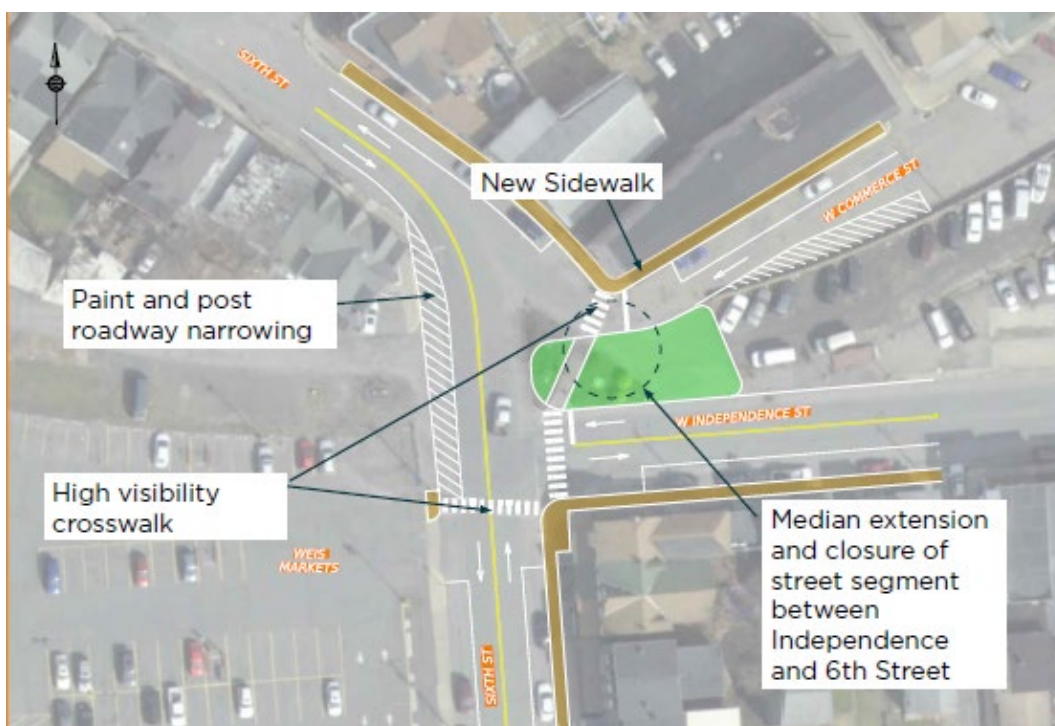
Unique Geometry Intersections



Market Street and Commerce Street

The Market and Commerce Street intersection is an example of a unique geometry and requires additional safety countermeasures beyond the standard application.

- Extending the median at Commerce to provide a pedestrian refuge island
- Extending the media at Market Street while still allowing for trucks to enter Dunkin Donuts
- Curb extensions and high visibility crosswalks at northern intersections.



Independence Street and 6th Street

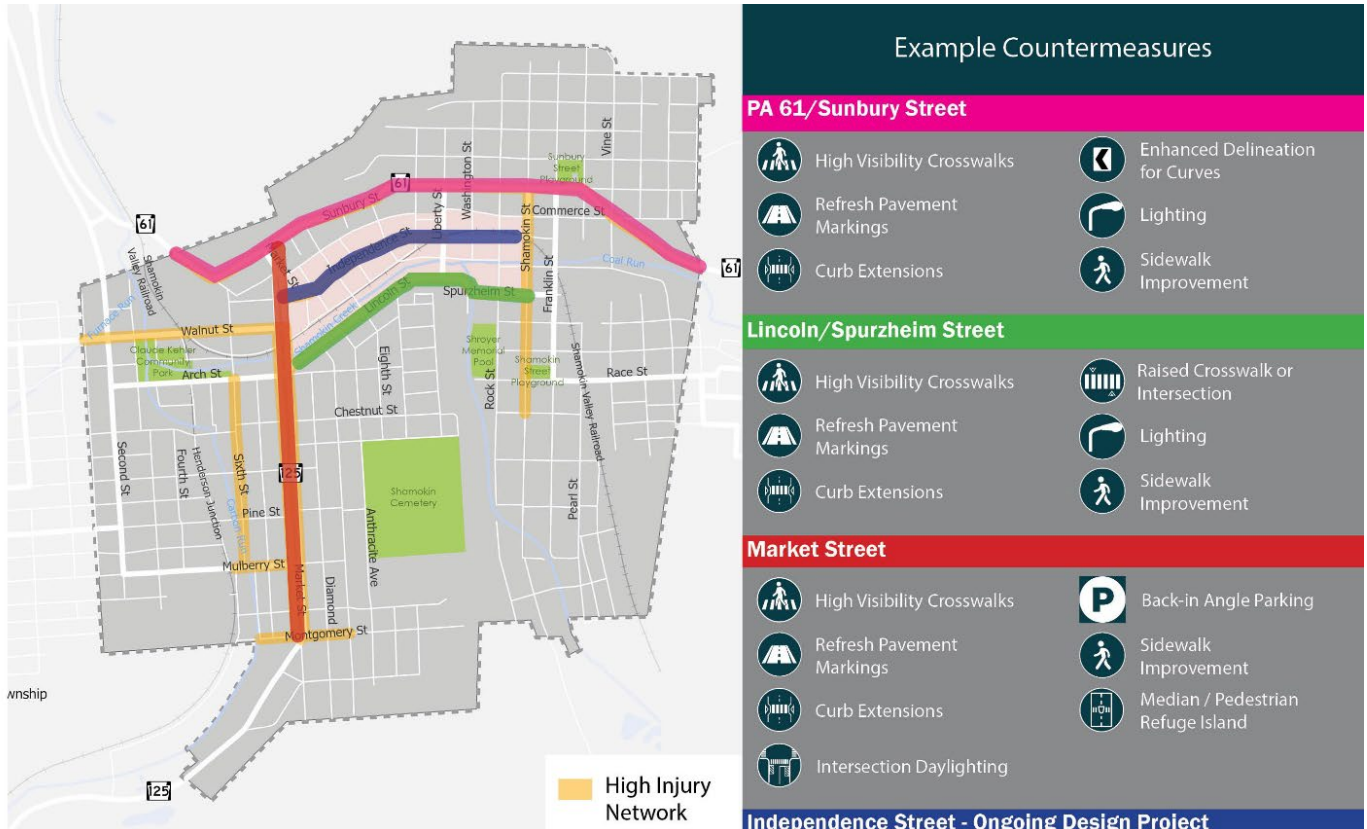
The Independence and 6th Street intersection is an example of a unique geometry and requires additional safety countermeasures beyond the standard application.

- Extending the median through paint and post at W Independence Street and W Commerce Street
- Refreshing pavement markings
- Narrowing Sixth Street after W Independence St
- Curb extensions to increase pedestrian safety

KEY CORRIDOR SAFETY IMPROVEMENTS

The project team defined safety improvements for the key corridors in Shamokin. These corridor safety countermeasures are examples of what can be applied throughout Shamokin.

FIGURE 23: CORRIDOR MAP OF KEY PROJECTS



More detailed information on each of the key projects is provided on the following pages.

Overview:

Sunbury Street is a state route, PA 61, that extends east/west throughout Shamokin. East of Pearl Street, PA 61 is known as Mt. Carmel Street. Located on the north edge of downtown, the corridor has a mix of residential and commercial uses. The typical roadway section includes one travel lane in each direction with on-street parking and sidewalks on both sides of the street. Many of the ADA ramps along the corridor were recently updated, and PennDOT is planning a major reconstruction of the corridor in conjunction with utility improvements in the next 10-15 years.

Key Issues:

- Combination of roadway curvature, narrow travel and on-street parking lanes, and truck traffic results in side-wiping of parked cars
- Sidewalks in disrepair
- Lack of pavement markings
- Faded or missing crosswalks
- Sightline issues with school buses in curved section between 9th and Orange streets
- Car rollovers on Mt. Carmel Street
- Missing pedestrian connection from City limits on Mt. Carmel Street into Coal Township

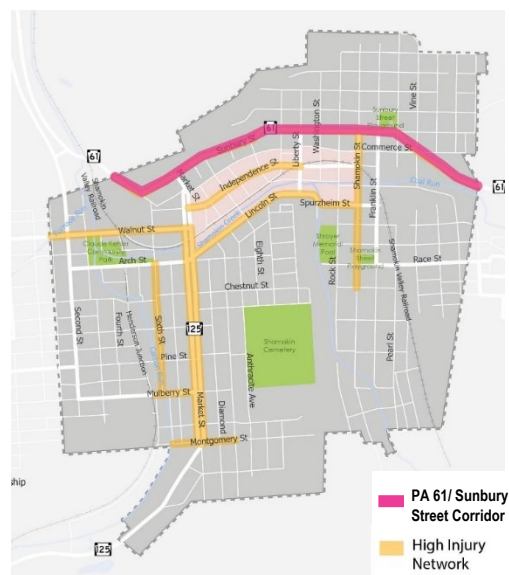
Safety Countermeasures:

- High visibility crosswalks
- Double yellow center line markings
- White edge line pavement markings to delineate parking
- Curb extensions
- Advance pavement markings for curves
- Improved lighting
- Sidewalk improvements

Other Recommendations

- In the short term, install pavement markings and safety countermeasures to address safety concerns between 9th and Orange Streets.
- In the long term, work with PennDOT to include pedestrian improvements in their roadway reconstruction of PA 61
- Extend guiderail along Mt. Carmel Street
- Construct sidewalks into Coal Township from Pool World

PA 61/ SUNBURY STREET



LINCOLN/SPURZHEIM STREET

Overview:

Lincoln and Spurzheim Streets are local routes and extend from Market to Shamokin Street. Located just south of downtown, the corridor has a school zone, emergency services, city hall, as well as a mix of commercial and residential uses. The typical roadway section includes one travel lane in each direction with on-street parking and sidewalks at least on one side of the street. ATV riders enter Shamokin from the AOAA through the Portal, which is located at Terrace Ave and Spurzheim Street. The corridor is a designated ATV travel route and the site of a proposed multimodal route.

Key Issues:

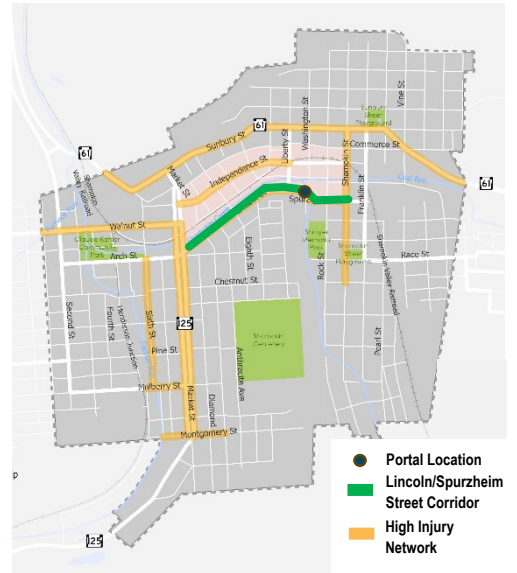
- Faded or missing crosswalks, especially in the school zone
- Overly wide intersections at 8th Street and N Liberty Street intersections, which increase pedestrian crossing distances and encourage drivers to take turns too fast

Safety Countermeasures:

- High visibility crosswalks
- Raised crosswalk
- Refresh pavement markings
- Curb extensions
- Sidewalk improvements
- Improved lighting

Other Recommendations

- In the long term, coordinate with 8th Street Bridge project to improve sidewalks and pedestrian crossings at Lincoln and 8th Street intersection
- Coordinate with emergency services to remove channelized right turn lane at Lincoln Street and N Liberty Street
- Improve connection to AOAA portal
- Raised crosswalk in the school zone



MARKET STREET

Overview:

Market Street is a state route, PA 125, that extends north and south from Sunbury Street to Mulberry Street. Located south of downtown, Market Street is a main thoroughfare and has a mix of commercial and residential uses. The typical roadway section includes a one-way travel lane in each direction separated by a wide grassy median with on-street parking and sidewalks. There is a pedestrian path on the median for a majority of the corridor.

Key Issues:

- Intersections with unique geometry and excess capacity, which are confusing and difficult for drivers to navigate
- Lack of pavement markings
- Faded or missing crosswalks
- Angle parking, which limits sight distance at intersections

Safety Countermeasures:

- High visibility crosswalks
- Refresh pavement markings
- Curb extensions
- Sidewalk improvements
- Improved lighting
- Intersection daylighting
- Pedestrian refuge islands
- Back-in angle parking

Other Recommendations

- In the short term, install pavement markings and implement lower-cost safety countermeasures to increase pedestrian safety.
- In the long term, work with PennDOT to improve the geometry of unique intersections such as Market and Chestnut Street.
- Incorporate bike lanes on both sides of the median to provide north/south bicycle connectivity



Overview:

Independence Street is local road that extends east to west from Market Street to Shamokin Street. Located in the center of downtown Shamokin, Independence Street primarily has commercial uses and public services such as the post office and local library. The typical roadway section includes a one-way travel lane with on-street parking and sidewalks on both sides of the street.

The City is currently in the preliminary design phase of a streetscape plan for Independence Street. The goal of the plan is to revitalize Independence Street as Shamokin's primary commercial corridor.

Key Issues from Streetscape Design Report:

- Intersection at Market Street with excess capacity, which are confusing and difficult for drivers to navigate
- Lack of pavement markings
- Faded or missing crosswalks
- Angle parking, which limits sight distance at intersections

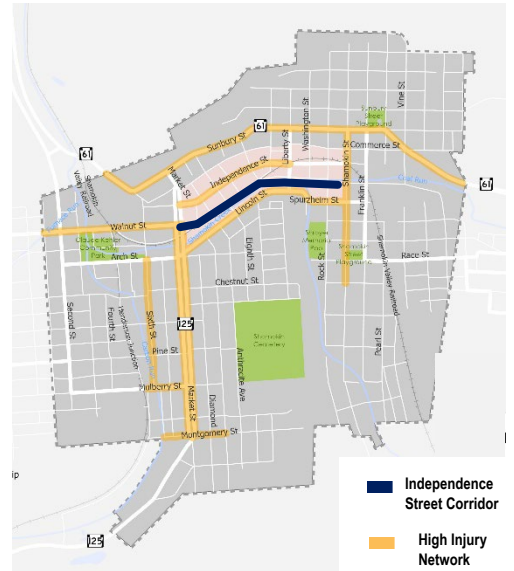
Safety Countermeasures:

- Intersection Daylighting
- Double yellow center line markings
- White edge line pavement markings to delineate parking
- Curb extensions
- High visibility crosswalks

Other Recommendations

- In the short term, coordinate with the Independence Streetscape Design team to implement lower-cost safety countermeasures to increase pedestrian safety.
- In the longer term, consider implementing countermeasures outside of the Streetscape project scope such as leading pedestrian intervals and lighting curb extensions at intersections.

INDEPENDENCE STREET



SYSTEMIC IMPROVEMENTS

Based on community feedback and the established Safety Toolkit, the project team recommended safety countermeasures for systemic improvements across Shamokin. Below are the countermeasures that apply to a majority of Shamokin's road network.

- Pavement markings
- Street signs and ATV wayfinding signs
- Lighting
- Speed humps / traffic calming measures
- Intersection daylighting
- High visibility crosswalks
- Leading pedestrian intervals
- Sidewalk infrastructure

It is not practical or cost-effective to implement these improvements at all intersections in the City. The Implementation Plan section of this document describes the process used to prioritize locations where systemic safety improvements should be built.

MULTIMODAL IMPROVEMENTS

Creating a Bicycle Network

The City can create a citywide, low stress bicycle network by including bicycle facilities on key corridors in conjunction with the proposed safety countermeasures and other future capital projects. Bicycle boulevards, where bicyclists share the lane with cars on low speed, low volume streets, can be implemented on streets such as Shamokin Street using traffic calming measures to slow vehicles, intersection safety countermeasures to improve visibility for all road users, and installing sharrow pavement markings and wayfinding signage for bicyclists. The proposed streetscape improvements on Independence Street will also create a more comfortable environment for bicyclists and should include wayfinding signage and bike racks. On Market Street, dedicated north/south bike lanes can be implemented on either side of the median in conjunction with the Market Street intersection improvements recommended in the safety action plan. Coordination with future trail projects, such as the Northumberland County Non-Motorized Rail Trail Master Plan (2022), can also help to identify specific locations for multimodal improvements and ensure safety countermeasures designs accommodate future trail networks.

Wayfinding and Street Signage

Shamokin residents and visitors would all benefit from improved signage related to street names, the designated ATV route, future bicycle facilities, and destinations. Upgrading historic street signs to more visible signs and installing signs where they are currently missing will help guide visitors throughout the City and reduce driver confusion. ATV wayfinding signage can also be improved by more clearly showing the designated ATV route on the map at the AOAA portal

entrance. Wayfinding signage for bicyclists and pedestrians on key routes will help guide users to the City's downtown, especially for tourists who are new to the area.

Sidewalk Upgrades

In combination with improving signage, sidewalk infrastructure is an important part of the City's multimodal network. Discussed previously in the report, existing sidewalks are in need of repair and key corridors in the City have missing sidewalks. In the northern part of Market Street, specifically past the Independence Street intersection, there are only sidewalks on one side of the street. On state owned roads, the City can coordinate with PennDOT to repair sidewalk infrastructure as part of planned or new capital projects. For example, PennDOT has a future roadway reconstruction project that includes Sunbury Street. Where feasible, implementation funds for safety action plan improvements should also be used to address sidewalk gaps on safety corridors.

All of the recommendations in this section should be considered for any capital improvement project in the City. SEDA-COG's Complete Street's policy has a good set of guidelines and checklist to help the City evaluate future multimodal improvements throughout the roadway network.

NON-INFRASTRUCTURE SOLUTIONS

This section presents non-engineering transportation safety countermeasures identified in the safety analysis. These countermeasures are intended to complement the engineering countermeasures discussed in the recommendations section and generally are intended to address behavioral factors contributing to crash risk. Countermeasures are grouped into education, enforcement, and policy approaches.

The strategies discussed in this section would be best implemented in coordination with all safety action plan stakeholders.

EDUCATION

Education strategies are focused on teaching road users road safety principles. These strategies can be developed to include interactive activities, comprehensive teaching notes, and information on road safety messages and concepts that can be taught at school or in off-school activities. The project team identified the following education-related strategies for the City of Shamokin.

Expand Road Safety Education for Children

Road safety education to children includes strategies such as safe routes to school, walking school bus, and bicycle trains that promote road safety to all users, particularly for pedestrians and bicyclists. These strategies or practices have shown communities and families that walking and biking can be a viable and safe transportation option, and thus can be incorporated into their own daily travel patterns.

School-focused road safety education for drivers of all ages is an important complement to road safety education for children. Transportation safety campaigns scheduled at times when higher numbers of children may walk or bike to school (e.g., beginning of the school year, after Spring

Vacation) can foster community awareness of a shared responsibility for road safety near schools.

Vulnerable Road User Education

Road safety education regarding vulnerable road users like pedestrians, bicyclists, and motorists includes strategies involving education from police officers. If the driver encroaches into the bike lane or fails to yield to the pedestrian at the crossing, the police officer pulls the driver over and hands them a flyer that has the information for drivers to adapt their behavior towards all road users; this can be in addition to a citation.

ENFORCEMENT

Police enforcement can increase driver awareness and consequently reduce crashes. Any directed enforcement strategies should be undertaken with great care to avoid inequitable enforcement activities. The most effective enforcement strategies tend to be those that can be done **transparently, consistently, and in coordination with education or outreach campaigns** such as enforcement in school zones during school hours. The project team identified the following enforcement-related strategies for the City of Shamokin.

Progressive Ticketing

Progressive ticketing is a method for introducing ticketing through a three-staged process. Issuing tickets is the strongest strategy of an enforcement program and it is usually reserved for changing unsafe behaviors that other strategies failed to change or that pose a real threat to the safety of road users. There are three main steps of an effective progressive ticketing program:

1. **Educating** - Establish community awareness of the problem. The public needs to understand that drivers are speeding and the consequences for road safety. Raising awareness about the problem will change some behaviors and create public support for the enforcement efforts to follow.
2. **Warning** - Announce what action will be taken and why. Give the public time to change behaviors before ticketing starts. Fliers, signs, newspaper stories and official warnings from officers can all serve as reminders.
3. **Ticketing** – After the “warning” period, hold a press conference announcing when and where the police operations will occur. If offenders continue their unsafe behaviors, police officers issue tickets.

Speed Enforcement in School Zones

Strict enforcement of speed laws in school zones is a law enforcement tool to address improve the safety for children walking and bicycling to school as well as drivers. Potential approaches include a ‘zero tolerance’ policy for speeding in school zones and increases in fines for drivers who violated the posted school zone speed limit.

High Visibility Saturation Patrols

A saturation patrol (also called a dedicated DWI patrol) consists of many law enforcement officers patrolling a specific area to look for drivers who may be impaired. These patrols usually

take place at times and locations where impaired driving crashes commonly occur. Like publicized sobriety checkpoint programs, the primary purpose of publicized saturation patrol programs is to deter driving after drinking by increasing the perceived risk of arrest.

For the City of Shamokin, a saturation patrol could be used during the weekend where there is potentially increased ATV activity along the designated routes.

POLICY

Policies establish guiding principles for decision-making. The following policy recommendations were identified for the City of Shamokin.

Driver Education Programming for ATV Riders

A driver education program for ATV riders can set safety standards for operating within the City. After passing the Portal and entering the City, driver behavior should shift to accommodate pedestrians and bicyclists on the road.

Formalize a Complete Streets Policy

The GO! Shamokin Plan mentions a Complete Streets policy for important corridors in the City, such as Independence Street and Sunbury Street. SEDA-COG, released a vision for a Complete Streets policy in 2014. The City could partner with SEDA-COG to expand their initial recommendations to be applied systematically instead of spot specific locations. Formalizing a Complete Streets Policy will help to prioritize multimodal safety as part of private and public investment.

Enhance Street Maintenance Operations

Maintenance of asphalt, pavement markings, signs, trees, and lighting are important to facilitating a safe driving culture. This requires dedicated funding, enhanced training, and should be prioritized according to the City's operational and maintenance budget constraints.

The background of the page is a light gray map of a city street grid. The grid is composed of thin, dark gray lines representing streets. The map is oriented with a north arrow pointing towards the top right. The streets are arranged in a complex pattern, with some major thoroughfares and many smaller, local streets. The map covers the entire page, with a large white rectangular area in the upper left corner that serves as a background for the title.

Implementation Plan

IMPLEMENTATION PLAN

PROJECT PRIORITIZATION

Projects proposed in this Shamokin Safety Action Plan are prioritized for implementation based on the project goals and public feedback. A data-driven prioritization process was developed to create the priority scoring. The prioritization rubric was based on the following categories, weighted equally:

- **Safety (20 points)**
 - If the project is located on the High Injury Network or crosses the High Injury Network
- **Public feedback (20 points)**
 - If the project location received public feedback during the engagement process, either in person or the online survey
- **Access to key destinations (20 points)**
 - The project scored points depending on the number of community destinations within a 500ft buffer
- **Multimodal considerations (20 points)**
 - If the project location has a missing sidewalk on either one side or both sides of the street
 - If the project is located along a designated ATV route
 - If the project is located along or part of the City's proposed multimodal network
- **Economic development (20 points)**
 - If the project is located within the City's designated Economic Opportunity zone scored points.

Scores were developed both at the corridor and intersection level. Since high-scoring intersections coincided with high scoring corridors, the prioritization results were consolidated into 15 top scoring corridors for capital improvements, as shown in Map 10. The priority capital projects or organized into three tiers with Tier 1 scoring the highest and Tier 3 scoring the lowest. The priority capital projects are listed out by project type, either along an entire corridor or spot specific improvements at priority intersections in Table 2.

Economic Opportunity Zone

Economic opportunity zones are part of a state program to encourage local economic development. Local municipalities designate an area for revitalization and apply to the state to qualify that are for tax benefits. These tax benefits encourage development in otherwise abandoned or underutilized pieces of land.

MAP 10 PRIORITY CAPITAL PROJECTS

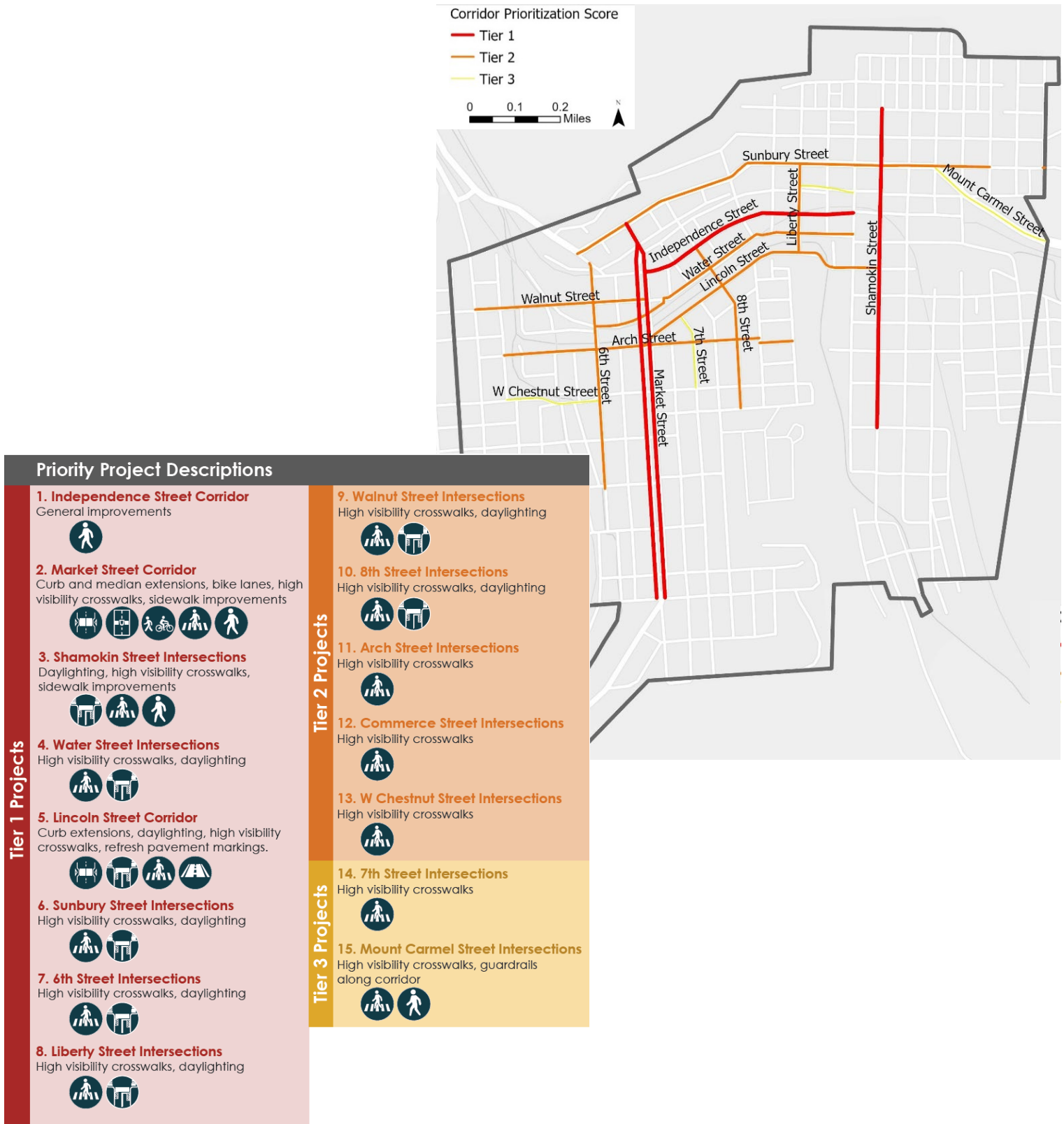
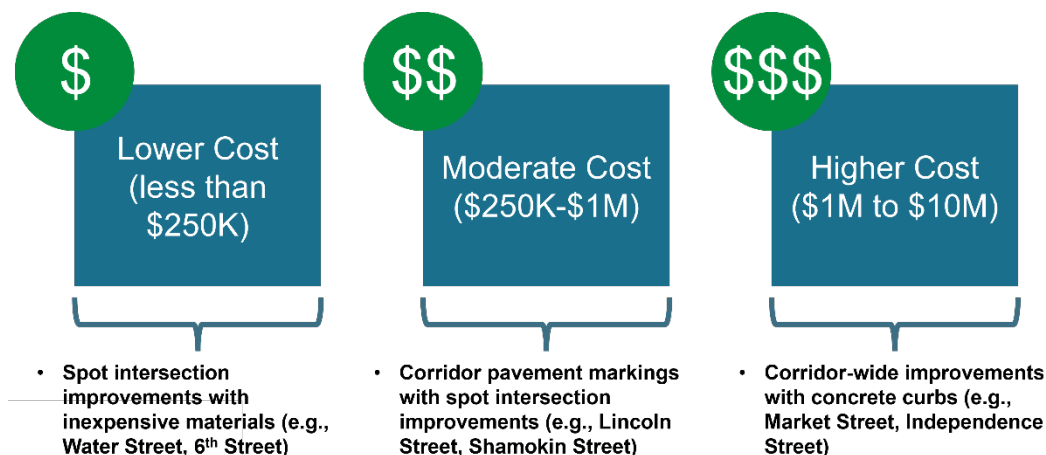


TABLE 2 PRIORITY CAPITAL PROJECTS

Rank	Street Name	Project Type	Project Description	From	To	Priority Score
1	Independence Street	Corridor wide	Additional improvements beyond initial streetscape project	Market Street	Rock Street	77.44
2	Market Street	Corridor wide	Curb and median extensions, bike lanes, high visibility crosswalks, sidewalk	Sunbury Street	E Montgomery Street	76.70
3	Shamokin Street	Spot specific at priority intersections	Daylighting, high visibility crosswalks, sidewalk improvements	Cameron Street	E Spruce Street	68.80
4	Water Street	Spot specific at priority intersections	High visibility crosswalks and daylighting	6th Street	Rock Street	65.72
5	Lincoln Street	Corridor wide	Curb extensions, daylighting, high visibility crosswalks, refresh pavement markings	Market Street	N Franklin Street	64.01
6	Sunbury Street	Spot specific at priority intersections	High visibility crosswalks and daylighting	N 6th Street	Cherry Street	62.52
7	6th Street	Spot specific at priority intersections	High visibility crosswalks and daylighting	Commerce Street	Pine Street	60.41
8	Liberty Street	Spot specific at priority intersections	High visibility crosswalks and daylighting	Lincoln Street	Sunbury Street	60.00
9	Walnut Street	Spot specific at priority intersections	High visibility crosswalks and daylighting	2nd Street	Market Street	58.09
10	8th Street	Spot specific at priority intersections	High visibility crosswalks and daylighting	Independence Street	High Street	56.35
11	Arch Street	Spot specific at priority intersections	High visibility crosswalks	3rd Street	Marshall Street	48.35
12	Commerce Street	Spot specific at priority intersections	High visibility crosswalks	Liberty Street	Rock Street	43.29
13	W Chestnut Street	Spot specific at priority intersections	High visibility crosswalks	3rd Street	6th Street	37.74
14	7th Street	Spot specific at priority intersections	High visibility crosswalks	Lincoln Street	Chestnut Street	29.31
15	Mount Carmel Street	Spot specific at priority intersections	Guardrails along corridor, high visibility crosswalks	Pearl Street	City Limit	26.67

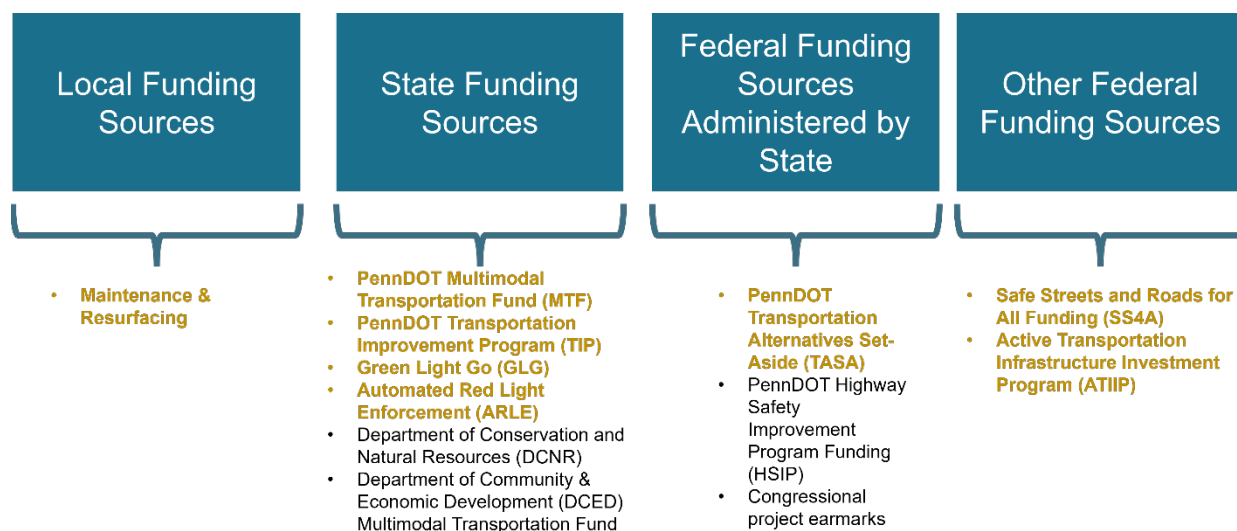
PROJECT COSTS

Costs for the improvements identified for the priority capital projects range from lower cost spot intersection improvements with temporary materials to higher cost corridor-wide improvements with permanent materials.



FUNDING AND IMPLEMENTATION PARTNERS

Several agencies and organizations may be involved in implementing the corridor projects and spot specific improvements. All the projects must consider not only the capital cost of installing the countermeasures, but operational and maintenance budgets as well. Some of the key funding sources for the projects will be through Safe Streets and Roads for All (SS4A) and potentially through the PennDOT Multimodal Transportation Fund (MTF).



Ongoing coordination will be necessary between implementation partners. The City should contact PennDOT and the County at the beginning phases of infrastructure projects to ensure they are in compliance with the Safety Action Plan as well as SEDA-COG's Complete Streets policy.

PROJECT PHASING

To streamline the decision-making process for the City, the project team has summarized the phasing approach for the top six corridors in order. The short- and long-term project priorities are included for each corridor. Phasing and prioritizing projects is critical for implementation for a city the size of Shamokin, where long-term planning and identification of funding sources is necessary for projects to be successful. Each corridor identified in this phasing will likely need to be approached in smaller segments, as seen in the design work underway for Independence Street. Right-sizing projects and tying them to applicable funding sources will allow for projects to continue moving and build momentum for future phases where the improvements can continue.

INDEPENDENCE STREET

Independence Street represents the main downtown commercial district in Shamokin, but the existing facilities lack adequate consideration for pedestrian safety. The Independence Street Streetscape Improvement Project, now underway in the engineering design phase, will implement major safety improvements in this critical corridor of the city. The engineering design, funded by a federal earmark, will be completed by summer 2025 and an initial construction phase, also funded by the same federal earmark, is slated to begin in fall 2025. The Phase 1 improvements are targeted for the blocks from approximately 9th Street to the at-grade railroad crossing at Liberty Street. The improvements will include bump-out curb extensions to shorten pedestrian crossing distances and improve sight lines, fully upgraded ADA facilities, and new striping with high-visibility “continental” crosswalk markings. These types of improvements included in Phase 1 will be similarly implemented for other segments of the corridor in future phases as funding becomes available. Other safety recommendations identified in the Safety Action Plan but not part of the streetscape scope (e.g., signal improvements, upgrades to the railroad crossing), should be addressed in future phases of the project.

MARKET STREET

Market Street is ranked second for the City’s corridor projects and is a state route. In the short-term, the City could partner with PennDOT to pilot bumpout treatments at the street corners and center medians using road paint and flex posts at one or two key locations (e.g., Chestnut and Market). More permanent curb improvements and changes to the typical section to include bike lanes will need to be phased over time as a PennDOT project on the Transportation Improvement Program (TIP). Project phasing could start adjacent to downtown and extend south as funds become available.

SHAMOKIN STREET/WATER STREET

Shamokin Street and Water Street ranked third and fourth for the City’s corridor projects. The corridors are grouped together based on shared short term and long term project phasing priorities. In the short term, the City can focus on intersections improvements implemented over time using City construction forces. Construction will likely occur at a few intersections and involve mostly paint and post projects. Over a longer period of time, the City can focus on improvement in conjunction with repaving projects to include traffic calming treatments. Long-

term improvements on Water Street should be considered as economic development advances in Shamokin, so the on-street parking can be leveraged as additional downtown parking.

LINCOLN STREET

Lincoln Street is ranked fifth for the City's corridor projects and has a combination of recommend spot-specific and corridor wide projects. In the short-term, the City can focus on intersection improvements implemented over time using construction forces. An example is refreshing pavement marking or stripping high visibility crosswalks at intersections. Coordination with the 8th Street Bridge project will help to implement safety countermeasures at the Lincoln/8th Street intersection in the short-term.

In the longer-term, The City can coordinate with the school district while implementing safety countermeasures near the Shamokin Area Elementary School. Addressing the channelized right-hand turn lane at the Lincoln Street and N Liberty Street intersection will involve coordinating with the nearby emergency services.

SUNBURY STREET

Sunbury Street is ranked sixth for the City's corridor projects and is a state route. In the short-term, the City can partner with PennDOT to address safety concerns between Ninth and Orange Streets. In the long term, the City can work with PennDOT to include pedestrian and vehicular improvements in the planned roadway reconstruction of PA 61.

IMPLEMENTATION MATRIX

Shamokin Safety Action Plan											
SEDA-COG and the City of Shamokin											
Implementation Matrix - Corridor Projects											
Project Information						Project Implementation					
Rank	Street Name	Project Type	Project Description	From	To	Priority Score	Potential Funding Sources	Potential Cost Range	Implementors & Collaborators	State Route (yes/no)	Notes
1	Independence Street	Corridor wide	Additional improvements beyond initial streetscape project	Market Street	Rock Street	77.44	MTF, SS4A, TASA	Higher Cost: \$1M - \$10M	City, PennDOT, SEDA-COG, SABER	No	Coincides with Independence Streetscape project plan
2	Market Street	Corridor wide	Curb and median extensions, bike lanes, high visibility crosswalks, sidewalk improvements, refresh pavement markings, traffic calming, median stop signs, geometric adjustments at complex intersections, bike lanes	Sunbury Street	E Montgomery Street	76.70	MTF, SS4A, TIP, ATIIIP	Higher Cost: \$1M - \$10M	PennDOT, City, SEDA-COG	Yes	Goal is to get this project on PennDOT's TIP
3	Shamokin Street	Spot specific at priority intersections	Standard Intersection improvements, daylighting, sidewalk improvements, traffic calming, pavement markings	Cameron Street	E Spruce Street	68.80	MTF, SS4A, ATIIIP, City forces	Moderate Cost: \$250K - \$1M	City, SEDA-COG	No	
4	Water Street	Spot specific at priority intersections	Standard Intersection improvements, sidewalk improvements at rail crossing, parking adjustments	6th Street	Rock Street	65.72	MTF, SS4A, City forces	Moderate Cost: \$250K - \$1M	City, SEDA-COG	No	Longer-term project phasing includes pedestrian improvements for the rail road crossing and improving the sidewalk infrastructure, which increases the potential cost range.
5	Lincoln Street	Corridor wide	Curb extension improvements, daylighting, pavement markings, geometric changes at Liberty Street, raised crosswalk at school	Market Street	N Franklin Street	64.01	MTF, SS4A, City forces	Moderate Cost: \$250K - \$1M	City, PennDOT SEDA-COG	No	Planned 8th Street Bridge project provides opportunity for intersection improvements, and coutermeasures at the channelized right turn at N Liberty Street will require coordination with emergency services.
6	Sunbury Street	Corridor wide	Bumpout intersection improvements, sidewalk improvements, pavement markings	N 6th Street	Cherry Street	62.52	TIP, MTF, SS4A, TASA	Higher Cost: \$1M - \$10M	PennDOT, City SEDA-COG	Yes	Short-term project phasing involves spot specific improvments and the longer-term projects include changing the street typical section in conjunction with the planned roadway reconstruction in the late 2030s.
7	6th Street	Spot specific at priority intersections	Unique Geometry and Standard Intersection improvements	Commerce Street	Pine Street	60.41	MTF, SS4A, City forces	Moderate Cost: \$250K - \$1M	City, SEDA-COG	No	Unique intersection geometry improvements at 6th Street and Independence will increase the potential cost range.
8	Liberty Street	Spot specific at priority intersections	Standard Intersection improvements and pavement markings	Lincoln Street	Sunbury Street	60.00	MTF, SS4A, City forces	Lower Cost: < \$250K	City, SEDA-COG	No	
9	Walnut Street	Spot specific at priority intersections	Standard Intersection improvements and pavement markings	2nd Street	Market Street	58.09	MTF, SS4A, City forces	Lower Cost: < \$250K	City, SEDA-COG	No	
10	8th Street	Spot specific at priority intersections	Standard Intersection improvements and pavement markings	Independence Street	High Street	56.35	MTF, SS4A, City forces	Lower Cost: < \$250K	City, SEDA-COG	No	
11	Arch Street	Spot specific at priority intersections	Standard Intersection improvements and pavement markings	3rd Street	Marshall Street	48.35	MTF, SS4A, City forces	Lower Cost: < \$250K	City, SEDA-COG	No	
12	Commerce Street	Spot specific at priority intersections	Unique Geometry and Standard Intersection improvements	Liberty Street	Rock Street	43.29	MTF, SS4A, ATIIIP	Moderate Cost: \$250K - \$1M	City, PennDOT, SEDA-COG	No	Unique intersection geometry improvements at Market Street and Commerce Street and extending the rail trail through the medians will increase the potential cost range.
13	W Chestnut Street	Spot specific at priority intersections	Standard Intersection improvements and pavement markings	3rd Street	6th Street	37.74	MTF, SS4A, City forces	Lower Cost: < \$250K	City, SEDA-COG	No	
14	7th Street	Spot specific at priority intersections	Standard Intersection improvements and pavement markings	Lincoln Street	Chestnut Street	29.31	MTF, SS4A, City forces	Lower Cost: < \$250K	City, SEDA-COG	No	
15	Mount Carmel Street	Spot specific at priority intersections	Guardrails along corridor, high visibility crosswalks, pavement markings, sidewalk construction from Pool World to City Line	Pearl Street	City Limit	26.67	MTF, SS4A, TIP	Moderate Cost: \$250K - \$1M	PennDOT, City SEDA-COG	Yes	

Priority Level Legend:

60 to 100 represents a higher priority per project objectives

30 to 60 represents a medium priority per project objectives

0.00 to 30 represents a lower priority per project objectives

MONITORING PROGRESS

Monitoring progress over time is essential to ensuring that the recommendations of the plan are implemented. This plan recommends identification of a champion who will be responsible for continuing to convene the Safety Working Group on a regular basis, perhaps quarterly, to present progress and discuss issues of mutual interest. The Safety Working Group should publish a very brief report, one or two pages in length, annually describing progress made to date and anticipated progress in the coming year.