Allentown

SAFE STREETS FOR ALL ACTION PLAN

February 2025 | Final Plan

EXECUTIVE SUMMARY

Overview

From 2019-2023, 284 people within the City of Allentown were victims of high-injury crashes, or crashes that resulted in either a fatality or suspected serious injury. In response, the City of Allentown City Council adopted a Vision Zero Policy resolution committing to the goal of eliminating traffic deaths and serious injuries by 2030 through a data-driven approach. The City acknowledges that fatal and serious injury crashes are preventable and through its commitment to reducing these crashes, launched a comprehensive safety effort beginning with this document, the Allentown Safe Streets for All (SS4A) Action Plan. The Action Plan is the first of its kind for Allentown and will serve as a guiding model for the City's approach to transportation safety, one that is data-driven and collaborative, to provide safer streets for residents and visitors. The Action Plan utilizes the Federal Highway Administration's (FHWA) Safe System Approach and is the foundation for the SS4A implementation grant program brought about by the passage of the Federal Bipartisan Infrastructure Law (BIL) or the Infrastructure Investment and Jobs Act (IIJA).

Community Engagement

The SS4A Action Plan is grounded in the lived experience of community members and informed by feedback from residents, businesses, and regional stakeholders. A diverse Steering Committee guided the process.

To gather widespread feedback on transportation safety challenges and opportunities, a user-friendly survey was conducted in English and Spanish. The survey, supported by email blasts, a social media campaign, and pop-up events, received 1,455 responses and 700 comments.

Vision

Allentown's streets are safe and accessible for all community members who live, work, or visit Allentown no matter their mode of transportation or background. The vision, developed in collaboration with the SS4A Steering Committee, provides direction for the plan's goals and paints a picture of the future if all the goals are accomplished. By 2030, there are zero traffic fatalities and serious injuries. Through data-driven monitoring and evaluation and collaboration with the community and regional stakeholders, the transportation network is designed for safe and equitable mobility, valuing different modes of transportation and connecting communities with each other and to jobs, education, and services.

Goals

Implement proven safety countermeasures.

Integrate the Safe System Approach into all aspects of City operations.

Utilize a monitoring and evaluation framework that assesses key performance indicators to track effectiveness of the implemented safety measures.

Foster strong partnerships with residents and regional collaboration through coordination on planning and funding.

Create a multimodal transportation network that supports a shift from driving to nonmotorized forms of transportation.

Expand the multimodal transportation network to increase connectivity throughout the city.

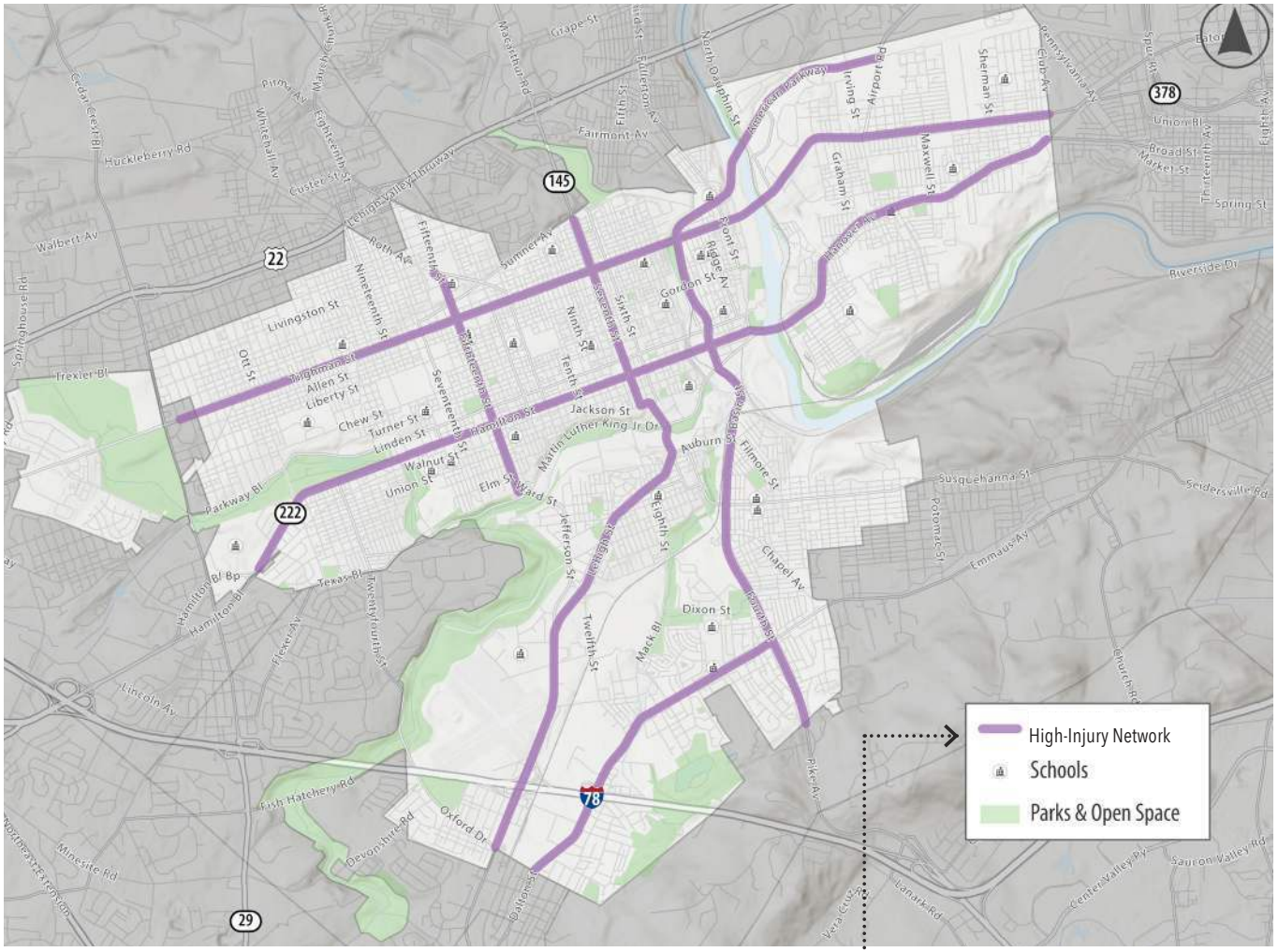
EXECUTIVE SUMMARY

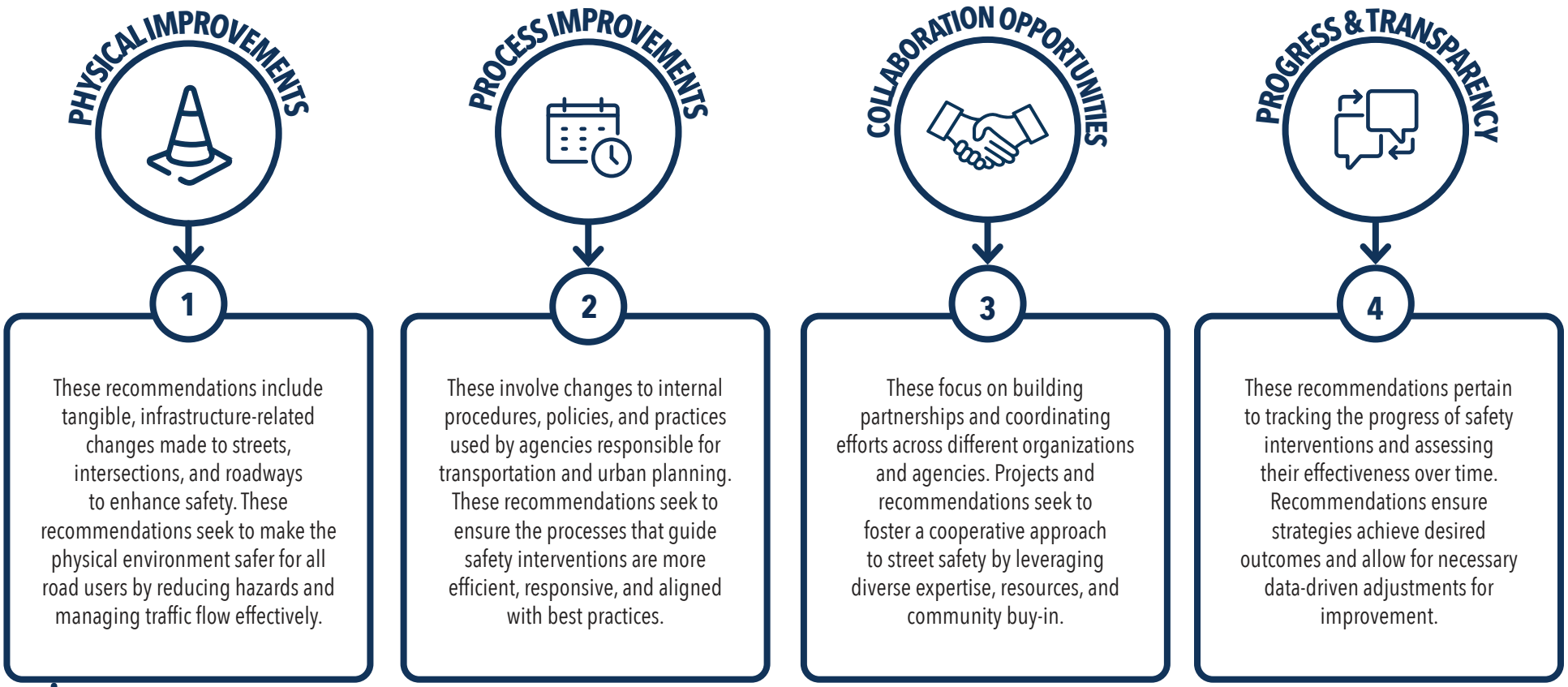
Data Analysis

At the core of the SS4A Action Plan is a data-driven analysis that determines where crashes are occurring, common crash types, and the top contributing factors of those crashes. Crash data analysis (data from 2019 to 2023) revealed that just three crash types – Angle, Hit Non Motorist, and Hit Fixed Object crashes – made up 75% of all fatal and serious injury crashes in Allentown.

A High Injury Network (HIN) was developed detailing which local roads accounted for the majority of fatal and serious injury crashes, guiding the project selection and prioritization process.

Additionally, a review of state, regional, and local planning efforts, from agencies such as PennDOT and the Lehigh Valley Planning Commission, was conducted to ensure that the SS4A Action Plan complements and builds upon existing efforts while emphasizing the role that roadway safety plays in achieving the objectives of these planning efforts.





Concept Plans

Physical improvement recommendations include concept plans for each of the high-injury network corridors. These concept plans present specific safety countermeasures (i.e., projects and interventions that can help improve safety) along the corridors and at intersections.

Examples of Safety Countermeasures

Left Turn Phasing


Crosswalk Lighting Enhancement


Curb Extension with Daylighting

Turning Vehicle Yield to Pedestrians


Backplates with Retroreflective Borders


Rectangular Rapid Flashing Beacon

Implementation

The Implementation chapter of the plan includes an implementation matrix that consolidates ongoing efforts and proposed recommendations in this Action Plan, along with identifying lead implementors, partners, and time frames for implementation.

For the concept plans, a prioritization framework is provided for consideration when implementing the physical improvements.

A funding glossary is also included with funding opportunities for the design and construction of the physical improvements.

Safety Dashboard

To support continued informed decision-making for City officials and community stakeholders, a public facing dashboard was created to complement the Action Plan. The dashboard presents user-friendly access to a range of crash metrics, including the frequency, severity, and type of incidents occurring within a defined area over a specific time frame. Key features include interactive maps, charts, and filtering tools that allow stakeholders to drill down by variables such as location, time of day, road conditions, weather, and crash causes.

The dashboard helps track the progress of Vision Zero goals by providing a clear picture of crash trends over time. It also supports transparent reporting and community outreach, allowing residents to stay informed about local safety efforts and outcomes. Ultimately, the Vision Zero Crash Dashboard serves as a critical tool for data driven decision-making, fostering safer streets and contributing to the overarching goal of eliminating traffic fatalities and serious injuries.

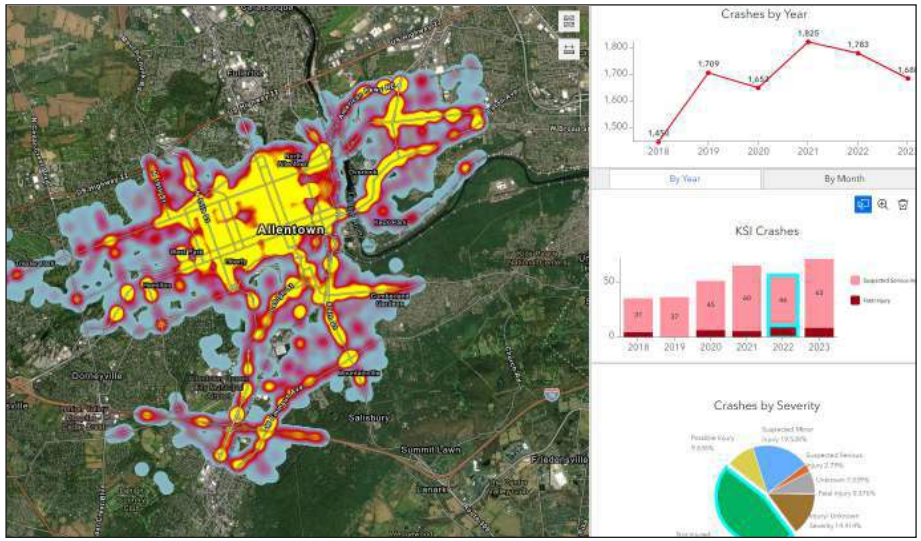
The safety dashboard can be accessed at https://experience.arcgis.com/experience/5d083389cc504254844180ace818b878/page/Crash-Dashboard/#data_s=id%3AdataSource_9%3A4

Next Steps

The City of Allentown's Safe Streets for All Action Plan is only the first step of many to achieve the City's safe streets goals. The adoption of this Action Plan allows the City to obtain Federal funding as part of an SS4A Implementation Grant.

Furthermore, this plan not only suggests recommendations for addressing roadway safety throughout Allentown, but also highlights the ongoing efforts that are being undertaken by the City. One of these efforts is an early implementation item from this plan. The City of Allentown was awarded a $384,000 Planning and Demonstration Award through the U.S. Department of Transportation's Safe Streets and Roads for All program. This funding will support the Traffic Calming/ Safety Demonstration Project and Feasibility Study, advancing efforts to make Allentown's streets safer for pedestrians, cyclists, and drivers.

The Allentown communtiy can stay updated on progress by visiting the City of Allentown's website at www.allentownpa.gov.



ACKNOWLEDGEMENTS

Safe Streets for All Steering Committee

Thank you to all the SS4A Steering Committee members who committed time, effort, and ideas throughout the planning process.

AJ Jordan, Lehigh and Northampton Transportation Authority (LANTA)

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Andrew Stengel, Allentown School District

Ben Dinkel, Lehigh Valley Planning Commission (LVPC)

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Scott Singerland, CAT

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Tatiana Quinones, Community Member & Business Owner

Tinku Khanwalkar, Allentown Environmental Advisory Council (EAC)

Trevor Tormann, Allentown Planning & Zoning

Yeimy (Jamie) Delgado, Allentown Public Works

ACKNOWLEDGEMENTS

Engagement Partners

Thank you to all the organizations who opened their event to a SS4A Pop-Up table.

- Puerto Rican Cultural Preservation Association Childrens Fest
- City of Allentown Juneteenth Celebration
- City of Allentown Movie in the Park
- Lehigh Valley Disability Pride
- City of Allentown Halloween Parade
- City of Allentown City Hall at the Table (CHATT)
- West End Alliance Tree Lighting Event

Stakeholder Groups

Thank you to the following stakeholders who submitted a questionnaire response and/or participated in a stakeholder interview.

- Allentown Parking Authority
- City of Bethlehem
- Emmaus Borough
- Fine Feater Foundation
- Lehigh Valley Planning Commission
- South Whitehall Township
- Greater Valley YMCA - Allentown Branch

Community Members & Organizations

Thank you to all the community members who responded to the SS4A survey and stopped by one of the SS4A pop-up tables! Your lived experiences helped inform the recommendations in this plan.

The Safe Streets for All Steering Committee is also grateful for all the organizations and individuals who used their connections and platforms in the community to share information throughout the planning process.

Consultant Team

Michael Baker International

Bowman

Faces International

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ONE WAY
Linden St
NO TURN ON RED
6:45 - 7:45 AM
2:30 - 3:15 PM
SCHOOL DAYS

01 INTRODUCTION

Purpose

From 2019-2023, 284 people within the City of Allentown were victims of high-injury crashes, or crashes that resulted in either a fatality or suspected serious injury. The frequency of these high-injury crashes has only been trending upward within the past five years. These crashes are concentrated along a set of City streets known as the high-injury network. Recognizing the growing need for safer, more inclusive streets, the City has undertaken an ongoing commitment to advancing roadway safety through its Safe Streets for All (SS4A) resolution as guided through this Action Plan. The City of Allentown aims to eliminate traffic-related fatalities and serious injuries by redesigning streets to better accommodate pedestrians, cyclists, public transit users, and drivers alike.

The purpose of this Plan is to transform Allentown's streets into safe, equitable, and accessible spaces for all residents and visitors. This plan seeks to eliminate traffic-related fatalities and serious injuries through targeted safety improvements, comprehensive policy changes, and community engagement by 2030. By prioritizing the safety of all road users, the plan aims to create streets that foster connection and mobility for everyone, regardless of age, ability, or mode of transportation.

This SS4A plan is the first of its kind for the City of Allentown; however, the City of Allentown's Safe Streets for All Action Plan proactively plans for and responds to national trends and community needs that have been rising in transportation planning and engineering. Allentown's SS4A Plan examines these trends and plans for them by:

Sharing Accountability for Safety Related Incidents.

Too often, pedestrian and cyclist injuries are attributed to their actions, rather than the dangerous conditions or poor infrastructure that create unsafe environments. This plan balances personal responsibility with the design of the streets and the systems that regulate them, recognizing that all road users deserve safe, predictable, and forgiving streets regardless of their mode of transport, allowing for truthful planning and design. This trend was used to develop the overall vision for this action plan.

Following Data-Driven Safety Interventions.

An action plan focuses on effective and implementable measures. Adopting safety interventions such as traffic calming, speed reductions, and enhanced pedestrian infrastructure that have proven to work allows for effective implementation. Allentown's SS4A Action Plan considered these trends in the development of its recommendations.

Incorporating People-First Street Design.

For decades, street design has prioritized speed and convenience for vehicles over the safety and well-being of people. By rethinking car-centric infrastructure and focusing on street designs that inherently promote safe behavior, this plan prioritizes human life above all else. By embedding these principles into every phase, SS4A lays the groundwork for a safer transportation network.

Through data-driven strategies, community engagement, and proven safety interventions, the Safe Streets for All Action Plan sets the foundation for a transportation system that is more sustainable and user-friendly. The plan aligns with the City's broader goals of fostering vibrant, healthy communities while addressing long-standing disparities in street safety and accessibility. By taking a proactive approach to road safety, Allentown is building a future where everyone can navigate the city's streets confidently and without fear.

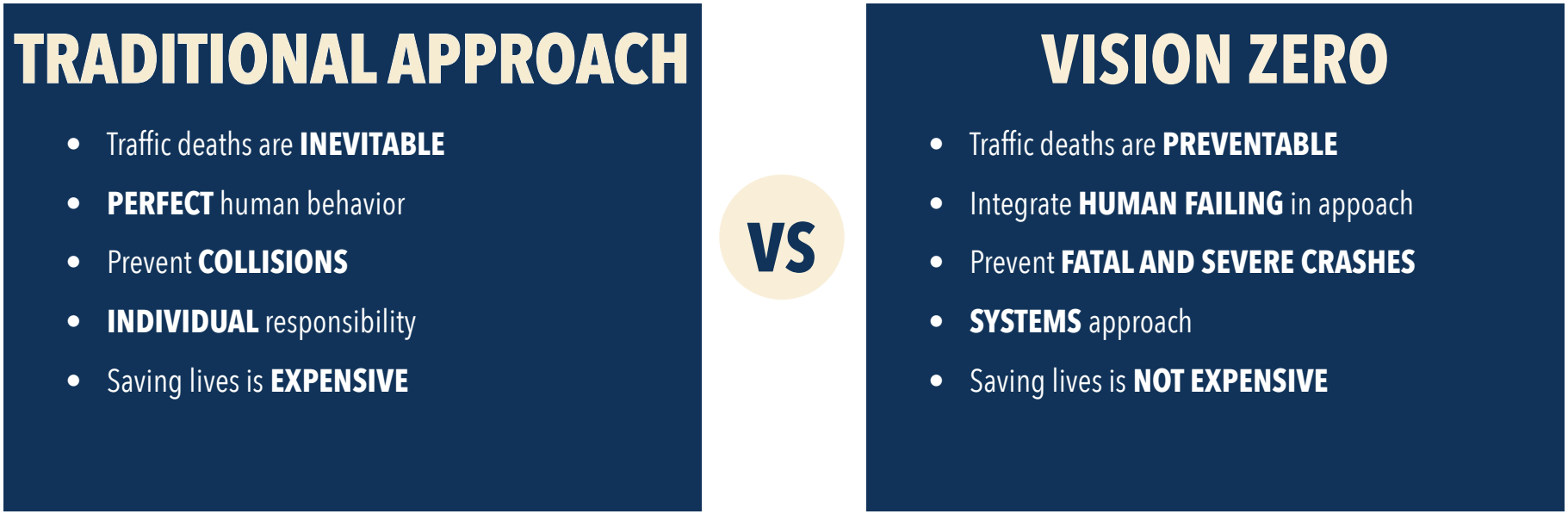
Vision Zero

According to the Vision Zero Network, Vision Zero is "a strategy to eliminate all traffic fatalities and severe injuries, while increasing safe, healthy, equitable mobility for all." The zero deaths vision acknowledges that even one death on our transportation system is unacceptable and focuses on safe mobility for all road users.

A Vision Zero approach to transportation safety is rooted in the understanding that all traffic deaths and serious injuries are preventable and that people make mistakes. Vision Zero calls for roads and policies to be designed to ensure that these mistakes do not result in serious injuries or fatalities. Vision Zero requires collaboration across a diverse group of stakeholders (transportation professionals, emergency services, policy makers, and the public) to identify and prioritize projects that are equitable and consider all road users.

Effective Vision Zero projects and strategies are data-driven and can be implemented at different scales.

Whether it is infrastructure-focused efforts like implementing proven safety countermeasures, or long-term behavioral modification approaches like driver-safety education programs, fulfilling Vision Zero requires a new paradigm that places safety as the most critical element of the transportation network.



Adapted from the Vision Zero Network.

Safe System Approach

This Action Plan utilizes the Federal Highway Administration's (FHWA) Safe System Approach in framing its recommendations. The Safe System Approach is a comprehensive and proactive strategy aimed at enhancing road safety by addressing the inherent risks within the transportation system.[1] This approach is grounded in the understanding that human errors are inevitable, and it seeks to design and manage road infrastructure in a way that minimizes the consequences of these mistakes. By focusing on both human mistakes and human vulnerability, the Safe System Approach aims to prevent crashes from occurring and to reduce the severity of injuries when crashes do happen.

The Safe System Approach is based on six principles and five objectives.

OBJECTIVES

1. **Safer People**: Encourage safe, responsible driving and behavior by people who use roads.
2. **Safer Vehicles**: Expand vehicle systems and features that help prevent crashes and minimize crash impacts.
3. **Safer Speeds**: Promote safer speeds through roadway design, appropriate speed limits, education, campaigns, and enforcement.
4. **Safer Roads**: Design roadways to mitigate human mistakes, encourage safer behaviors, and facilitate safe travel.
5. **Post-Crash Care**: Enhance survivability of crashes through access to emergency medical care.

PRINCIPLES

1. **Death and serious injuries are unacceptable.**
2. **Humans make mistakes**. The transportation system can be designed and operated to accommodate certain types and levels of human mistakes.
3. **Humans are vulnerable.** It is critical to design and operate a transportation system that is human-centric.
4. **Safety is proactive.** Tools should be applied proactively to prevent crashes rather than waiting for crashes to occur and reacting.
5. **Responsibility is shared.** Involvement of all stakeholders is needed.
6. **Redundancy is crucial.** All parts of the transportation system need to be strong so that if one part fails, the other parts still protect people.

1 U.S. Department of Transportation. (2022) What is a Safe System Approach? https://www.transportation.gov/safe-system-approach

Safe Streets for All Program

The passage of the Federal Bipartisan Infrastructure Law (BIL) or the Infrastructure Investment and Jobs Act (IIJA) was landmark legislation when it was signed into law in November 2021. The law not only provided historic levels of funding for transportation, but also placed increasing emphasis on roadway safety through the introduction of new discretionary programs such as Safe Streets and Roads for All (SS4A). The SS4A program supports the U.S. Department of Transportation's National Roadway Safety Strategy and its goal of zero roadway deaths using a Safe System Approach.

The SS4A Program supports the development of a Comprehensive Safety Action Plan that identifies the most significant roadway safety concerns in a community and the implementation of projects and strategies to address roadway safety issues. Action Plans are the foundation of the SS4A implementation grant program; an Action Plan must be in place before an applicant can be eligible to receive SS4A federal funding to implement projects and strategies. The SS4A program provides funding for two types of grants:

Planning and Demonstration Grants

These grants provide Federal funds to develop, complete, or supplement a Comprehensive Safety Action Plan. The goal of an Action Plan is to develop a holistic, well-defined strategy to prevent roadway fatalities and serious injuries. Planning and Demonstration Grants also fund supplemental planning and/or demonstration activities that inform the development of a new or existing Action Plan.

Implementation Grants

These grants provide Federal funds to implement projects and strategies identified in an Action Plan to address a roadway safety problem. Projects and strategies funded can include infrastructure, behavioral, and/or operational activities. Implementation Grants may also include demonstration activities, supplemental planning, and project-level planning, design, and development. Applicants must have an eligible Action Plan to apply for Implementation Grants.

Leadership Commitment & Goal Setting

In early 2024, the City of Allentown City Council adopted a Vision Zero Policy by resolution.[1] According to the resolution, the Vision Zero Policy will be implemented by using data-driven policy changes and engaging stakeholders in the community to design and actualize a transportation system that provides safe, healthy, and equitable mobility for all. This Vision Zero Policy seeks to achieve its purpose by establishing that Vision Zero is a priority for the City of Allentown and creating a Vision Zero task force of senior city officials (or their designees) that is responsible for gathering data, working with the community to develop an action plan for executing the goals of Vision Zero, and utilizing equity-focused strategies that establish safe speeds, safe streets, and foster a culture of safety and collaboration.

The Vision Zero resolution included the following goals:

1. Eliminate traffic deaths and serious injuries by 2030.
2. Collect, analyze, and use data to understand trends and any potential disproportionate effects of traffic related incidents on communities.
3. Create a Vision Zero task force and advisory group to develop and implement an action plan that is guided by community input.

The SS4A Action Plan aligns with all three of these Vision Zero goals. The recommendations in this plan work towards eliminating traffic deaths and serious injuries by 2030. The SS4A Action Plan Steering Committee was convened to guide the Action Plan process which included data collection and community engagement to understand trends and disproportionate effects of traffic related incidents on communities.

> *The life and health of all persons living and traveling within the City of Allentown is our utmost priority, and no persons should fear potential death or serious injury while traveling on our city streets.*

> *Streets and transportation systems have traditionally been designed to primarily navigate cars efficiently, and Vision Zero supports a paradigm shift by designing streets and transportation systems to move all people safely, including people of all ages and abilities: pedestrians, bicyclists, and public transit users, as well as drivers and passengers of motor vehicles.*

> *Making streets safer for all people using all modes of transportation and encourage people to travel on foot, by bicycle, and by public transit, which supports a healthier, more active lifestyle and reduces environmental pollution.*

Quotes from Vision Zero Resolution.

1 City of Allentown. (2024) Vision Zero Resolution. https://www.allentownpa.gov/Portals/0/adam/Content/Ra6iOgiNXEmkdJ0808QxuQ/Url/Resolution%20-%20Adoption%20of%20Vision%20Zero.pdf

Plan Development Process

The Action Plan was developed over the course of one year, starting in March 2024 and concluding in February 2025. The Plan was informed by both data and community feedback.

Project Component	2024										2025	
	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB
Project Kick-Off												
Steering Committee Meetings												
Public Launch Meeting												
Pop-Up Events												
Stakeholder Questionnaires and Interviews												
Survey												
Data Collection and Review												
Safety Analysis												
Equity Review												
Projects and Recommendations												
Dashboard and Toolkit												
Draft Report												
Final Report and Presentation to Council												

KEY: **Stakeholder and Community Engagement** **Data Collection** **Plan Development** **Other**

Data Collection

The project team collected both qualitative and quantitative data that was supplemented by stakeholder and public engagement. Data collected includes:

- Past and existing crash data as detailed in the Safety Analysis chapter.
- Ongoing projects and initiatives as detailed in the **Ongoing Efforts** sections in the **Project and Recommendations** chapter.
- Demographic and socioeconomic data and equity indicators as detailed in **Appendix A, Community Profile**.
- Comparison data from peer cities as detailed in **Appendix C, Peer City Comparison Report.**
- Best practices from comparable small cities as detailed in **Appendix D, Small City Vision Zero Best Practices**.

Stakeholder & Community Engagement

Effective public engagement is an essential, intentional, dynamic, and ongoing process. With this in mind, the consultant team created a stakeholder and public engagement program that built upon the City's commitment to community engagement and leveraged the groundwork that has been established through initiatives like the Allentown Vision 2030 Community Ambassador Program and City Hall at the Table (CHATT).

The stakeholder and community engagement program elevated what is central to the SS4A Action Plan: equity. Equity was baked into the approach, which was inclusive and designed to hear from a broad cross-section of the City's residents with special emphasis put on engaging the Allentown School District, and historically marginalized communities and economically disadvantaged groups.

The stakeholder and community engagement program also supported aspects of the equity needs assessment that was integrated into all the components of the Action Plan. Specifically, the stakeholder and public engagement program incorporates the following equity needs assessment pillars:[1]

- Learn about the specific needs of vulnerable populations.
- Identify priority needs.
- Get a clear description of needs and their underlying causes.
- Ensure that actions taken align with community needs as identified by community members.
- Increase public engagement and build public trust.
- Secure community support for projects and future actions.
- Provide the public with a sense of ownership in activities carried out in their communities.
- Increase agency accountability.

Members of the SS4A Steering Committee in a work session.

1 Center for Transportation, Equity, Decisions, and Dollars. (2021) Transportation Equity Toolkit: Transportation Needs Assessment and Project Prioritization. https://cutr.usf.edu/wp-content/uploads/2021/09/CTEDD-Transportation-Equity-Toolkit-04212021.pdf

Local News interview at a SS4A pop-up event.

Snapshot of feedback points mapped on the SS4A survey.

The engagement program included the following components:

- A diverse Steering Committee that guided the process and provided feedback to the consultant team.
- A user-friendly survey in English and Spanish to get widespread feedback on transportation safety challenges and opportunities. The survey was open for three months from May to July 2024. Survey outreach was supported by email blasts, a social media campaign, and pop-up events. The survey received a total of 1,455 responses (581 responses to the survey questions, 874 mapped points) and 700 comments, highlighting concerns such as speeding motorists, lack of off-road walking/biking paths, double parking, reckless driving, and inadequate pedestrian infrastructure. A full survey report is found in **Appendix B, Stakeholder and Public Engagement Report**.
- A robust outreach campaign to raise awareness about the process, survey, and other engagement opportunities.
- Stakeholder interviews and questionnaires.
- A public launch event to kick-off the process and raise awareness of the initiative.
- Two series of four community engagement pop-up events in each of the areas of Allentown designed to engage residents during the survey/data collection phase and to share findings and get feedback on the toolkit/dashboard.
- A presentation to City Council at the conclusion of the process to present the SS4A Action Plan.

A summary of the stakeholder and public engagement program is included in **Appendix B, Stakeholder and Public Engagement Report**.

Equity

As noted in the Stakeholder and Public Engagement section, equity was centered throughout the development of this Action Plan, starting with the planning process and engagement to the final recommendations and ensuring ongoing transparency.

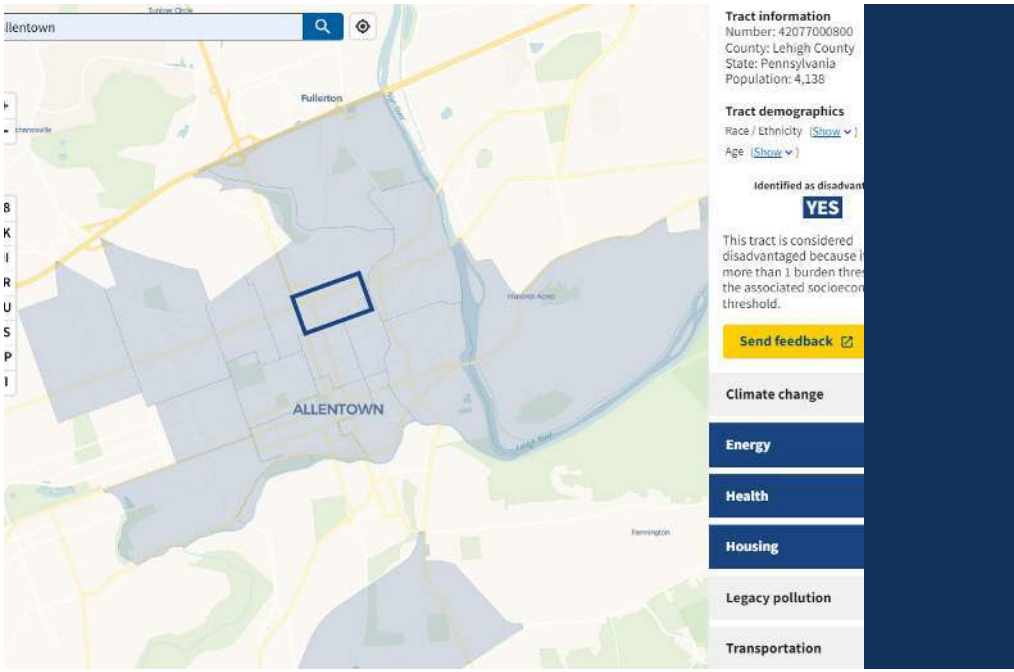
The project team utilized multiple tools to identify areas of the city that should be given greater weight when considering how to prioritize recommendations and plan for inclusive, equitable engagement. The tools are outlined below. For more information on how equity was integrated into the Stakeholder and Engagement components, please see the Stakeholder and Public Engagement section in this Introduction chapter and **Appendix B, Stakeholder and Public Engagement Report.** For more information on how equity is integrated into the prioritization of projects, please see the **Prioritization section** in the **Projects and Recommendations chapter**. Data sets and maps of the data analyzed as part of the equity needs assessment is in **Appendix A, Community Profile.**

PA Department of Environmental Protection PennEnviroScreen

The Pennsylvania Department of Environmental Protection has created the Pennsylvania Environmental Justice Mapping and Screening Tool (PennEnviroScreen) to identify, track, and analyze communities in the state that are impacted by Environmental Justice issues more effectively.[1] This tool utilizes over 30 indicators, including environmental, health, and socio-economic data points to determine, by Census Tract, which areas of Pennsylvania meet the definition of an Environmental Justice Area. These areas highlight communities that have been historically marginalized, underserved, or overburdened by negative impacts such as pollution.

Climate and Economic Justice Screening Tool

In January of 2021, President Biden directed the Council of Environmental Quality to create the Climate and Economic Justice Screening Tool to identify communities that are overburdened by impacts from multiple stresses, like climate change or environmental pollution, and are underserved by public infrastructure and funding.[2] The tool utilizes datasets that fall into eight categories: climate change, energy, health, housing, legacy pollution, transportation, water and wastewater, and workforce development.



Snapshot of Allentown in the Climate and Economic Justice Screening Tool noting disadvantaged Census Tracts in blue. Tract 8 is highlighted as an example.

1 PA Department of Environmental Protection. (2024). PennEnviroScreen. https://gis.dep.pa.gov/PennEnviroScreen/?emulatemode=1

2 Council of Environmental Quality. (2024) Climate and Economic Justice Screening Tool. [Website no longer available]

Alignment with Other Planning Efforts

This Action Plan aligns with existing planning efforts at the state, regional, and local level. It is designed to complement and build upon existing efforts, while emphasizing the role that roadway safety plays in achieving the objectives of these planning efforts.

Statewide Efforts

PennDOT Strategic Highway Safety Plan

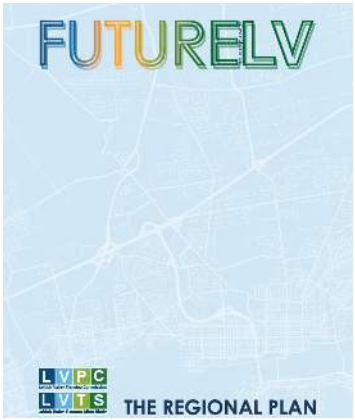
At the State level, PennDOT's 2022 Strategic Highway Safety Plan (SHSP) details the Commonwealth's blueprint to reduce fatal and serious injury crashes through 2027. The plan targets Priority Emphasis Areas and Safety Focus Areas that have the most influence on improving highway safety statewide. Among the state's priority emphasis areas include:

- **Pedestrian Safety** - Walking is the most fundamental form of transportation used by people of all ages and physical abilities. While the total number of fatalities have been trending down in Pennsylvania, pedestrian fatalities have been marginally increasing and account for 14% of the statewide fatalities each year. Active transportation is on the rise and being promoted across all areas of the state from urban centers to small rural towns. This has resulted in increasing pedestrian activity making it more likely to have collisions with motor vehicles if safety measures are not implemented.
- **Lane Departure Crashes** - Pennsylvania sustains more fatalities (52%) and serious injuries (42%) each year due to vehicles departing their travel lane compared to any other crash type. A lane departure occurs when a vehicle crosses the edge line or center line of a roadway. Two-thirds of all fatal and serious injury lane departures include a collision with a fixed object, most commonly trees, utility poles, embankments, and guiderails.
- **Impaired Driving** - Alcohol related crashes have been a top concern in PA since the first edition of the SHSP in 2006. While fatalities in this area have steadily decreased over the last 15 years, they remain high. Drug-related fatalities have been increasing and may even grow more with the potential legalization of recreational marijuana. Driving while impaired by any substance (legal or illegal) puts all roadway users in harm's way and continues to account for approximately one of every three highway fatalities.
- **Vulnerable User Safety** (pedestrians and bicyclists). PennDOT continues to work with its partners at the regional and municipal level in driving down the total number of crashes related to Vulnerable Road Users.

PennDOTActiveTransportation Plan

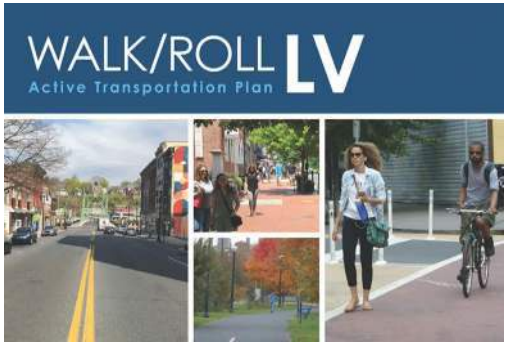
PennDOT's Active Transportation Plan, developed in 2019, aims to enhance walking and bicycling infrastructure and safety across the state. The plan provides a vision and framework for improving conditions for pedestrians and cyclists, emphasizing safety, multimodal connectivity, and increased active transportation. The core policy statement of the plan is "PennDOT shall make accommodations for active transportation a routine and integral element of planning, project development, design, construction, operations, and maintenance." This SS4A Action Plan encourages ongoing collaboration with PennDOT whenever improvements are planned for state-owned roadways in Allentown.

Regional Efforts



FutureLV: The Regional Plan

FutureLV is the region's comprehensive plan. Elements of FutureLV act as the Long-Range Transportation Plan (LRTP) for the Lehigh Valley. The LRTP plans for a 25 year horizon and is updated every four years. It serves as a long-term funding plan with projects and plans that the region can reasonably expect to achieve over the next 25 years. Projects in Appendix F align with improvements and concept plans in the SS4A Action Plan and are included in the LRTP.



Walk/Roll LV

Walk/Roll LV is the first active transportation plan for the Lehigh Valley region. It aims to make walking and biking safer and more accessible for people of all ages and abilities. The plan includes actionable recommendations and priority projects to enhance the pedestrian and bicycle network.

The plan includes concepts for a priority bike network and pedestrian network connections. The SS4A Action Plan aligns with these concepts, the priority pedestrian and bike network connections, and the policies and programs noted in the Walk/Roll LV Plan.

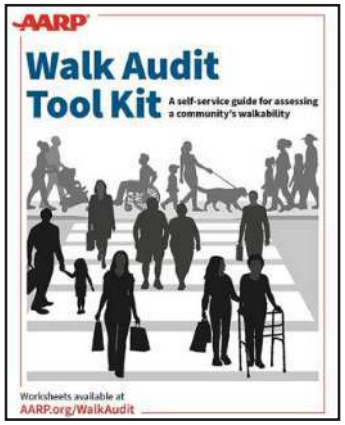
Traffic Safety Plan

The Lehigh Valley Traffic Safety Plan (2016), developed by the Lehigh Valley Planning Commission (LVPC), aims to reduce traffic fatalities and major injuries by at least 50% over the next two decades. The plan analyzes crash trends from 2010 to 2014, identifying high-priority areas and recommending countermeasures.

Key goals include reducing the average annual fatality rate from 56.2 to 30.4 by 2030 and the major injury rate from 151 to 84.1. The rates are determinied by the number of fatalities or serious injuries in a year devided by population at risk. The plan emphasizes a multidisciplinary approach, incorporating education, enforcement, engineering, evaluation, encouragement, and equity to improve highway safety.

The plan identifies several crash types and contributing factors, proposing mitigation strategies such as improved signage, off-road improvements, bicycle and pedestrian accommodations, and advanced technologies. Specific areas of focus include pedestrian and head-on crashes, which have shown upward trends. The plan also highlights the importance of community engagement and equitable distribution of safety benefits. Funding sources for safety improvements include federal and state grants, loans, and programs like the Highway Safety Improvement Program (HSIP) and the Pennsylvania Multimodal Transportation Fund (MMTF). The LVPC will continue to monitor and evaluate safety investments to ensure effective implementation and resource allocation.

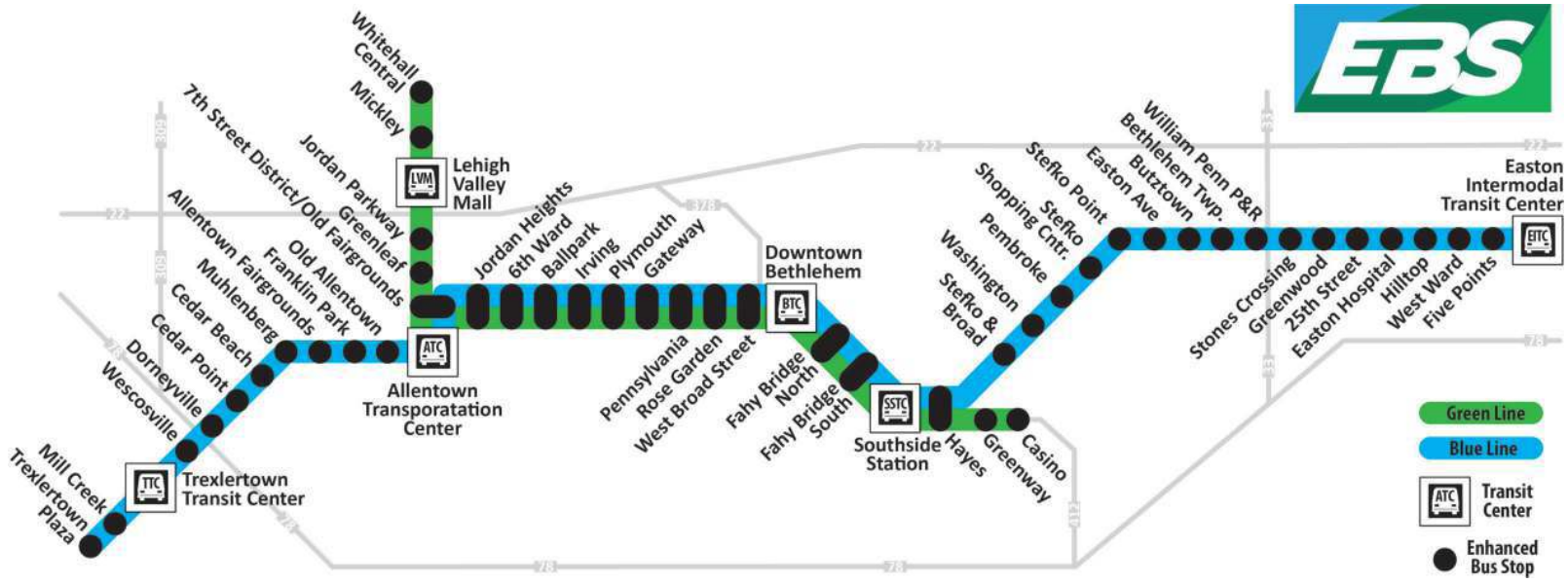
AARP Walk Audit



The United Way, AARP, and LVPC conducted a walk audit in the Lehigh Valley. This initiative, part of the Age-Friendly Lehigh Valley project, involved over 170 volunteers from various community organizations. The audit aimed to identify areas needing improvement in Lehigh and Northampton Counties, focusing on creating a safer, more accessible pedestrian network for all residents, including older adults and people with disabilities. Walk Audit data was incorporated into the data collection phase of this planning process and helped to inform the plan's recommendations.

LANTA Enhanced Bus/BRT Study

The Lehigh and Northampton Transportation Authority (LANTA) is implementing Enhanced Bus Service (EBS), the Lehigh Valley's Bus Rapid Transit System (BRT). EBS routes only service certain bus stops known as EBS stops, each located in a named EBS Station area. In the near future, these named EBS Stations will receive passenger amenities like shelters, benches, advanced technology, and enhanced service. LANTA is currently on phase four of a seven phase implementation plan. The SS4A Action Plan's concept plans along EBS routes apply transit-supportive design guidelines promoted by LANTA and prioritize safety improvements near EBS stations and along LANTA bus routes



LANTA EBS Routes.

Local Efforts

City of Allentown Recompete Plan[1]

Recompete is a place-based investment program through the U.S. Economic Development Administration that aims to lift communities up from economic challenges. The primary focus of the program is to close the prime-age employment gap (PAEG) and support 25-54 year old residents get into the workforce and earn good-paying jobs. The City of Allentown's Recomplete Plan focuses on Franklin Park, Center City, and the 1st and 6th Wards as priority neighborhoods since the employment gap in those areas is double the citywide level at 12.1%. The Recompete Plan was awarded a $20 million implementation grant.

Part of the Recompete Plan focuses on investing in transportation options, including partnering in the SS4A Action Plan process, supplementing LANTA service with expanded transportation options, investing in targeted pedestrian, bicycle, and walkability focused infrastructure, operating an alternative transportation mini-grant program, and more. The SS4A Action Plan aligns with the Recompete Plan by promoting multi-modal infrastructure improvements and using the Recompete priority neighborhoods as a layer of consideration when prioritizing projects.

Allentown Vision 2030: City of Allentown Comprehensive and Economic Development Plan[2]

The Vision 2030 Plan presents a 10-year vision that guides inclusive and equitable growth in Allentown. The plan was developed alongside the community and resulted in principles and actions in five focus areas and four geographic areas. The SS4A Action Plan supports principles within the Accessibility and Connectivity focus area, specifically: Principle 1 – Create safe and efficient routes; Principle 2 – Connect places in the City; and Principle 4 – Create mobility choices.

City of Allentown Citywide Bike Infrastructure Plan

The City of Allentown is currently working on a Citywide Bike Infrastructure Plan that will complement the SS4A Action Plan. The plan will identify strategies for overhauling and expanding its current bike infrastructure to create a vibrant, accessible, and sustainable urban environment. The strategies will address gaps in the city's bike lane, trail, and shared lane network to enhance connectivity, safety, and accessibility for people riding bikes. It will also promote a more active and healthy community by addressing pressing public health and environmental challenges.

1 City of Allentown. (2024) Recompete Plan. https://www.allentownpa.gov/en-us/Government/Departments/Community-Economic-Development/Planning-Zoning/Featured-Plans-and-Projects/Recompete-Plan

2 City of Allentown. (2019) Allentown Vision 2030. https://www.allentownpa.gov/Portals/0/adam/Content/pH1M2J85z0iTPG7zrktI_w/Url/Vision2030FullPlan.pdf

Plan Organization

The SS4A program, as detailed in the Safe Streets and Roads Funding for All Federal Program 2023 Notice of Opportunity, requires that a grant-funded Action Plan adhere to a standard organizational structure. This Action Plan is organized into six chapters and five appendices aligned with the U.S. Department of Transportation's Safe Streets and Roads for All Action Plan Components.[1]

CHAPTER	CONTENTS	ALIGNMENT WITH SS4A REQUIREMENT
Introduction	The Introduction chapter sets the scene for the Action Plan by describing its purpose and the Safe Systems Approach. The Safe System Approach sets the foundation for the plan recommendations, plan development process, alignment with other planning efforts, and the City of Allentown's leadership commitment.	• Leadership Commitment • Planning Structure • Engagement and Collaboration • Equity Considerations
Vision and Goals	The overarching vision and goals that guide the Action Plan.	• Goal Setting
Safety Analysis	An in-depth analysis of locations where there are crashes and the severity of the crashes, as well as contributing factors and crash types by relevant road users. The Safety Analysis chapter establishes the high-injury network. The high-injury network is a set of city streets that have a concetration of high-injury crashes (i.e., crashes that have resulted in a fatality or serious injury).	• Safety Analysis
Projects and Recommendations	The Projects and Recommendations chapter is organized into four focus areas: Physical Improvements, Collaboration Opportunities, Policy and Process Improvements, and Progress and Transparency.	• Policy and Process Changes • Strategy and Project Selections • Progress and Transparency
Implementation	The Implementation chapter consolidates all of the recommendations into a matrix that identifies project leads, partners, time frame, and status. Funding options for these recommendations are included as a funding glossary.	• Policy and Process Changes • Strategy and Project Selections

1 U.S. Department of Transportation. (2022) Safe Streets and Roads for All Action Plan Components. https://www.transportation.gov/sites/dot.gov/files/2022-06/SS4A_Action_Plan_Components.pdf

CHAPTER	CONTENTS	ALIGNMENT WITH SS4A REQUIREMENT
Appendix A: Community Profile	The Community Profile provides an analysis of existing demographic and socioeconomic conditions within the City of Allentown. The Community Profile also identifies underserved communities through an initial equity assessment.	• Safety Analysis (Demographic Components) • Equity Considerations
Appendix B: Stakeholder and Community Engagement Report	The Stakeholder and Community Engagement Appendix shares more details about the engagement and collaboration that occurred throughout the planning process. This appendix includes an outreach and survey report.	• Planning Structure • Engagement and Collaboration
Appendix C: Peer City Comparison Report	This report is a review of comparable cities in Pennsylvania and their road safety initiatives. The report identifies best practices from the cities and helps to establish benchmarks for comparing crash rates per capita.	Not applicable SS4A Action Plan component; however, it supports Strategy and Project Selections.
Appendix D: Small City Vision Zero Review	This appendix summarizes Vision Zero best practices from similar small cities across the United States.	
Appendix E: Safety Toolkit	The Safety Toolkit serves as a guide to the countermeasures applied in proposed physical improvements to improve road safety.	
Appendix F: Long Range Transportation Plan Projects	This appendix is a list of projects included in the Lehigh Valley Planning Commission's Long Range Transportation Plan (LRTP) that align with suggested concept plan recommendations and are included in the 2023-2026 Transportation Improvement Program (TIP).	

02 VISION AND GOALS

Vision

The vision, developed in collaboration with the SS4A Steering Committee, provides direction for the plan's goals and paints a picture of the future if all the goals are accomplished.

Allentown's streets are **safe and accessible** for all **community members who live, work, or visit Allentown no matter their mode of transportation or background**. By 2030, there are **zero traffic fatalities and serious injuries**.

Through **data-driven monitoring and evaluation** and **collaboration with the community and regional stakeholders**, the transportation network is designed for **safe and equitable mobility, valuing different modes of transportation and connecting communities** with each other and to jobs, education, and services.

Goals

The City of Allentown will strive to meet the Safe Streets for All Action Plan's vision by actively pursuing the following goals. Recommendations and key actions are included in each of the four focus areas to accomplish the Plan's goals.

Implement proven safety countermeasures. The City will identify and adopt a range of evidence-based safety measures tailored to reduce crashes and enhance overall street safety.

Integrate the Safe System Approach into all aspects of City operations. The holistic Safe System Approach will be embedded into city planning and operational processes. This approach recognizes that road users are fallible and makes allowances for errors, ensuring that streets are designed to mitigate the severity of crashes.

Utilize a monitoring and evaluation framework that assesses key performance indicators to track effectiveness of the implemented safety countermeasures. The City will establish a robust framework to continuously monitor and evaluate the effectiveness of implemented safety measures.

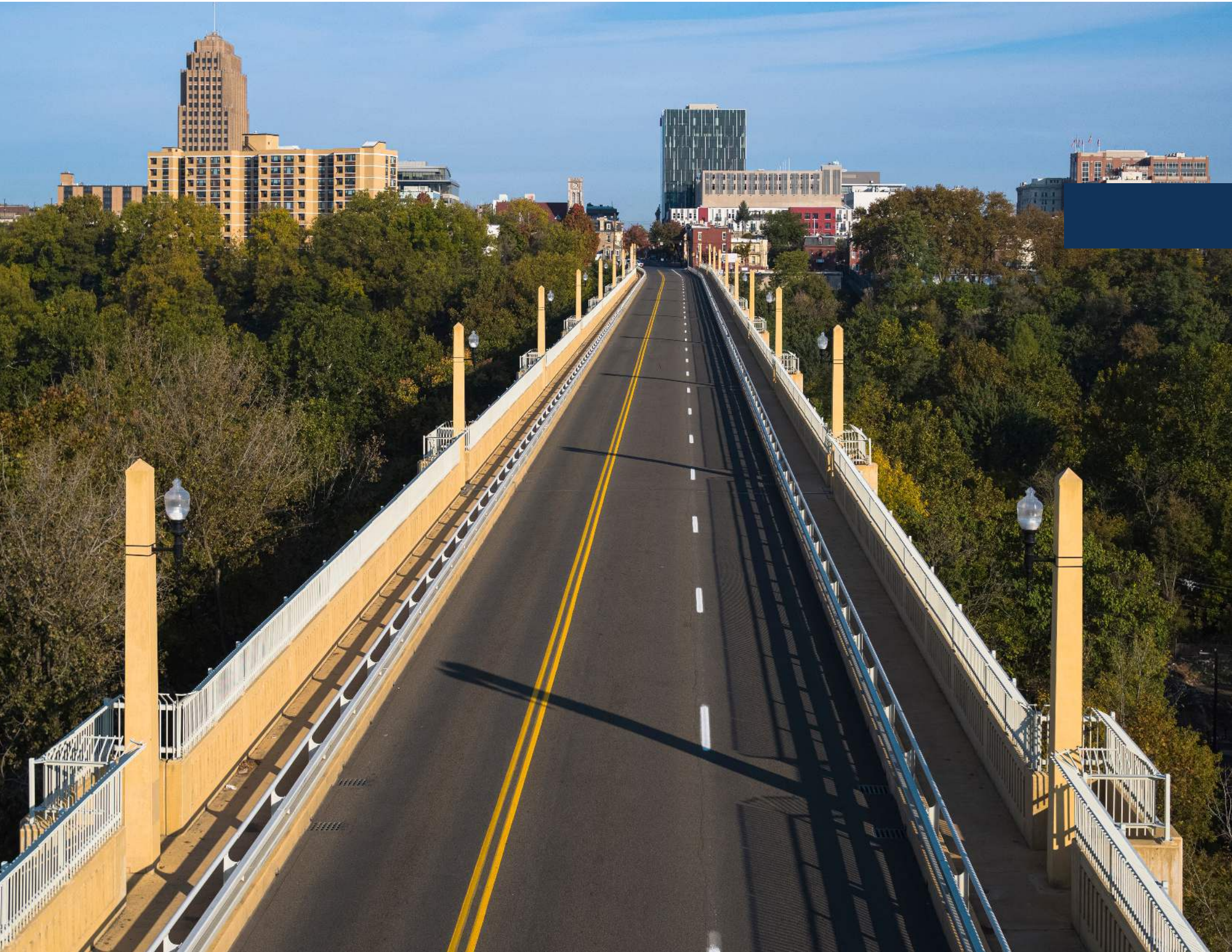
Foster strong partnerships with residents and regional collaboration through coordination on planning and funding. Engagement with community members and regional partners will be prioritized to create a collaborative approach to road safety. This includes organizing public forums, surveys, and workshops to gather input.

Expand the multimodal transportation network to increase connectivity throughout the city. The City aims to develop an inclusive transportation network that caters to various modes of travel, including walking, cycling, public transit, and vehicular traffic

Create a multimodal transportation network that supports a shift from driving to nonmotorized forms of transportation. To promote sustainable and active transportation, the City will work on creating a transportation network that encourages walking, biking, and the use of public transit over driving.

The table below highlights the intersection between the plan's project and recommendation focus areas and strategic goals. It demonstrates how success in each focus area will be achieved through the implementation stages of the Safe Streets for All planning process. By aligning each focus area with its corresponding goals, the City of Allentown will streamline safety improvements across the community and measure progress using built-in benchmarks and metrics as outlined in the **Progress & Transparency** section and in the **Implementation** chapter.

FOCUS AREA	RELEVANT GOALS
Physical Improvements	
Collaboration Opportunities	
Policy & Process Improvements	
Progress & Transparency	



03 SAFETY ANALYSIS

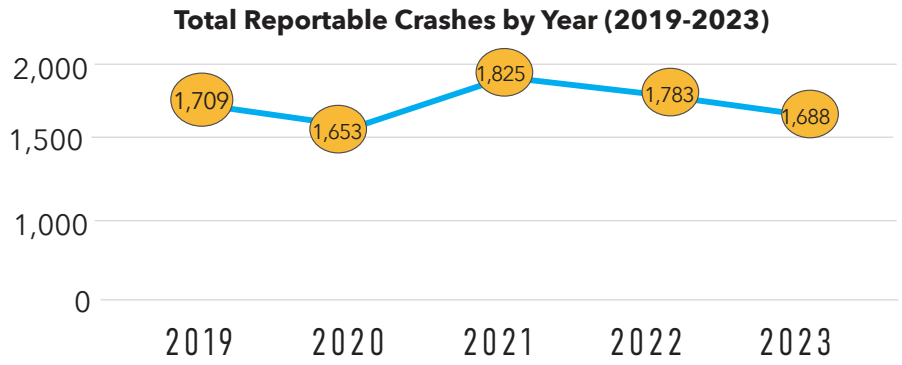
Crashes by Year

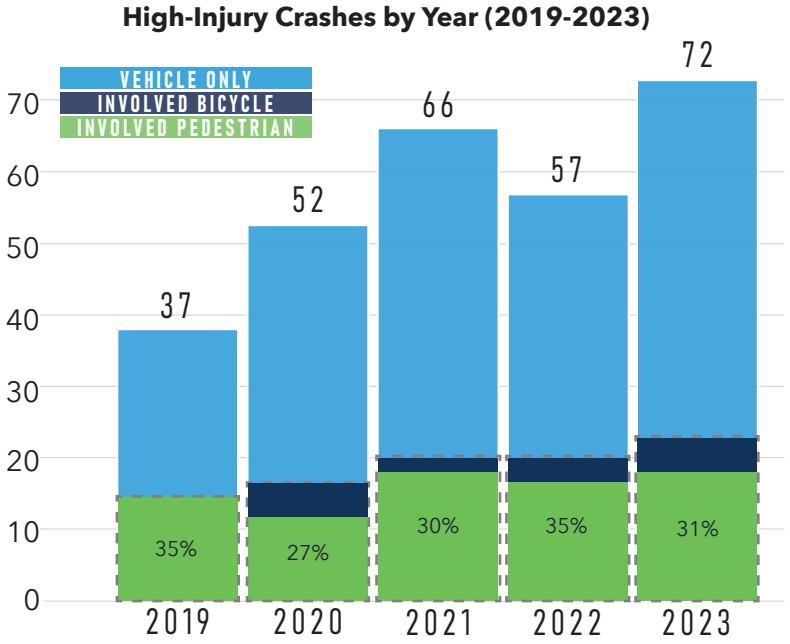
Reportable crashes within the City of Allentown were reviewed using PennDOT's Pennsylvania Crash Information Tool (PCIT) for the five-year period between 2019-2023. A reportable crash is one in which there is injury to anyone involved and/or a vehicle must be towed from the scene and cannot be driven. Over the five-year period, there were 1,732 average crashes per year with low deviation year to year (with the exception of 2020 likely due to COVID-19 related travel restrictions).

Additional analysis was conducted specifically for high-injury crashes, which include all crashes that resulted in either a fatality or suspected serious injury. These types of crashes were chosen because they represent the most serious threat to safety, and eliminating such crashes is the primary goal of a Vision Zero/Safe System Approach.

There were a total of 284 high-injury crashes from 2019-2023 with a low of 37 in 2019 and a high of nearly double that number (72) in 2023. The frequency of high-injury crashes trended upward within the past five years but notably did not experience a dip in 2020 (and in fact increased by 26% compared to 2019). This provides an interesting case study where although vehicle volumes decreased, there was an increase in reported speeds, a major contributor to high-injury crashes.

Although high-injury crashes made up a small percentage of overall crashes, they dramatically impacted vulnerable road users (pedestrians, bicyclists, and other non motorized forms of transportation).





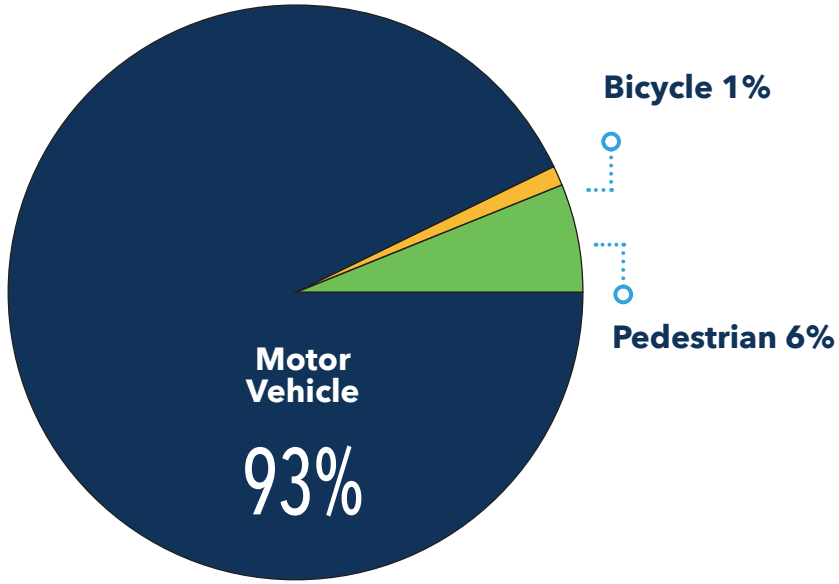
Crashes by Mode Type

In terms of mode type, the vast majority of overall crashes involved only motor vehicles (93%) with crashes involving either a pedestrian, bicycle, or other non motorized form of transportation accounting for the remaining 7%.

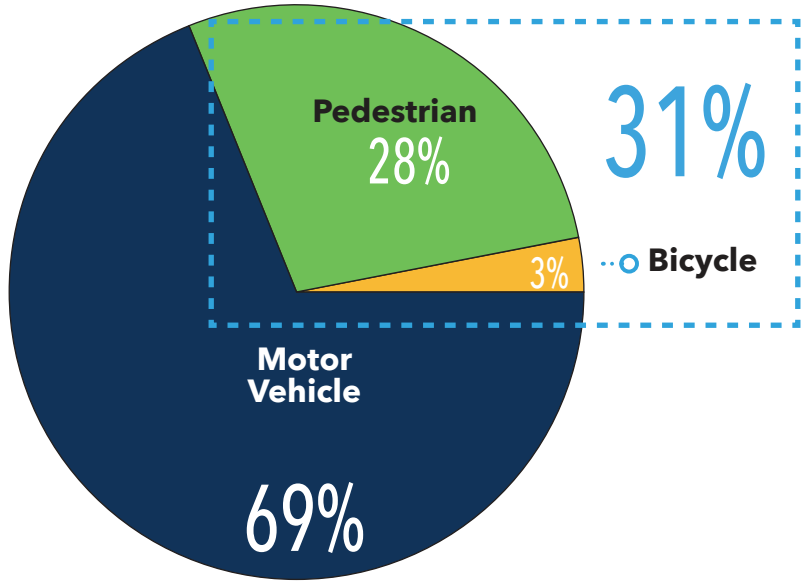
However, these proportions shift significantly when looking at high injury crashes where pedestrian and bicycle crashes comprise over 31% of such crashes. This points to the increased vulnerability of people who walk, bike, or use other forms of non motorized transportation and the pressing need to eliminate the types of high injury crashes that disproportionately affect their safety and wellbeing.

In addition, over the decades, many safety features have been added to cars to protect the occupants of the vehicles such as air bags, cameras, sensors, lane assist, etc. These have lead to less severe crashes for motorists.

All Crashes by Mode



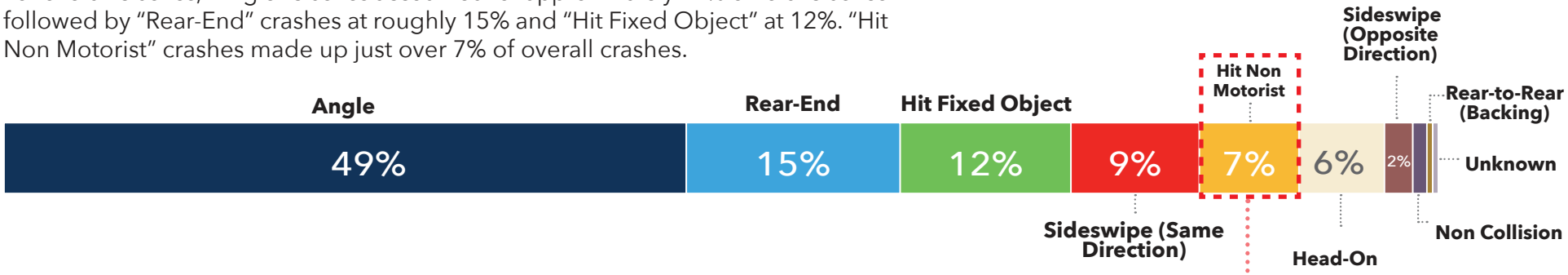
High-Injury Crashes by Mode



Crashes by Collision Type

All Crashes

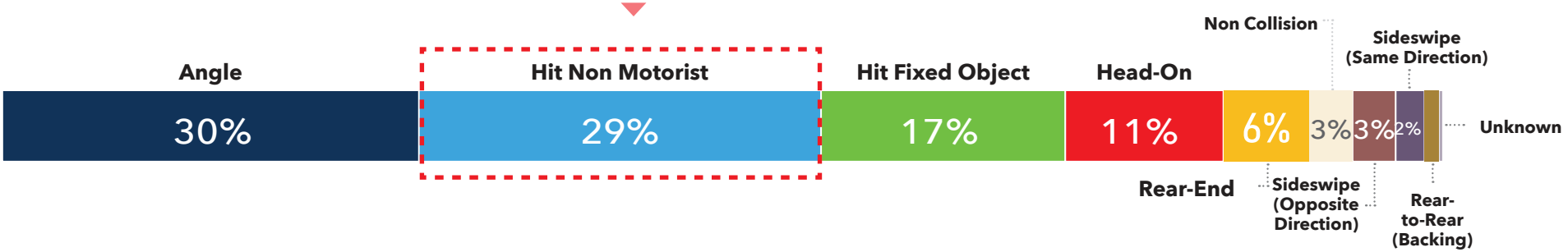
For overall crashes, "Angle" crashes accounted for approximately 49% of total crashes followed by "Rear-End" crashes at roughly 15% and "Hit Fixed Object" at 12%. "Hit Non Motorist" crashes made up just over 7% of overall crashes.



High-Injury Crashes

For high-injury crashes, "Hit Non Motorist" crashes made up approximately 29% of crashes just behind "Angle" crashes at roughly 30%. "Hit Fixed Object" crashes accounted for just over 17% of crashes, followed by "Head-On" crashes at approximately 11%. It is important to note the higher proportion of "Non Motorists" (pedestrians, bicyclists, etc.) involved in high-injury crashes this further highlights the increased vulnerability of these road users.

Non motorists are over represented in high-injury crashes (29%) compared to overall crashes (7%)



Contributing Factors

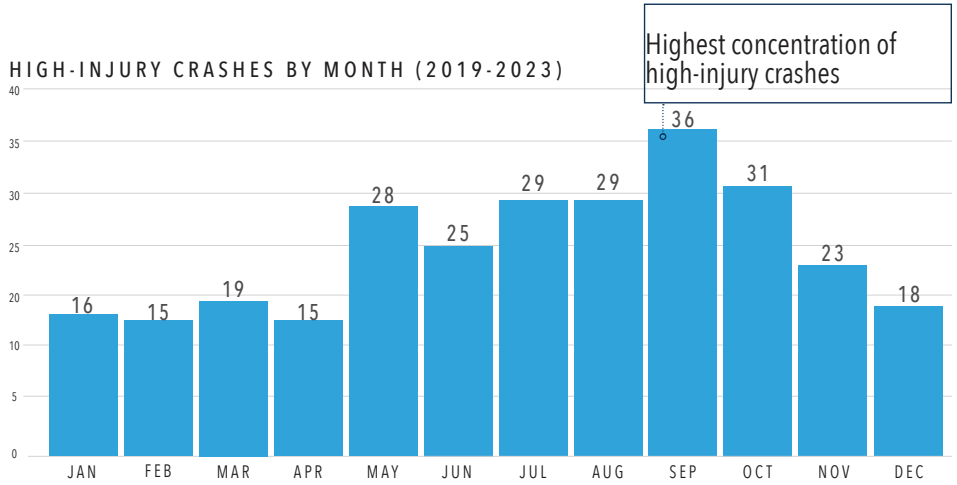
High Injury Crashes

PennDOT tracks a variety of contributing factors related to crashes within the PCIT database. Identifying these contributing factors can help highlight existing trends within the data and aid in developing potential countermeasures.

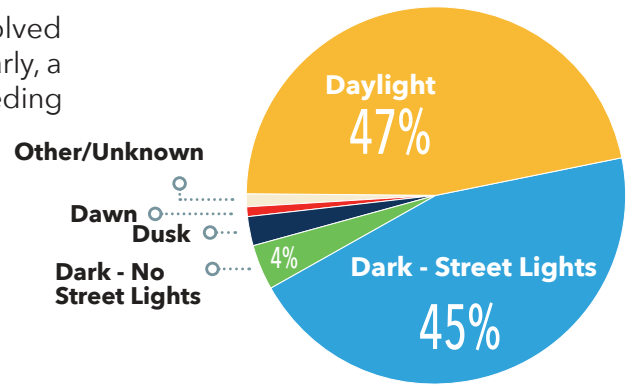
There were some variation in high injury crashes by month with the highest concentrations taking place in the fall with September (36) being the highest followed by October (31) and July/August (29). These months correspond to changes in lighting levels as well as schools returning to session, increasing risks to vulnerable users.

In terms of environmental conditions, close to half of the high injury crashes took place in daylight. However, 45% occurred in dark conditions with street lights, pointing towards possible issues with l\j\ inadequate lighting, especially at intersections.

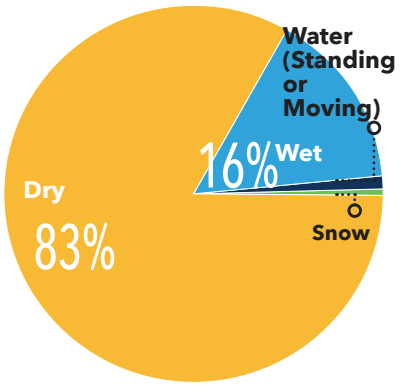
Looking at driver behavior, over 12% of high injury crashes involved the use of alcohol compared to roughly 7% of total crashes. Similarly, a higher percentage of high injury crashes involved suspected speeding (8%) compared to all crashes (2%).



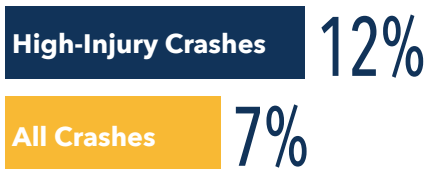
Type of Illumination: High-Injury Crashes



Wet vs Dry Roadway Conditions: High-Injury Crashes

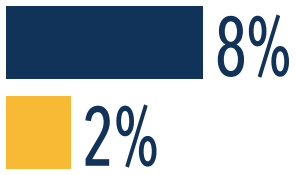


Involved Use of Alcohol



Aggressive Driving

Suspected Speeding



Intersection vs Midblock

For all crashes, around 57% of crashes occurred at intersections compared to approximately 43% occurring at midblock locations. This trend was mirrored in high-injury crashes involving a pedestrian where roughly 59% occurred at intersections. This highlights a need to address safety concerns at intersections throughout the city.

Additionally, over 41% of high-injury crashes (and 43% of high-injury crashes involving a pedestrian) that occurred at intersections took place in dark conditions with street lights on. This could point towards issues with insufficient lighting at these intersections that impact visibility for both drivers and pedestrians.

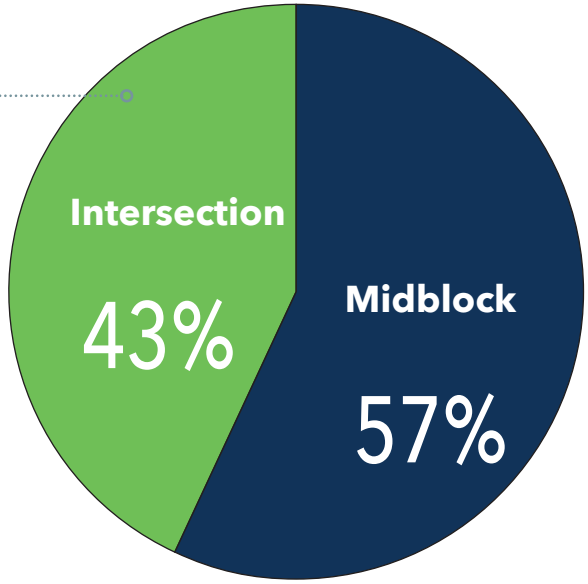
Roadway Ownership

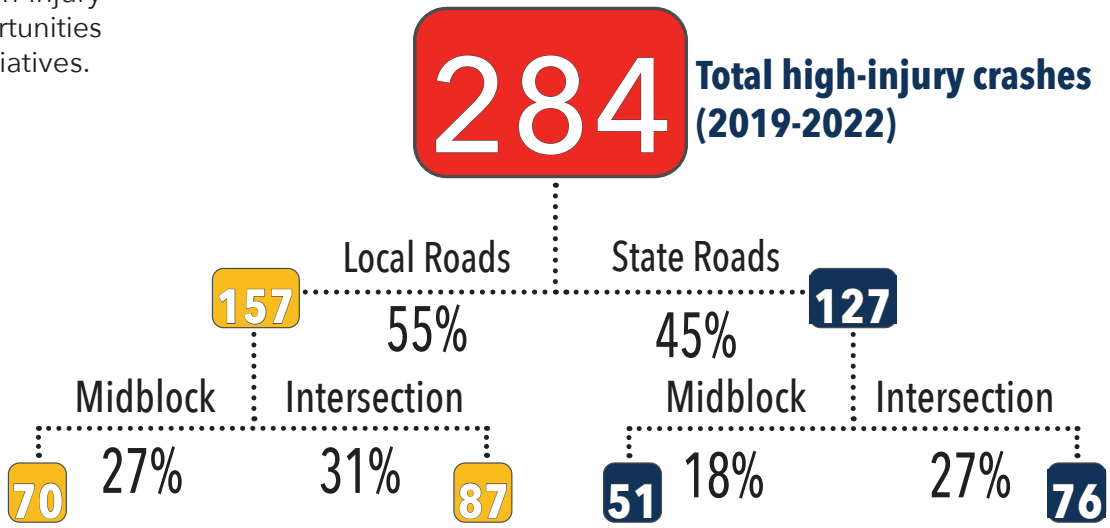
Roadway ownership plays a significant role in determining what improvements can be implemented on certain roadways. Of the 284 total high-injury crashes, the majority (55%) occurred on City-owned roads compared to 45% on state-owned roads. This distinction is important when considering potential countermeasures and determining the appropriate partners that need to be included in the decision making process. The fact that the majority of high-injury crashes were on City-owned roads means there could be opportunities to make significant safety improvements through City-led initiatives.

41%

Dark With Street Lights On

High-Injury Crashes: Intersection vs Midblock

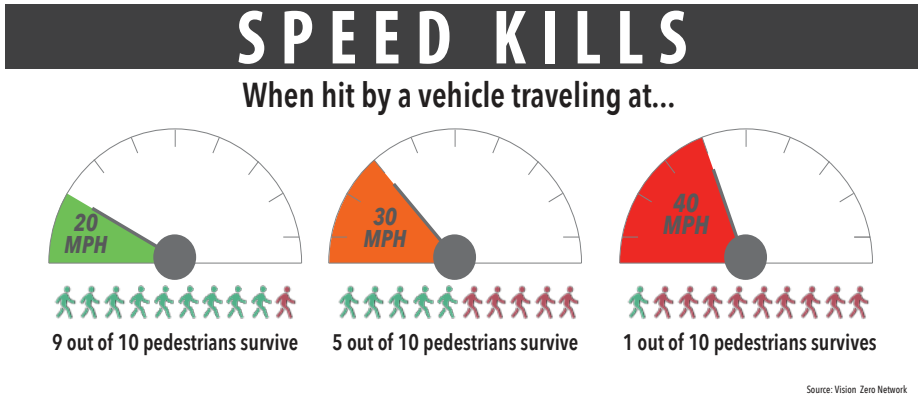




Speed

Vehicle speed is often the most critical factor in determining the severity of a crash. This is especially true for crashes involving pedestrians or other vulnerable users. The chances of being killed by a vehicle increase greatly with the speed of the vehicle. Although only 8% of high-injury crashes were reported as "Suspected Speeding" there is a likelihood that more crashes involved speeds that would be considered unsafe in terms of high-injury crashes.

Increases in vehicle speed also greatly limits the field of vision for drivers. This can reduce awareness of surroundings, including vulnerable road users, and lead to crashes.



Field of Vision at 20 MPH

Field of Vision at 40 MPH

Speed Countermeasures

Speeding is often a root cause of many crashes and increases the severity of crashes. There are many countermeasures that are recommended to address speeding. The following are some of the most common countermeasures used and recommended by the Federal Highway Administration[1] to reduce speeding:

Advisory speed displayed with curve warning sign.

Advisory Speeds

Advisory speeds are installed with curve warning signs (either on the same sign or as a supplemental plaque) to recommend a safe speed for traversing a horizontal curve.

Special pavement marking to encourage speed reduction for impending curve.

Pavement Speed Limit Marking

A pavement speed limit marking displays the posted speed limit on the pavement. It is used to emphasize the speed limit. A *slow curve ahead* pavement marking warns the driver of a potentially hazardous curve. This pavement marking is meant to supplement advisory signs. Because they are exposed to traffic wear, both types of pavement markings require regular maintenance to ensure their continued visibility.

1 Federal Highway Administration. (N.d) Home Page. https://highways.dot.gov/

A solar-powered feedback sign.

Speed Activated Sign

A speed activated sign is an electronic sign that is connected to a device that measures the speed of approaching vehicles. If the vehicle is exceeding the legal speed limit, then the electronic sign is activated to display the legal speed limit. This may also be accompanied by the word "SLOW" or other appropriate message. A similar device is a speed feedback sign. When connected to a speed-measuring device, a speed feedback sign displays the speed at which a vehicle is traveling. The speed-activated sign and the speed feedback sign can be effective in speed transition areas (e.g., entering a school zone or other area characterized by high volumes of non-motorized traffic).

Reducing Lane Width

Reducing lane width to as narrow as 10 feet can reduce speeds. This can be accomplished by restriping narrower lanes without reducing pavement width. The remaining space can then be used for non-motorized uses, buffer areas between travel lanes and non-motorized uses,or space for on-street parking.

Road Diet

A road diet is a conversion of an existing street cross section to create space for other uses (e.g., bicycle lanes, sidewalks, turn lanes, or on-street parking).

Example of a road diet where the original road was four lanes with two lanes in each direction.

Speed Tables

Speed tables are similar to speed humps but have an extended flat section that can accommodate an entire car. This design allows for speeds of 25 to 30 mph, which are typical for local and collector streets. Speed tables are generally placed on roadways where there is minimal heavy truck traffic and is often used in conjunction with a crosswalk on the flat portion of the speed table.

Speed Hump

A speed hump is a raised section of asphalt approximately 10 to 14 feet long and 3 to 4 inches high. Speed humps are typically used on lower-speed residential streets in rural areas that are experiencing a high incidence of speeding and/or cut-through traffic. Speed humps are not to be confused with speed bumps, which are much shorter and usually found in parking lots. Speed humps have been found to reduce injury crashes by 40 to 50% and speeds by nine mph.

Visual differences between speed tables and speed humps.

Speed Cushions

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

Center Island and Raised Medians

A center island or raised median can be used to create a shift in the travel path. Shifting traffic is an effective way to reduce speeds. A center island or raised median may also be used to narrow the "optical width" of the roadway, which will make the roadway appear narrower, thereby reducing speeds. Medians have been shown to be effective in lowering operating speeds, especially when they create a deflection in the vehicle path at the beginning of the median.

Mini-Roundabouts

A mini-roundabout is smaller than a conventional roundabout and has a mountable center island that is either flush with the pavement or slightly mounded. It is typically installed on roadways with speed limits of 35 mph or lower. This measure can reduce speeds by an average of 10 mph, since traffic is required to yield to road users in the mini-roundabout.

Neighborhood Traffic Circle

A neighborhood traffic circle is intended for low-volume and low-speed roads, such as those in residential areas. A raised center island is constructed in the intersection. Landscaping can be added to the island for aesthetic value but should not obstruct the view of the intersection. A traffic circle is quite different from a roundabout or mini-roundabout, as a yield sign is not mandatory for this intersection. Also, it is permissible to turn left in front of the center island, a maneuver that is prohibited at a conventional roundabout. Traffic circles have been found to reduce speeds by up to 15 mph.

Example of a neighborhood traffic circle.

Speed Sensitive Signals

According to the Safe Routes to School online Guide, some agencies have installed innovative traffic control measures, such as speed sensitive traffic signals, to reduce motor vehicle speeds. These devices involve using pavement loops to detect the speed of a motor vehicle. If the speed exceeds the speed limit, the traffic signal ahead will display a red light. Drivers learn that speeding on such streets will require them to stop at the traffic signal and be further delayed. This treatment is not applicable to local streets inside neighborhoods that do not have traffic signals, but can be applicable to collector and some arterial streets. Some communities are timing their traffic signals to a preset reasonable speed. Motorists who exceed the preset speed will be stopped at the next traffic signal. Signs with SIGNAL SET AT XX MPH can be installed along the street to alert drivers.

CASE STUDY

PUTTING IT INTO PRACTICE: SPEED SENSITIVE SIGNALS

Boulder, CO; Arlington, VA; and Washington, D.C.

High-speed motor vehicles pose a serious threat to the safety of children who are crossing arterial streets near schools and are one of the largest challenges in providing safe routes to school. Innovative measures have been used to reduce motor vehicle speeds such as the speed sensitive signals used in Boulder, CO, Arlington, VA and Washington, D.C. The signals use pavement loops to detect the speed of a motor vehicle. If the motor vehicle exceeds the speed limit, the traffic signal ahead displays a red light. Drivers learn that speeding on such streets will require them to stop at the light and be further delayed. The sign "speed sensitive signal" conveys that message to drivers.

Speed sensitive signals were added in as part of a traffic calming project done at Sunnyslope High School in Phoenix, Arizona. The signals monitored motorists speed and flashed their driving speed and a bright LED strobe light if a motorist exceeded the 35 mph speed limit by 5 mph or more. Along with other traffic improvements, including a staggered crosswalk, the speed sensitive signals resulted in slower motorist speeds (on average cars went 6 mph under the speed limit) and a reduction in pedestrian crashes. The avenue averaged 32 pedestrian crashes per year during the previous three years, but only one crash in the six months following the project (PEDSAFE, 2013).

SAFETY ANALYSIS CONTINUED ON NEXT PAGE

High-Injury Crash Hot Spots

Mapping hot spots can help identify historic trends and potential hazardous conditions for all users. The heatmap on the next page highlights crash hot spots for high-injury crashes from 2019-2023. Corridors and intersections with high-injury crash clusters were identified and used to develop the high-injury network that serves as a starting point for identifying problem areas and developing potential countermeasures.

For corridors, Tilghman Street/Union Boulevard had the highest concentration of high-injury crashes (45) accounting for nearly 16% of total high-injury crashes within the city. Based on this high proportion of high-injury crashes along this roughly seven-mile stretch, this corridor was selected for additional analysis that can be found later in the **Physical Improvements section.**

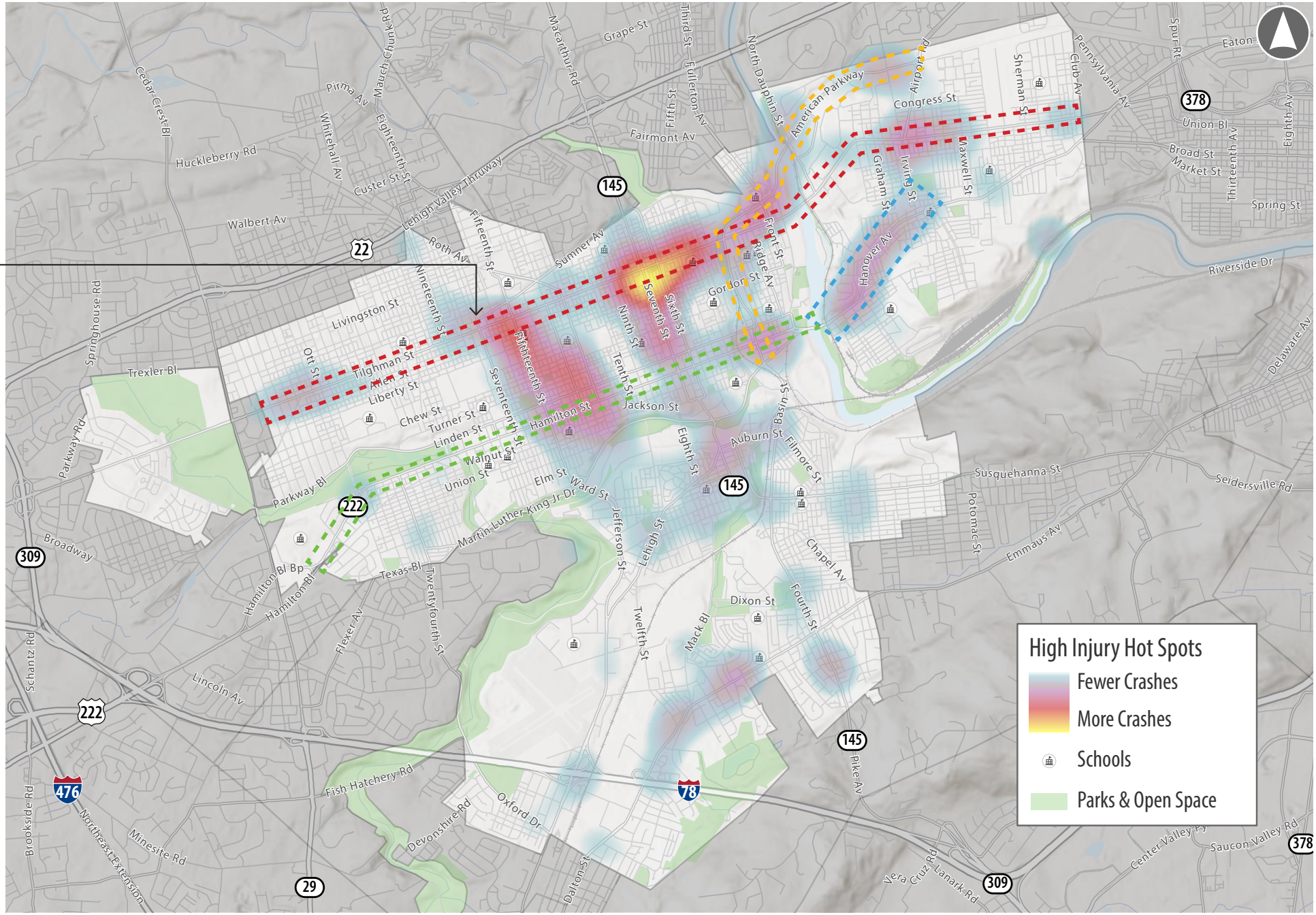
Hamilton Street/Boulevard had the second highest concentration (15), followed by E Hamilton Street/Hanover Avenue and American Parkway (both with 14), and Lehigh Street (13). 7th Street, 15th Street, and Emmaus Avenue were each tied at 11 crashes.

Top 5 High-Injury Crash Corridors

	Roadway Name	Crashes	%	Direction	Owner
1	Tilghman Street/ Union Boulevard	45	15.8%	Two-Way	State
2	Hamilton Street/ Boulevard	15	5.3%	Two -Way/ One-Way	State/ Local
T3	E Hamilton Street/ Hanover Avenue	14	4.9%	Two-Way	Local
T3	American Parkway	14	4.9%	Two-Way	Local
4	Lehigh Street	13	4.6%	Two-Way	State
T5	7th Street	11	3.9%	One-Way	State/ Local
T5	15th Street	11	3.9%	Two-Way	State
T5	Emmaus Avenue	11	3.9%	Two-Way	State
	Totals	**121**	**48.6%**		

**T designation stands for tied corridors.*

Combined, these eight corridors accounted for nearly 49% of high-injury crashes.


High Injury Hot Spots
Fewer Crashes
More Crashes
Schools
Parks & Open Space
0
1
Miles
Huckleberry Rd
Walbert Av
Cedar Crest Bl
Springhouse Rd
Trexler Bl
Parkway Rd
Broadway
Schantz Rd
Brookside Rd
Minesite Rd
Northeast Extension
Lincoln Av
Fish Hatchery Rd
Devonshire Rd
Oxford Dr
Dalton St
Vera Cruz Rd
Lanark Rd
Center Valley Py
Saucon Valley Rd
Livingston St
Ott St
Tilghman St
Allen St
Liberty St
Chew St
Turner St
Linden St
Walnut St
Union St
Hamilton St
Elm St
Ward St
Martin Luther King Jr Dr
Parkway Bl
Hamilton Bl Bp
Hamilton Bl
Texas Bl
Twentyfourth St
Flexer Av
Jefferson St
Lehigh St
Twelfth St
Mack Bl
Dixon St
Fourth St
Chapel Av
Potomac St
Susquehanna St
Emmaus Av
Seidersville Rd
Auburn St
Basin St
Filmore St
Eighth St
Ninth St
Tenth St
Seventh St
Sixth St
Fifteenth St
Seventeenth St
Nineteenth St
Jackson St
Gordon St
Ridge Av
Front St
Hanover Av
Graham St
Irving St
Maxwell St
Sherman St
Congress St
American Parkway
North Dauphin St
Airport Rd
Pennsylvania Av
Club Av
Spur Rt
Eaton
Union Bl
Broad St
Market St
Thirteenth Av
Eighth Av
Spring St
Riverside Dr
Delaware Av
Pike Av
Roth Av
Sumner Av
Lehigh Valley Thruway
Custer St
Eighteenth St
Whitehall Av
Pirma Av
Mauch Chunk Rd
Macarthur Rd
Grape St
Third St
Fullerton Av
Fifth St
Fairmont Av
145
22
222
309
476
78
29
378

High-Injury Crash Maps

The following pages provide additional maps at a closer scale to show high-injury crash hot spots as well as individual pedestrian and bicycle high-injury crash locations throughout the city.


Pedestrian Crashes
Fatal Injury
Suspected Serious Injury
Bicycle Serious Injury Crashes
High Injury Hot Spots
Fewer Crashes
More Crashes
Schools
Parks & Open Space
Lehigh Valley Thruway
Whitehall Av
Nineteenth St
Livingston St
Fifteenth St
Roth Av
Twelfth St
Allen St
Fifteenth St
Seventeenth St
Liberty St
Chew St
Turner St
Linden St
Hamilton St
Union St
Elm St
Martin Luther King Jr Dr
Parkway Bl
Ott St
Cedar Crest Bl
Trexler Bl
Tilghman St
Broadway
Hamilton Bl Bp
Texas Bl
Haines Mill Rd
Walnut St
Twentyfourth St
Flexer Av
Trexler Park Drive
Cedar Creek Road
Springhouse Road
Shrewsbury Road
Parkview Avenue
Park Boulevard
Honochick Drive
Cedar Creek Boulevard
Martin Luther King Drive
Connector Rd
College Drive
Mosser Street
Texas Boulevard
Lehigh Parkway North Parkway
Lehigh Parkway East Parkway
Sherwood Road
Nottingham Road
Greenwood Road
Park Drive
Lehigh Parkway
Nevada Street
Green Acres Drive
Andrea Drive
Yorkshire Road
Yorkshire Circle
Robin Hood Drive
Barnsdale Rd
Bishop Road
Beverly Drive
Hays Street
Edward Street
College Lane
Ryan Drive
Elm Drive
South Drive
Mosser Drive
Club Dr
Aidan Dr
Westview Drive
Cedarbrook Road
Donney Park Road
Mertz Lane
Court St
Maple St
Cetronia St
Webster St
Angus Place
Fortysecond Street
Chelsea Lane
Evergreen Road
Aster Street
Fortieth Street
Page Street
Parkside Court
Springwood Court
Thirtysixth Court
Park Vista Terrace
Springwood Drive
Thirtyseventh Street
Schaeffer Street
Linden Street
Scenic Street
Adams Street
Chew Street
Fortyfirst Street
Tamarack Drive
Sterling Street
Chestnut Drive
Union Street
Sycamore Street
Thirtythird Street
No Name Rd
Hamilton Bl
Crest Avenue
Miller Street
Reading Road
Walnut Street
School St
Type St
Frances St
Muhlenberg Street
Fairview Street
Winton St
Star St
Elm Street
Dodge St
Ford St
Saxon St
Stearns St
Buick St
Elm Court
South Street
College Drive
Harvest Way
Saint Elmo Street
Saint Lucas Street
Twentysecond Street
Spring St
Hill St
Willow St
Hickory St
Maple Street
Yocco Drive
Twentieth Street
Saint George Street
Nineteenth Street
Buffalo St
Emmett Street
Lafayette Street
Albright Avenue
Leh St
Ruhr St
Collins St
Ralston St
May St
Roy St
Utica St
Brighton St
Francis St
Catherine St
Hays St
Twentysixth Street
Glenwood Street
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Leh Street
Felix St
Twentyfirst Street
Bulwer St
Bayard St
Ideal St
Jewel St
Gage St
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Tremont Street
Highland Street
Twentyninth Street
Main Street
Kaiser St
Kurtz St
Greenleaf Street
Whitehall Street
Thirtiethth Street
Thirtyfirst Street
Cedar Street
Thirtysecond Street
Thirtyfourth Street
Thirtyfifth Street
Marshall Street
Arch St
Pennsylvania Street
Main St
Twentyeighth Street
Fairmont Street
Ott Street
Columbia Street
Lily St
Woodlawn Street
Carl St
Congress Street
Helen Street
No Office Center Pl
No Name St
Wedgewood Road
Thirtyninth Street
Kingston Place
Aberdeen Circle
Edinburgh Road
Cambridge Circle
Oxford Circle
Eton Rd
Kilmer Avenue
Wordsworth Street
Thirtyeighth Street
Benner Road
Short Hill Drive
Hampshire Court
North Dorset Court
South Dorset Court
Washington Street
Dorset Road
Carey St
Carrot St
Eighteenth Street
Barclay St
Seventeenth Street
Sixteenth Street
Sumner Avenue
James St
Utica Street
Bird St
Saint Cloud Street
Bath St
Boone St
Early Street
Warren Street
Scott St
Wayne Street
Milton St
Baxter St
Cable St
Clinton St
Russell Street
Mercer St
Newton St
Howe St
Court Street
Franklin Street
Fulton Street
Fourteenth Street
Ralph St
Perry St
Rush St
West Street
Beaver St
Bird Street
Little John Lane
Greenwood Road
Robin Hood Drive
Nottingham Road
Overhill Road
Nottingham Rd
Sherwood Road
Park Drive
Lehigh Parkway
Lehigh Parkway North Parkway
Twelfth Street
Richland St
Thirteenth Street
Madison Street
Mercer Street
Richland Street
Green Street
Blank St
Peach St
Elmwood Street
Lynn St
Poplar Street
Jefferson Street
Franklin St
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Fortysecond Street
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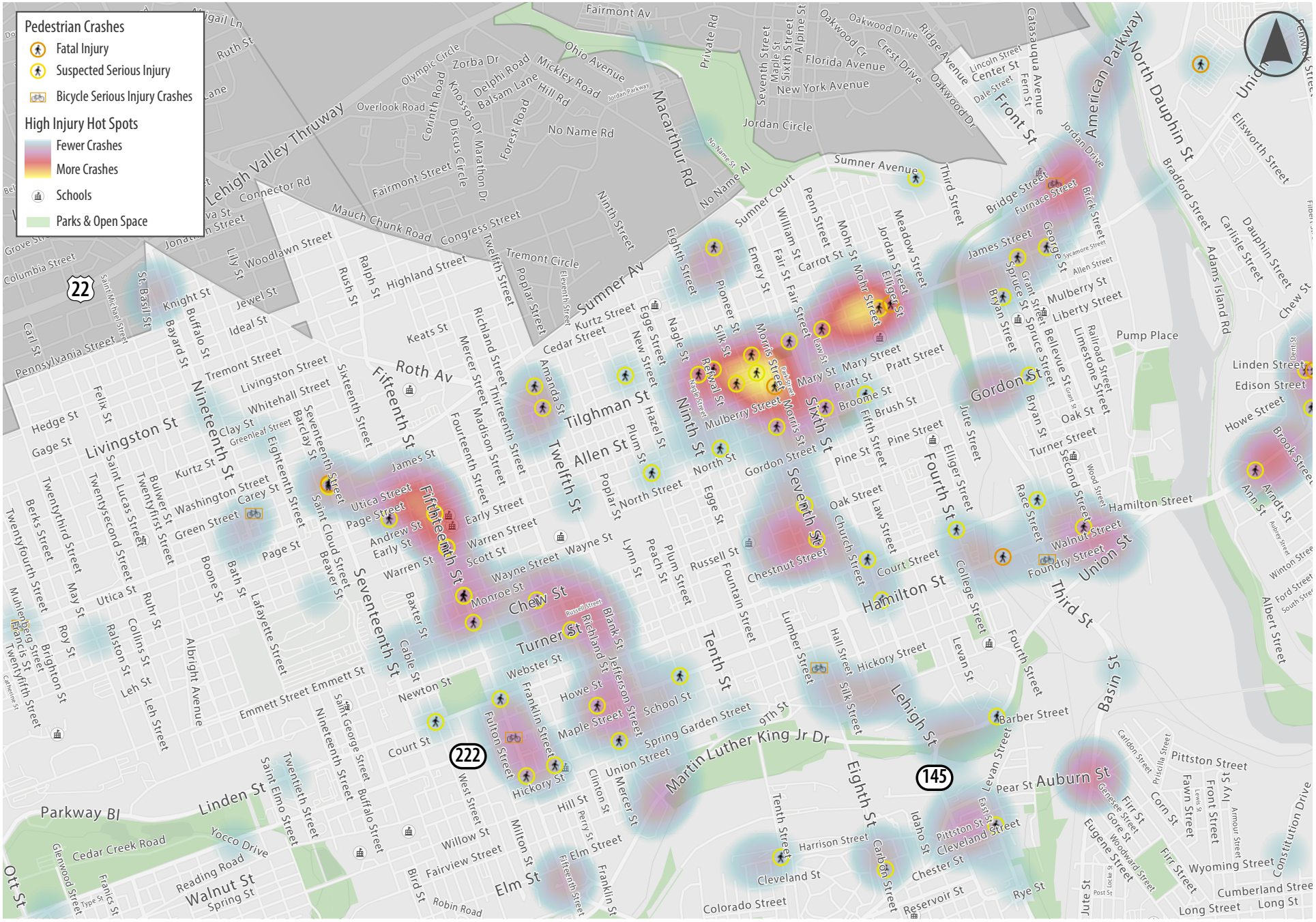
Pedestrian Crashes
Fatal Injury
Suspected Serious Injury
Bicycle Serious Injury Crashes
High Injury Hot Spots
Fewer Crashes
More Crashes
Schools
Parks & Open Space
Lehigh Valley Thruway
Macarthur Rd
Sumner Av
Roth Av
Tilghman St
Allen St
Livingston St
Hamilton St
Chew St
Turner St
Martin Luther King Jr Dr
Linden St
Elm St
Walnut St
Auburn St
Gordon St
Union St
Third St
Fourth St
Fifth St
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Seventh St
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Eleventh St
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Thirteenth St
Fourteenth St
Fifteenth St
Seventeenth St
Nineteenth St
Lehigh St
Basin St
Front St
North Dauphin St
American Parkway
Jordan Circle
No Name Rd
Fairmont Av
Ohio Avenue
Mickley Road
Hill Rd
Forest Road
Overlook Road
Corinth Road
Delphi Road
Balsam Lane
Zorba Dr
Olympic Circle
Knossos Dr
Discus Circle
Marathon Dr
Fairmont Street
Mauch Chunk Road
Congress Street
Tremont Circle
Poplar Street
Ninth Street
Connector Rd
Lily St
Woodlawn Street
Columbia Street
Pennsylvania Street
Carl St
Knight St
Buffalo St
Bayard St
Jewel St
Ideal St
Tremont Street
Livingston Street
Whitehall Street
Hedge St
Gage St
Felix St
Clay St
Greenleaf Street
Barclay St
Seventeenth Street
Eighteenth Street
Sixteenth Street
Rush St
Ralph St
Highland Street
Keats St
Richland Street
Mercer Street
Madison Street
Fourteenth Street
Thirteenth Street
Kurtz Street
Cedar Street
Egge Street
New Street
Nagle St
Pioneer St
Silk St
Emery St
Fair St
Fair Street
Law St
William St
Penn Street
Carrot St
Mohr St
Mohr Street
Jordan Street
Elliger St
Meadow Street
Sumner Court
Eighth Street
Third Street
Bridge Street
Furnace Street
Brick Street
Jordan Drive
James Street
George St
Sycamore Street
Allen Street
Spruce St
Grant St
Bryan Street
Mulberry St
Liberty Street
Pump Place
Railroad Street
Limestone Street
Bellevue St
Linden Street
Edison Street
Howe Street
Oak St
Turner Street
Second Street
Wood Street
Hamilton Street
Race Street
Walnut Street
Foundry Street
Union St
Brook Street
Ann St
Ardndt St
Albert Street
Ford Street
Winton Street
Mary St
Pratt St
Pratt Street
Broome St
Fifth Brush St
Pine St
Pine Street
Jute Street
Elliger Street
Oak Street
Law Street
Church Street
Court Street
College Street
Levan St
Fourth Street
Hall Street
Silk Street
Hickory Street
Barber Street
Lumber Street
Fountain Street
Russell St
Chestnut Street
Gordon Street
Mulberry Street
Morris St
Morris Street
Renwal St
Wade Street
Rear Street
Amanda St
Hazel St
Plum St
Poplar St
North Street
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Egge St
Lynn St
Peach St
Plum Street
Wayne St
Wayne Street
Scott St
Warren Street
Warren St
Early Street
Early St
Andrew St
Page Street
Utica Street
James St
Saint Cloud Street
Beaver St
Page St
Green Street
Carey St
Washington Street
Kurtz St
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Bulwer St
Saint Lucas Street
Twentysecond Street
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Berks Street
Muhlenberg Street
Francis St
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Newton St
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Court St
Saint George Street
Nineteenth Street
Twentieth Street
Saint Elmo Street
Buffalo Street
Parkway Bl
Cedar Creek Road
Yocco Drive
Glenwood Street
Reading Road
Spring St
Ott St
Type St
Bird St
Robin Road
Fairview Street
Willow St
West Street
Milton St
Hill St
Perry St
Clinton St
Mercer St
Union Street
Spring Garden Street
School St
Maple Street
Howe St
Jefferson Street
Richland St
Blank St
Franklin Street
Fulton Street
Hickory St
Elm St
Fifteenth Street
Franklin St
Ninth St
Tenth Street
Harrison Street
Cleveland St
Colorado Street
Reservoir St
Carbon Street
Chester St
Idaho St
Cleveland Street
Pittston St
Eighth St
Levan Street
Pear St
Rye St
Jute St
Post St
Eugene Street
Woodward Street
Gore St
Genesee Street
Carlton Street
Priscilla Street
Pittston Street
Fawn Street
Lewis St
Front Street
Ivy St
Armour Street
Corn St
Firr St
Firr Street
Wyoming Street
Cumberland Street
Long Street
Long St
Constitution Drive
Ellsworth Street
Dauphin Street
Carlisle Street
Adams Island Rd
Bradford Street
Chew St
Lincoln Street
Center St
Dale Street
Fern St
Catasauqua Avenue
Oakwood Dr
Oakwood Ct
Oakwood Drive
Florida Avenue
Crest Drive
Ridge Avenue
New York Avenue
Seventh Street
Maple St
Sixth Street
Alpine St
Private Rd
No Name Al
No Name St
Jordan Parkway
Eleventh Street
Saint Michael Street
St. Basil St
22
222
145
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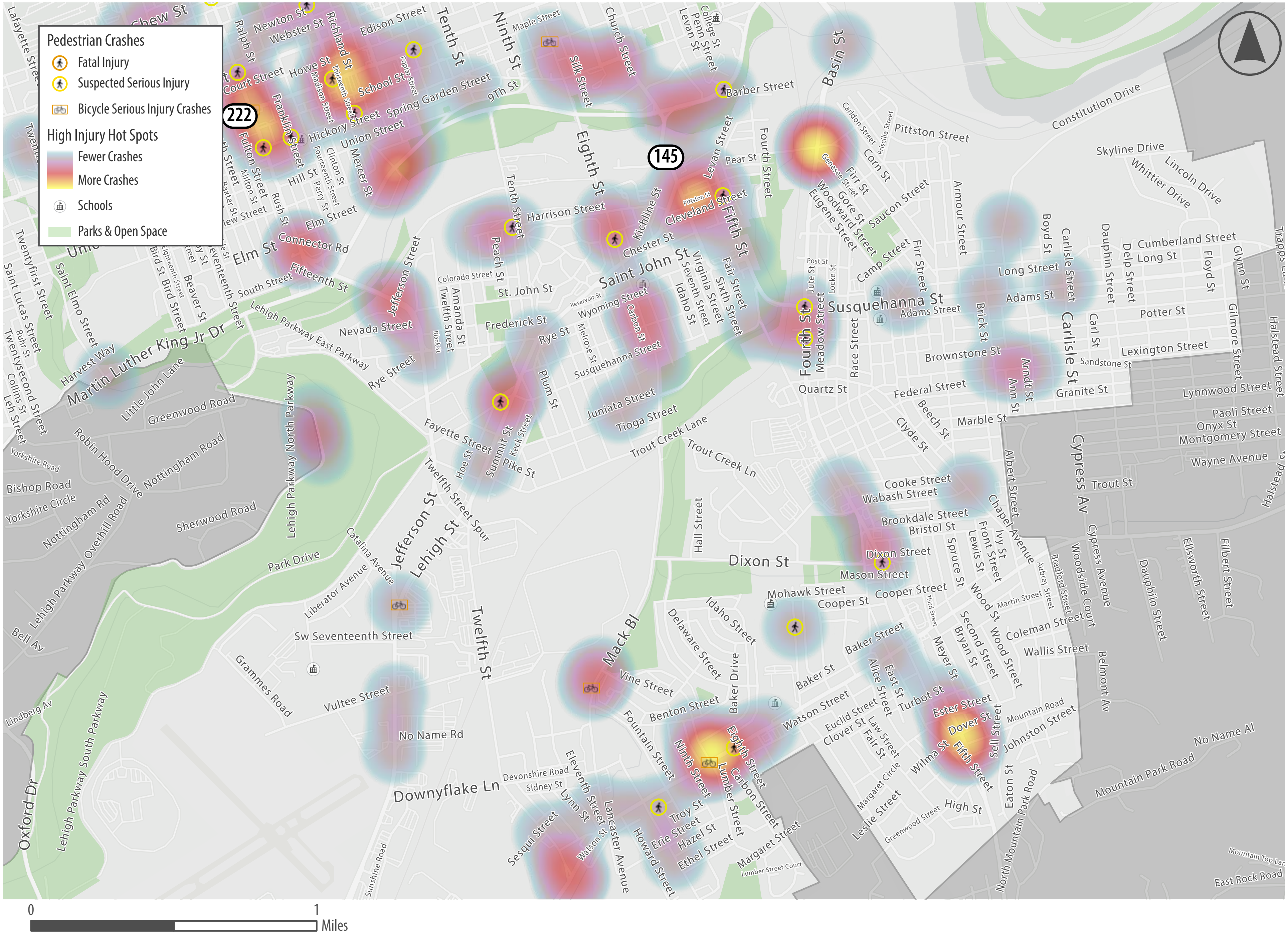
Miles


Pedestrian Crashes
Fatal Injury
Suspected Serious Injury
Bicycle Serious Injury Crashes
High Injury Hot Spots
Fewer Crashes
More Crashes
Schools
Parks & Open Space
0
1
Miles


Pedestrian Crashes
Fatal Injury
Suspected Serious Injury
Bicycle Serious Injury Crashes
High Injury Hot Spots
Fewer Crashes
More Crashes
Schools
Parks & Open Space
222
145
Martin Luther King Jr Dr
Lehigh Parkway East Parkway
Lehigh Parkway North Parkway
Lehigh Parkway South Parkway
Saint John St
Susquehanna St
Dixon St
Downyflake Ln
Constitution Drive
Cumberland Street
Eighth St
Ninth St
Tenth St
Twelfth St
Fourth St
Fifth St
Carlisle St
Cypress Av
Jefferson St
Lehigh St
Mack Bl
Elm St
Oxford Dr
Mountain Park Road
Basin St
0
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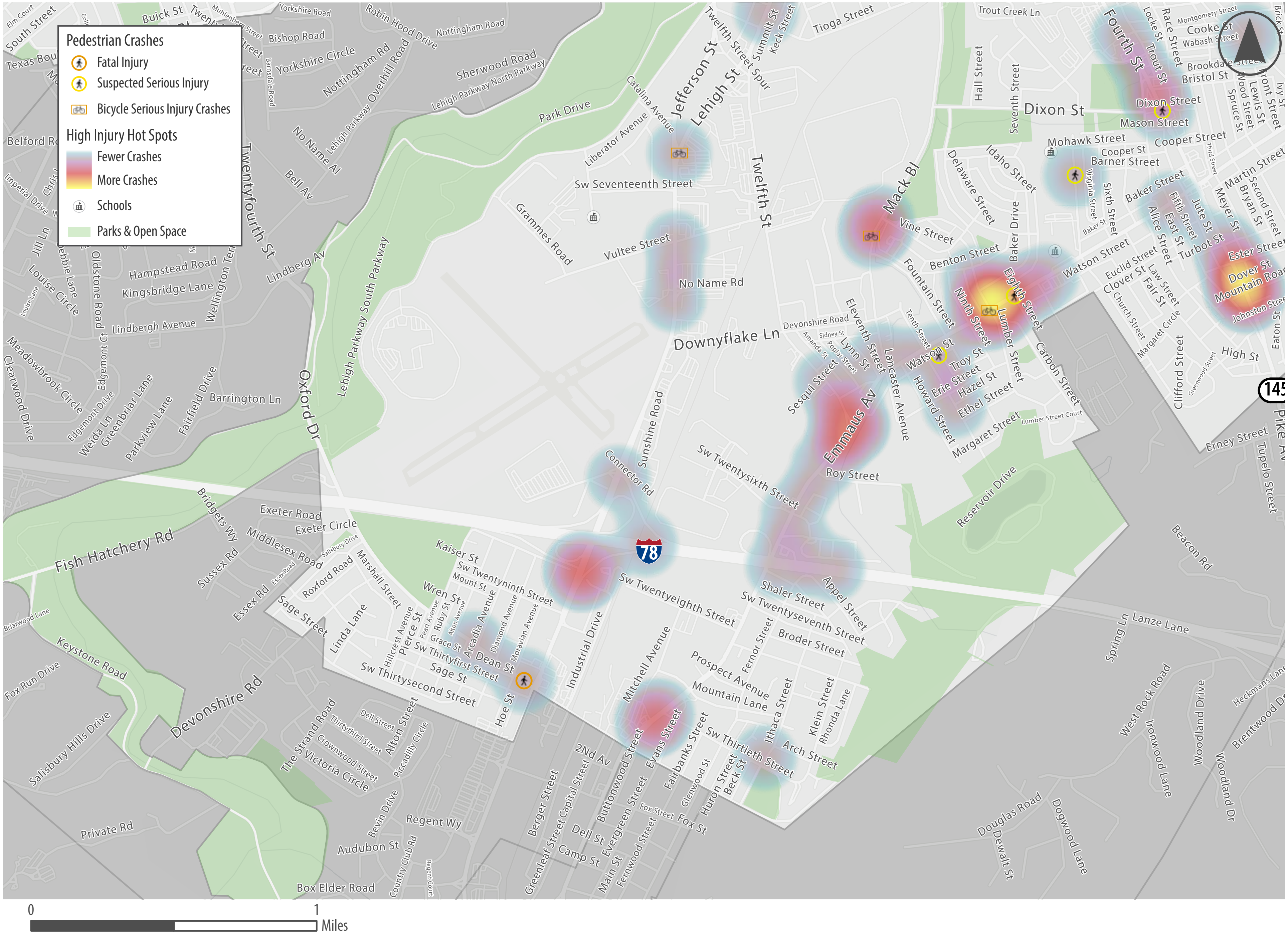
Miles


Pedestrian Crashes
Fatal Injury
Suspected Serious Injury
Bicycle Serious Injury Crashes
High Injury Hot Spots
Fewer Crashes
More Crashes
Schools
Parks & Open Space
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Miles
78
145
Fish Hatchery Rd
Devonshire Rd
Oxford Dr
Lehigh Parkway South Parkway
Downyflake Ln
Emmaus Av
Mack Bl
Dixon St
Fourth St
Twelfth St
Jefferson St
Lehigh St
Sw Seventeenth Street
Vultee Street
No Name Rd
Sw Twentysixth Street
Sw Twentyeighth Street
Sw Twentyseventh Street
Sw Thirtysecond Street
Sw Thirtieth Street
Industrial Drive
Mitchell Avenue
Connector Rd
Sunshine Road
Roy Street
Shaler Street
Appel Street
Broder Street
Prospect Avenue
Mountain Lane
Arch Street
Reservoir Drive
Lanze Lane
Pike Av
Park Drive
Sherwood Road
Twentyfourth St
Lindbergh Avenue
Barrington Ln
Keystone Road

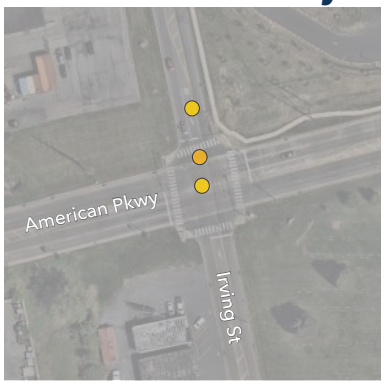
High-Injury Crash Intersections

The crash analysis identified five intersections each with a total of three high-injury crashes:

A. American Parkway/Irving Street
B. Auburn Street/Basin Street
C. 15th Street/Allen Street
D. Tilghman Street/Penn Street
E. Union Boulevard/Irving Street/Airport Road

These intersections vary in context ranging from wide arterial roadways in commercial areas to more compact urban residential settings. Together they make up a useful representation of the variety of roadways within the city and provide a starting point for potential focus areas. They can also help identify existing conditions that may be present at other intersections that make them conducive to future high-injury crashes.

A. American Parkway/Irving Street

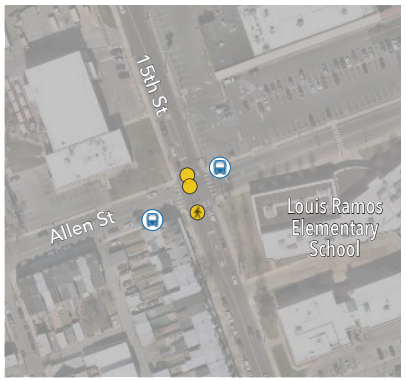


Wide, four-lane roadway with high speeds and high volumes.

B. Auburn Street/Basin Street

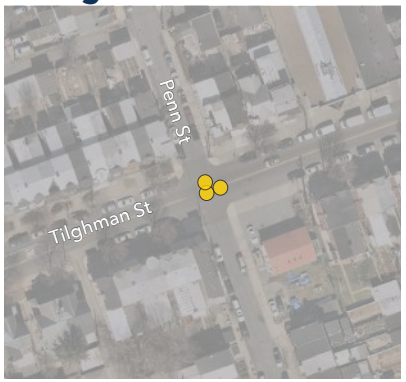
Wide crossing widths and large turning radii at corners

C. 15th Street/Allen Street



High traffic commercial/residential area with transit stops and nearby elementary school.

D. Tilghman Street/Penn Street



Dense residential area with limited visibility.

E. Union Boulevard/Irving Street/Airport Road

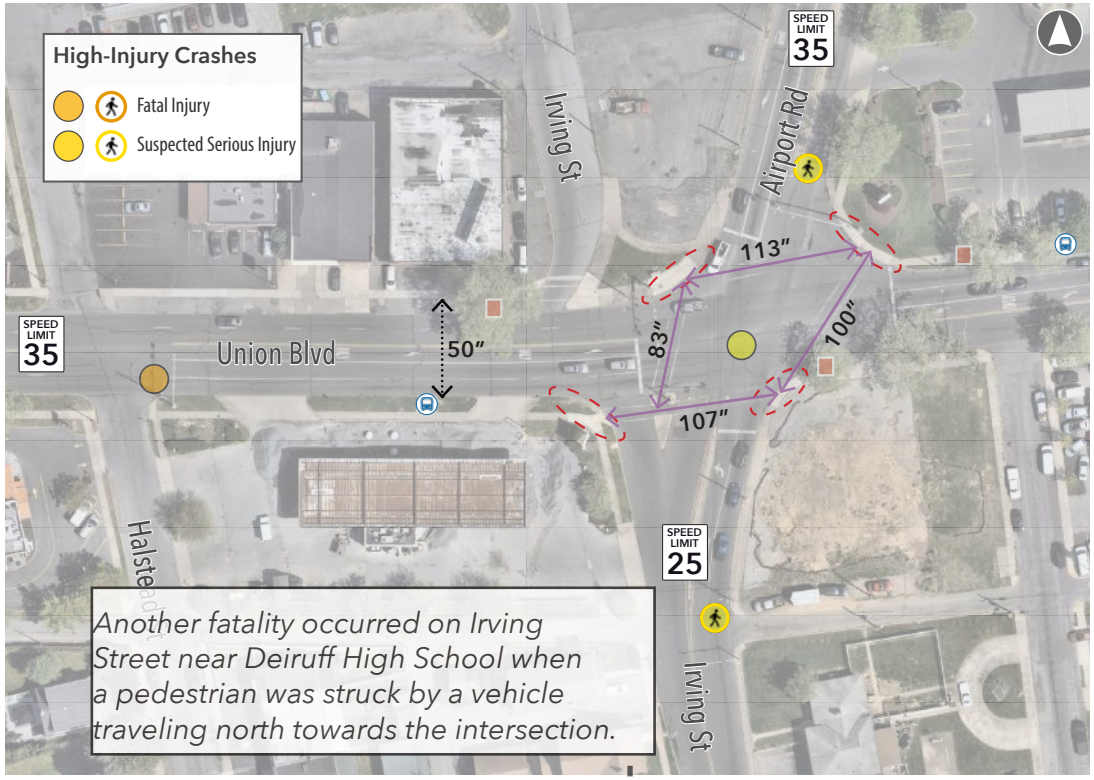
The intersection of Union Boulevard, Irving Street, and Airport Road also had three high-injury crashes including two involving pedestrians. In addition, another fatal crash occurred just 300 feet west of the intersection (motorcycle traveling east toward intersection at unsafe speeds).

This five-legged, skewed intersection is the juncture of three high volume roadways with a mix of uses including commercial, residential, and transit. It features many characteristics that contribute to major safety concerns, especially for pedestrians, including:

- Wide turning radii
- Long, angled pedestrian crossings with worn paint
- Excessive roadway width
- Visibility concerns due to sight distances

Average Daily Traffic

Union Boulevard: 15,751
Airport Road: 10,344
Irving Street: 13,924



Wide turning radii with no stop control for oncoming traffic.

Broken pedestrian push button.

Long crossing distances with worn markings.

A radar speed feedback sign was installed to encourage drivers to obey the 25 MPH speed limit. As seen in the photo above, this tactic alone may not be enough to calm traffic.

High-Injury Crashes Involving a Pedestrian

Between 2019-2023 there were a total of 80 high-injury crashes involving a pedestrian being struck by a vehicle within the city. Of theses crashes, there were 11 that resulted in a fatality and 69 that resulted in a suspected serious injury. As mentioned earlier, pedestrians represent one of the most vulnerable types of road users and due to this are disproportionately killed or seriously injured in crashes. Identifying areas that are prone to high-injury crashes involving pedestrians is the first step to diagnosing existing conditions that contribute to such crashes.

The table to the right shows the five corridors with the highest number of high-injury crashes involving a pedestrian. Combined, these corridors accounted for over 48% of such crashes from 2019-2023.

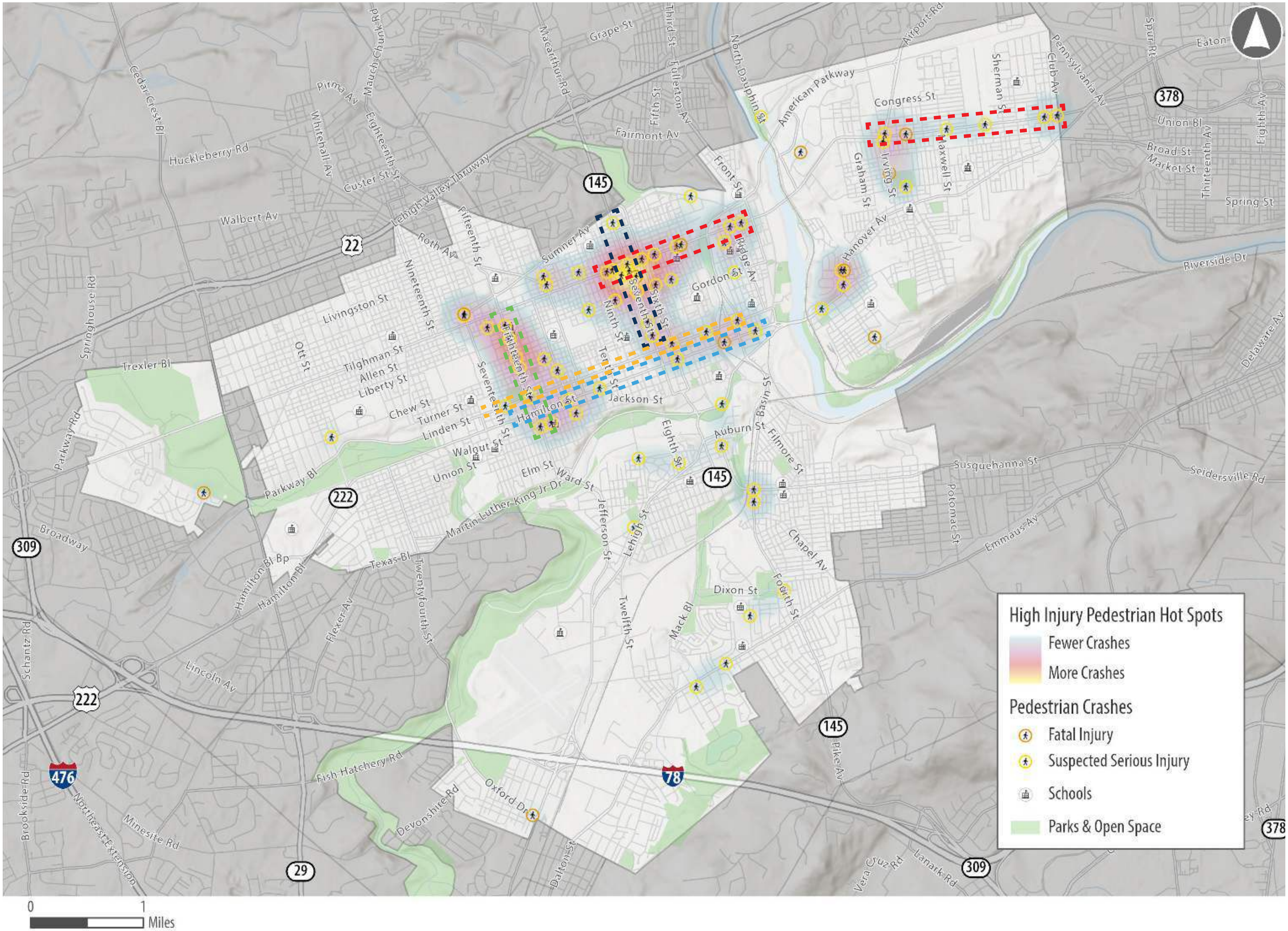
Similar to overall high-injury crashes, the Tilghman Street/Union Boulevard corridor had the highest concentration of high-injury crashes involving a pedestrian (16) accounting for 20% of such crashes. 15th Street had the second most (8) and notably included two crashes in close proximity to Luis Ramos Elementary and Jackson Early Childhood Center.

7th Street also ranked high in these types of crashes (6), and when combined with crashes along Tilghman Street, there is a clear hotspot in and around the intersection of these two roadways. It is also notable that 7th Street and Linden Street are examples of the many one-way roadways in the city, which often feature higher vehicle speeds due to their design and lack of natural traffic calming features.

Pedestrian High-Injury Crash Corridors

	Roadway Name	Crashes	%	Direction	Owner
1	Tilghman Street/ Union Boulevard	16	20.0%	Two-Way	State
2	15th Street	8	10.0%	Two-Way	State
3	7th Street	6	7.5%	One-Way	State/ Local
4	Hamilton Street/ Boulevard	5	6.3%	Two -Way/ One-Way	State/ Local
5	Linden Street	4	5.0%	One-Way	Local
	Totals	**33**	**48.8%**		

Combined, these five corridors accounted for nearly 49% of pedestrian high-injury crashes.

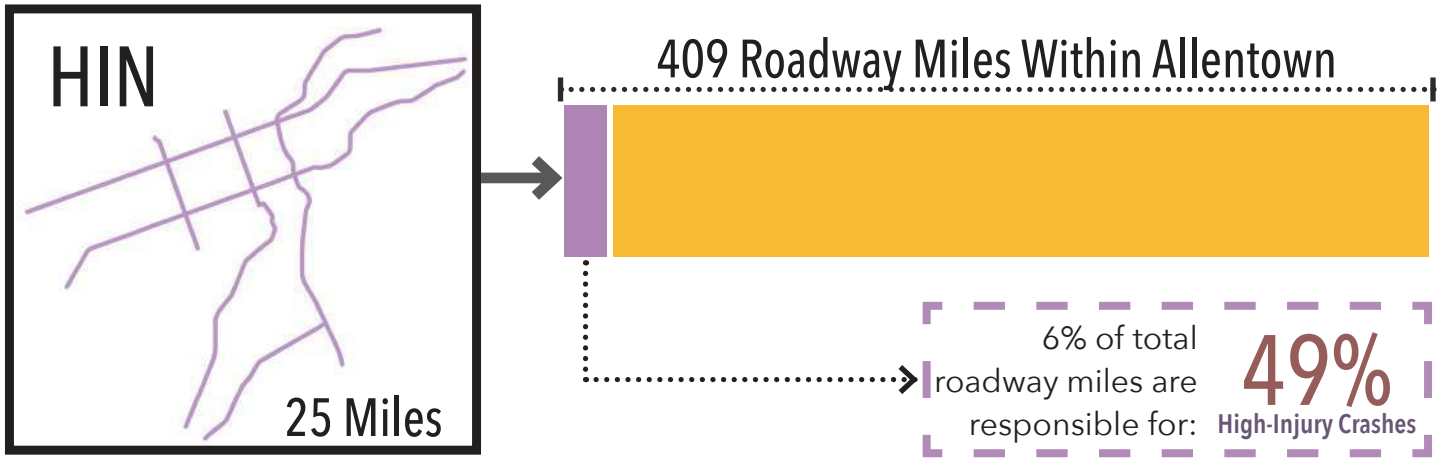

High Injury Pedestrian Hot Spots
Fewer Crashes
More Crashes
Pedestrian Crashes
Fatal Injury
Suspected Serious Injury
Schools
Parks & Open Space
0
1
Miles

High-Injury Network

Developing a high-injury network (HIN) is essential to highlighting where high-injury crashes have occurred. It also plays a key role in identifying areas that are prone to such crashes and can aid in developing strategic countermeasures to prevent future crashes.

To develop the HIN for the city, the high-injury crashes heat maps were used to identify corridors and intersections with high concentrations of crashes. The resulting network was then reviewed and manually adjusted to identify a subset of corridors where the most high-injury crashes have occurred. The HIN is primarily made up of arterial roadways that experience high traffic volumes and speeds on a daily basis. Collectively, the 25 miles of roadway within the HIN represent just 6% of total roadway miles within the city but account for more than 49% of high-injury crashes.

The HIN serves as a starting point for investigating existing roadway design characteristics and other contributing factors that are conducive to high-injury crashes. Focusing efforts on addressing issues on these roadways can provide the most immediate impact to reducing high-injury crashes within the city. Developing strategies for the HIN can also help when identifying areas with similar conditions that are susceptible to high-injury crashes in order to take a preemptive approach to implementing appropriate countermeasures.




High-Injury Network
Schools
Parks & Open Space
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Miles
Tilghman St
Hamilton St
Seventh St
Fifteenth St
Lehigh St
Fourth St
Basin St
Hanover Av
American Parkway
Union Bl
Pike Av
Dalton St
Parkway Bl
Livingston St
Allen St
Liberty St
Chew St
Turner St
Linden St
Walnut St
Union St
Jackson St
Martin Luther King Jr Dr
Auburn St
Gordon St
Sumner Av
Roth Av
Ott St
Nineteenth St
Seventeenth St
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Sixth St
Ridge Av
Front St
Graham St
Maxwell St
Irving St
Airport Rd
Sherman St
Club Av
Pennsylvania Av
Fairmont Av
Fifth St
Fullerton Av
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North Dauphin St
Grape St
Macarthur Rd
Lehigh Valley Thruway
Custer St
Eighteenth St
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Whitehall Av
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Riverside Dr
Spring St
Thirteenth Av
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Market St
Spur Rt
Church Rd
Center Valley Py
Saucon Valley Rd
Lanark Rd
Vera Cruz Rd
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High-Injury Crash Corridor Case Study

Tilghman Street / Union Boulevard

This roughly seven mile corridor runs from the city's western border with South Whitehall Township to the eastern border with the City of Bethlehem and represents the highest high-injury crash corridor in the city. Tilghman Street is owned by PennDOT and also known as State Route 1002. From 2019-2023, there were 45 total high-injury crashes along the corridor accounting for nearly 16% of all high-injury crashes, and roughly 23% of high-injury pedestrian crashes.

Due to this high concentration of crashes, the corridor was selected for additional analysis to help identify existing conditions and potential contributing factors that lead to high-injury crashes along the corridor. This analysis can also help inform other areas with similar conditions that could be conducive to future crashes if not addressed.

Due to the length and varied conditions (roadway geometry, traffic volume, land use context, etc.) the corridor was divided into three segments based on shared characteristics. The three segments (Tilghman Street West, Tilghman Street East, and Union Boulevard) are outlined below. These segments were further broken down into segments to better pinpoint local conditions.

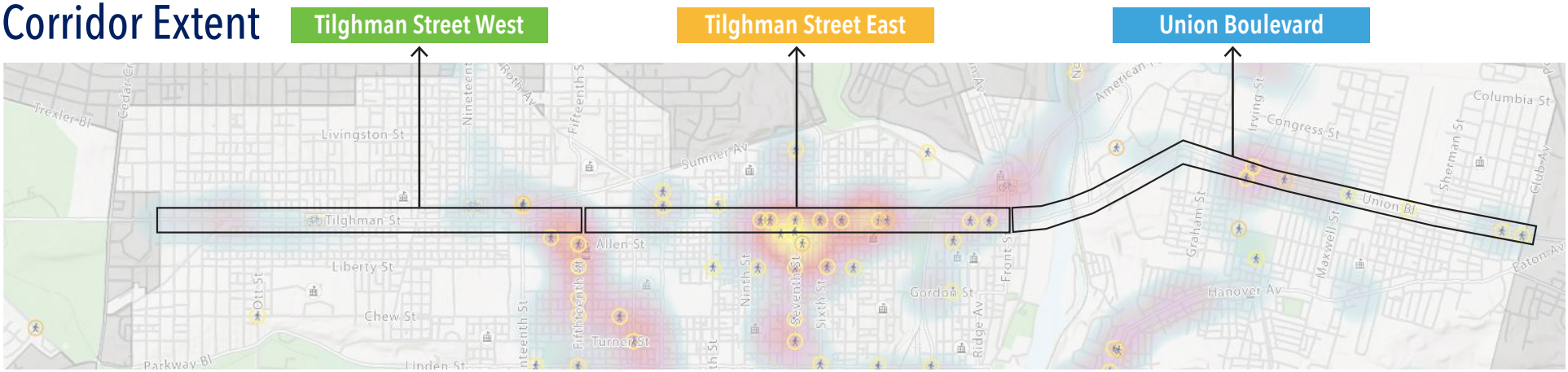
This case study illustrates the process undertaken to understand each high-injury crash corridor prior to developing concept plans for improvements as seen in the **Projects and Recommendations chapter**.

High-Injury Crashes

45

	Fatal	Serious Injury
Vehicle Only	0	16
Pedestrian	2	16
Bicycle	0	1
Motorcycle	1	9
Totals	3	42

Corridor Extent



Crash Rates

The table to the right compares the crash rate (high-injury crashes per 1 million vehicle miles traveled) along the corridor with average statewide rates on roadways with similar width and traffic volume characteristics.

Each of the three broader corridor segments were broken down further to account for variation in cross-section width and traffic volumes. While the majority of the corridor experienced higher than average high-injury crash rates, the most significant differences were:

- ***7th Street and Front Street*** (nearly 10 times the statewide average of 0.07)
- ***19th Street to 15th Street*** (nearly 4 times the statewide average of 0.09).

	Section	AADT	Width (ft)	Length (ft)	Crashes	Crash Rate	State Rate	Difference
Tilghman St. West	Western City Limits – Cedar Crest Boulevard	23,578	50	5,195	2	0.05	0.11	- 0.06
	Cedar Crest Boulevard – 19th Street	13,169	36	7,944	8	0.22	0.07	+ 0.15
	19th Street – 15th Street	8,789	36	2,495	3	0.40	0.09	+ 0.31
Tilghman St. East	15th Street – 7th Street	8,594	36	4,838	4	0.28	0.09	+ 0.19
	7th Street – N. Front Street	10,064	36	4,712	13	0.79	0.07	+ 0.72
Union Blvd.	N. Front Street – N. Ellsworth Street	22,855	36	2,700	1	0.05	0.07	- 0.02
	N. Ellsworth Street – Airport Road	21,988	50	3,157	3	0.13	0.11	+ 0.03
	Airport Road– Eastern City Limit	14,403	50	6,310	11	0.35	0.11	+ 0.24

4X State Average

10X State Average

Tilghman Street West - Western City Limits to 15th Street

High-Injury Crashes **13**

Section 1 - City Limits to Cedar Crest Boulevard

High-Injury Crashes **2**

Average Daily Traffic

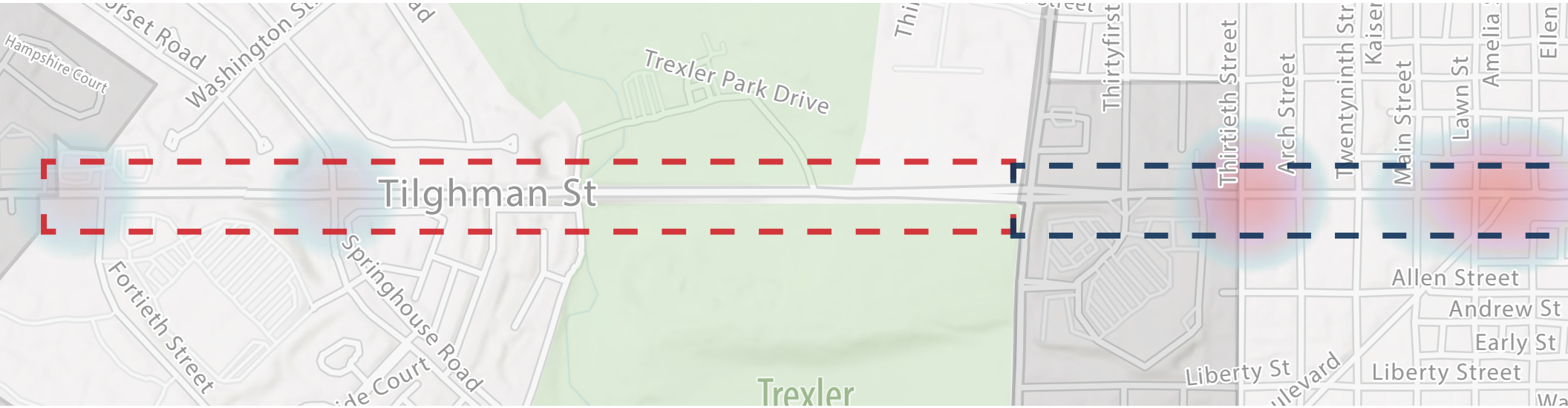
23,578 vehicles

SPEED LIMIT **45**

Three lanes (~50' wide) with turn lanes at intersections and two-way left center turn lane and wide marked shoulders (7'-8').

Roadway Context

- Primarily commercial
- No on-street parking
- Limited sidewalks
- Pedestrian crossings provided at signals



Section 2 - Cedar Crest Boulevard to 19th Street

High-Injury Crashes **8**

Average Daily Traffic

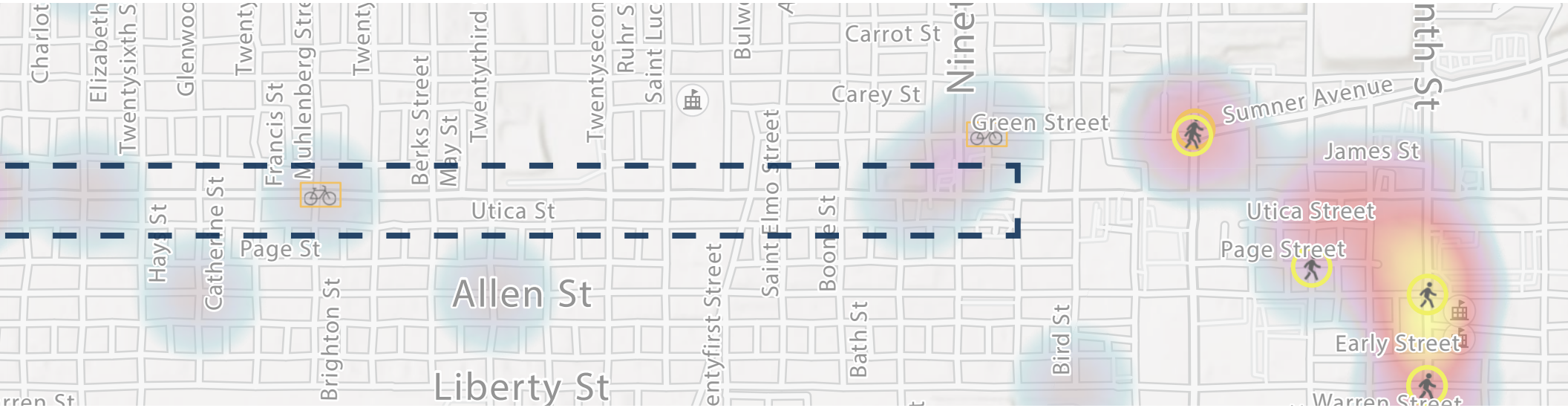
13,169 vehicles

SPEED LIMIT 40	SPEED LIMIT 35
West of Broad St	*East of Broad St*

Two-lane (~44' wide) cross-section with dedicated left turn lanes at signals (Ott Street).

Roadway Context

- Low-density residential
- Minimal on-street parking
- Sidewalks on both sides of roadway
- Crosswalks at stop/signal controlled intersections and intermittently across side streets
- Cedar Crest Boulevard is within South Whitehall Township. Any improvements should be coordinated with South Whitehall Township



Section 3 - 19th Street to 15th Street

High-Injury Crashes **3**

Average Daily Traffic

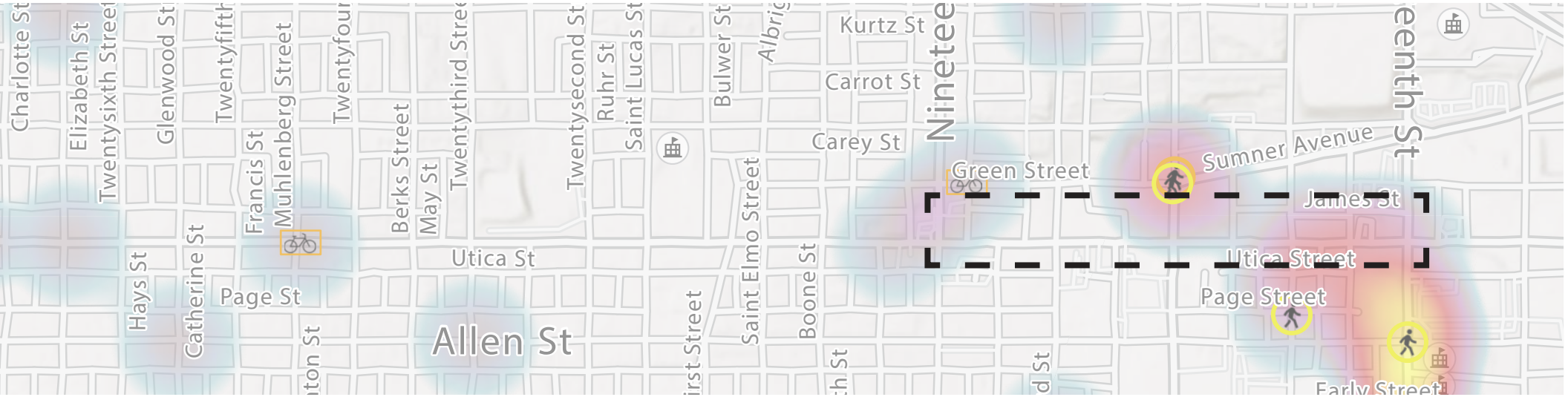
8,789 vehicles

SPEED LIMIT 25

Two lanes (~30' wide) with left turn lanes at signals.

Roadway Context

- Urban commercial
- Medium density housing
- On-street parking in residential areas
- Sidewalks on both sides
- Crosswalks at numbered cross-streets (stop and signal control)



Tilghman Street East - 15th Street to North Front Street

High-Injury Crashes **13**

Existing Conditions

Average Daily Traffic

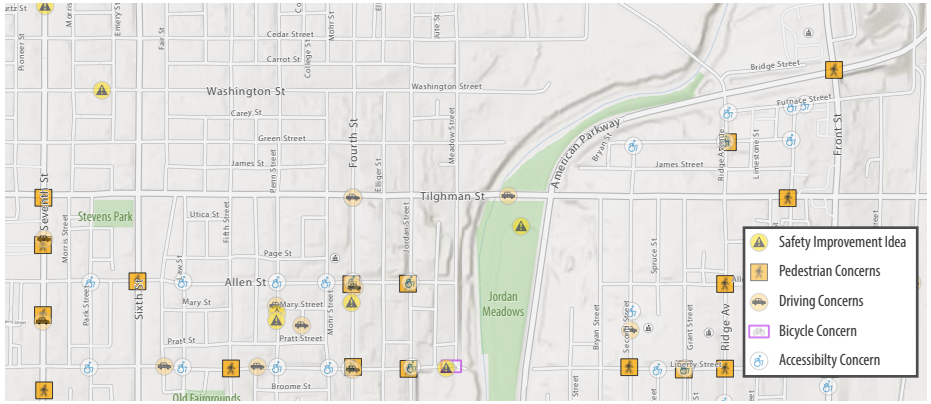
10,064 vehicles

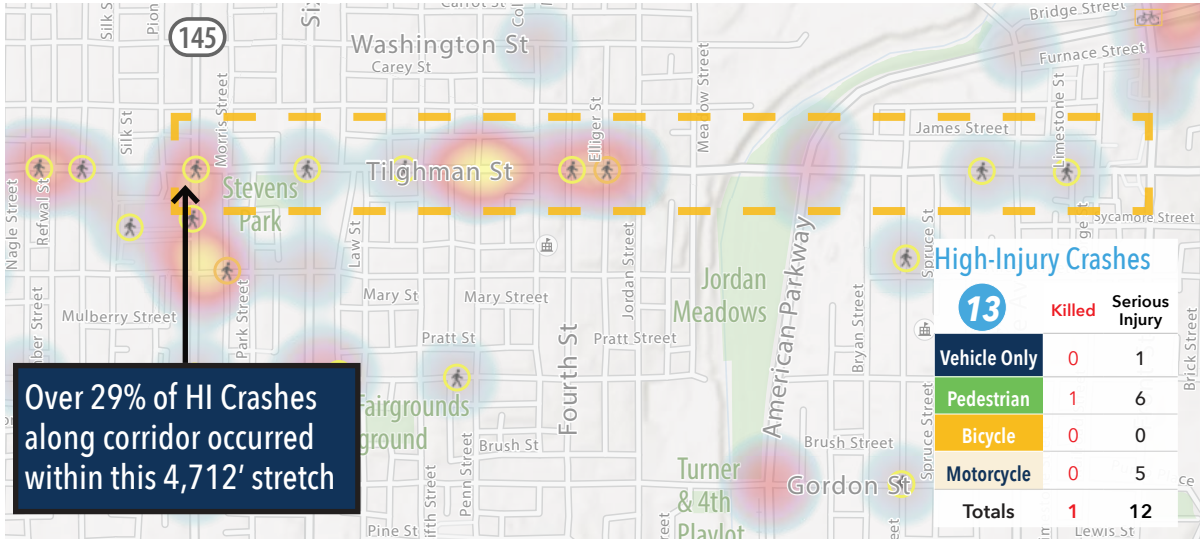
Land Use Context

- Primarily medium density housing (row homes)
- High on-street parking
- Sidewalks along both sides of roadway
- Crosswalks at major intersections

Two-lane (~36' wide) cross-section with dedicated left turn lanes at some signals.

WikiMapping Feedback





Crash Analysis

Of the 45 crashes occurring throughout the 7.2 mile Tilghman Street/Union Boulevard corridor, 13 (29%) occurred in this 4,712 ft segment, and the corridor crash rate was over 10 times the statewide average for a similar roadway.

Over 53% (7) of these incidents involved a pedestrian including one fatality. Nearly 70% of crashes occurred at either unsignalized intersections (39%) or midblock locations (31%).

Section 1 - 15th Street to 7th Street

High-Injury Crashes **4**

Average Daily Traffic

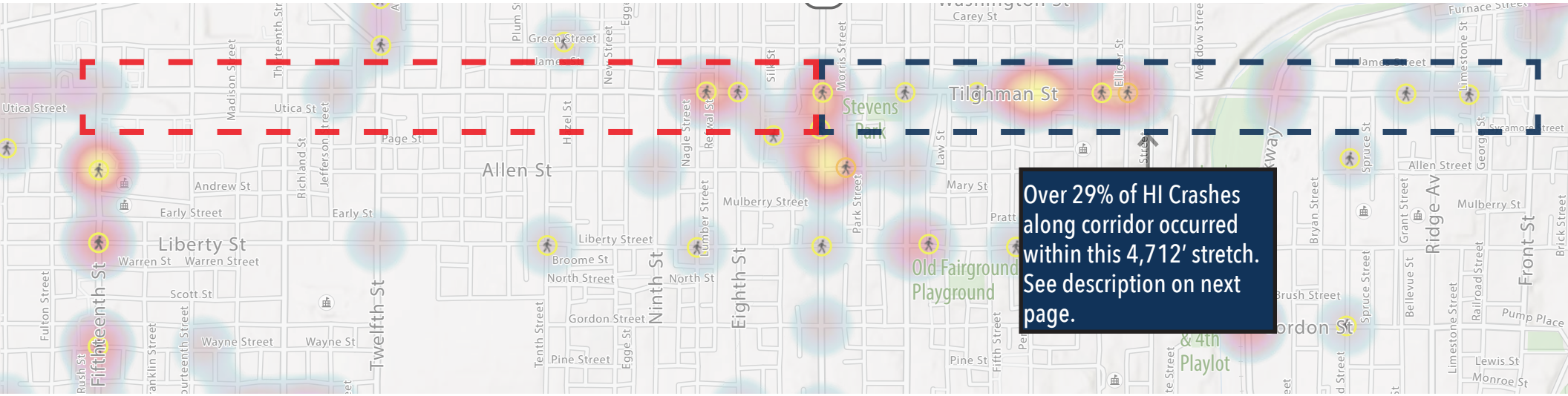
8,594 vehicles

SPEED LIMIT 25

Two-lane (~34' wide) cross-section with dedicated left turn lanes at some signals.

Land Use Context

- Primarily commercial transitioning to medium density housing (row homes)
- High on-street parking
- Sidewalks along both sides of roadway
- Crosswalks at major intersections (numbered cross-streets, stop and signal control) and intermittently elsewhere



Section 2 - 7th Street to North Front Street

High-Injury Crashes 13

Average Daily Traffic
10,064 vehicles

SPEED LIMIT 25

Twolane (~36' wide) cross-section with dedicated left turn lanes at some signals.

Land Use Context

- Primarily medium density housing (row homes)
- High on-street parking
- Sidewalks along both sides of roadway
- Crosswalks at major intersections (numbered cross-streets, stop and signal control) and intermittently elsewhere

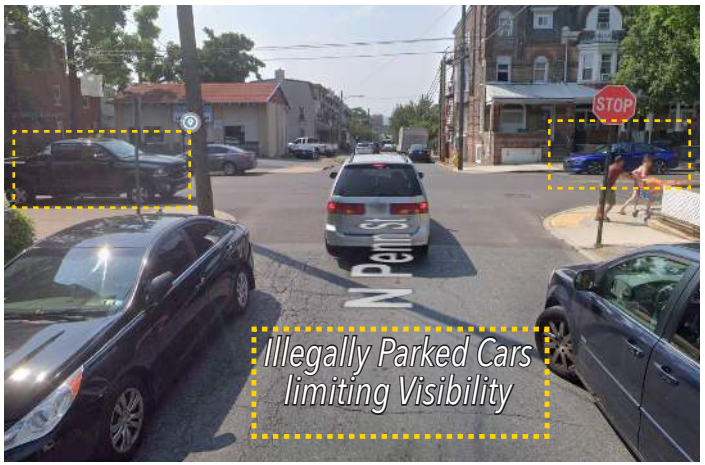
High-Injury Crashes

13	Fatal	Serious Injury
Vehicle Only	0	1
Pedestrian	1	6
Bicycle	0	0
Motorcycle	0	5
Totals	1	12

Corridor within the Corridor

Of the 45 crashes occurring throughout the 7.2 mile corridor, 13 (29%) occurred in this 4,712 ft segment and, the corridor crash rate was over 10 times the statewide average for a similar roadway.

Over 53% (7) of these incidents involved a pedestrian including one fatality. Nearly 70% of crashes occurred at either unsignalized intersections (39%) or midblock locations (31%).



Visibility concerns combined with high traffic speed/ volumes and competing uses lead to increased traffic conflicts.

Union Boulevard - Airport Road to East City Limits

High-Injury Crashes **11**

Existing Conditions

Average Daily Traffic

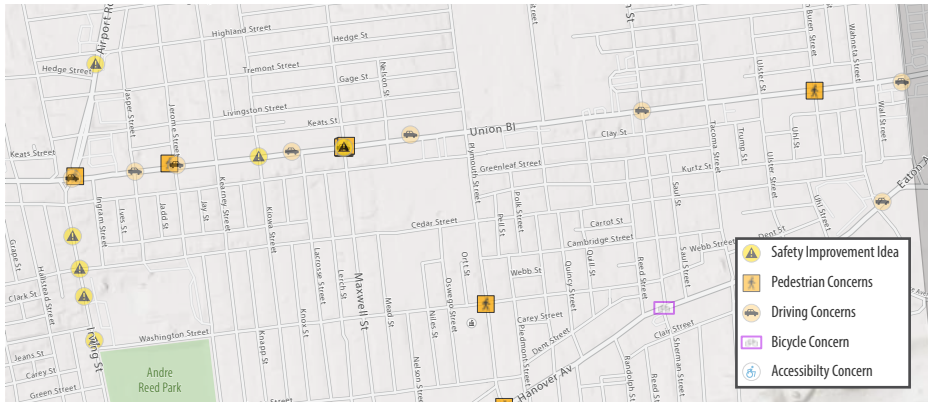
14,403 vehicles

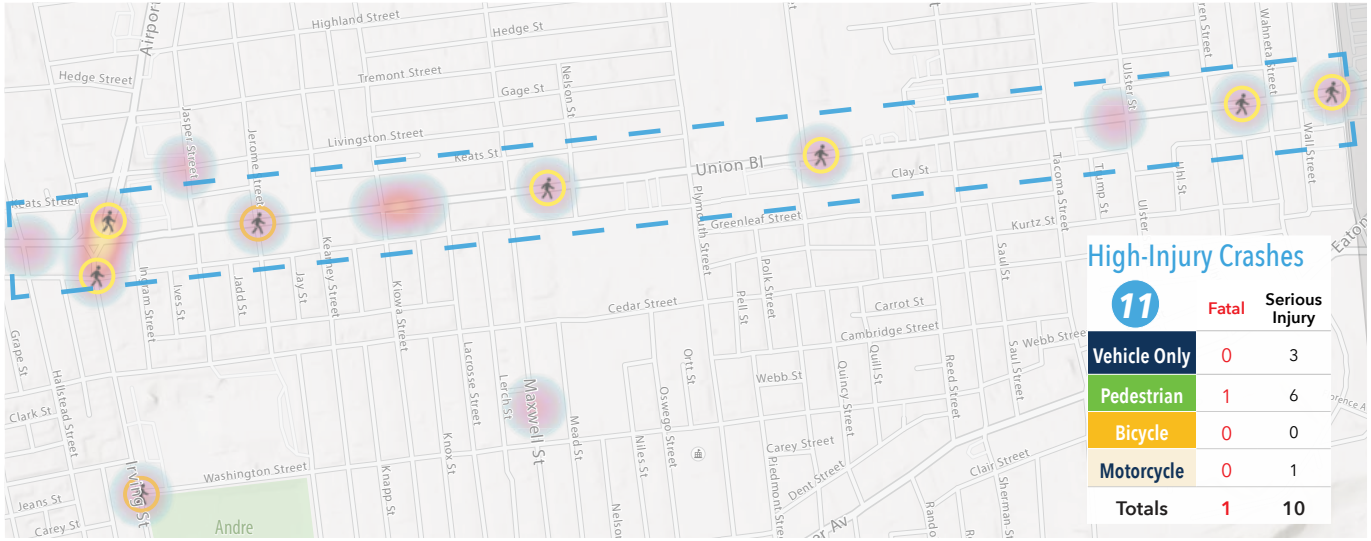
Roadway Context

- Primarily commercial with residential to north/ south
- Sidewalks both sides
- Intermittent on-street parking
- Crosswalks at intersections

Two-lane (~50' wide) cross-section with no turn lanes.

WikiMapping Feedback





Crash Analysis

This 1.1-mile stretch was responsible for 11/45 (24%) of high crashes along the corridor, over four times the state average for similar roadways.

The majority, seven out the 11(64%), involved a pedestrian, and all occurred at either unsignalized intersections or midblock locations. Four of the seven (57%) took place in dark conditions with street lights on.

Section 1 - North Front Street to North Ellsworth Street

High-Injury Crashes: 1

Average Daily Traffic

22,855 vehicles

SPEED LIMIT 35

Three-lane (~36' wide) cross-section with turn lanes at intersections and two-way left center turn lane between intersections).

Roadway Context

- Commercial/light industrial
- No on-street parking
- Sidewalks on both sides
- Crosswalk at North Ellsworth Street
- Includes Tilghman Street Bridge

Section 2 - North Ellsworth Street to Airport Road

High-Injury Crashes **3**

Average Daily Traffic

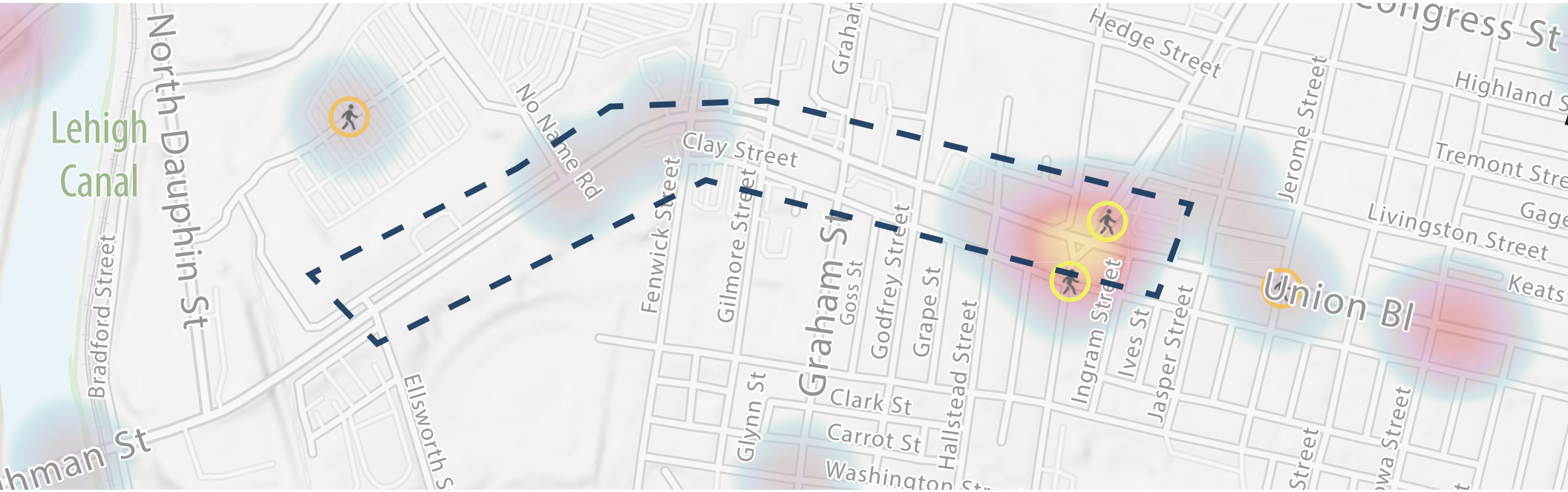
21,988 vehicles

SPEED LIMIT 35

Four-lane (~52' wide) cross-section with no turn lanes other than approaching the Airport Road intersection.

Roadway Context

- Commercial/light industrial with some residential south of corridor
- No on-street parking
- Sidewalks along both sides
- Crosswalks at intersections



Section 3 - Airport Rdoad to East City Limits

High-Injury Crashes **11**

Average Daily Traffic

14,403 vehicles

SPEED LIMIT 35

Two-lane (~50' wide) cross-section with no turn lanes.

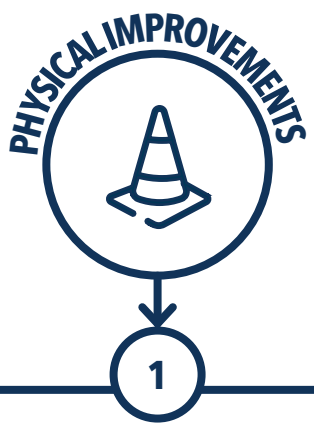
Roadway Context

- Primarily commercial with residential to north/south
- Sidewalks both sides
- Intermittent on-street parking
- Crosswalks at intersections

04

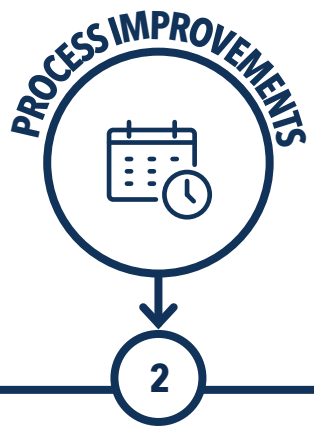
PROJECTS & RECOMMENDATIONS

This section details the steps and commitments the City of Allentown can take to achieve the Action Plan's Vision and Goals. These projects and recommendations are categorized into four focus areas:



1

These recommendations include tangible, infrastructure-related changes made to streets, intersections, and roadways to enhance safety. These recommendations seek to make the physical environment safer for all road users by reducing hazards and managing traffic flow effectively.

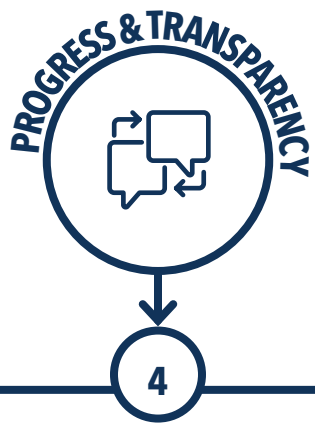


2

These involve changes to internal procedures, policies, and practices used by agencies responsible for transportation and urban planning. These recommendations seek to ensure the processes that guide safety interventions are more efficient, responsive, and aligned with best practices.

3

These focus on building partnerships and coordinating efforts across different organizations and agencies. Projects and recommendations seek to foster a cooperative approach to street safety by leveraging diverse expertise, resources, and community buy-in.



4

These recommendations pertain to tracking the progress of safety interventions and assessing their effectiveness over time. Recommendations ensure strategies achieve desired outcomes and allow for necessary data-driven adjustments for improvement.

Supports the following SS4A Action Plan Goals:

Physical Improvements

Physical improvements focus on tangible changes to the infrastructure of our streets and intersections. These upgrades are designed to make the environment safer for all users – pedestrians, cyclists, and drivers – by reducing risks and preventing crashes through better design and engineering solutions. Any physical improvements need to consider ownership and responsibilities of the roadway in order to coordinate with the appropriate entities, especially on state routes.

Ongoing Efforts

There are many physical improvements to the city's road infrastructure underway that demonstrate the City of Allentown's commitment to implementing principles of the Safe System Approach and proven safety countermeasures. The improvements that are underway are indicated in the map to the right. Descriptions of some of the projects are included on the following pages.

Ongoing Safety Improvement Projects

Traffic Signal Improvements

1. Lehigh St./Union St.
2. 15th St./Highland St.
3. Union Blvd./Fenwick St.
4. Tilghman St./ N 12th St.
5. Allen St./7th St.
6. Tilghman St./4th St.
7. Turner St./7th St.
8. Chew St./7th St.
9. Susquehanna St./Front St.
10. Union St./S 3rd St.
11. Basin St./Auburn St.
12. Airport Rd./American Pkwy.
13. N Irving St./ American Pkwy.
14. Hamilton St./S 3rd St.
15. American Pkwy./Gordon St.
16. Linden St./American Pkwy.
17. American Pkwy./Sumner Ave.
18. Front St./American Pkwy.
19. American Pkwy./N Bradford St.
20. PennDOT 4th St. Plans
21. Hanover Ave.
22. 15th St.

Intersection Improvements

23. 15th St./Greenleaf St.
24. 7th St./Hamilton St.
25. 15th St./Roth Ave.
26. 15th St./Sumner Ave.

Road Extension

27. Riverside Dr. and D&L Trail (Furnace St. to Lehigh Ave.)
28. Riverside Dr. Extension to Hamilton St.

Speed Cushion Installation

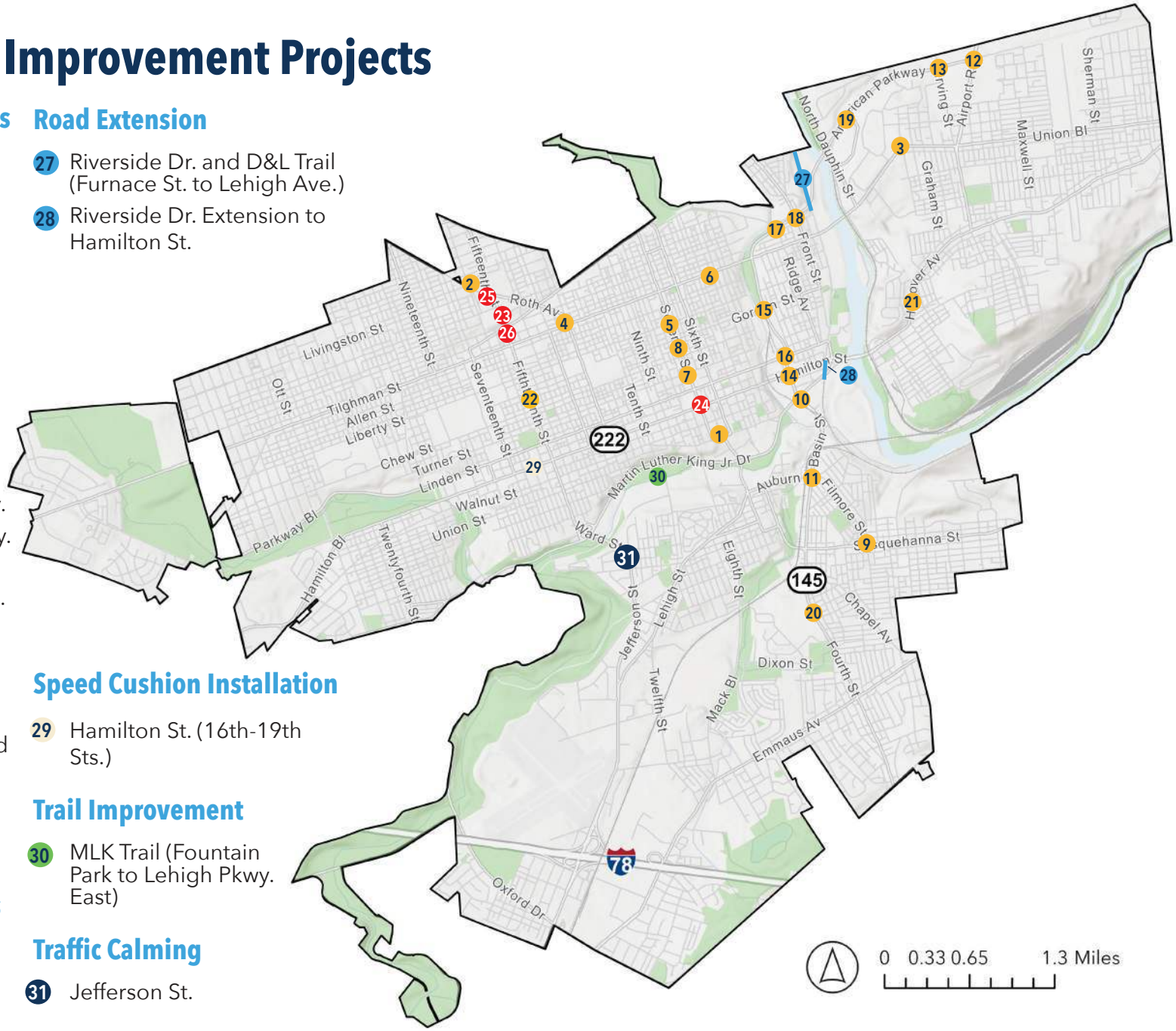
29. Hamilton St. (16th-19th Sts.)

Trail Improvement

30. MLK Trail (Fountain Park to Lehigh Pkwy. East)

Traffic Calming

31. Jefferson St.



Signal Improvements: Lehigh Street and Union Street

Union Street and Lehigh Street; Union Street and 6th Street

Upgrades to the traffic signals and signage around two intersections along Union Street including overhead street name signs, left turn yield on flashing yellow arrow, push button for walk signal with countdown timer, no turn on red, and left lane must turn left.

Map Key: 1

Signal Improvements: American Parkway

American Parkway from Bradford Street to Hamilton Street

A series of upgrades to the traffic signals and signage along American Parkway including but not limited to overhead street name signs, signal ahead, left turn yield on green, push button for walk signal with countdown timer, and no turn on red.

Map Key: 15 16 17 18 19

Hanover Avenue Corridor Project

Hamilton Street and Albert and Sherman Streets; Hanover Avenue and Carlisle, Graham, Irving, Maxwell, Wahneta, and Linden Streets

As part of a Pennsylvania Department of Community and Economic Development (DCED) Multimodal Transportation Fund (MTF) grant, the City of Allentown is currently working on a set of intersection improvements to address deficiencies and safety concerns at several intersections along the Hanover Avenue corridor. These improvements aim to improve traffic operations and predictability to enhance safety and comfort for users of all ages and abilities. The project also specifically targets improvements for pedestrians (high visibility crosswalks, pedestrian signal upgrades, ADA ramps, etc.) at these key intersections to improve safety, access, and comfort along the corridor.

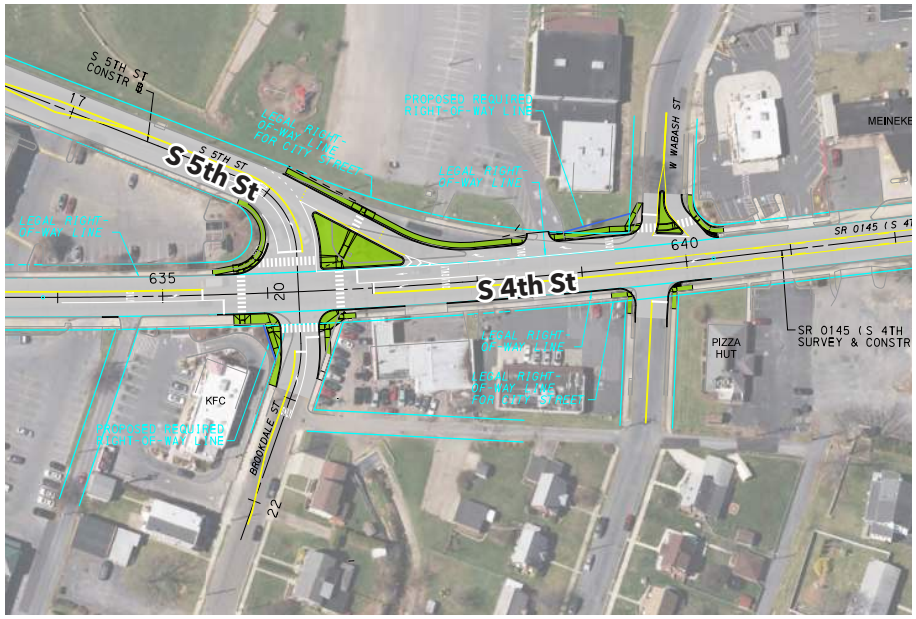
Map Key: 21

SR 0145-13 Safety Improvement Project

4th Street (SR 0145) from West Emmaus Avenue to West Wyoming Street

This PennDOT project includes traffic signal upgrades, the addition of a center turn lane, roadway mill and overlay, widening for right turn lanes, radius improvements, and construction of a retaining wall, stormwater improvements, and sidewalks.

Map Key: 20



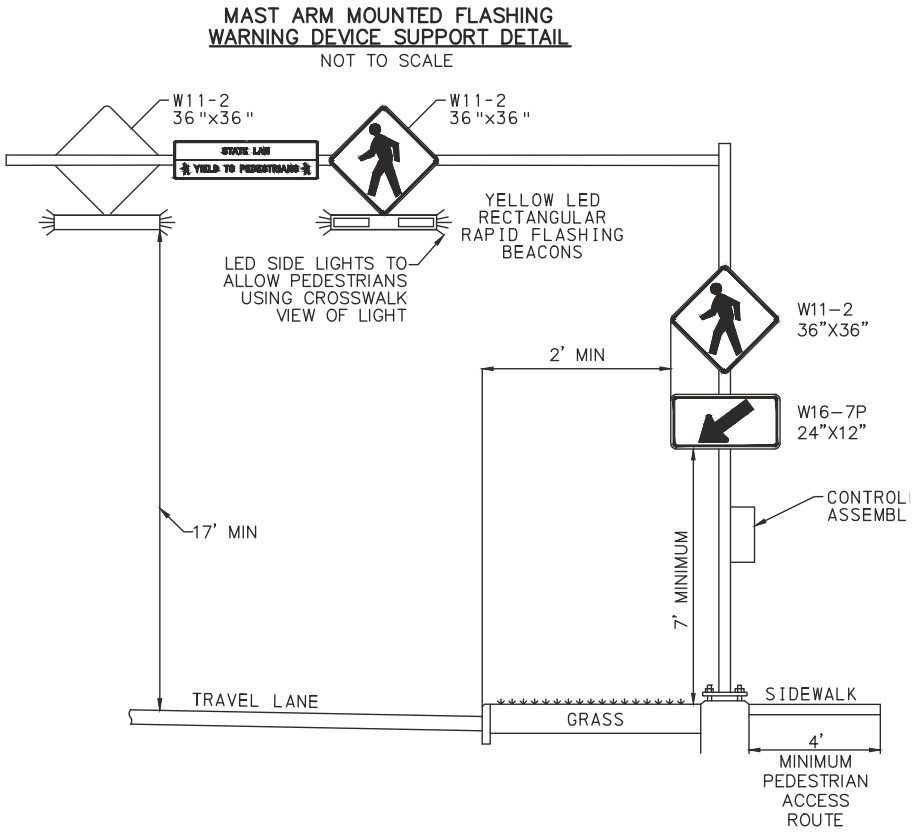
Proposed sidewalk improvements in green along 4th Street.

Intersection and Signal Improvements: 15th Street

15th Street and Sumner Avenue, Roth Avenue, Greenleaf Street, and Highland Avenue

Traffic signals will be upgraded at four intersections along 15th Street. Upgrades to the traffic signals also include signage that increases awareness and visibility of crossing pedestrians, such as Rectangular Rapid Flashing Beacons (RRFBs), LED side lights on the RRFB, no turn on red signs, push to walk buttons, and more.

Map Key: 23 25 26



Proposed signage and warning device for 15th St and Greenleaf Street.

Center Square Redesign

7th Street and Hamilton Street

Redesign of the intersection at 7th Street and Hamilton Street will expand the northeast sidewalk and connect it to the Center Square, creating a plaza and public gathering space. The southeast corner of the intersection, adjacent to the Lehigh County Government Center, is also extended to shorten the crossing distance. The redesign realigns the lanes for the new traffic pattern and adds a bike lane along Hamilton Street.

Map Key: 24

Allentown Center Square Redesign.

Speed Cushions: Hamilton Street

Hamilton Street from South Lafayette Street to North 15th Street

Installation of speed cushions along Hamilton Street along with speed cushion advance warning markings.

Map Key: 29

MLK Trail Extension

Fountain Park to Little Lehigh Parkway

This project involves construction of a 1.2 mile extension of the Martin Luther King Drive (MLK) Trail. The proposed 10-foot-wide paved, multi-use path provides a strategic walking and bicycling link from Lehigh Parkway Park to Fountain Park in the City of Allentown. The project also closes a critical gap between the MLK Trail and the Little Lehigh Parkway Path network creating an 8-mile-long trail network in this section of Allentown.

Map Key: 30

MLK Jr. Drive.

Jefferson Street Pedestrian Safety and Traffic Calming Plan

Jefferson Street from St. John Street to Liberator Avenue

As part of the City's Demonstration Grant project, a "road diet" project will be completed to calm traffic and enhance pedestrian safety for the Jefferson Street corridor from Wyoming Street to Lehigh Street. The demonstration project will include temporary pavement markings to delineate 8' parking lanes, 5' bike lanes, 12' travel lanes, edge lines and flexible delineators at skewed/ multileg intersections to visually narrow the roadway and to better delineate the travel lanes.

Map Key: 31

Temporary pavement markings and flexible delineators will be installed as part of a traffic calming demonstration project on Jefferson Street.

Recommended System-Wide Improvements

Establish a district-wide speed limit through the application of a residence district.

A consistent speed limit across certain districts of a city simplifies enforcement, reduces driver confusion, and encourages safer driving behavior. Much of Allentown is developed as dense residential neighborhoods or mixed-use business and residential districts. The City could designate these areas as residence districts, and apply a 25 MPH speed limit. Speed limits higher than 25 MPH are incompatible with this development pattern. This process will require documentation through the applicable traffic studies, and passing an ordinance per the PA Vehicle Code (Title 75).[1]

An alternative to a district-wide speed limit would be lowering the posted speed limit along the high-injury network. Lowering the speed limit, even by five MPH, has been shown to have a measurable effect on the number of crashes and instances of speeding. Lowering speed limits can also open access to other street design options that can further increase safety and comfort for other road users, as the posted speed limit often dictates the design parameters of the street. The City should conduct a comprehensive review of speed limits on local roads and determine if any could be lowered. For state roads, PennDOT should be engaged to conduct a similar review.

Restore one-way streets in Allentown's core to two-way streets.

Decades ago, many of Allentown's streets in the downtown core and surrounding core neighborhoods were converted from two-way streets into one-way streets to facilitate ease of access by vehicular traffic to downtown department stores and offices. These conversions did not consider the impact on non-motorized modes of transportation. The 2014 Downtown Allentown Development and Urban Design Plan recommends restoring these one-way streets to two-way and removing excess vehicular travel lanes to accommodate wider sidewalks or bike facilities[2]. As the plan states "Instead of downtown serving as a place to travel through, these types of strategies will substantially support downtown as a place that people go to." Furthermore, restoration to two-way streets supports:

- **Enhanced Safety:** Two-way streets slow down traffic, reducing the number and severity of crashes.
- **Better Circulation:** They promote more efficient movement for a variety of transportation methods, offering more direct routes to destinations.
- **Greater Visibility for Businesses:** Two-way streets boost foot traffic by making businesses more visible and accessible.
- **Improved Mobility:** Easier navigation and less confusion for drivers and cyclists, plus shorter walking distances from parking and bus stops.
- **Emergency Response:** EMS and police response times are proven to be improved with two-way streets.

This process will require documentation through the applicable traffic studies, and passing an ordinance per the PA Vehicle Code (Title 75) as well as a transition process explained in PennDOT Publication 46.[3]

1 Commonwealth of Pennsylvania. https://www.legis.state.pa.us/WU01/LI/LI/CT/HTM/75/75.HTM

2 City of Allentown. (2014) Downtown Allentown Development and Urban Design Plan. https://www.allentownpa.gov/Portals/0/adam/Content/u44vwUubmEWp0mN3NeTzmQ/Url/DowntownDevPlan.pdf

3 PennDOT. (2014). Traffic Engineering Manual. https://www.dot.state.pa.us/public/PubsForms/Publications/Pub%2046.pdf

Leverage demonstration projects to pilot safety countermeasures.

Demonstration projects (also known as "quick build projects") are an effective strategy for showcasing and testing new traffic safety measures and street designs in real-world settings. These projects involve implementing low-cost changes, such as new temporary bike lanes, pedestrian plazas, or traffic calming features, to gather public feedback and observe their impact before making permanent, higher-cost improvements. The City of Allentown was recently awarded a Safe Streets for All Demonstration Grant to implement a demonstration project. This project is highlighted as an early implementation project in the **Implementation chapter**.

Evaluate and upgrade street lighting.

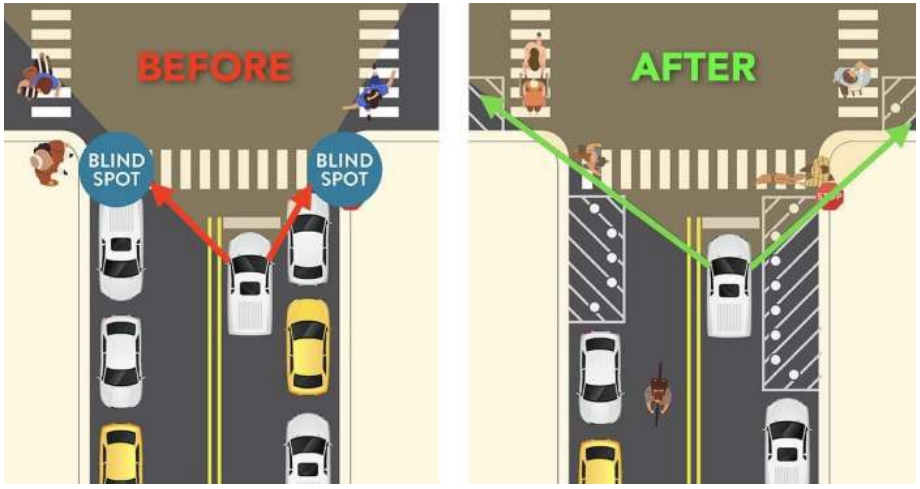
Evaluating and upgrading lighting levels is crucial for enhancing street safety, particularly for pedestrians. Proper lighting improves visibility, helping both pedestrians and drivers detect hazards more effectively. This reduces the risk of crashes and increases pedestrian confidence in navigating streets at night. Additionally, well-lit areas can deter crime, making streets feel safer and encouraging more nighttime activity. Lighting is one of the U.S. Department of Transportation Federal Highway Administration (FHWA)'s proven safety countermeasures for roadway safety. Appropriate lighting can reduce nighttime crashes at intersections involving a pedestrian by 42%. Lighting upgrades should be made with breakaway feature, or be shielded or placed far enough from the roadway to reduce the probability and/or severity of fixed-object crashes. Modern lighting technology allows precise control of lighting wattage with minimal excessive light affecting the nighttime sky or spilling over to adjacent properties. The City can refer to the FHWA's Pedestrian Lighting Primer for a process for evaluation of lighting and model design standards.[1]

Implement system-wide Complete Streets improvements.

See the **Policy and Process Improvements section** for ways that the City can apply countermeasures and Complete Street design standards to its network of streets in a comprehensive, systematic fashion. Two opportunities to do this are through the annual resurfacing program and the annual traffic signal maintenance program.

The City of Allentown can utilize the annual resurfacing program to make safety improvements. The City should prioritize one-to-two corridor wide resurfacing projects each year that will change pavement markings to enhance traffic calming and safety, add bicycle lanes, narrow vehicle lanes, add striping along parking lanes, add intersection daylighting, and add high visibility crosswalks.

Additionally, the City can utilize the annual traffic signal maintenance program to make upgrades such as lighting upgrades, implementation of leading pedestrian intervals, no turn on red signage, and other signal related upgrades.



Before/After Daylighting Improvements. | *Source: Bikescape*

1 U.S. DOT FHWA. (2022) Pedestrian Lighting Primer. https://highways.dot.gov/sites/fhwa.dot.gov/files/2022-09/Pedestrian_Lighting_Primer_Final.pdf

Study the feasibility of using the network of alley ways for a low-stress bike network.

One of Allentown's many assets is the built-out grid street network, including a network of alley ways that run parallel to the streets. Alleyways are often overlooked, but could offer a unique solution to providing safe biking routes. They provide a quieter and less congested alternative to main roads, making them ideal for novice cyclists and those seeking a more relaxed ride. By integrating these alleyways into the broader bike network, the City could enhance connectivity, improve safety, and promote cycling as a viable mode of transportation, all while maximizing existing infrastructure. As part of this study, the City should consider how mid-block crossings to connect the alleyways would operate.

Site Specific Recommended Improvements - Concept Plans

In addition to system-wide improvements, targeted improvements along the high-injury network are included in a set of concept plans. The following pages outline the existing conditions as well as proposed improvements for the following corridors:

- 4th Street/Basin Street (Emmaus Street to Union Street)
- 7th Street (Sumner Avenue to Union Street)
- 15th Street (Ward Street to Roth Avenue)
- American Parkway (Union Street to Airport Road)
- Emmaus Avenue (31st Street to 4th Street)
- Hamilton Street (Ott Street to 5th Street)
- Hamilton Street and Hanover Avenue (6th Street to Carlisle Street)
- Lehigh Street (Oxford Drive to MLK Jr. Drive)
- Tilghman Street East (15th Street to N Front Street)
- Union Boulevard (N Front Street to Eastern City Limits)

Each plan set begins with a cover page that provides an overview of the sections that constitute the corridor (corridors have one to four sections), existing conditions along the corridor, proposed changes, and a cost estimate for the proposed changes. Following the cover page, existing conditions of each section of the corridor are explored in detail followed by proposed countermeasures/changes for each of the sections. Countermeasures are defined in **Appendix E, Safety Toolkit**.

4TH STREET/BASIN STREET CORRIDOR

Corridor Overview

This corridor includes a mix of smaller scale commercial businesses and residential homes. The many driveways and access points create conflict points for pedestrians, bicyclists, and motorists. 4th Street is State Route 145 and is under the jurisdiction of PennDOT. Basin Street is an Allentown City Street.

Improvements included in this concept plan are focused on lowering vehicle speeds through traffic calming and improving intersections for enhanced pedestrian safety. Bikeability is addressed through off road trail improvements included as part of the City of Allentown's Auburn Cross Trails Park Master Plan, future Lehigh Landing Trail, and existing Trout Creek Trails which will create a safer bike route that is generally parallel to Basin Street.

Section 1 - Emaus Avenue to West Susquehanna Street

The area is primarily commercial with residential housing to the east, no on-street parking, and sidewalks on both sides of the roadway.

Concept Plans

- Emaus Avenue to Wabash Street
- Wabash Street to West Susquehanna Street
- Detail: PennDOT Safety Improvement Project

Section 2 -West Susquehanna Street to Union Street

The area is primarily commercial with minimal residential housing, no on-street parking, and sidewalks on the east side of the roadway.

Concept Plans

- West Susquehanna Street to Auburn Street
- Auburn Street to Union Street
- Detail: Signal Improvements

PLANNING LEVEL COST ESTIMATE

$333,000

PROPOSED IMPROVEMENTS

- Coordinate with PennDOT to maximize improvements included in the ongoing SR 145 Section 13S project.
- Traffic signal improvements are planned at the intersection of South 3rd Street/Union Street.
- Add high visibility crosswalks, countdown timers, ADA ramps, leading pedestrian intervals at Auburn Street/Basin Street.
- Convert painted median to raised concrete median with landscaping at Auburn Street/ Basin Street signal up to the railroad overpass bridge.

4TH STREET/BASIN STREET CORRIDOR

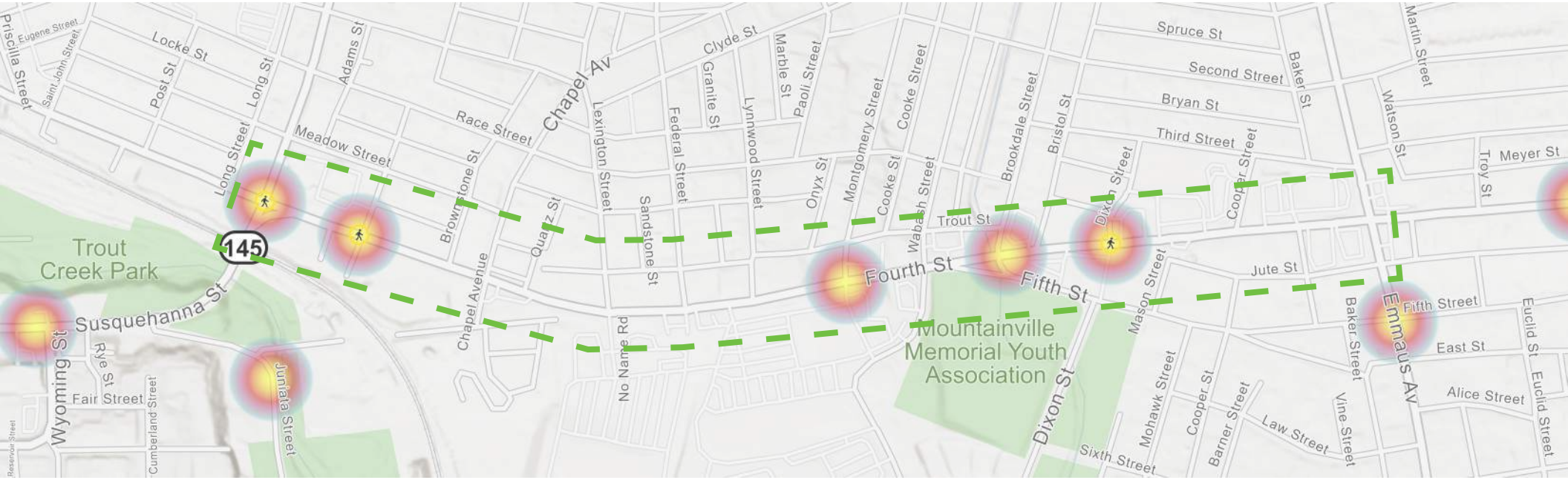
Section 1 – Emaus Avenue to West Susquehanna Street

SPEED LIMIT 40

Three-lane cross-section with one travel lane in each direction and center-left turn lane (turn lanes at traffic signals).

Roadway Context

- Primarily commercial businesses with residential to the east
- No on-street parking permitted
- Sidewalks along both sides of roadway
- Crosswalks at major intersections (signal-controlled)



Section 2 – West Susquehanna Street to Union Street

SPEED LIMIT 35

Four-lane cross-section with two travel lanes in each direction.

Roadway Context

- Primarily commercial with minimal residential housing
- No on-street parking permitted
- Sidewalks along east side of roadway
- Crosswalks at major intersections (signal-controlled)

4TH STREET/BASIN STREET CORRIDOR

Section 1 Concept Plan - Emaus Avenue to Wabash Street

PennDOT Safety Improvement Project

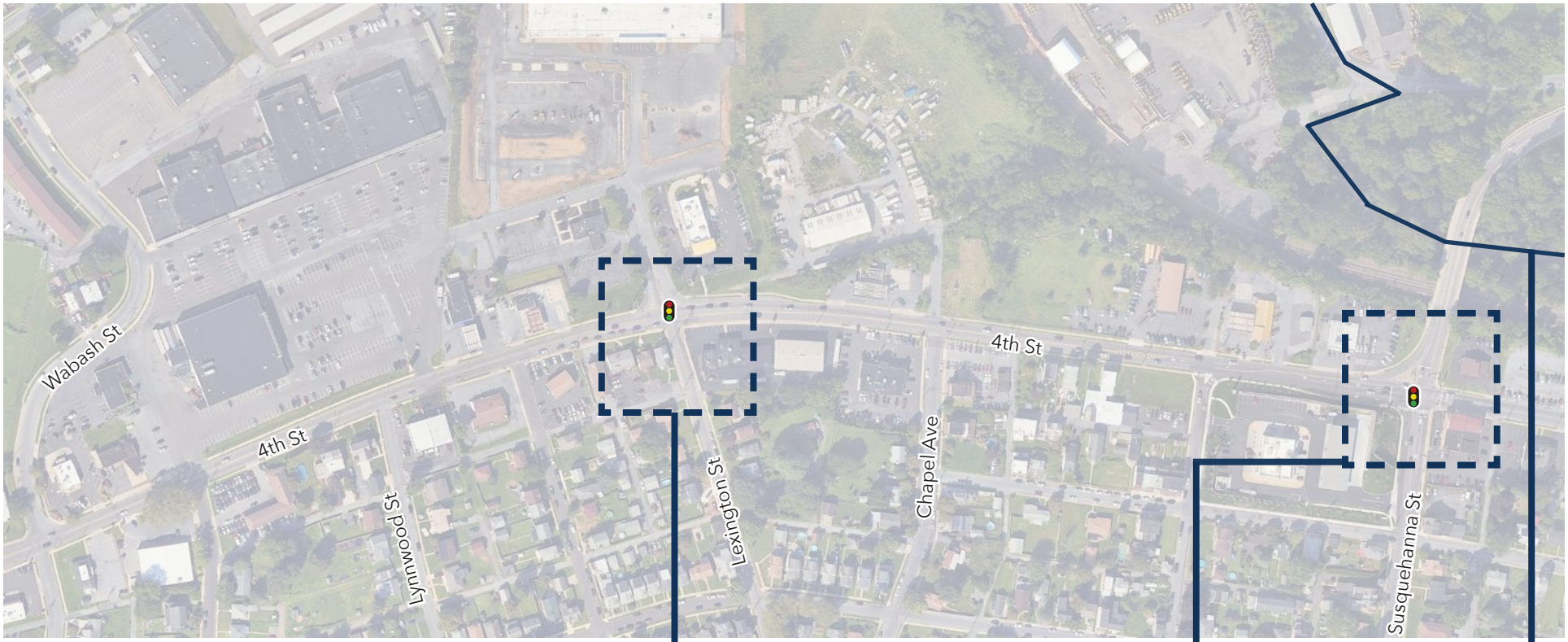
Upgrade ADA facilities at traffic signal

PennDOT Safety Improvement Project

SEE DETAILED CONCEPT PLAN

4TH STREET/BASIN STREET CORRIDOR

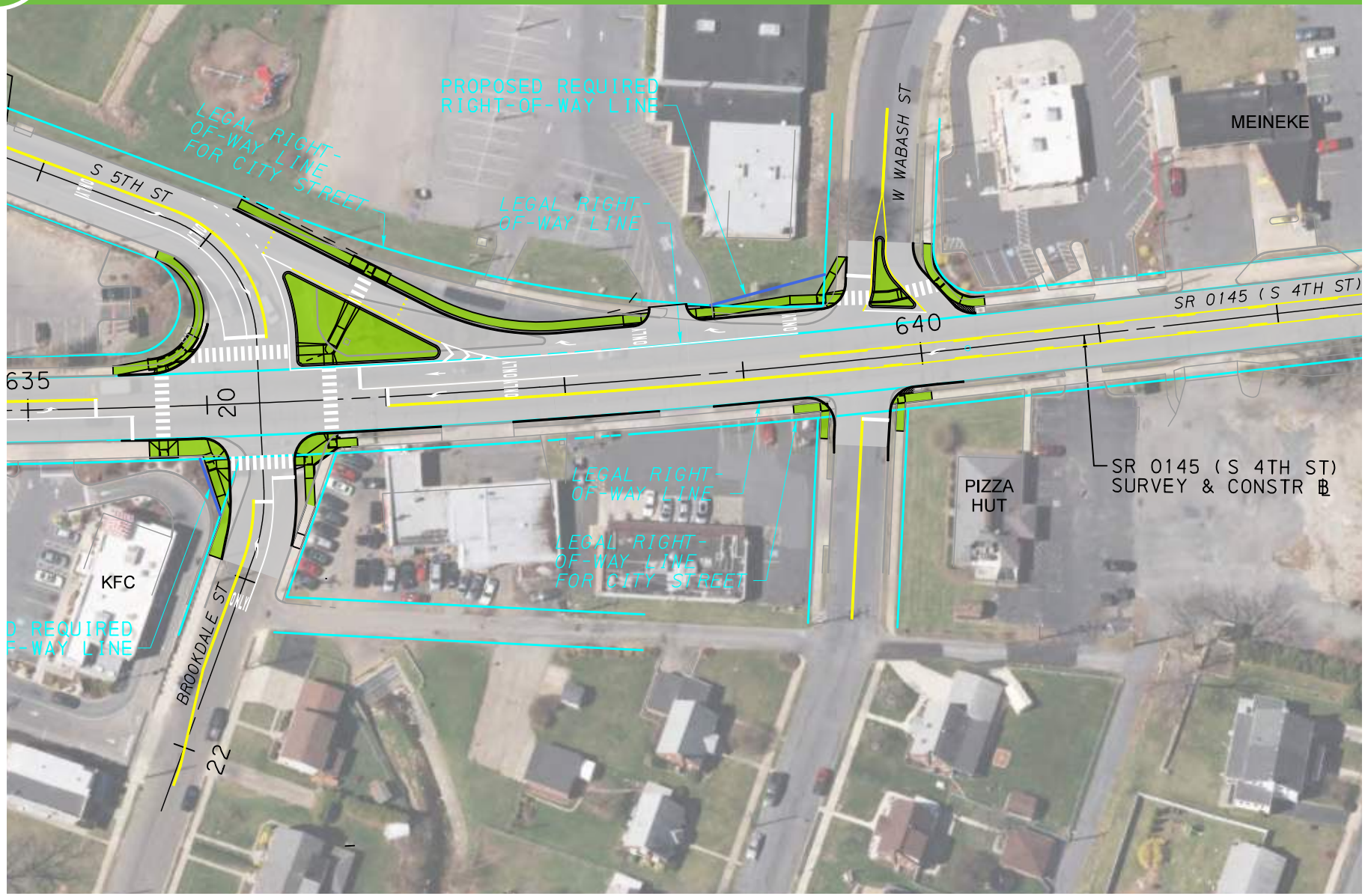
Section 1 Concept Plan - Wabash Street to West Susquehanna Street



DETAILED CONCEPT PLAN

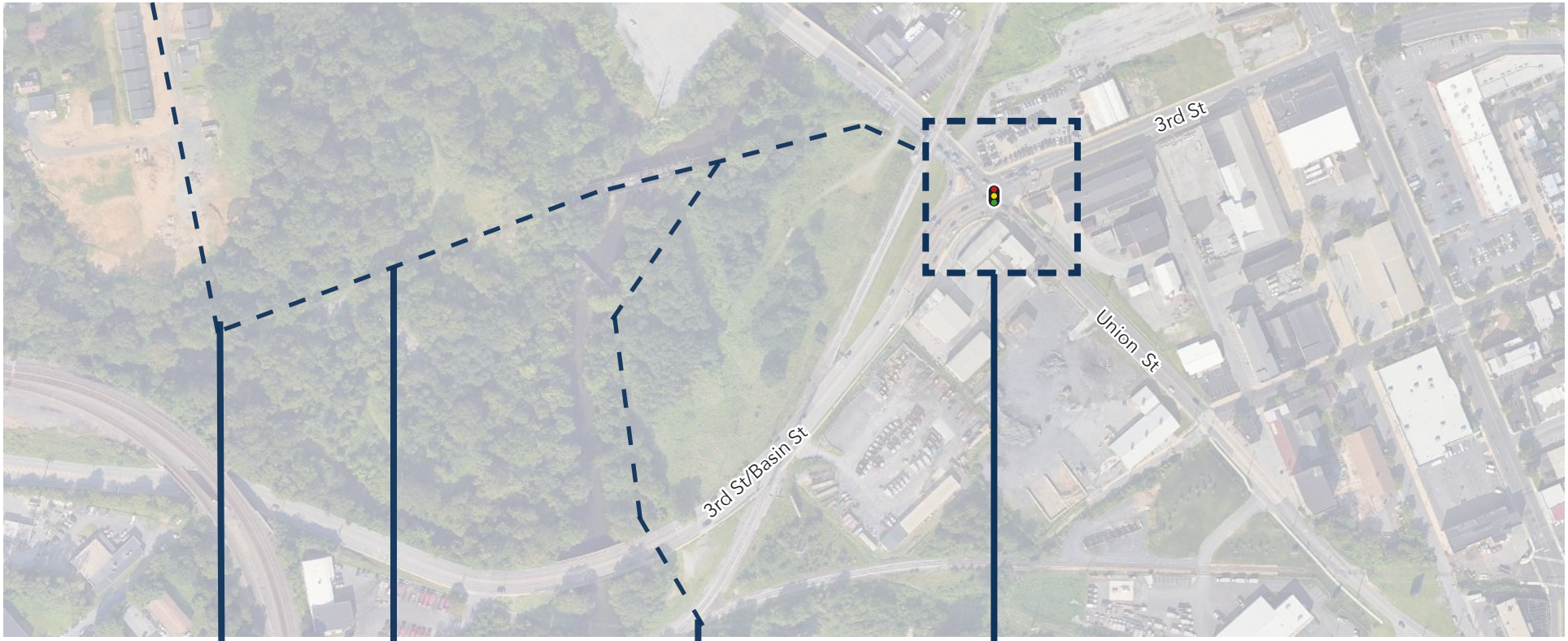
4TH STREET/BASIN STREET CORRIDOR

PennDOT Safety Improvement Plan



Section 2 Concept Plan - West Susquehanna Street to Auburn Street

Section 2 Concept Plan - Auburn Street to Union Street



Future shared roadway

Future shared used path- see Auburn Cross Trails Park Master Plan

Future shared use path - see Lehigh Landing Trail Plan

Upgrade ADA facilities at traffic signal

Improvements planned as part of ongoing signal improvement project

SEE DETAILED CONCEPT PLAN

DETAILED CONCEPT PLAN

4TH STREET/BASIN STREET CORRIDOR

Signal Improvements

	INTERVAL				INTERVAL				INTERVAL			INTERVAL				INTERVAL			INTERVAL				EMERGE FLASHI OPERAT
SIGNAL	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
1,2,3	R	R	R	R	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
4,17	G/←G	G/←G	G/←Y	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
5	G	G	G	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
6	G	G	G	G	G	G	Y	R	R/←G	←Y ①	R ①	R/←G	R/←G	←Y	R	R	R	R	R	R	R	R	R
7,8 *	M	FH ⑥	H ⑥	H ⑥	M	FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	OFF
9	←R	←R	←R	←R	←R	←R	←R	←R	←G	←Y ②	←R ②	←R	←R	←R	←R	←G	←Y	←R	←R	←R	←R	←R	←R
10,11	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y ③	R ③	G	G	Y	R	R
12	←R	←R	←R	←R	←R	←R	←R	←R	←G	←Y ④	←R ④	←G	←G	←Y	←R	←R	←R	←R	←R	←R	←R	←R	←R
13,14	R	R	R	R	R	R	R	R	R	R	R	G	G	Y ③	R ③	R	R	R	G	G	Y	R	R
15,16 *	H	H	H	H	H	H	H	H	H	H	H	M	FH ⑧	H ⑧	H ⑧	H	H	H	M	FH	H	H	OFF

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
FIXED			3	3			4	3		3.5	3			3.5	3		3.5	3			4	3
MINIMUM	7				7				7			7				7			7			
PASSAGE	3				3				3			3				3			3			
MAX 1	7				28				33			33				33			27			
PEDESTRIAN*	⑤				7	13						⑦							7	18		
MEMORY	NL				MX				NL			NL				NL			NL			

PROGRAM 1	13	30	26	26	26	41
PROGRAM 2	13	23	29	29	29	35
PROGRAM 3	13	30	32	32	32	35

*UPON PEDESTRIAN ACTUATION ONLY, OTHERWISE HAND AT ALL TIMES

① R/←G IF FOLLOWED BY 4+7

② ←G IF FOLLOWED BY 3+8

③ G IF FOLLOWED BY 4+8

④ ←G IF FOLLOWED BY 4+7

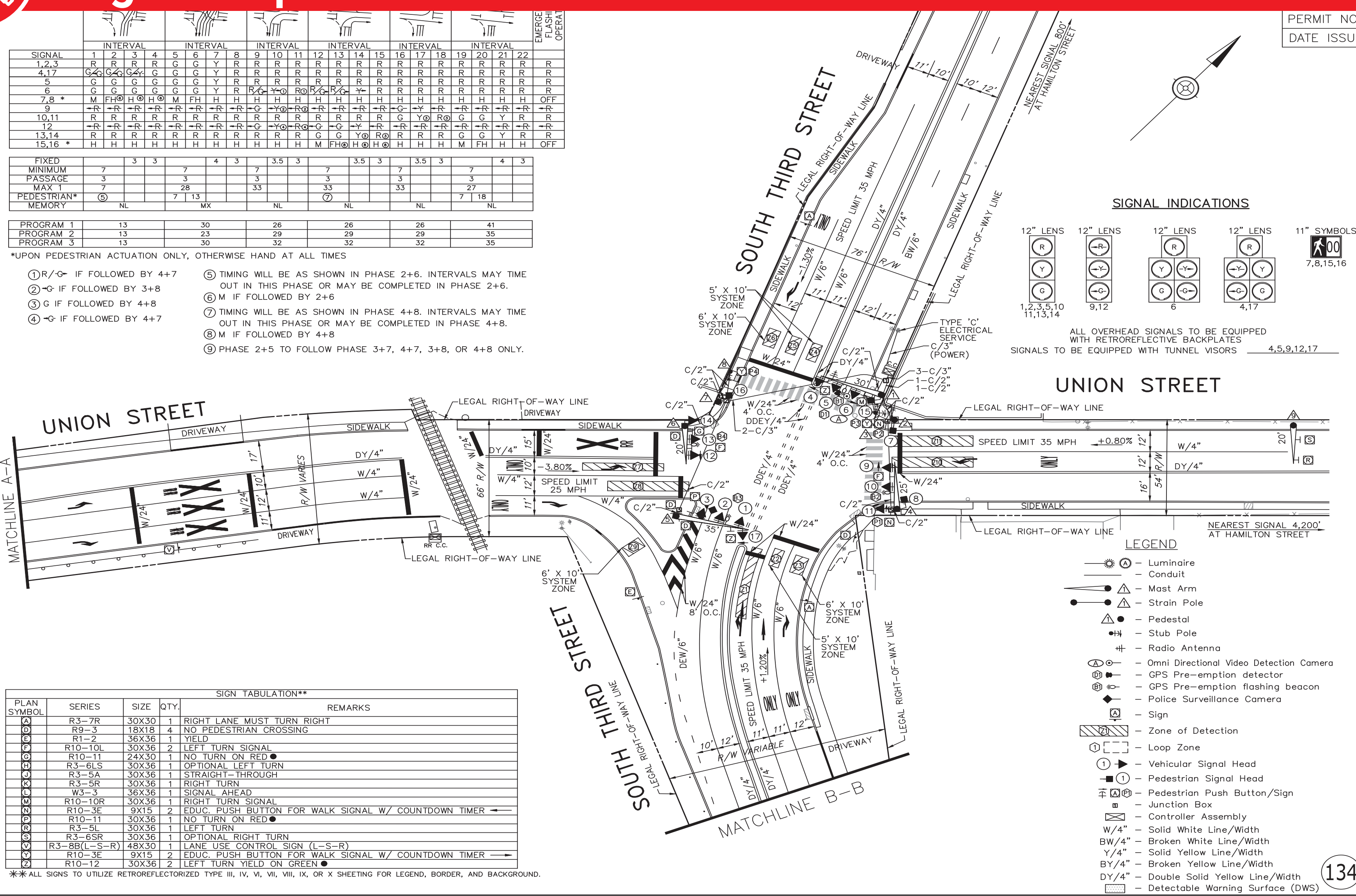
⑤ TIMING WILL BE AS SHOWN IN PHASE 2+6. INTERVALS MAY TIME OUT IN THIS PHASE OR MAY BE COMPLETED IN PHASE 2+6.

⑥ M IF FOLLOWED BY 2+6

⑦ TIMING WILL BE AS SHOWN IN PHASE 4+8. INTERVALS MAY TIME OUT IN THIS PHASE OR MAY BE COMPLETED IN PHASE 4+8.

⑧ M IF FOLLOWED BY 4+8

⑨ PHASE 2+5 TO FOLLOW PHASE 3+7, 4+7, 3+8, OR 4+8 ONLY.



SIGN TABULATION**				
PLAN SYMBOL	SERIES	SIZE	QTY.	REMARKS
Ⓐ	R3–7R	30X30	1	RIGHT LANE MUST TURN RIGHT
Ⓓ	R9–3	18X18	4	NO PEDESTRIAN CROSSING
Ⓔ	R1–2	36X36	1	YIELD
Ⓕ	R10–10L	30X36	2	LEFT TURN SIGNAL
Ⓖ	R10–11	24X30	1	NO TURN ON RED ●
Ⓗ	R3–6LS	30X36	1	OPTIONAL LEFT TURN
Ⓙ	R3–5A	30X36	1	STRAIGHT–THROUGH
Ⓚ	R3–5R	30X36	1	RIGHT TURN
Ⓛ	W3–3	36X36	1	SIGNAL AHEAD
Ⓜ	R10–10R	30X36	1	RIGHT TURN SIGNAL
Ⓝ	R10–3E	9X15	2	EDUC. PUSH BUTTON FOR WALK SIGNAL W/ COUNTDOWN TIMER ←
Ⓟ	R10–11	30X36	1	NO TURN ON RED ●
Ⓡ	R3–5L	30X36	1	LEFT TURN
Ⓢ	R3–6SR	30X36	1	OPTIONAL RIGHT TURN
Ⓥ	R3–8B(L–S–R)	48X30	1	LANE USE CONTROL SIGN (L–S–R)
Ⓨ	R10–3E	9X15	2	EDUC. PUSH BUTTON FOR WALK SIGNAL W/ COUNTDOWN TIMER →
Ⓩ	R10–12	30X36	2	LEFT TURN YIELD ON GREEN ●

** ALL SIGNS TO UTILIZE RETROREFLECTORIZED TYPE III, IV, VI, VII, VIII, IX, OR X SHEETING FOR LEGEND, BORDER, AND BACKGROUND.

Q:\PA-FTWA-MC\MCM\eng\ALLENCI1\313967_American Pky\DWG\967SIG10.dwg

7TH STREET CORRIDOR

Corridor Overview

This corridor includes a section of two-way traffic between the city line and Washington Street and then three one-way lanes south toward Center City Allentown. It includes a mix of row homes and businesses close to the street with on-street parking on both sides of the roadway. It is designated SR 145 and leads directly to Center City Allentown from a Route 22 interchange just to the north of the city line. This generates significant high-speed traffic to/from Route 22. It also includes some signalized intersections with major cross streets and gas stations/convenience stores on each corner, which creates numerous conflicts and unexpected vehicle movements.

PLANNING LEVEL COST ESTIMATE

$684,000.00

Section 1 - Sumner Avenue to Union Street

The area transitions from residential to downtown/commercial, with on-street parking and sidewalks on both sides of the roadway.

Concept Plans

- Sumner Avenue to Tilghman Street
- Tilghman Street to Turner Street
- Turner Street to Union Street

PROPOSED IMPROVEMENTS

- Add intersection daylighting throughout the corridor to improve visibility for all users at intersection.
- Add countdown timers, leading pedestrian intervals, and "No Turn on Red" signs at signalized intersections.
- Add high visibility crosswalks parallel to 7th Street at all side roads and major commercial driveways.
- Remove commercial driveways close to major signalized intersections when multiple driveways are present into the same business.
- Add curb extensions at bus stops and side roads where feasible to minimize crossing distance for pedestrians and to calm traffic.
- The intersection of 7th/Hamilton Streets is part of an ongoing intersection improvement project that will enhance safety in Center City.

7TH STREET CORRIDOR

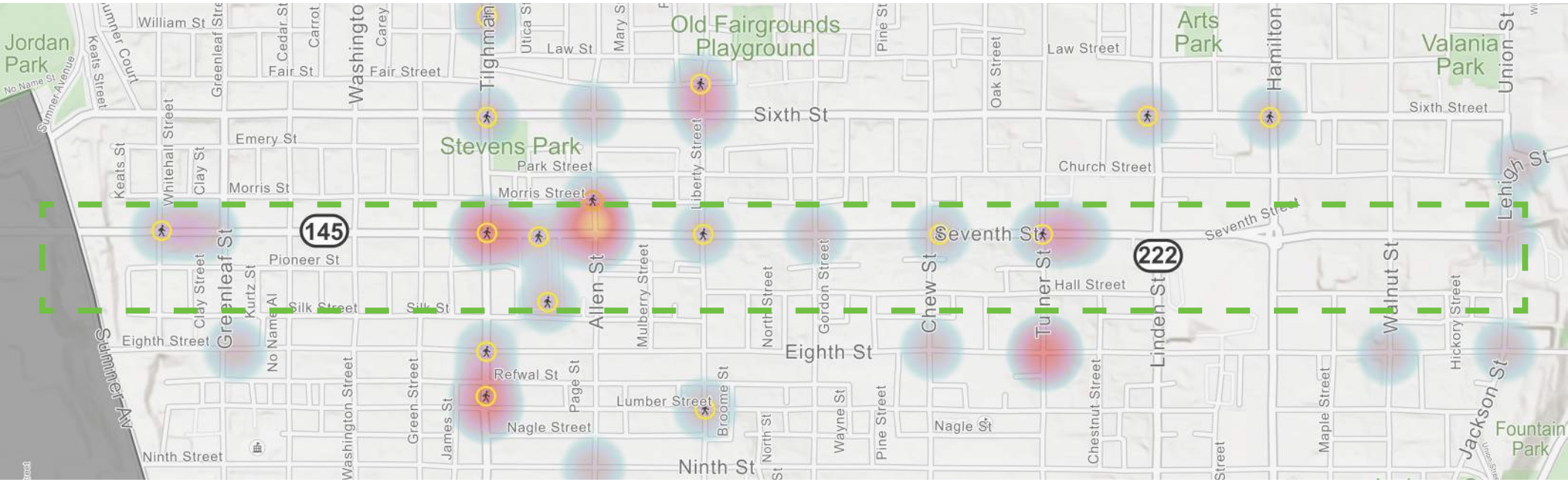
Section 1 – Sumner Avenue to Union Street

SPEED LIMIT 30

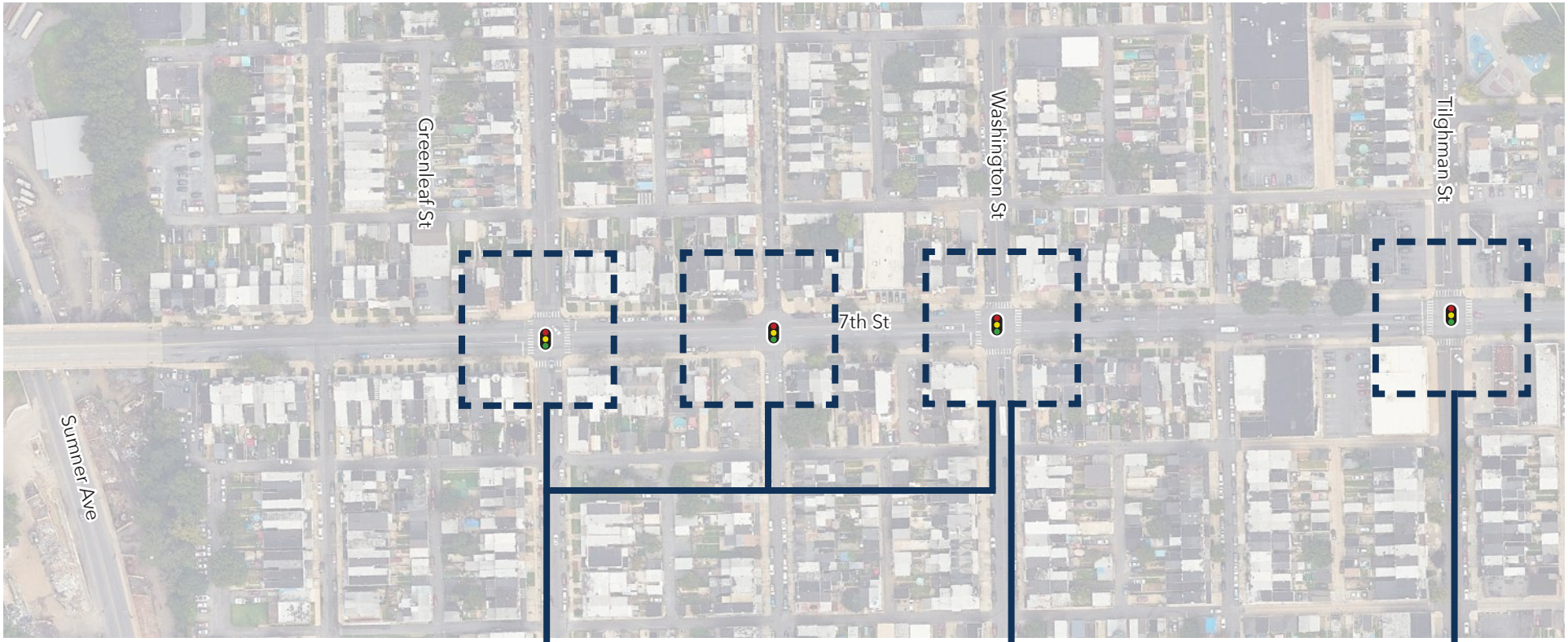
Three-lane cross-section in southbound direction.

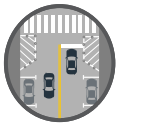
Roadway Context

- Residential (from Sumner Avenue to West Turner Street), Downtown/commercial (from West Turner Street to Union Street)
- On-street parking on both sides
- Sidewalks along both sides of roadway
- Crosswalks at major intersections (signal-controlled and some minor side streets)



Section 1 Concept Plan - Sumner Avenue to Tilghman Street





Daylighting at intersection

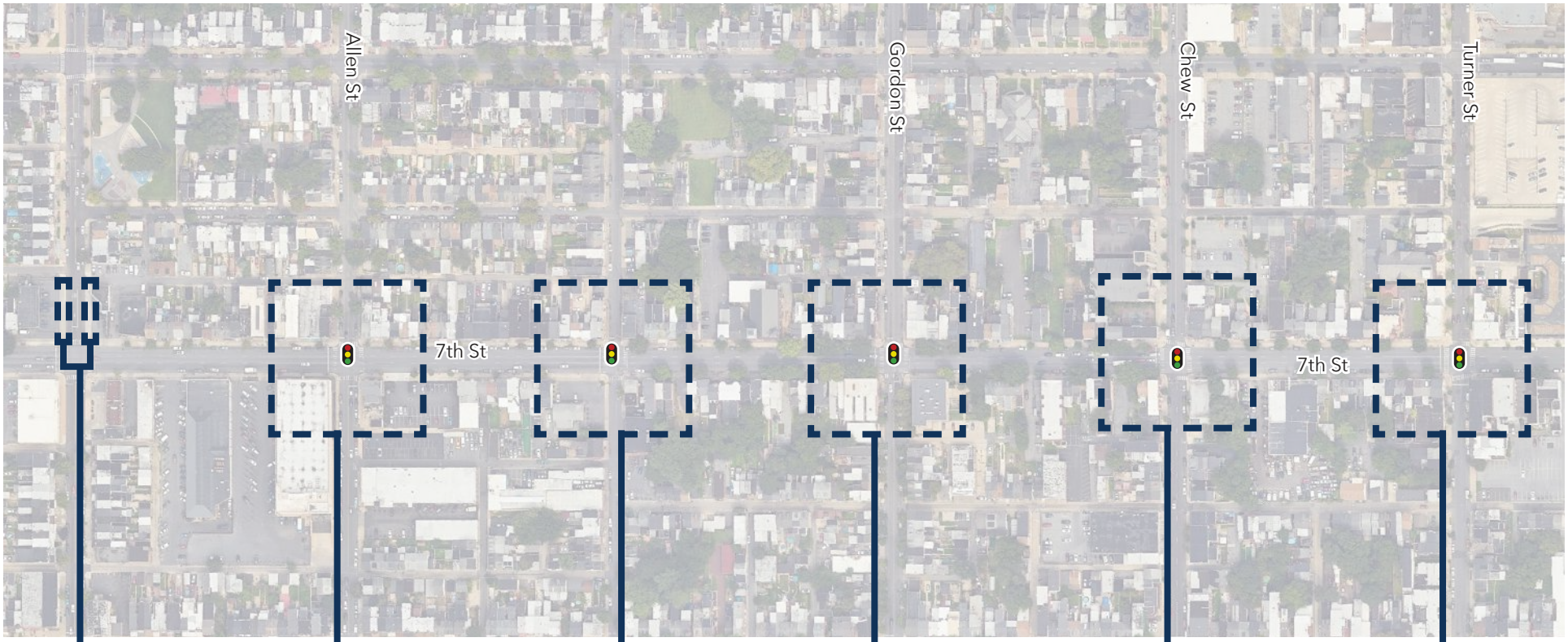
Upgrade traffic signal to include countdown timer/pedestrian crossing signal

Curb extension

SEE DETAILED CONCEPT PLAN

Traffic signal is already ADA accessible

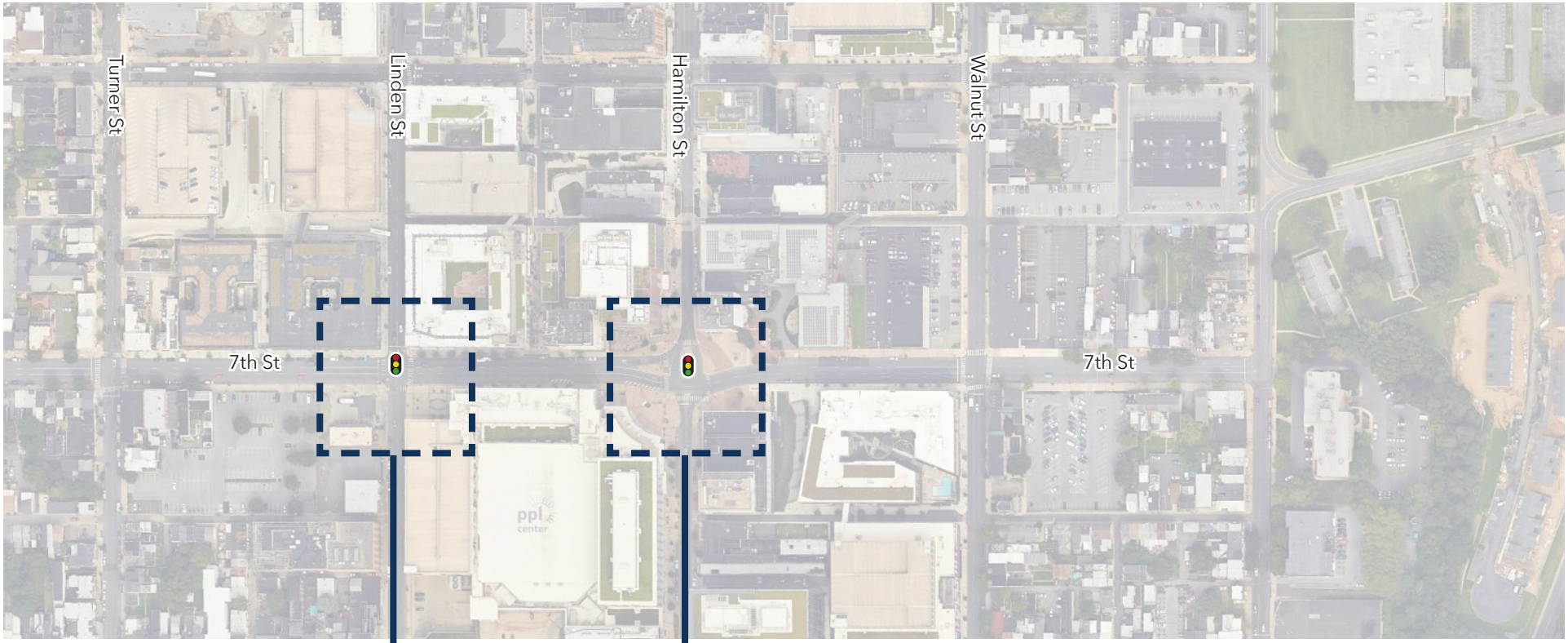
Section 1 Concept Plan - Tilghman Street to Turner Street



Close driveways

Upgrade traffic signals to include countdown hand/ person signals

Section 1 Concept Plan - Turner Street to Union Street



15TH STREET CORRIDOR

Corridor Overview

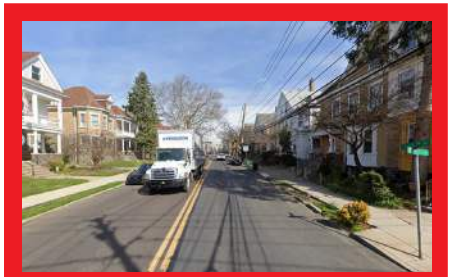
The 15th Street Corridor is one of the primary north/south direction corridors in the high-injury network and runs from Ward Street (south) to Roth Avenue (north). The corridor is primarily residential with a mix of higher density apartments and row homes as well as detached single family residences. There are a number of heavy pedestrian generators including schools (Trexler Middle School, Louis Ramos Elementary School), LANTA bus stops, West Park, and the Allentown YMCA. Crash patterns indicate issues with improper/careless turns, including at least 10 incidents where a turning vehicle struck a pedestrian. Existing turning restrictions are limited by time of day and can lead to confusion and unpredictability for all road users. 15th Street is State Route 2006 and owned by PennDOT.

Section 1 - Ward Street to Hamilton Street

Higher density residential with apartments and row homes.

Concept Plans

- Ward Street to Union Street
- Union Street to Hamilton Street

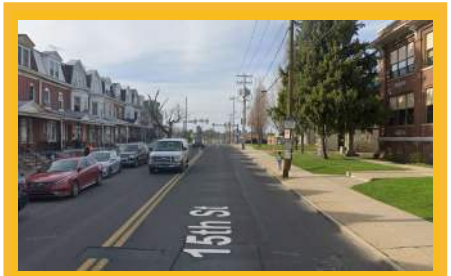


Section 2 - Hamilton Street to Chew Street

Detached single family residential and connections to West Park and Hamilton St.

Concept Plans

- Linden Street to Chew Street



Section 3 - Chew Street to Roth Avenue

Row homes transitioning to mixed-use commercial with connections to schools.

Concept Plans

- Chew Street to Liberty Street
- Early Street to Green Street
- Sumner Avenue to Roth Avenue

PLANNING LEVEL COST ESTIMATE

$2,150,960

PROPOSED IMPROVEMENTS

- Reduce speed limit to 25 MPH.
- Strategies to improve predictability and reduce turning conflicts at all intersections.
  - » Prohibit right turn on red movements.
  - » Turns must yield to pedestrian signage.
- Systemic intersection upgrades along corridor including:
  - » Daylighting.
  - » Curb extensions.
  - » High visibility crosswalks.
  - » Crosswalk Lighting Enhancements.
  - » Rectangular rapid flashing beacons (RRFB).
  - » Pedestrian signals with leading pedestrian intervals (LPIs).

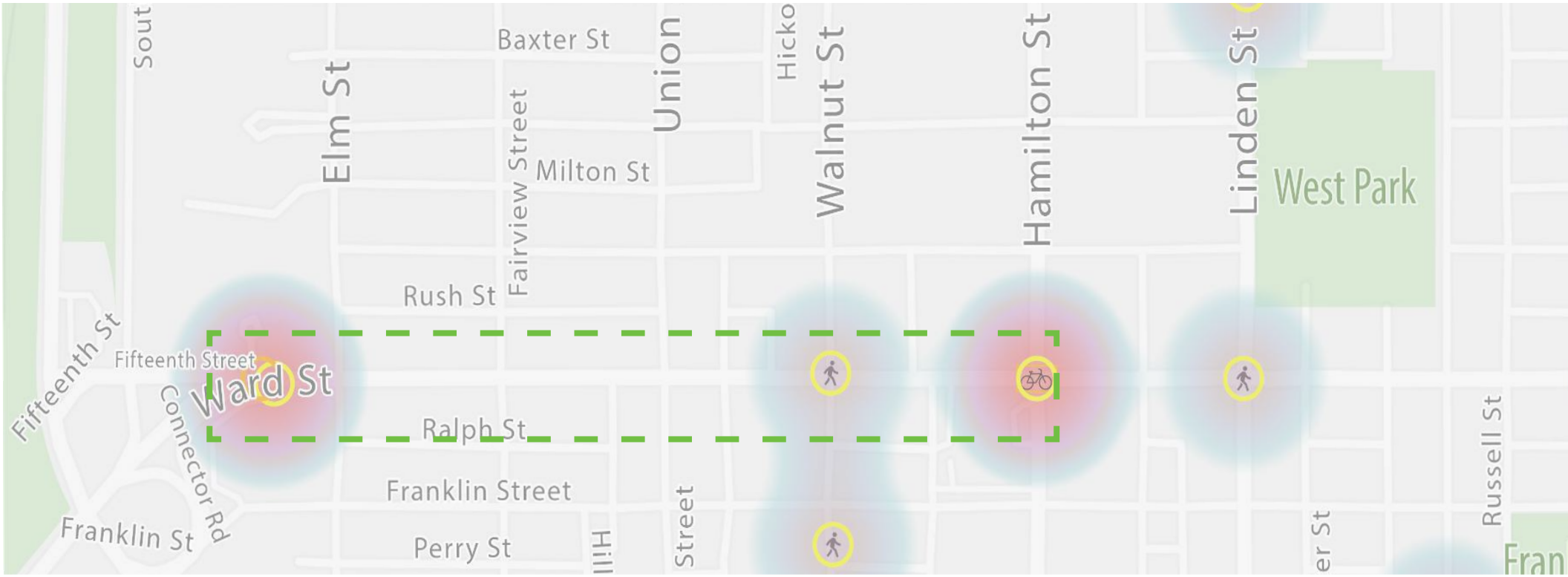
Section 1 - Ward Street to Hamilton Street

SPEED LIMIT 30

38' wide two-lane cross-section with bicycle lane markings in both directions.

Roadway Context

- Higher density residential
- On-street parking both sides
- Sidewalks along both sides of roadway
- High-injury crash cluster near Ward Street



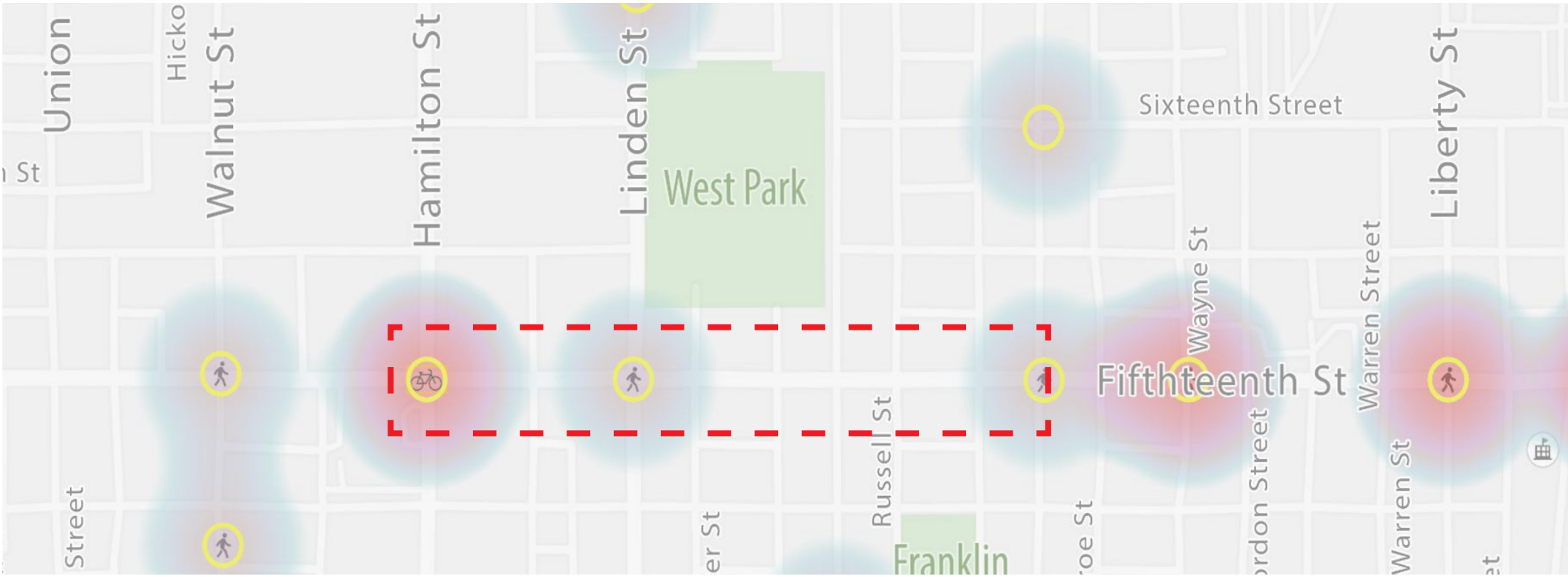
Section 2 - Hamilton Street to Chew Street

SPEED LIMIT 30

38' wide two-lane cross-section with bicycle lane markings in both directions.

Roadway Context

- Single family residential
- Sidewalks along both sides of roadway
- Connections to West Park
- Crosswalks at intersections



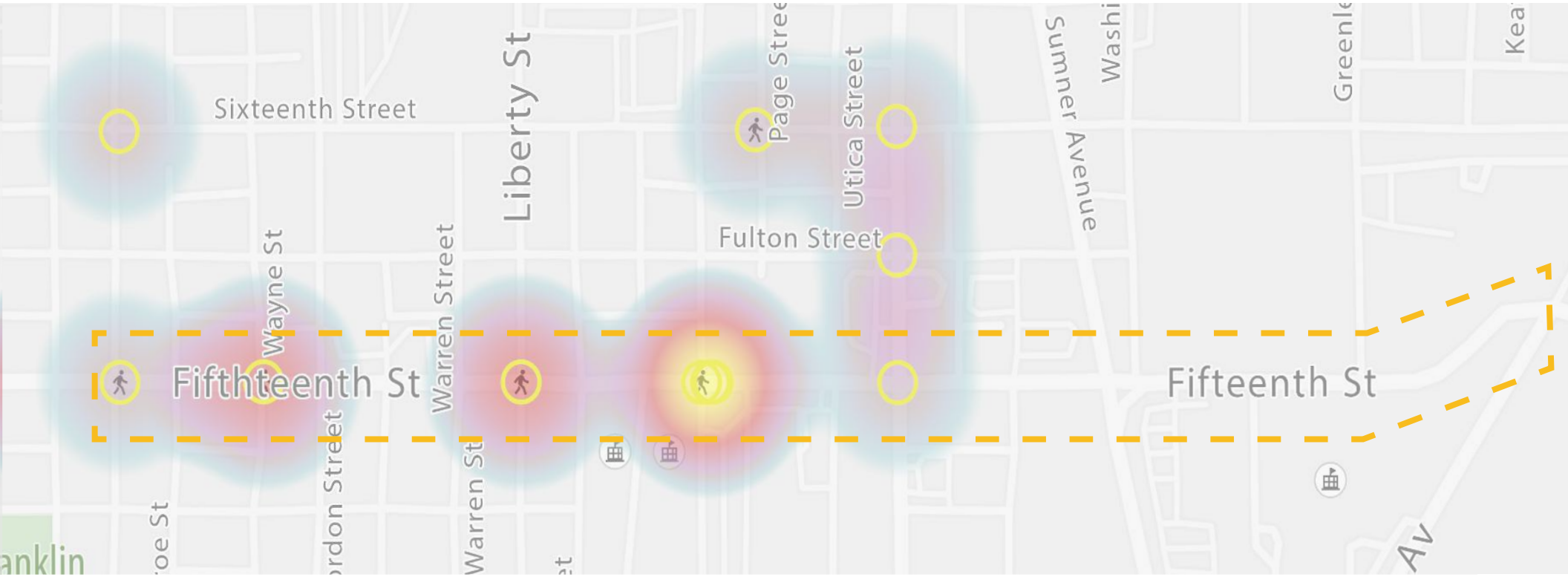
Section 3 - Chew Street to Roth Avenue

SPEED LIMIT 30

40' wide two-lane cross-section with bicycle lane markings in both directions.

Roadway Context

- Primarily commercial with some residential
- Sidewalks along both sides of roadway
- Intermittent on-street parking
- Crosswalks at intersections
- High-injury crash cluster at Allen Street near Luis Ramos Elementary School

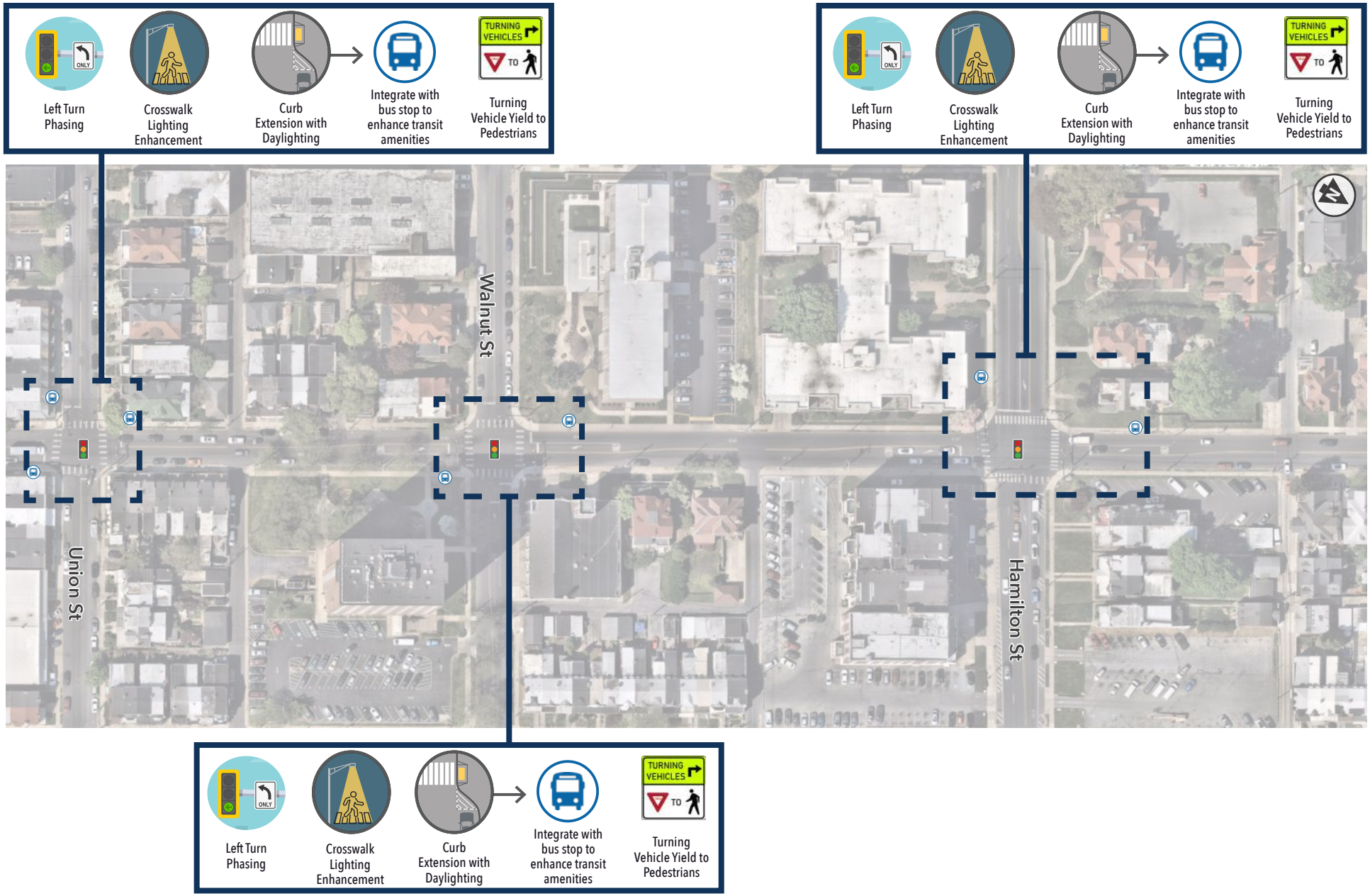


15TH STREET CORRIDOR

Section 1 Concept Plan - Ward Street to Union Street

15TH STREET CORRIDOR

Section 1 Concept Plan - Union Street to Hamilton Street



15TH STREET CORRIDOR

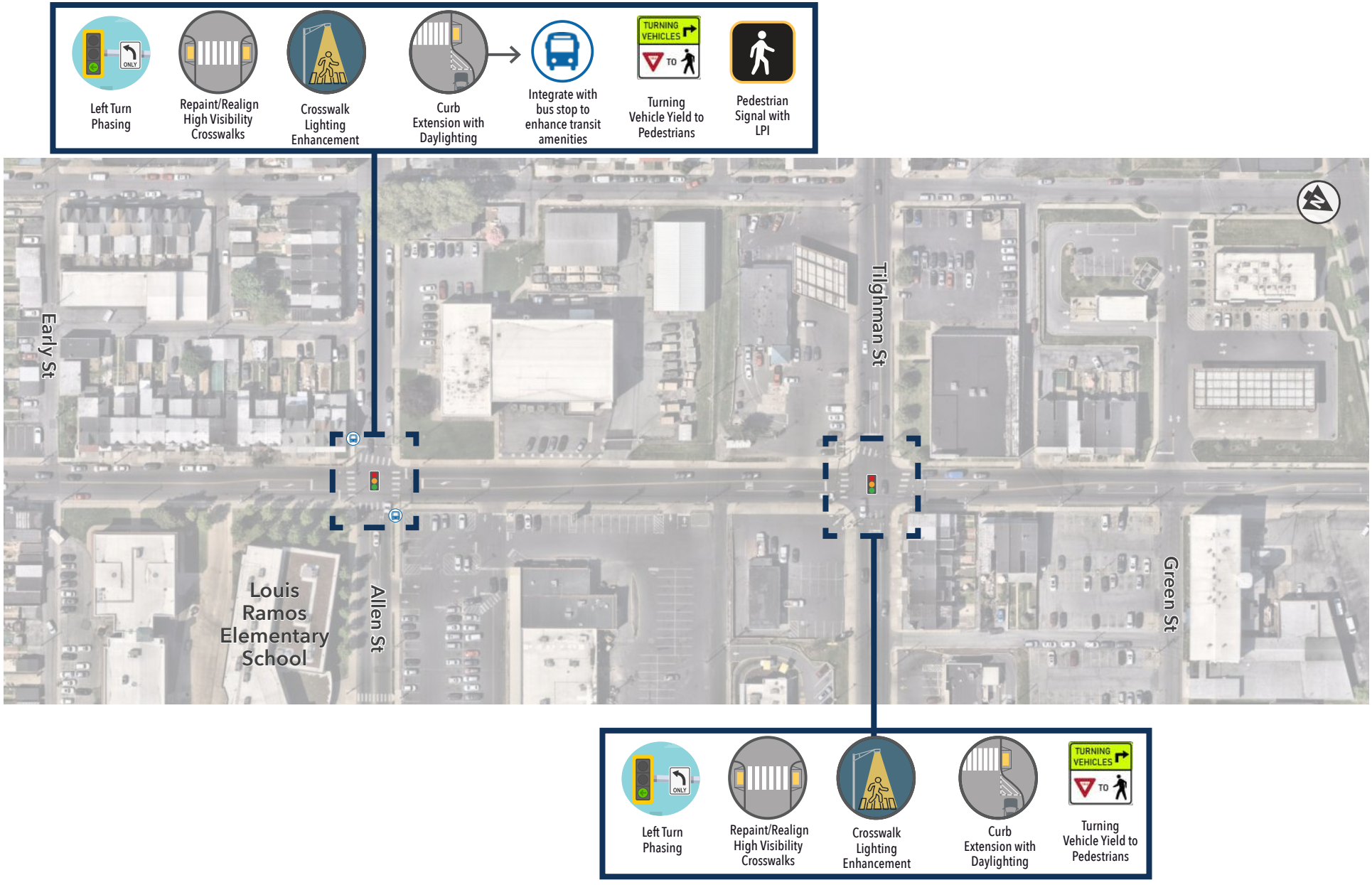
Section 2 Concept Plan - Linden Street to Chew Street

15TH STREET CORRIDOR

Section 3 Concept Plan - Chew Street to Liberty Street

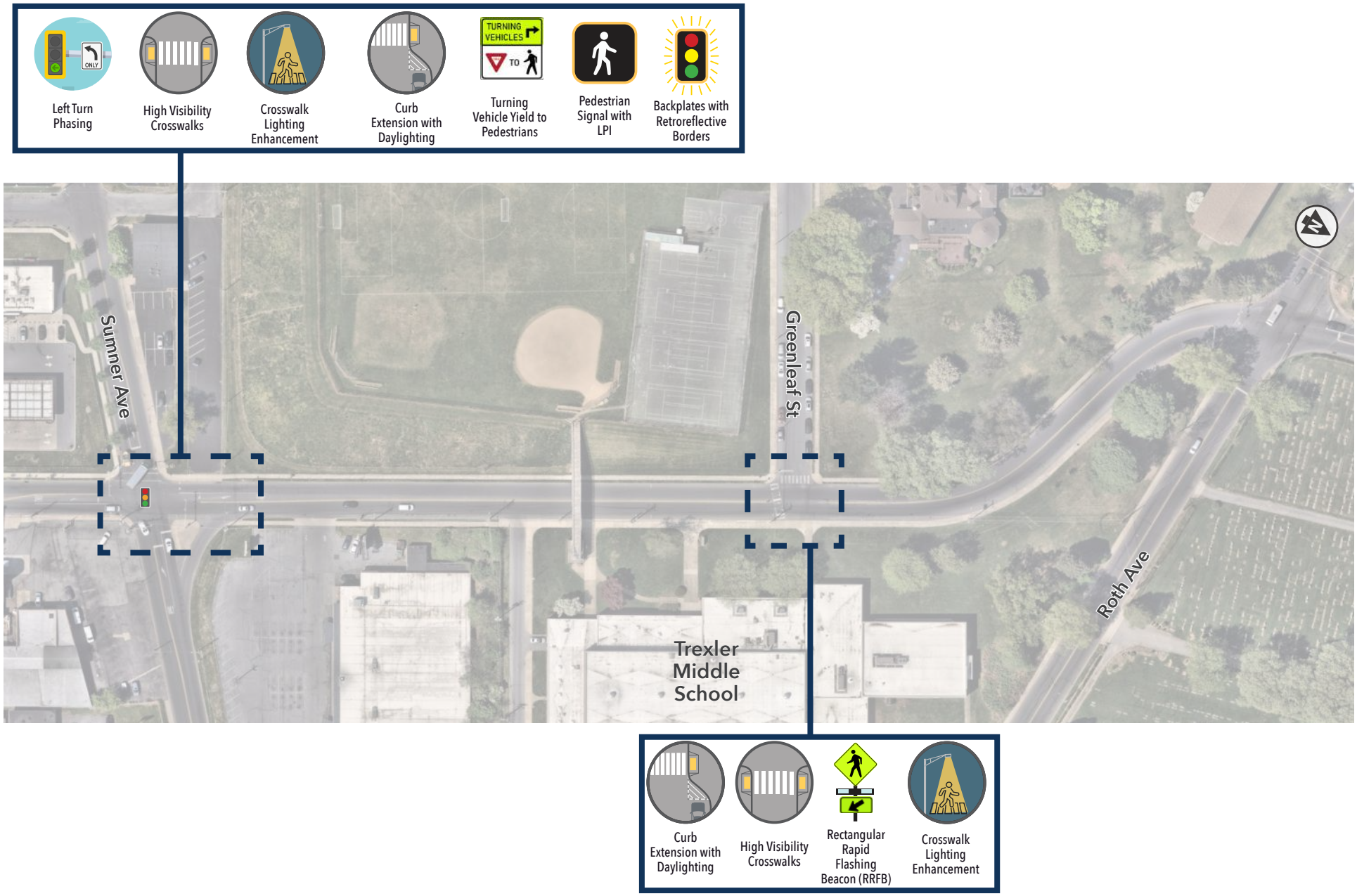
15TH STREET CORRIDOR

Section 3 Concept Plan - Early Street to Green Street



15TH STREET CORRIDOR

Section 3 Concept Plan - Sumner Avenue to Roth Avenue



AMERICAN PARKWAY CORRIDOR

Corridor Overview

American Parkway has safety issues related to speeding throughout the corridor as well as lack of safe pedestrian crossings at signalized intersections. Proposed improvements will focus on countermeasures that contribute to pedestrian safety improvements and traffic calming to lower motor vehicle speeds. The corridor is predominantly commercial, featuring both general commercial and industrial areas, including notable landmarks like Coca Cola Park. There is no on-street parking allowed throughout the corridor. Pedestrian infrastructure varies, with some areas having sidewalks and others lacking them. There are some crosswalks at major intersections that are signal-controlled. American Parkway is a City-owned road.

PLANNING LEVEL COST ESTIMATE

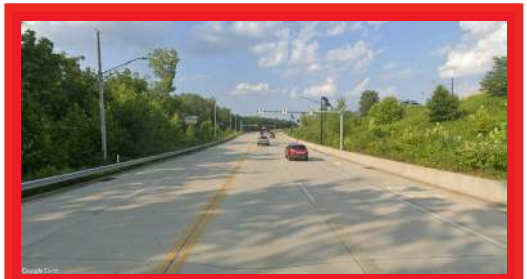
$1,696,000

Section 1 - Union Street to Gordon Street

The area is primarily commercial with minimal residential housing, no on-street parking, and sidewalks on the east side of the roadway.

Concept Plans

- Union Street to Gordon Street



Section 2 - Gordon Street to Airport Road

The area is primarily commercial and industrial, no on-street parking, and limited pedestrian access routes without sidewalks.

Concept Plans

- Gordon Street to Sumner Avenue
- Sumner Avenue to Lehigh River
- Dauphin Street to Business Park Lane
- St. Luke's Way to Airport Road

PROPOSED IMPROVEMENTS

- Convert painted median islands to raised, curbed islands with landscaping, and add low landscaping in existing concrete islands.
- Add speed display signs in both directions at selected locationsalong the corridor.
- Add curve warning signs and rumble stripes north and south of the curve near Tilghman Street.
- Add high visibility crosswalks, leading pedestrian intervals, "No Turn on Red" signs and pedestrian countdown timers at all signalized intersections.
- Add street trees at regular spacing parallel to the roadway where currently not present to visually narrow the roadway corridor and create side friction to lower vehicle speeds.
- Add curb extensions at Front Street/American Parkway.
- Consider a shared use path connection from the existing Jordan Creek Greenway to the proposed Riverside Drive Trail using the former railroad corridor south of Sumner Avenue, a sidepath/sidewalk along Sumner Avenue, crosswalk at Sumner Avenue/American Parkway signal, shared use path/shared roadway design along Bridge Street, and trail through stormwater management area west of American Parkway to the new intersection of Jordan Drive/Riverside Drive to cross over to the proposed trail.

Section 1 – Union Street to Gordon Street

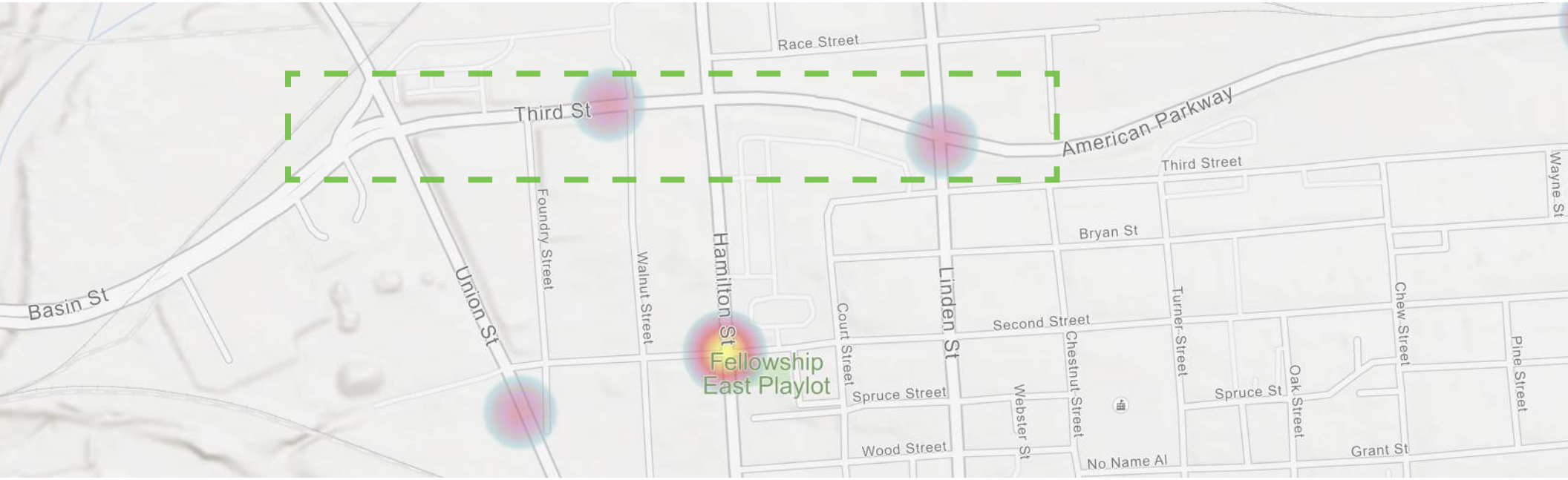
SPEED LIMIT

35

Four-lane cross-section with two travel lanes in each direction.

Roadway Context

- Primarily commercial with minimal residential housing
- No on-street parking permitted
- Sidewalks along east side of roadway
- Crosswalks at major intersections (signal-controlled)



AMERICAN PARKWAY CORRIDOR

Section 2 – Gordon Street to Airport Road

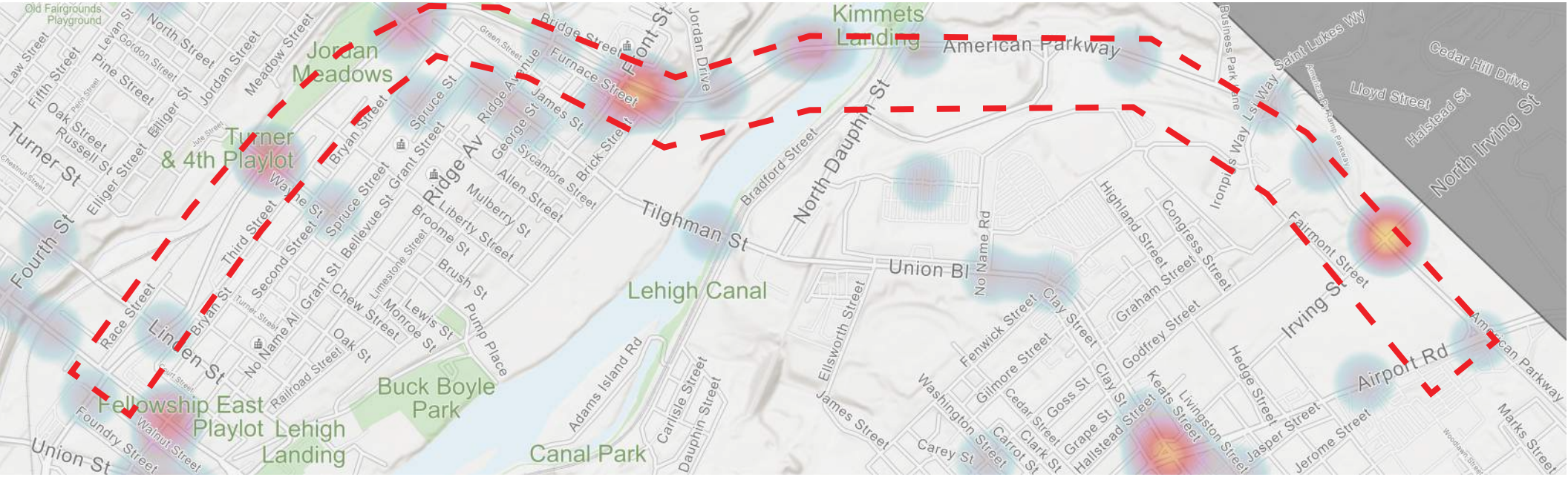
SPEED LIMIT

40

Four-lane cross-section with two travel lanes in each direction.

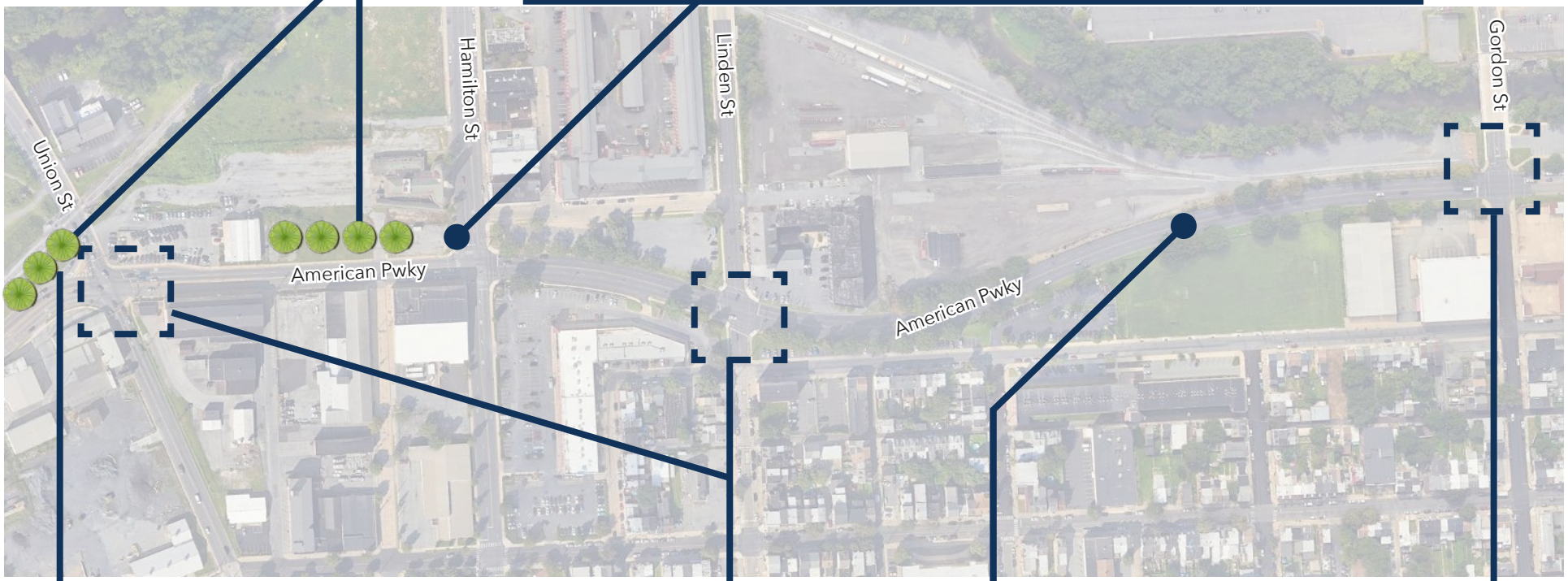
Roadway Context

- Primarily commercial (industrial) and Coca Cola Park
- No on-street parking permitted
- No sidewalks and limited pedestrian access routes along route
- Crosswalks at major intersections (signal-controlled)



AMERICAN PARKWAY CORRIDOR

Section 1 Concept Plan - Union Street to Gordon Street

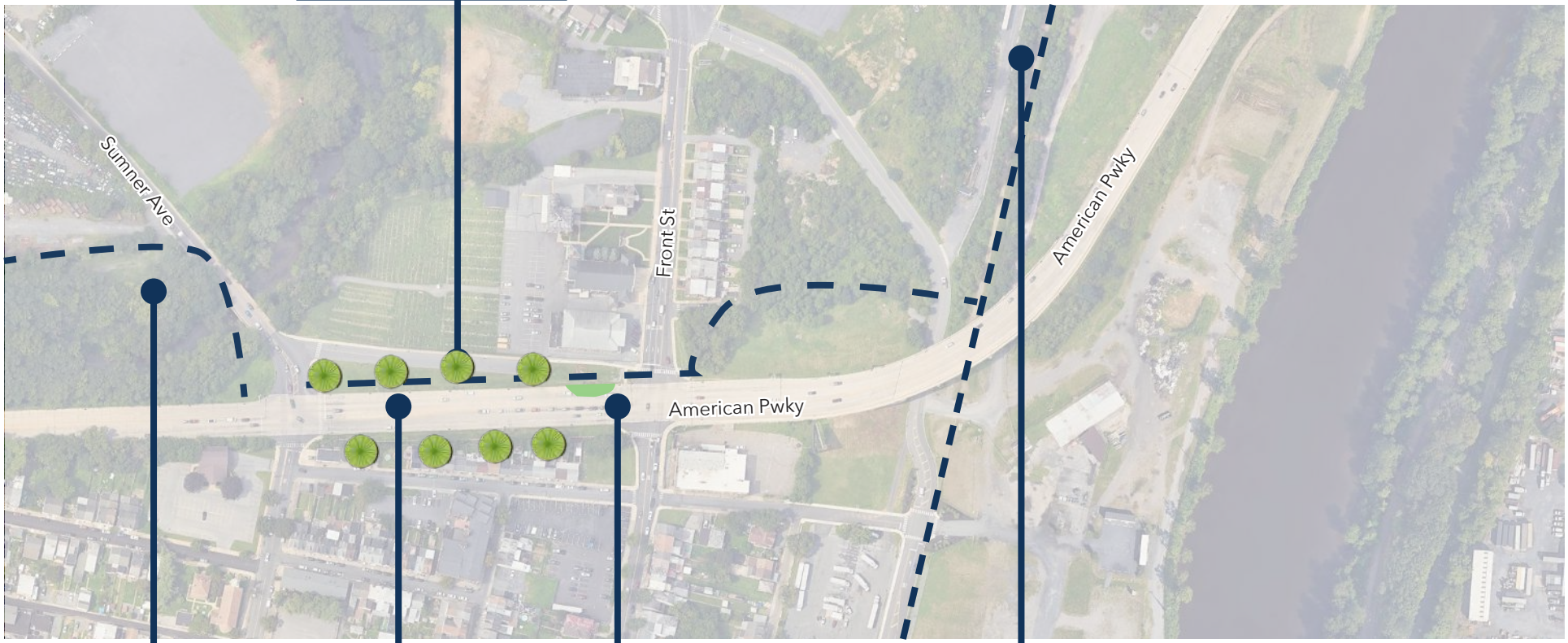


AMERICAN PARKWAY CORRIDOR

Section 2 Concept Plan – Gordon Street to Sumner Avenue

AMERICAN PARKWAY CORRIDOR

Section 2 Concept Plan - Sumner Avenue to Lehigh River

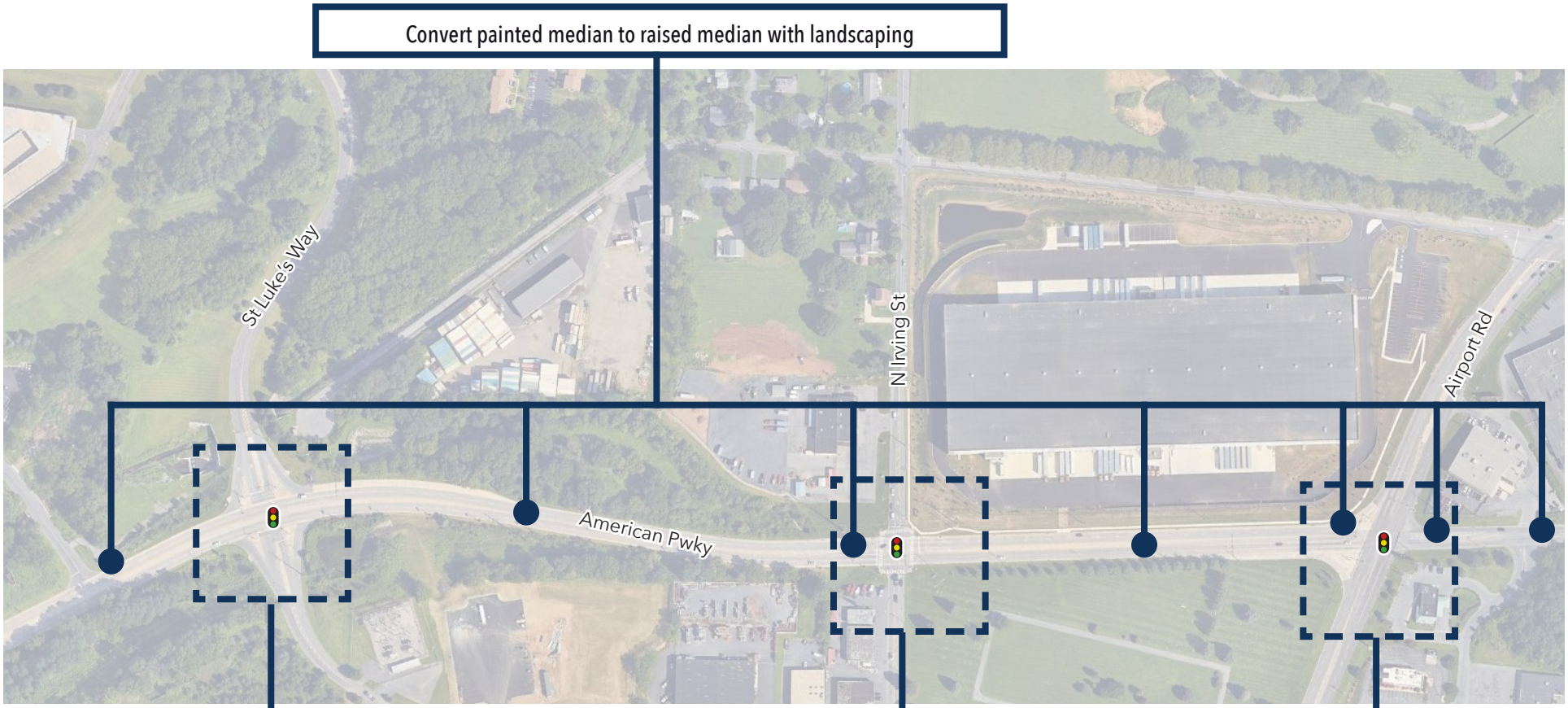


AMERICAN PARKWAY CORRIDOR

Section 2 Concept Plan – Dauphin Street to Business Park Lane

AMERICAN PARKWAY CORRIDOR

Section 2 Concept Plan - St. Luke's Way to Airport Road



EMMAUS AVENUE

Corridor Overview

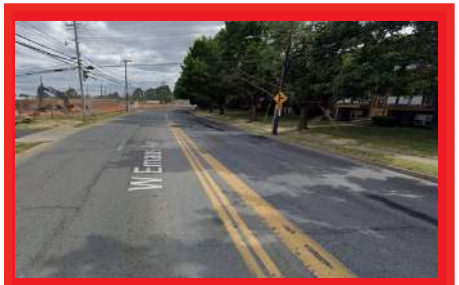
The Emmaus Avenue Corridor is an example of a suburban corridor that experiences both high traffic volumes and vehicle speeds. High traffic speeds are likely the result of a posted 40 MPH speed limit, wide roadway widths, and stretches of roadway with wide gaps between traffic signals. The corridor features a wide range of land uses ranging from commercial (including two major grocery stores), apartment buildings, single family residential homes, LANTA transit stops, and South Mountain Middle School. The corridor also has two intersections (Emmaus Avenue/12th Street; Emmaus Avenue/Menges Avenue/Mack Boulevard/Lancaster Avenue) with challenging geometry that leads to unpredictability and conflicts. Emmaus Avenue is State Route 2002 and owned by PennDOT.

Section 1 - 31st Street to 27th Street

The area is primarily residential and commercial including Giant Grocery.

Concept Plans

- 31st Street to 27th Street



Section 2 - 27th Street to 10th Street

The area is primarily commercial with light industrial and residential.

Concept Plans

- 27th Street to Roy Street
- Roy Street to 10th Street
- Detail: Intesection Redesign

Section 3 - 10th Street to 4th Street

The area is largely single family residential with connections to South Mountain Middle School.

Concept Plans

- 10th Street to Church Street
- Church Street to 4th Street

PLANNING LEVEL COST ESTIMATE

$2,279,340

PROPOSED IMPROVEMENTS

- Traffic calming.
  - » Reduce speed limit to 35 MPH.
  - » Add pedestrian refuge islands with curb extensions and crosswalks at traffic non signalized intersections.
  - » Add rectangular rapid flashing beacons (RRFB) at midblock locations with high pedestrian traffic.
  - » Reduce travel lane width and add a two way left turning lane or median.
- Strategies to improve predictability and reduce turning conflicts at intersections.
  - » Prohibit right turn on red movements.
  - » Add pedestrian signals with leading pedestrian intervals (LPIs).

EMMAUS AVENUE CORRIDOR

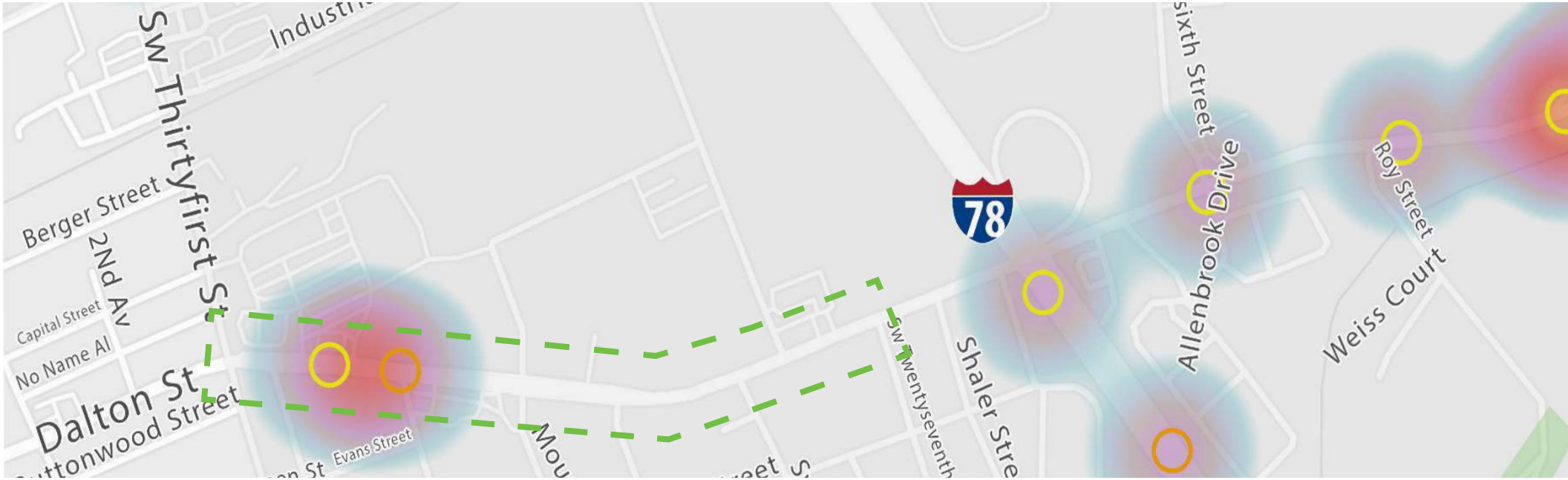
Section 1 - 31st Street to 27th Street

SPEED LIMIT 40

38' wide two-lane cross-section with intermittent painted center median.

Roadway Context

- Mix of commercial and residential
- Sidewalks along both sides of roadway but gaps along the southern side
- High-injury crash cluster between 31st Street and 30th Street



EMMAUS AVENUE CORRIDOR

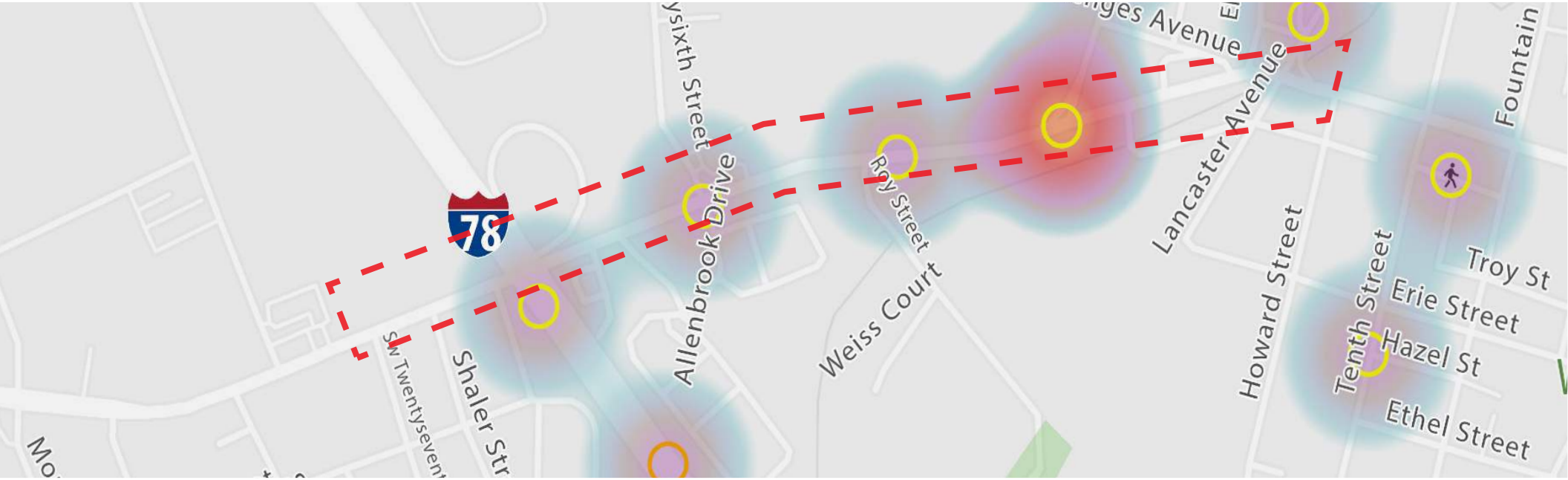
Section 2 - 27th Street to 10th Street

SPEED LIMIT 40

50' wide four-lane cross-section with intermittent center raised median transitioning to 38' three-lane cross-section.

Roadway Context

- Mix of commercial, light industrial, and higher density apartments
- Sidewalks along both sides of roadway but gaps along norther side
- High-injury crash cluster at 12th Street



Section 3 - 10th Street to 4th Street

SPEED LIMIT 35

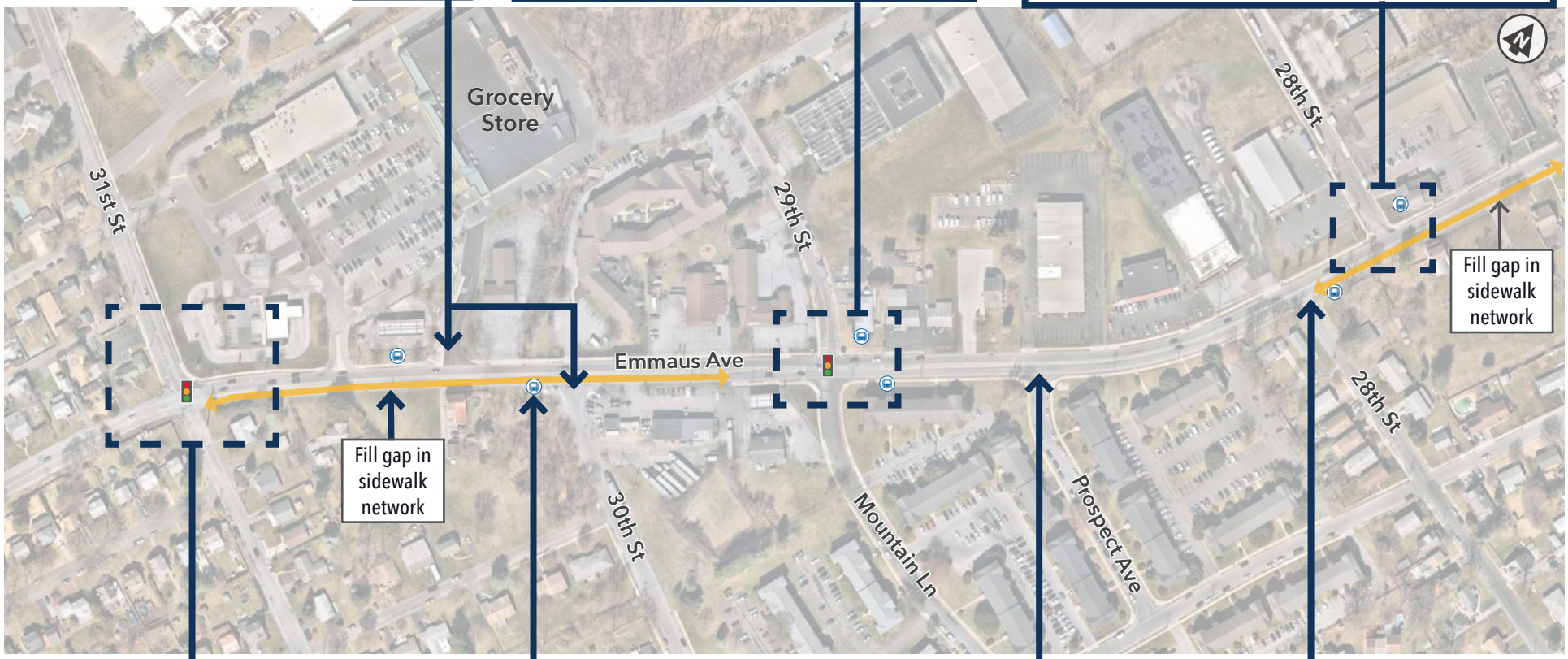
38' wide two-lane cross-section with center turning lane at signalized intersections.

Roadway Context

- Primarily single family residential
- Sidewalks along both sides of roadway
- High-Injury crash clusters at Lumber Street and 8th Street
- Connections to South Mountain Middle School

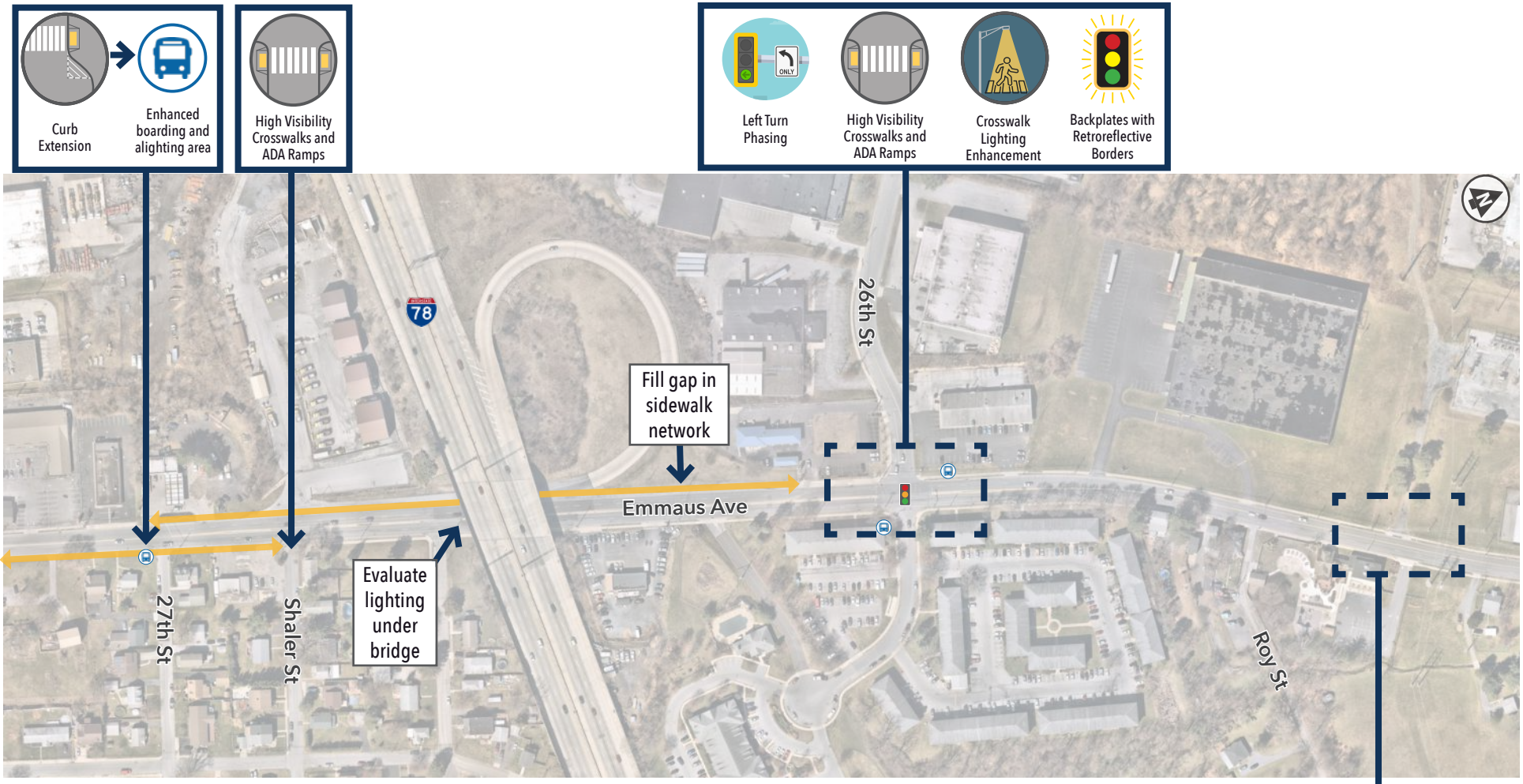
EMMAUS AVENUE CORRIDOR

Section 1 Concept Plan - 31st Street to 27th Street



EMMAUS AVENUE CORRIDOR

Section 2 Concept Plan - 27th Street to Roy Street



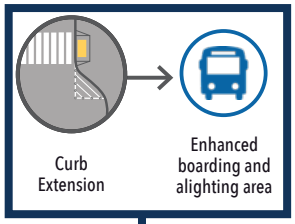
Traffic Calming Road Diet

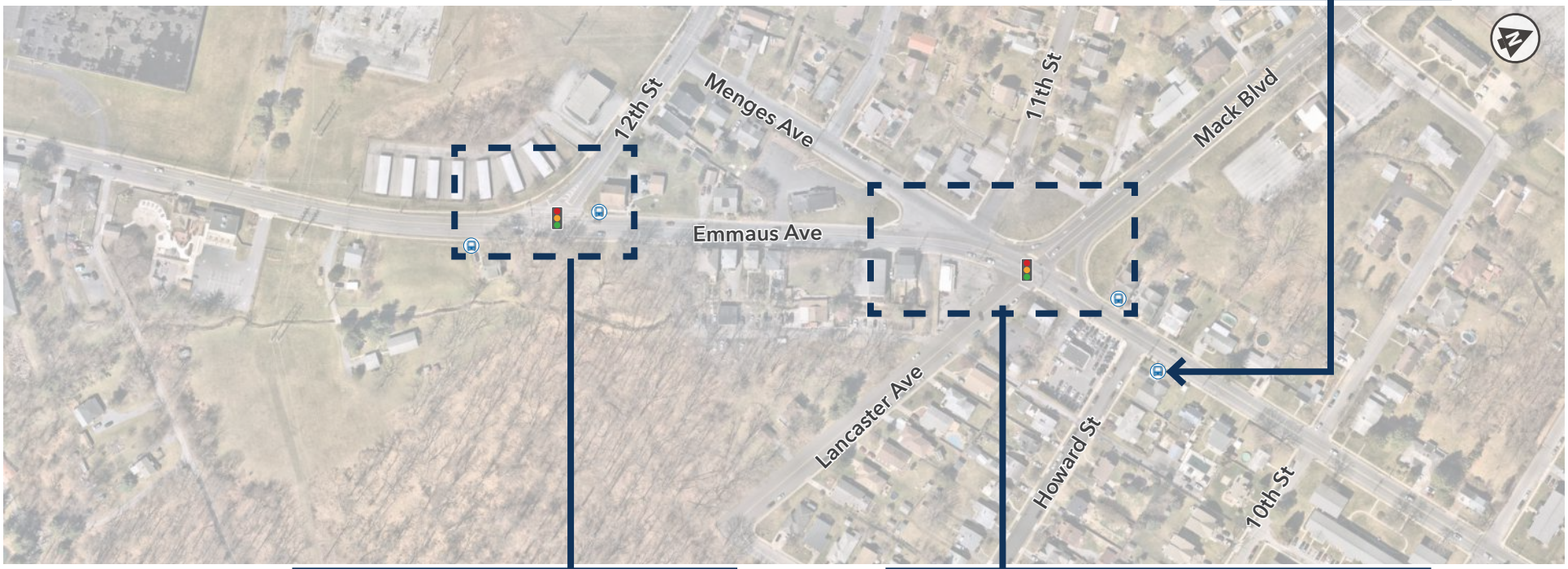
Eliminate one eastbound lane and install combination of two-way left turning lane or landscaped median where turns are not necessary. This treatment is applicable on existing three- or four-lane segments of roadway throughout Section 2 of the corridor.

EMMAUS AVENUE CORRIDOR

Section 2 Concept Plan - Roy Street to 10th Street

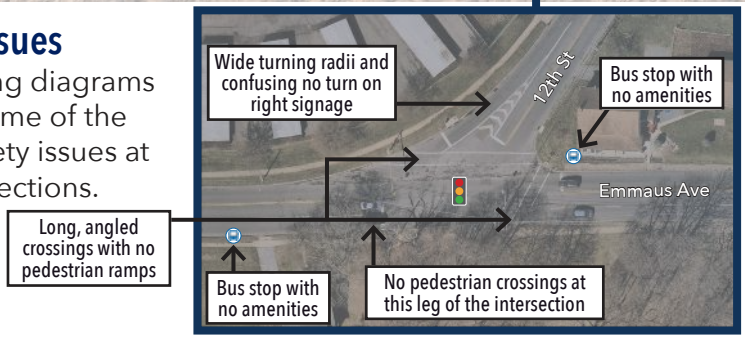
This section of the corridor features two distinctly challenging intersections that present safety concerns for all road users. The first at Emmaus Avenue/12th Street features very wide turning radii and long, angled pedestrian crossings. The second at Emmaus Avenue/Menges Avenue/Mack Boulevard/Lancaster Avenue features multiple legs and turning movements that lead to confusion and unpredictability.

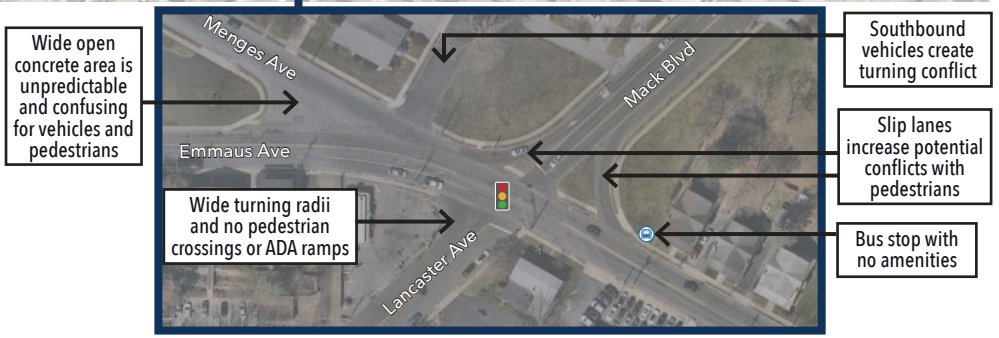




Existing Issues

The following diagrams highlight some of the existing safety issues at these intersections.





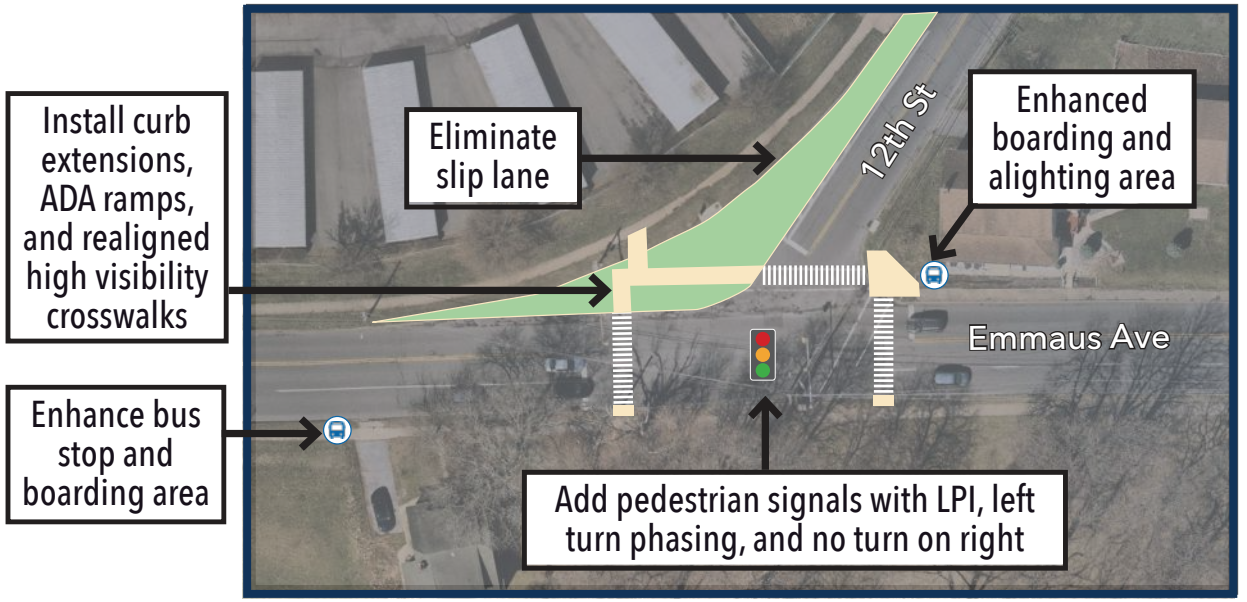
DETAILED CONCEPT PLAN

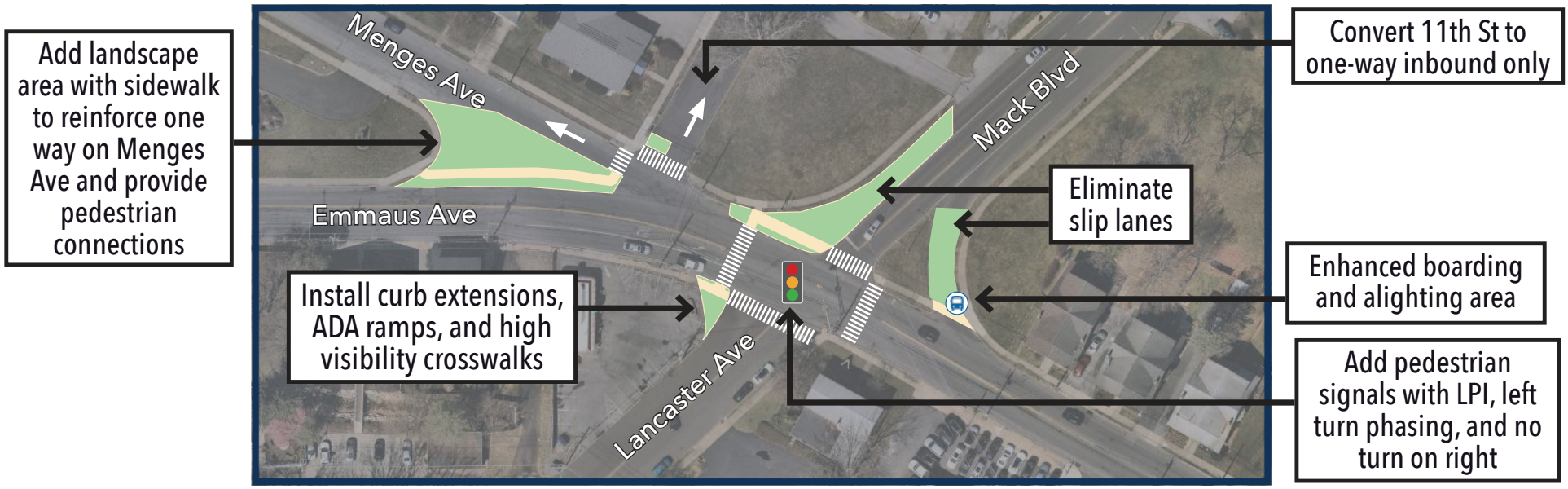
EMMAUS AVENUE CORRIDOR

Potential Intersection Redesign

The accompanying graphics show some possible strategies to improve the intersections. These countermeasures aim to enhance safety and predictability by simplifying the turning movements for vehicles as well as clearly defining safe, comfortable areas for pedestrians to cross the roadway.

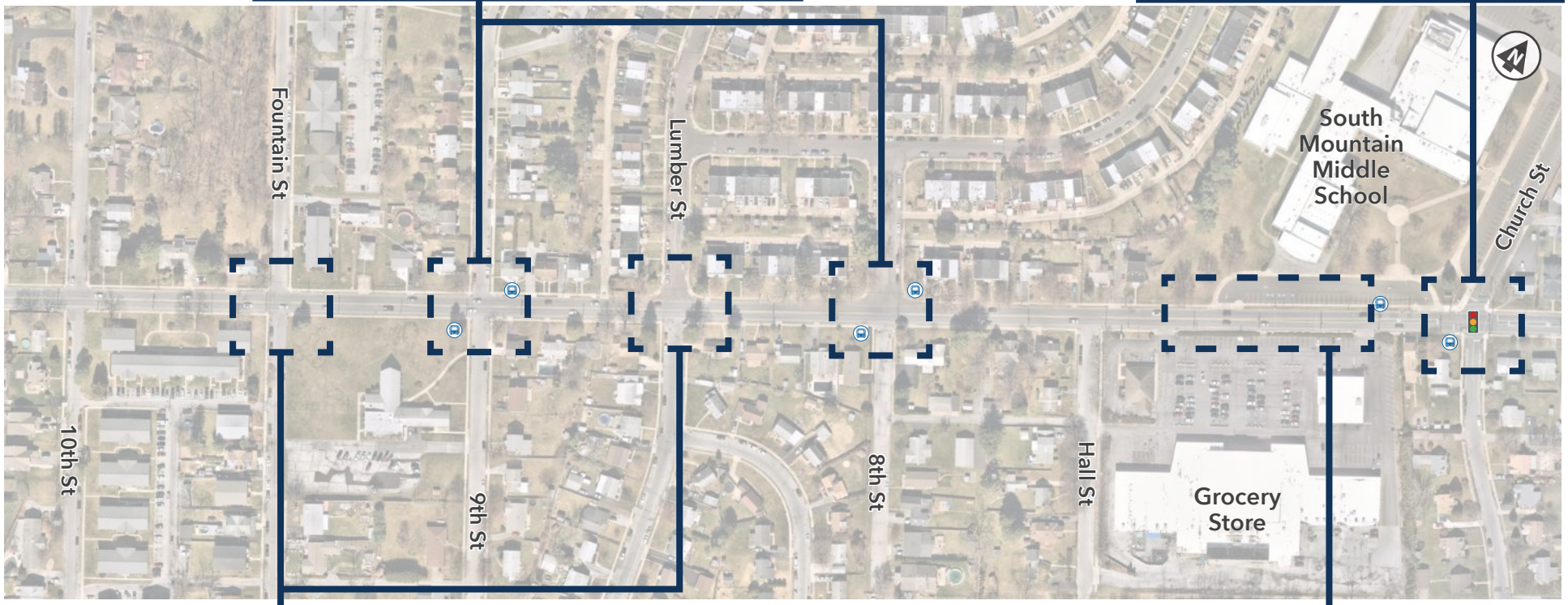
These types of treatments can be implemented in a phased approach using paint and quick build materials first to test the concepts before installing more permanent solutions. This approach can also be applied to other intersections throughout the city that have similar designs and safety issues.





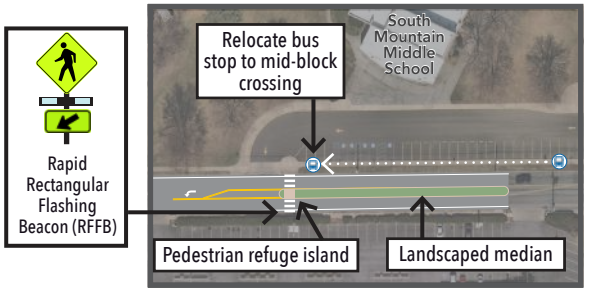
EMMAUS AVENUE CORRIDOR

Section 3 Concept Plan - 10th Street to Church Street



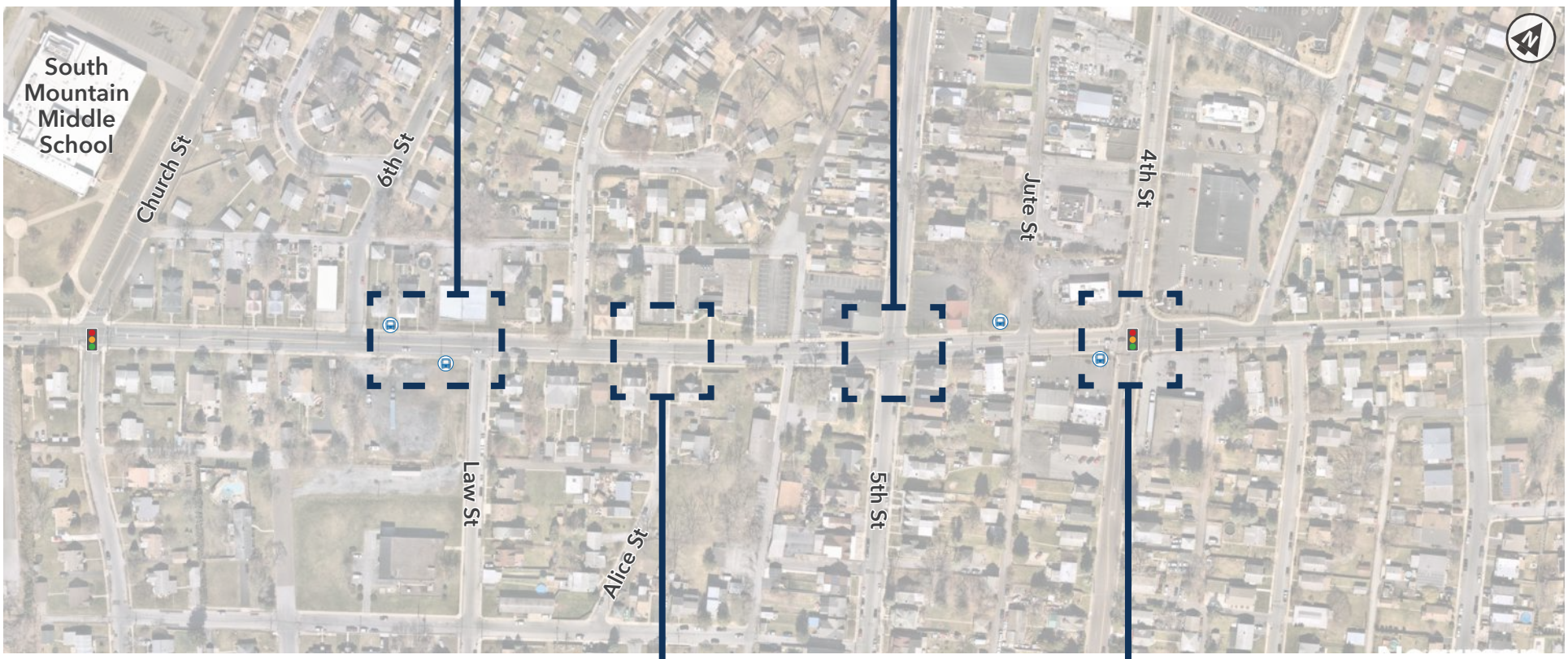
Enhanced Pedestrian Crossing

Enhancing the pedestrian crossing with a RRFB, pedestrian refuge, and crosswalk could improve safe access to South Mountain Middle School, the relocated bus stop, and the grocery store to the south. A landscaped median could also help calm traffic along this stretch of roadway.



EMMAUS AVENUE CORRIDOR

Section 3 Concept Plan - Church Street to 4th Street



HAMILTON STREET

Corridor Overview

This corridor has a mix of safety issues related to speeding vehicles and intersection conflicts. The combination of safety countermeasures in these concept plans will help Allentown achieve their Vision Zero goals on one of the city's most prominent main street corridors. Hamilton Street is State Route 222 in this area under the jurisdiction of PennDOT.

PLANNING LEVEL COST ESTIMATE

$4,041,000

Section 1 - Ott Street to 19th Street

The area is primarily residential with Cedar Beach Park and some small businesses, no on-street parking, and sidewalks on both sides of the roadway.

Concept Plans

- Ott Street to 19th Street
- Detail: Pedestrian Island
- Detail: Ott Street Roundabout

Section 2 - 19th Street to 10th Street

The area is primarily commercial with a mix of residential, on-street parking, with sidewalks and crosswalks at major intersections.

Concept Plans

- 19th Street to 15th Street
- 15th Street. to 12th Street
- 12th Street to 9th Street

Section 3 - 10th Street to 5th Street

The area is densely commercial with some residential housing, on-street parking, and pedestrian access routes with sidewalks.

Concept Plans

- 9th Street to 5th Street
- Detail: 7th and Hamilton Redesign

PROPOSED IMPROVEMENTS

- Consider installation of a modern roundabout at the intersection of Hamilton Street/Ott Street. This will serve as a major traffic calming element as well as a gateway to the City of Allentown.
- Include ADA ramp upgrades, high visibility crosswalks, lighting improvements, pedestrian countdown timers and leading pedestrian intervals (LPIs) at signalized intersections throughout the corridor.
- Add a raised concrete island at 21st Street with a RRFB with street lighting to create formal trail crossing between Cedar Beach Park and Union Terrace Park/Amphitheater as part of the future Cedar Beach Trail network.
- Add curb extensions for existing crosswalk / RRFB at St. Cloud Street to St. Luke's Hospital building.
- Add white edgelines for parking lanes where on-street parking is permitted.
- Consider curb extensions with intersection daylighting for bus stops at 13th, 14th and 15th Streets and other intersections where feasible in the corridor.
- Ongoing intersection improvement project at 7th and Hamilton Street will improve pedestrian and bicycle safety.
- Consider curb extensions, RRFB, intersection daylighting, and high visibility crosswalk at Penn Street/Hamilton Street for crosswalk to City Hall (similar to 6th Street at the Artwalk).
- Consider roadway realignment at the west end of Hamilton Street bridge.

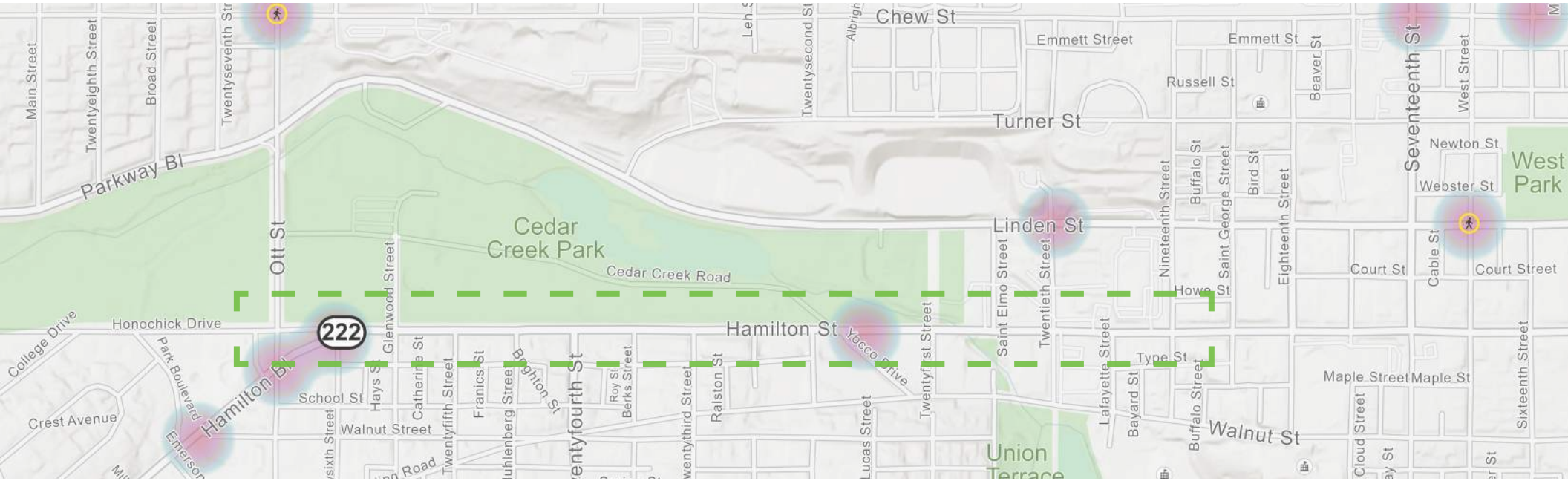
Section 1 – Ott Street to 19th Street

SPEED LIMIT 35

Four-lane cross-section with two travel lanes in each direction.

Roadway Context

- Primarily residential with Cedar Beach Park to the north and some small businesses near numbered streets
- Sidewalks along both sides of roadway
- Crosswalks at major intersections (numbered cross-streets and signal-controlled)



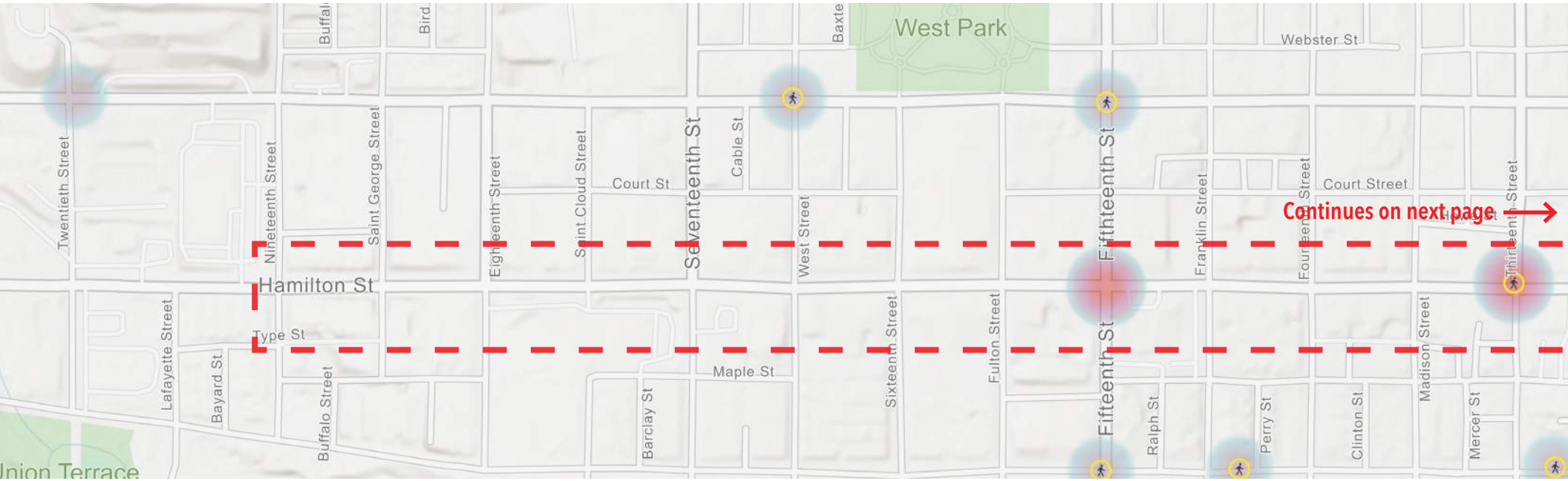
Section 2 - 19th Street to 10th Street

SPEED LIMIT 35

Three-lane cross-section (two eastbound travel lanes) with dedicated left turn lanes at

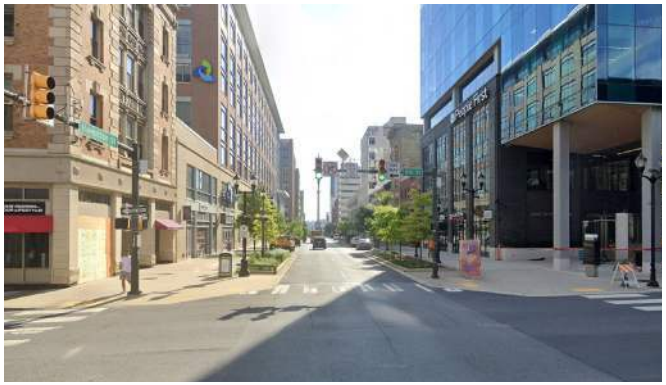
Roadway Context

- Mostly commercial with a mix of residential housing
- On-street parking permitted
- Sidewalks along both sides of roadway
- Crosswalks at major intersections (numbered cross-streets and signal-controlled) and intermittently elsewhere



Section 3 - 10th Street to 5th Street

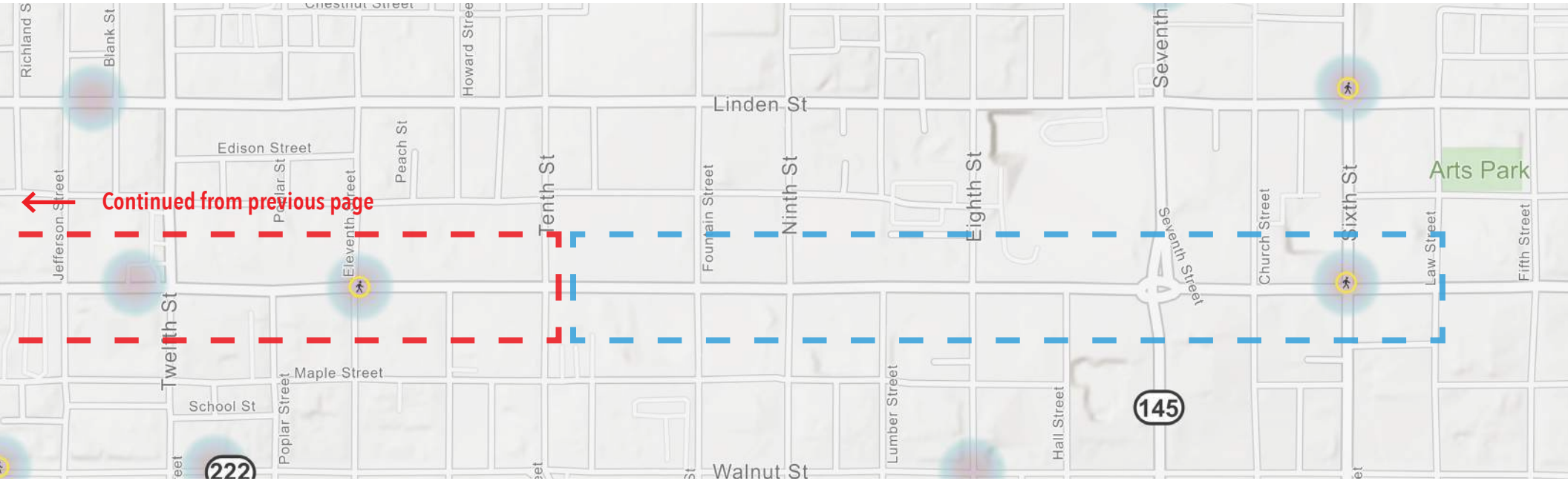
SPEED LIMIT 25



Two-lane cross-section (eastbound one way traffic).

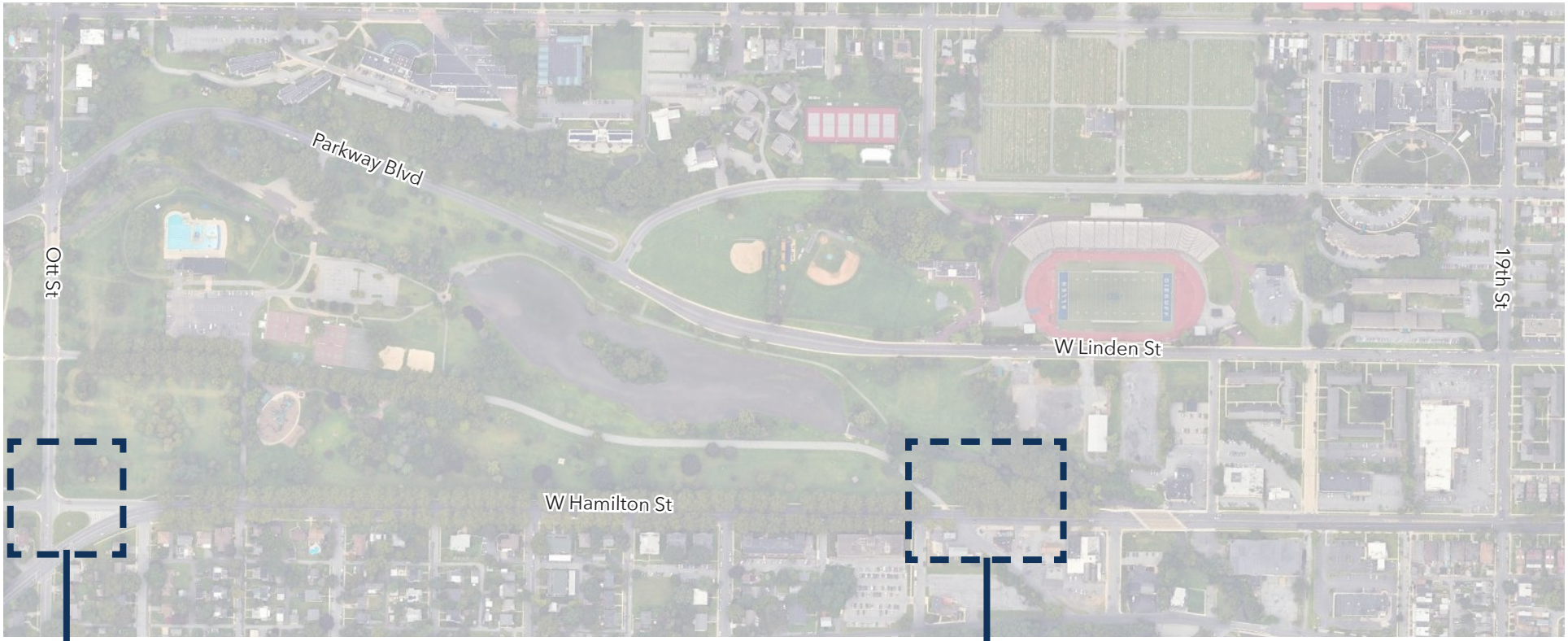
Roadway Context

- Downtown densely commercial with some residential housing
- On-street parking permitted
- Sidewalks along both sides of roadway
- Crosswalks at major intersections (numbered cross-streets and signal-controlled) and intermittently elsewhere



HAMILTON STREET CORRIDOR

Section 1 Concept Plan - Ott Street to 19th Street



SEE DETAILED CONCEPT PLAN

Geometric Roadway Improvement (install roundabout)

SEE DETAILED CONCEPT PLAN

High Visibility Crosswalk

Crosswalk Lighting Enhancement

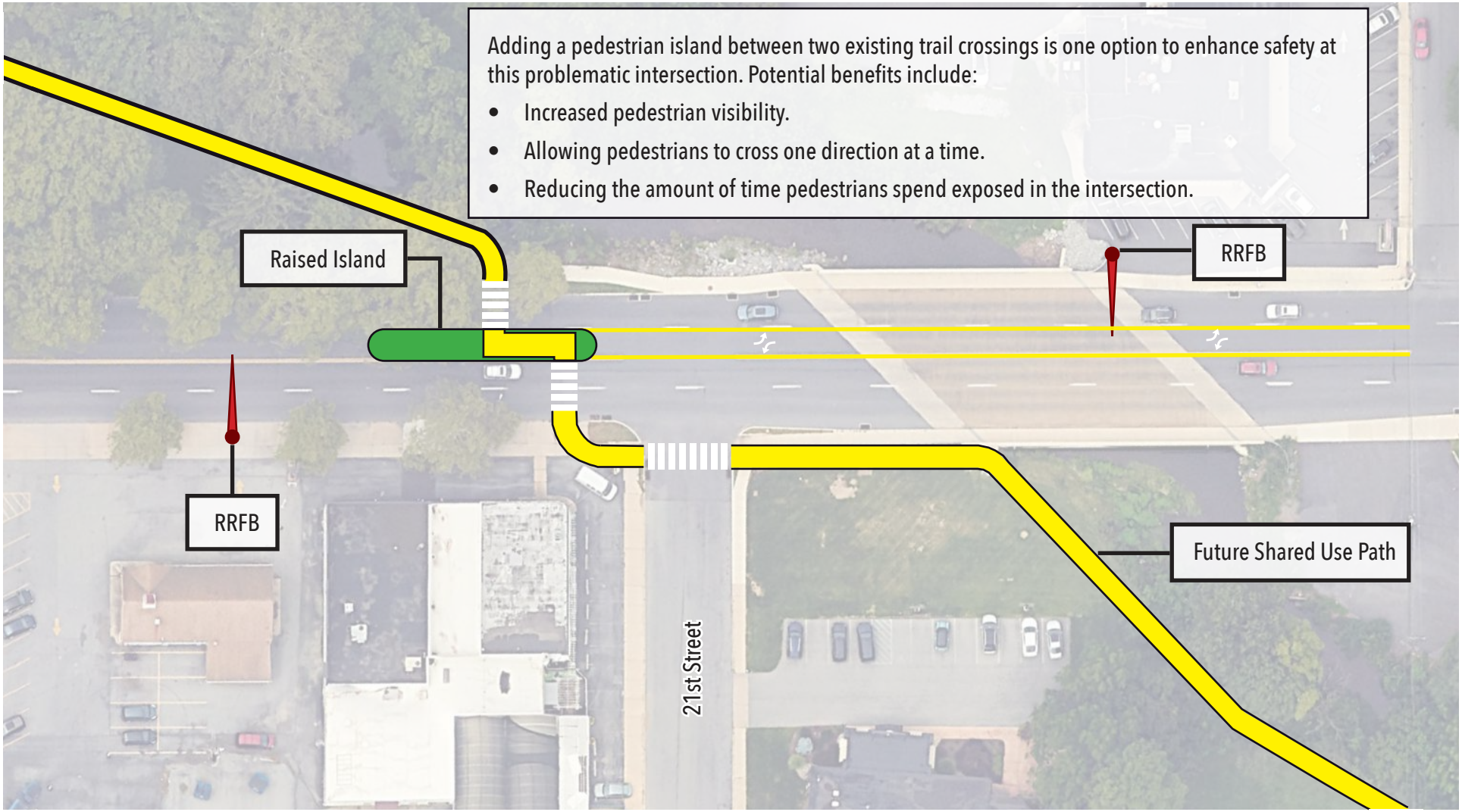
Rapid Rectangular Flashing Beacon (RRFB)

Pedestrian Island

DETAILED CONCEPT PLAN

HAMILTON STREET CORRIDOR

Pedestrian Island 21st Steet and Hamilton Street



DETAILED CONCEPT PLAN

HAMILTON STREET CORRIDOR

Hamilton Boulevard and Ott Street Roundabout

Rendering of possible roundabout design at the intersection of Hamilton Boulevard and Ott Street.

What is a Modern Roundabout?

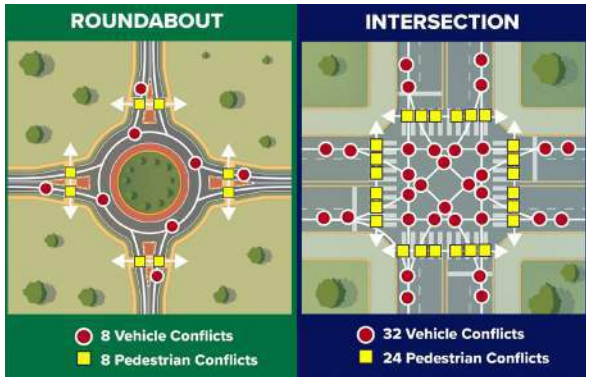
A modern roundabout is a circular intersection designed to manage traffic flow safely and efficiently. Unlike older traffic circles or rotaries, modern roundabouts feature specific design elements that prioritize efficiency and reduce collision risks. Key characteristics include a circular roadway where vehicles travel counterclockwise, yield-on-entry rules, curved approaches, and low-speed limits typically between 15-25 mph. Additional features, such as splitter islands, guide traffic into the roundabout, protect pedestrians, and provide safe crossing points. Roundabouts differ from traffic circles as modern roundabouts have smaller footprints, priorities low speeds, include no stop signs or traffic signals, and require entering vehicles yield to traffic inside the roundabout compared to traffic circles.

Roundabouts are becoming an increasingly popular safety countermeasure in the US. Maryland currently has over 100, New York over 65, and Virginia over 30. The state with the most roundabouts is Washington with about 200 roundabouts.

Roundabouts	Traffic Circles
Low Speeds	High Speeds
Small Footprint	Large Footprint
Entering vehicles yield to traffic inside the roundabout	Vehicles inside circle yield to entering vehicles
No stop signs or traffic signals	Can include stop signs or traffic signals

Safety Benefits

Modern roundabouts offer significant safety advantages over traditional intersections. One of the most notable benefits is the reduction in conflict points. A traditional four-way intersection has 32 vehicle conflict points and 24 pedestrian conflict points, while a roundabout has only eight vehicle and eight pedestrian conflict points. The curved design and reduced speeds also lower the risk of severe collisions. Studies[1] show that roundabouts reduce fatal crashes up to 90%, injury crashes by 76%, and overall crashes by 35%. Furthermore, roundabouts virtually eliminate high-speed head-on and T-bone collisions, which are common at traditional intersections. Pedestrian safety is enhanced as well, with shorter crossing distances and refuge islands that allow them to cross one direction of traffic at a time.



Source: NY DOT 2024.

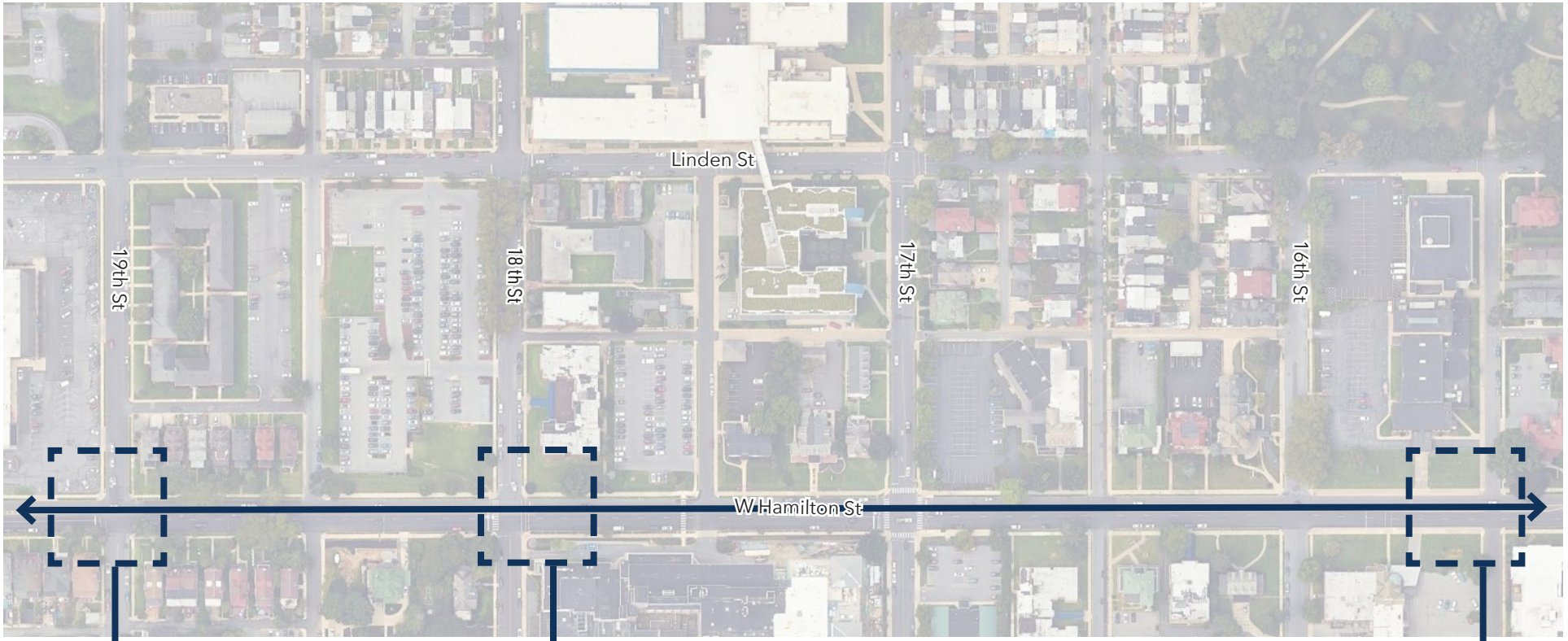
Traffic Capacity Benefits

In addition to improving safety, modern roundabouts enhance traffic flow and capacity. Unlike stop signs or traffic signals, roundabouts allow continuous vehicle movement, reducing delays and idle times. This makes them particularly effective during off-peak hours when vehicles would otherwise wait unnecessarily at red lights. Roundabouts typically carry about 30% more vehicles than similarly sized signalized intersections during peak flow conditions. Multi-lane roundabouts can handle higher traffic volumes, efficiently separating and directing traffic streams. Their ability to accommodate fluctuating traffic demand makes them an excellent choice for a wide range of road networks.

1 FHWA (n.d) Modern Roundabouts: A Safer Choice. https://highways.dot.gov/sites/fhwa.dot.gov/files/2022-06/fhwasa15016.pdf

HAMILTON STREET CORRIDOR

Section 2 Concept Plan - 19th Street to 15th Street



Backplates with Retroreflective Borders

Extend Streetscape Pedestrian Lighting

Striping roadway

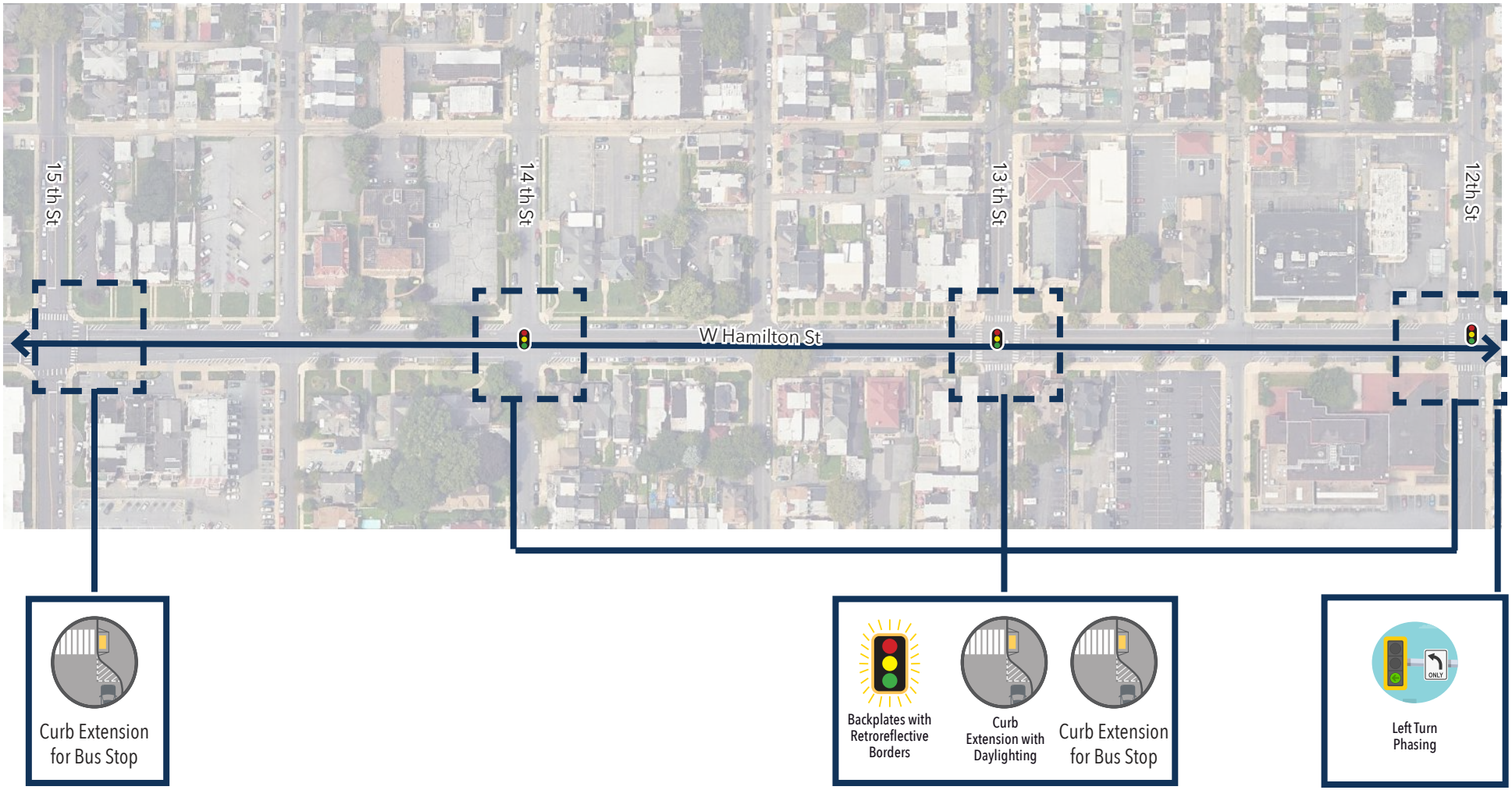
Curb Extension with Daylighting

Rectangular Rapid Flashing Beacon (RRFB)

High Visibility Crosswalk

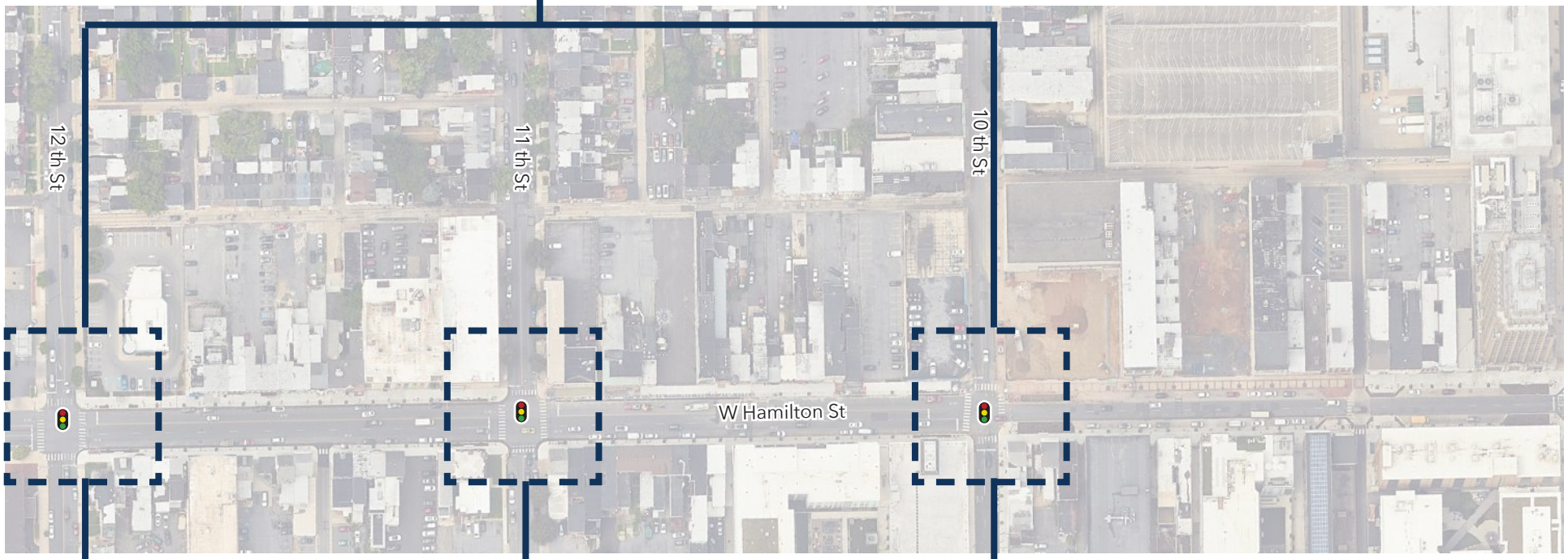
HAMILTON STREET CORRIDOR

Section 2 Concept Plan - 15th Street to 12th Street



HAMILTON STREET CORRIDOR

Section 2 Concept Plan - 12th Street to 9th Steet



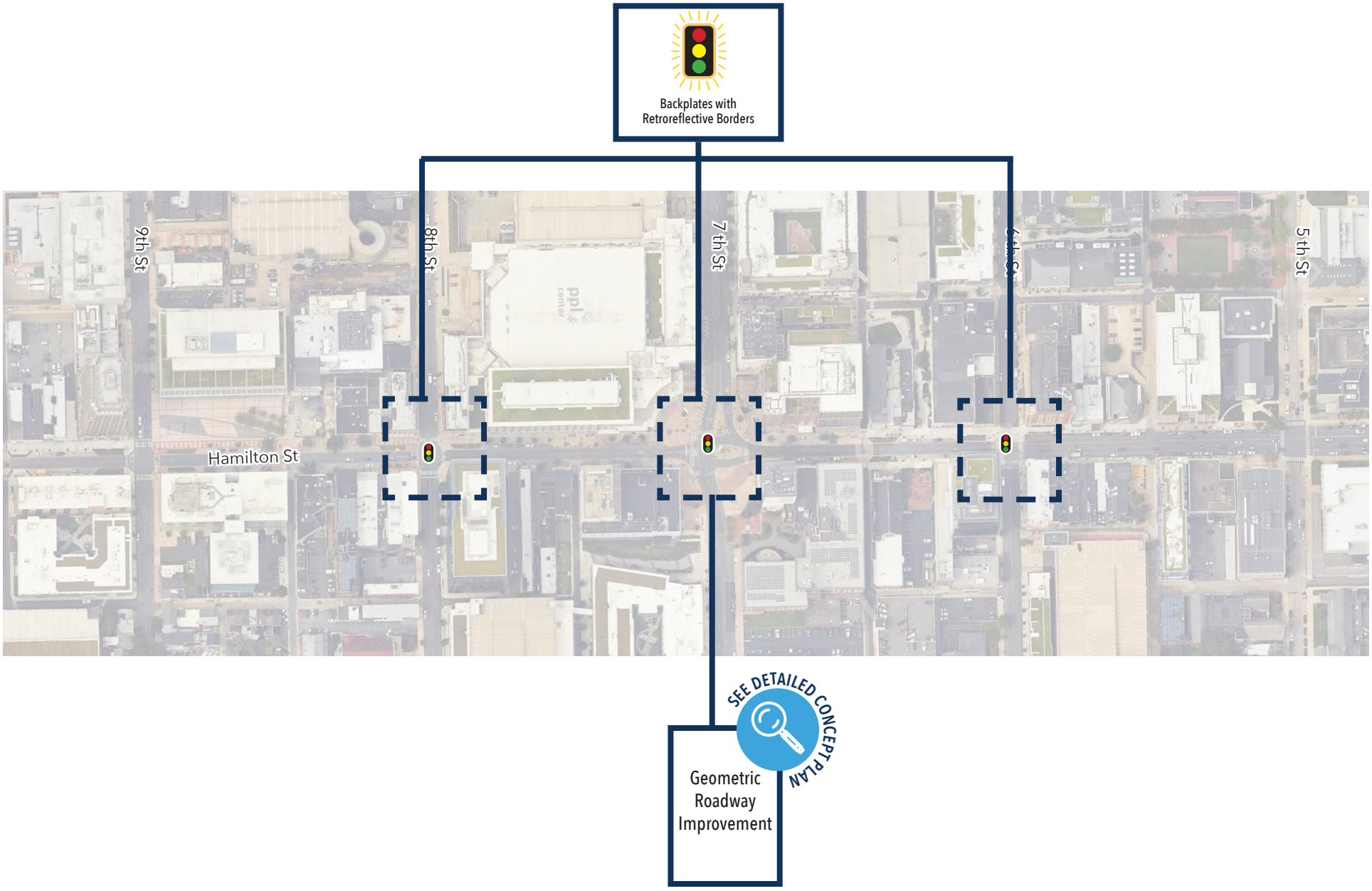
Left Turn Phasing

Backplates with Retroreflective Borders

Curb Extension with Daylighting

HAMILTON STREET CORRIDOR

Section 3 Concept Plan - 9th Street to 5th Street



DETAILED CONCEPT PLAN

HAMILTON STREET CORRIDOR

7th Street and Hamilton Street Redesign

HAMILTON STREET/HANOVER AVENUE

Corridor Overview

The Hamilton Street Corridor represents another primary piece of the high-injury network with a mix of land uses and roadway context. Section 1 is highly urbanized with many pedestrians that face difficult crossings over the wide, high traffic roadway. The corridor has a steep downhill as it approaches 4th Street leading to increased speeds before entering the more spread out commercial context of Section 2. This section also features a complicated intersection at Front Street as well as two bridges that lead to increased vehicle speeds. Section 3 features very high traffic volumes as well as a very difficult intersection at Hamilton Street/Hanover Avenue/Carlisle Street. This area is in close proximity to the D&L Trail, but does not currently have a direct connection. Hamilton Street is State Route 222 in this area under the jurisdiction of PennDOT.

PLANNING LEVEL COST ESTIMATE

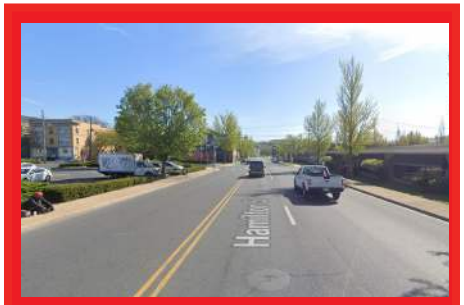
$1,654,240

Section 1- 6th Street to American Parkway

The area is primarily commercial with minimal residential housing, on-street parking and sidewalks on both sides.

Concept Plans

- 6th Street to Penn Street
- Penn Street to American Parkway

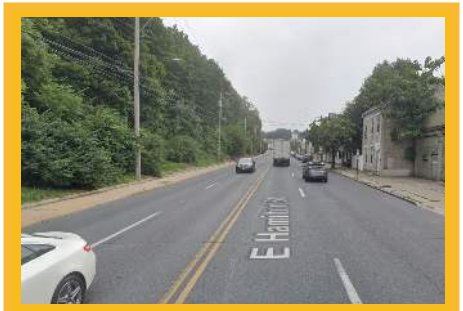


Section 2 -American Parkway to Front Street

The area is primarily commercial and light industrial, no on-street parking, and sidewalks on both sides.

Concept Plans

- American Parkway to 2nd Street
- 2nd Street to Front Street



Section 3 - Front Street to Carlisle Street

The area is primarily commercial with residential to north/south, intermittent on-street parking, and sidewalks on both sides.

Concept Plans

- Front Street to Albert Street
- Albert Street to Brook Street
- Brook Street to Carlisle Street
- Detail: Intersection

PROPOSED IMPROVEMENTS

- Systemic intersection upgrades along corridor including:
  - Daylighting.
  - Curb extensions.
  - High vsibility crosswalks.
  - Crosswalk lighting Enhancements.
  - Rectangular rapid flashing beacons (RRFB).
  - Pedestrian signals with leading pedestrian intervals (LPIs).
- Redesign intersection at Hamilton Street/Front Street.
- Redesign intersection at Hamilton Street/Hanover Avenue/Carlisle Street.
- Install sidewalk level bicycle lanes along corridor.

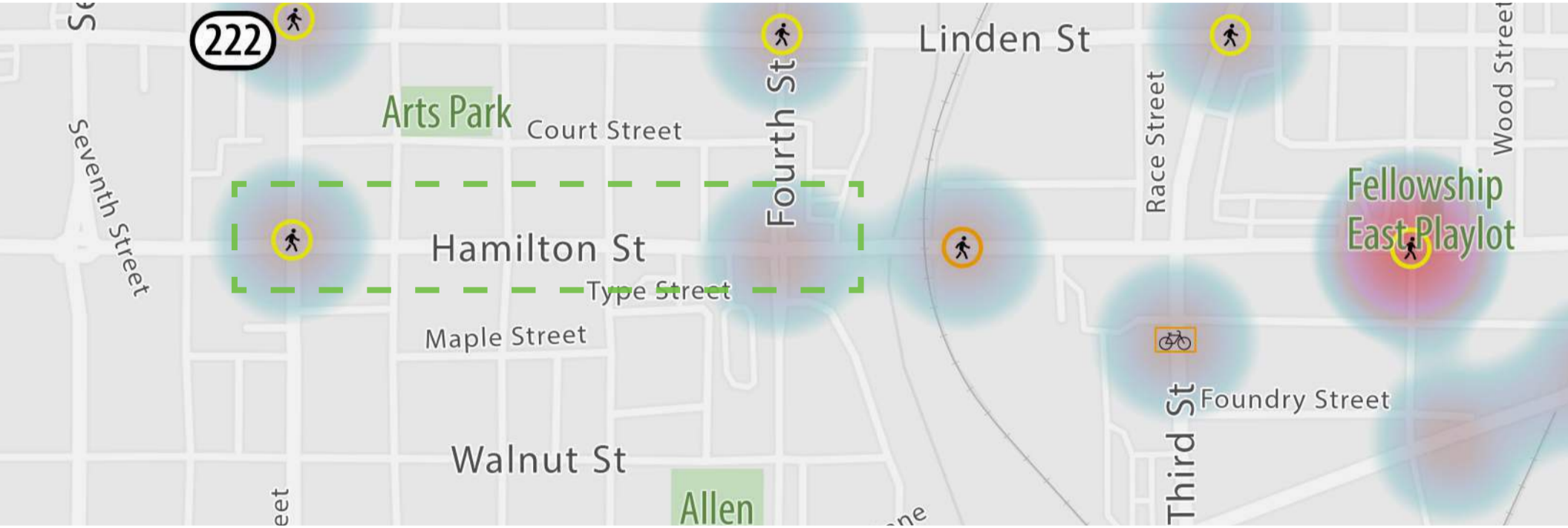
Section 1 - 6th Street to American Parkway

SPEED LIMIT 30

58' wide three-lane cross-section (two lanes eastbound) with sharrow markings in both directions.

Roadway Context

- Commercial
- On-street parking both sides
- Sidewalks along both sides of roadway
- Steep grade decline from 5th to 4th Street
- Unprotected midblock crossing at Penn Street



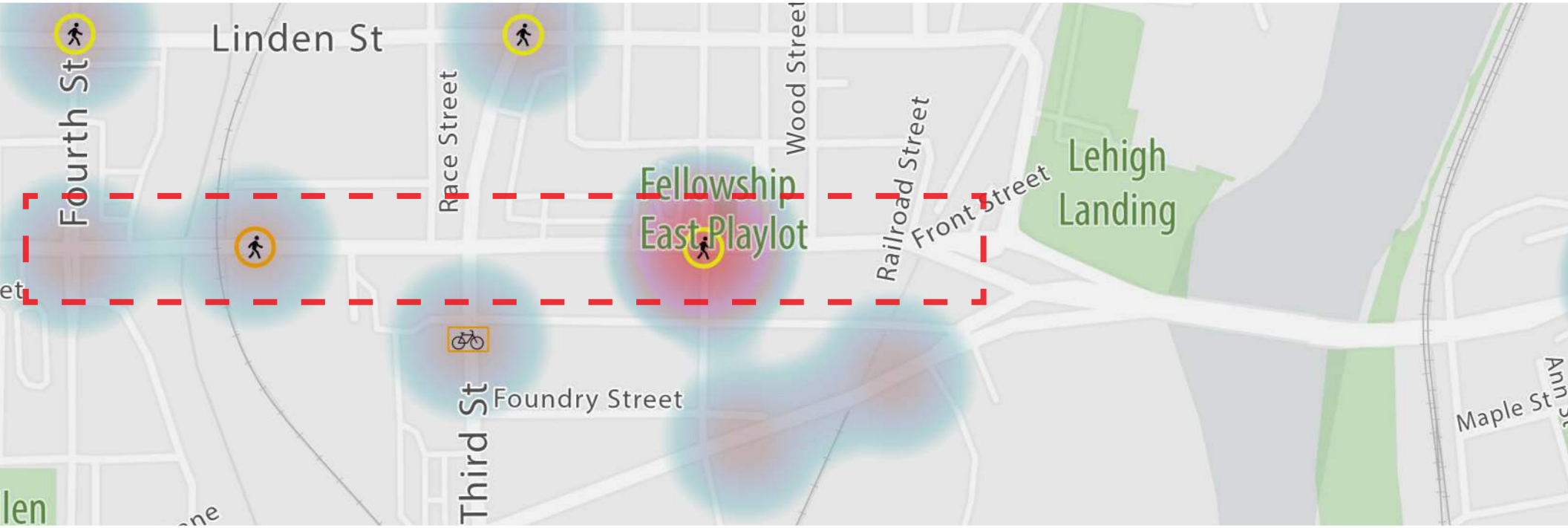
Section 2 - American Parkway to Front Street

SPEED LIMIT 30

48' wide three-lane cross-section (two lanes eastbound) with turning lanes at American Parkway and Riverside Drive.

Roadway Context

- Commercial/light industrial
- No on-street parking except on bridge
- Sidewalks along both sides of roadway
- Crosswalks at intersections



HAMILTON STREET/HANOVER AVENUE CORRIDOR

Section 3 - Front Street to Carlisle Street

SPEED LIMIT 25

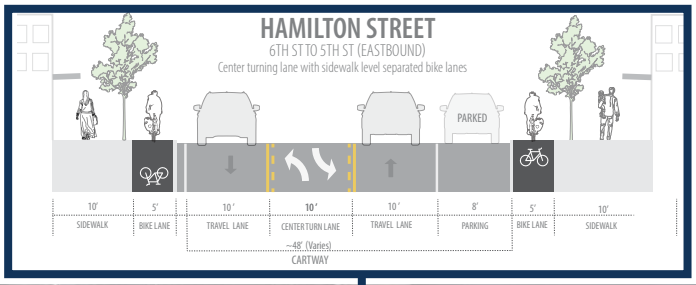
48' wide four-lane cross-section with challenging intersections at Front Street and Carlisle Street/Hanover Avenue.

Roadway Context

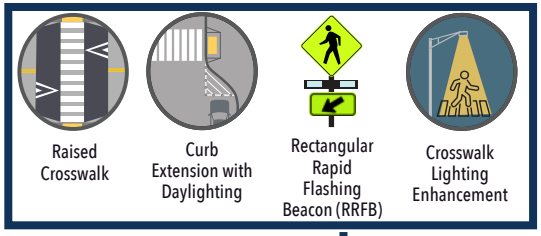
- Primarily commercial with residential to north/south
- Sidewalks along both sides of roadway
- Intermittent on-street parking
- Crosswalks at intersections

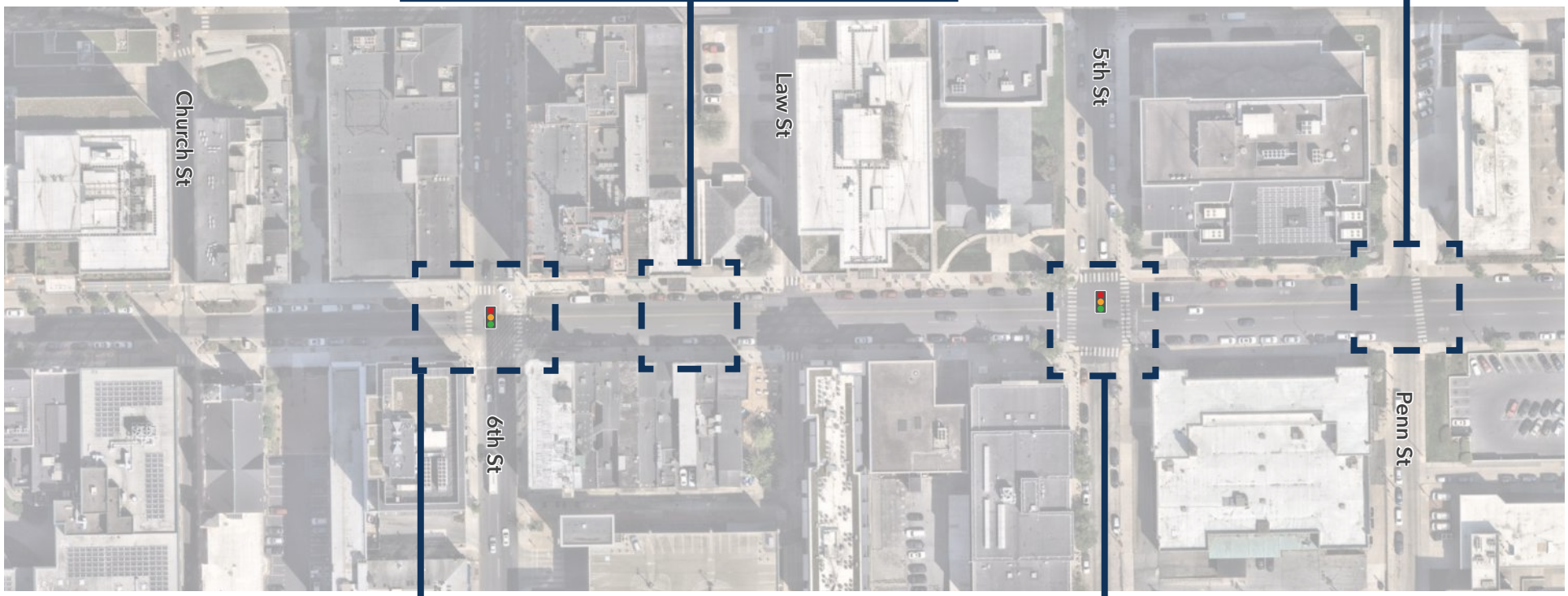
HAMILTON STREET/HANOVER AVENUE CORRIDOR

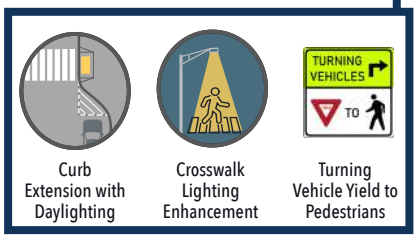
Section 1 Concept Plan - 6th Street to Penn Street

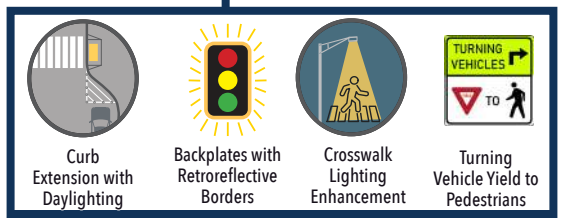


Potential Cross Section



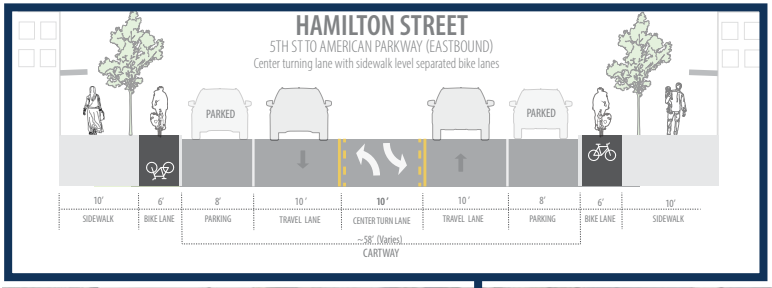






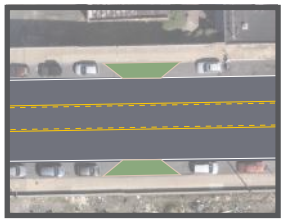
HAMILTON STREET/HANOVER AVENUE CORRIDOR

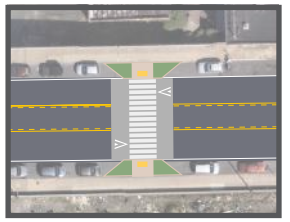
Section 1 Concept Plan - Penn Street to American Parkway

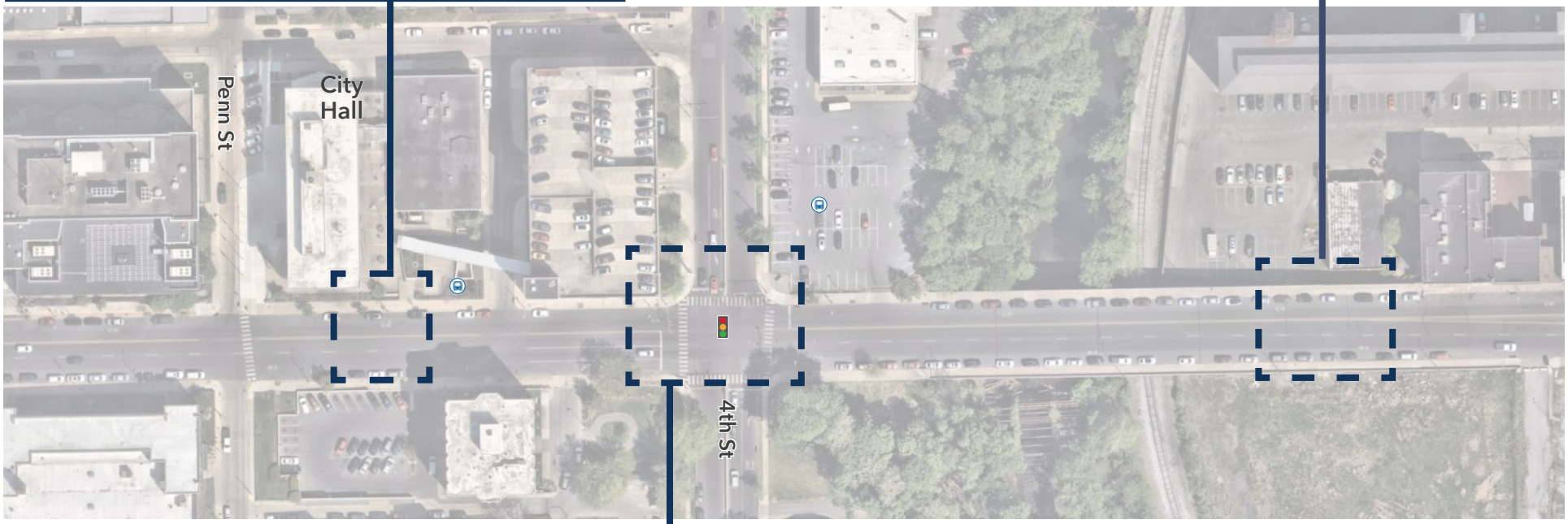


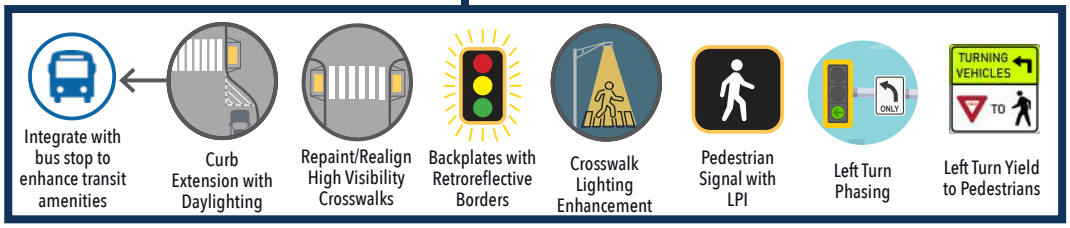
Potential Cross Section

Install chokers to calm traffic across bridge

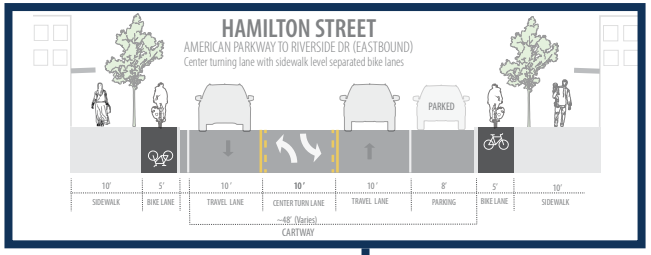

Choker


Choker with Raised Crosswalk

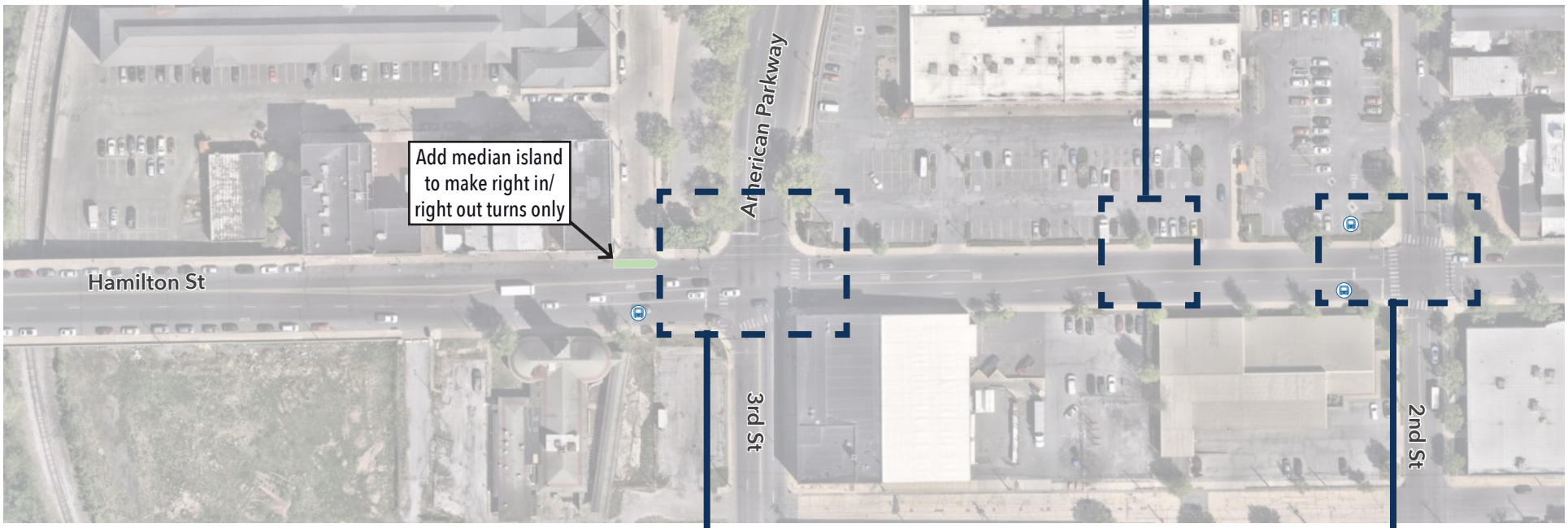


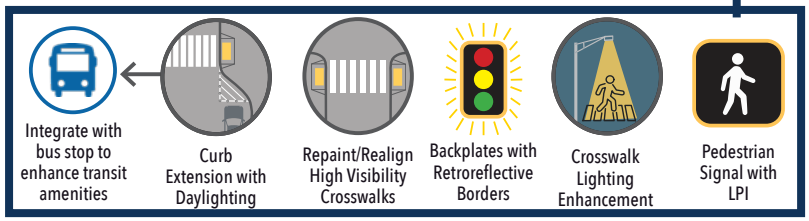


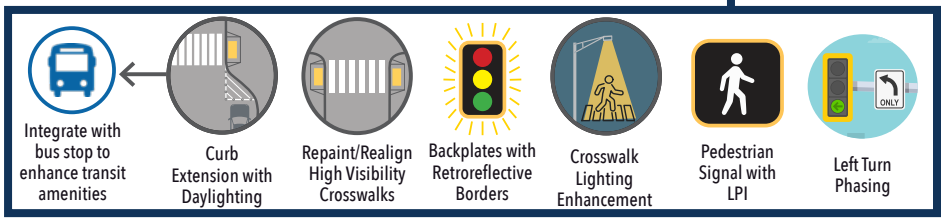
Section 2 Concept Plan - American Parkway to 2nd Street



Potential Cross Section

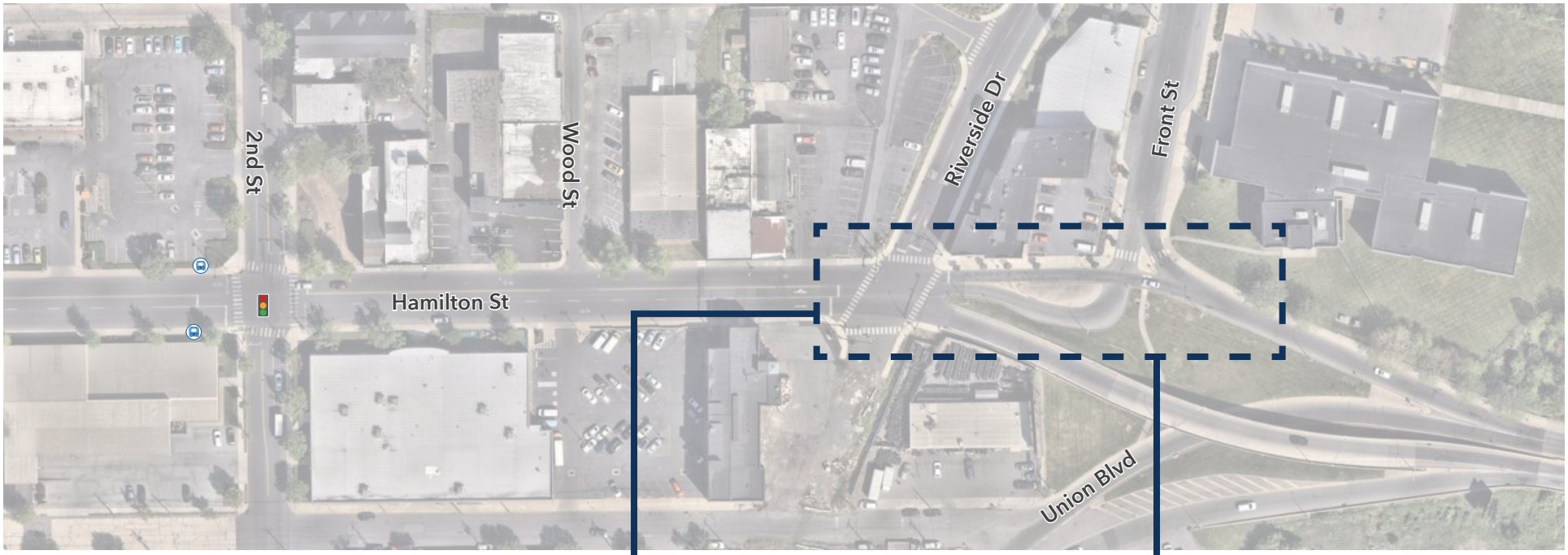


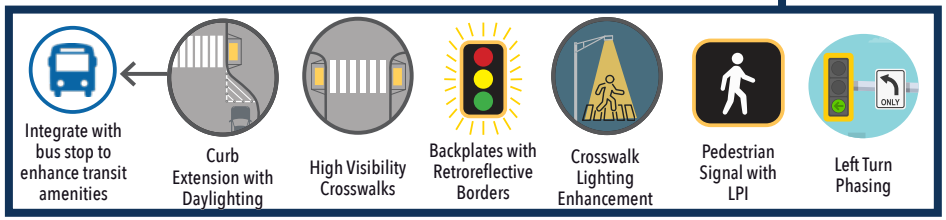


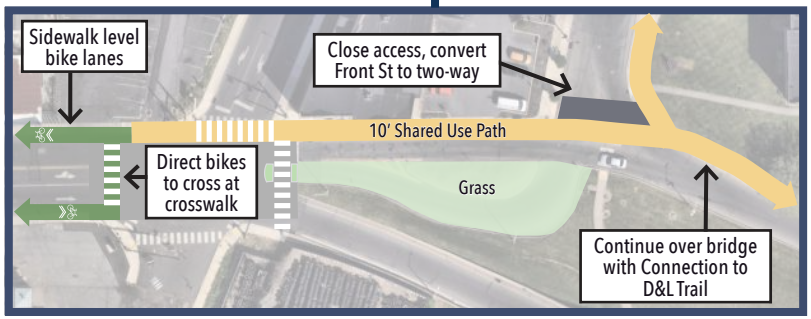


HAMILTON STREET/HANOVER AVENUE CORRIDOR

Section 2 Concept Plan - 2nd Street to Front Street



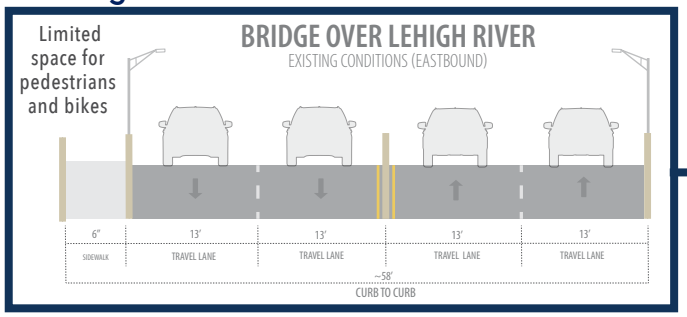




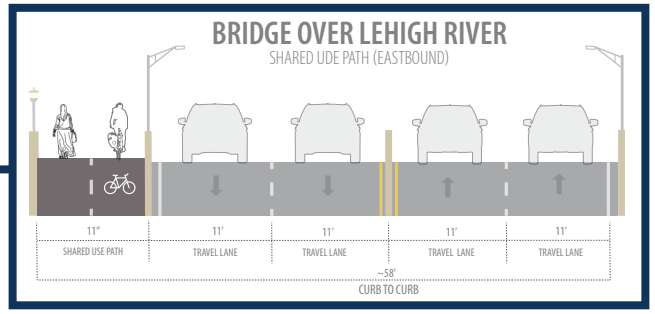
HAMILTON STREET/HANOVER AVENUE CORRIDOR

Section 3 Concept Plan - Front Street to Albert Street

Existing Cross Section

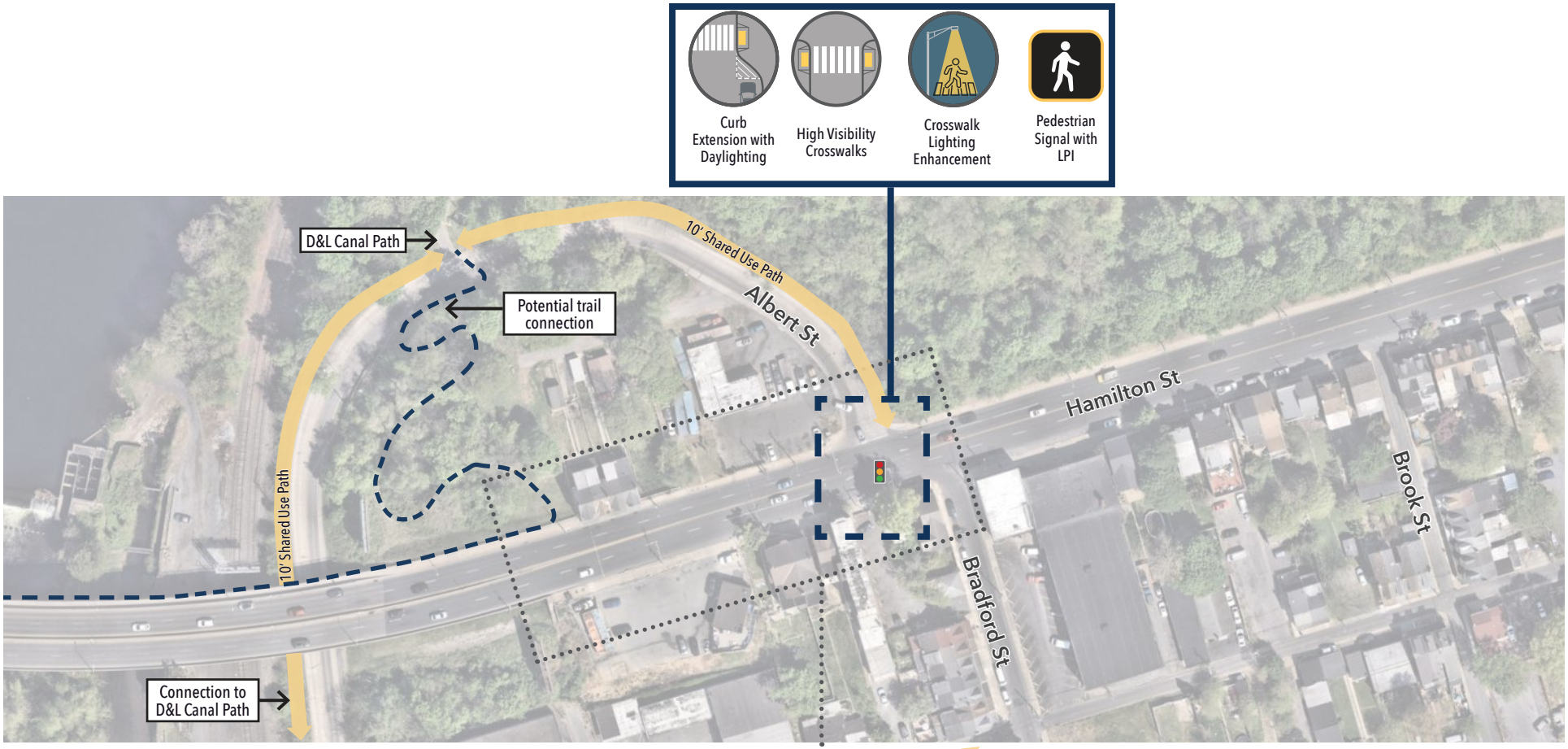


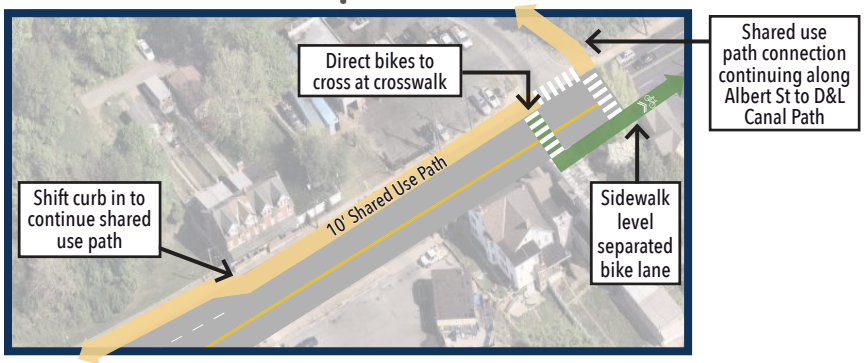
Potential Cross Section



HAMILTON STREET/HANOVER AVENUE CORRIDOR

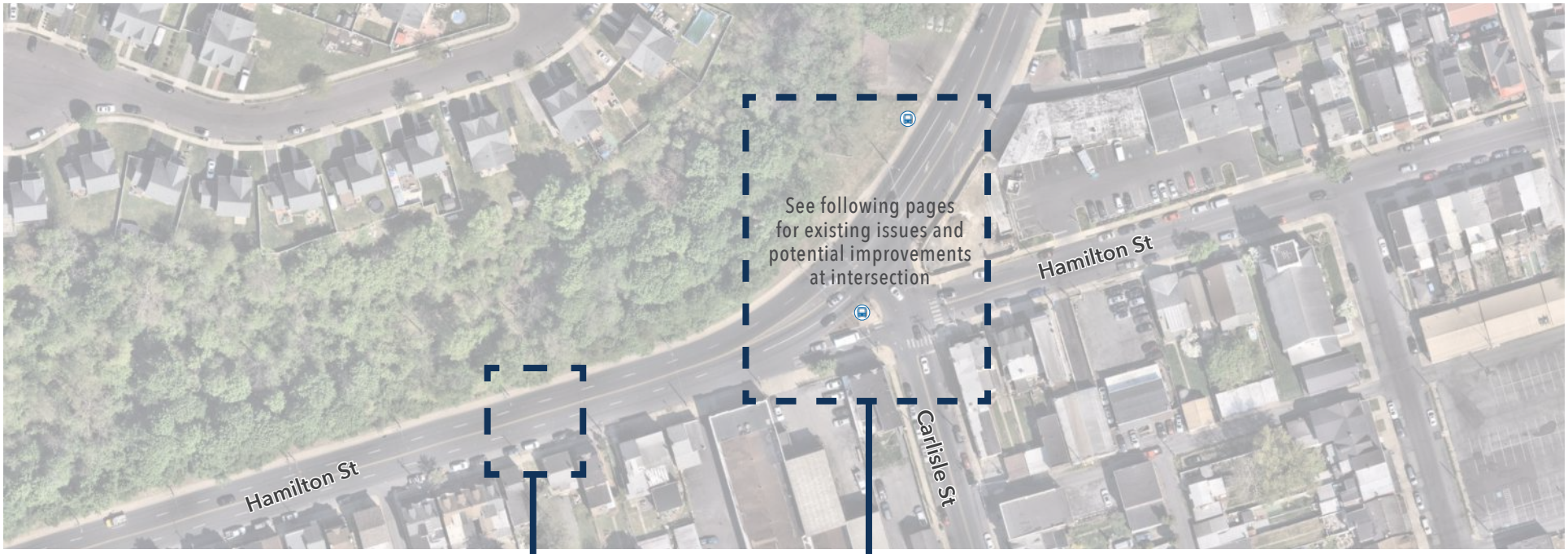
Section 3 Concept Plan - Albert Street to Brook Street



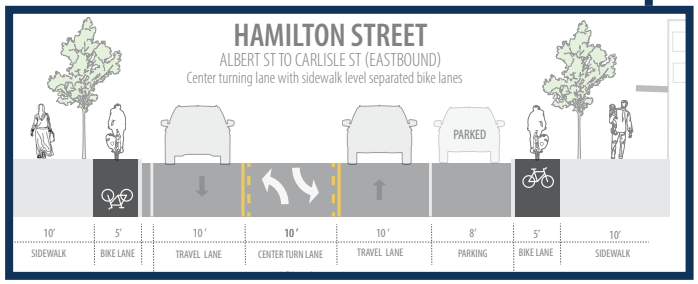


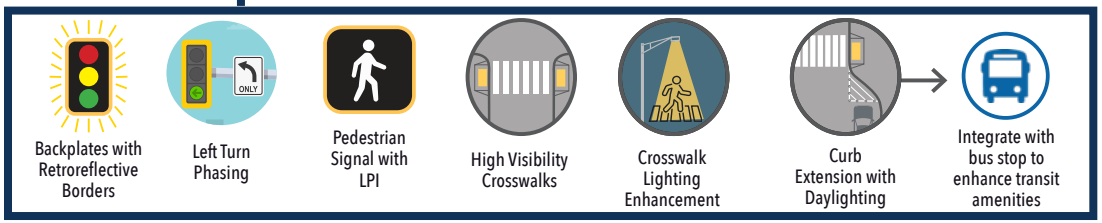
HAMILTON STREET/HANOVER AVENUE CORRIDOR

Section 3 Concept Plan - Brook Street to Carlisle Street



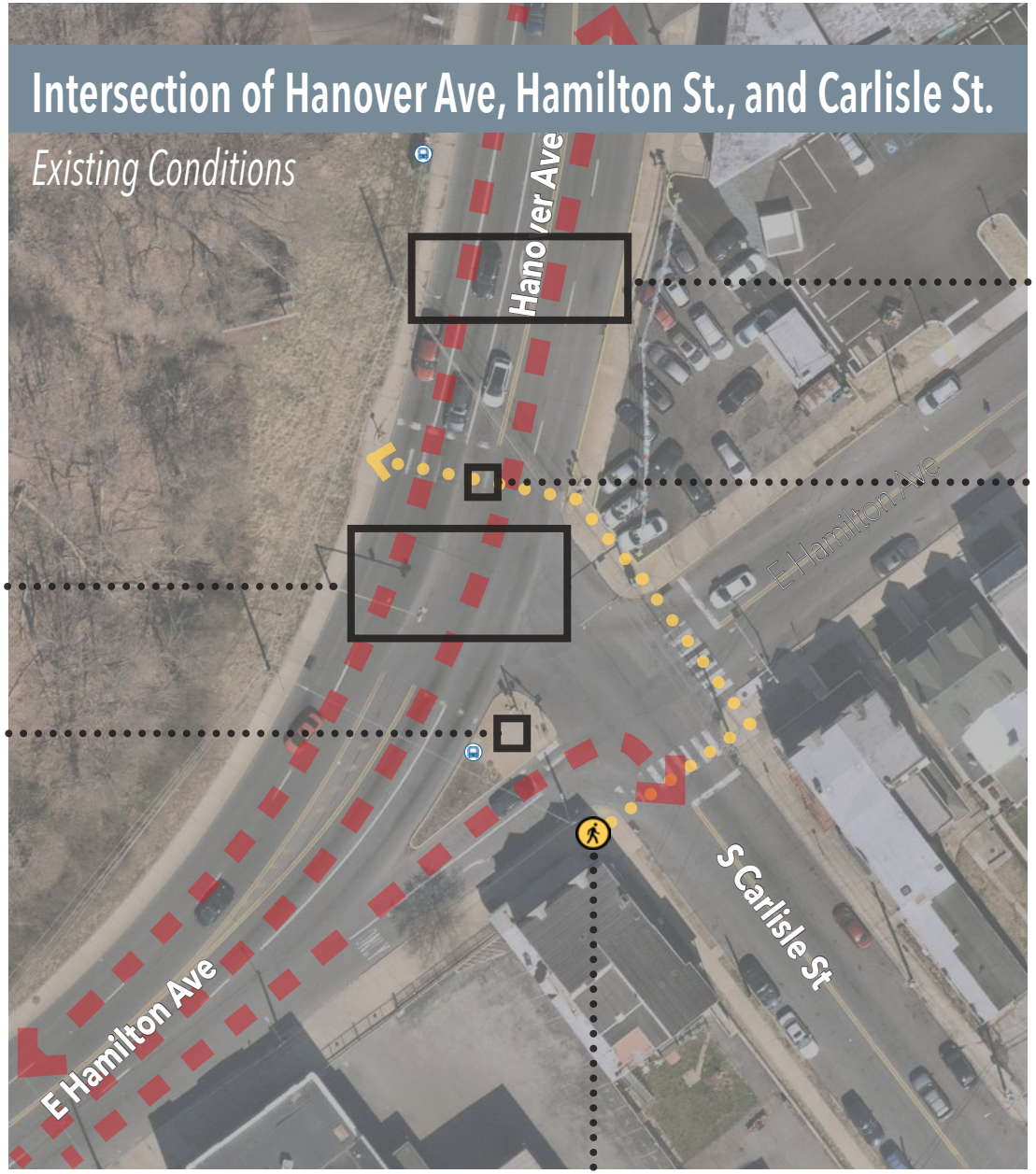
Potential Cross Section





Intersection of Hanover Ave, Hamilton St., and Carlisle St.

Existing Conditions



Wide four-lane roadway with visibility/speed concerns

Faded crosswalks with wide crossing distances, missing ADA Ramps, and no dedicated pedestrian phases

Leads to conflicts with turning vehicles for pedestrians when trying to cross

High traffic volumes and multiple unpredictable turning movements

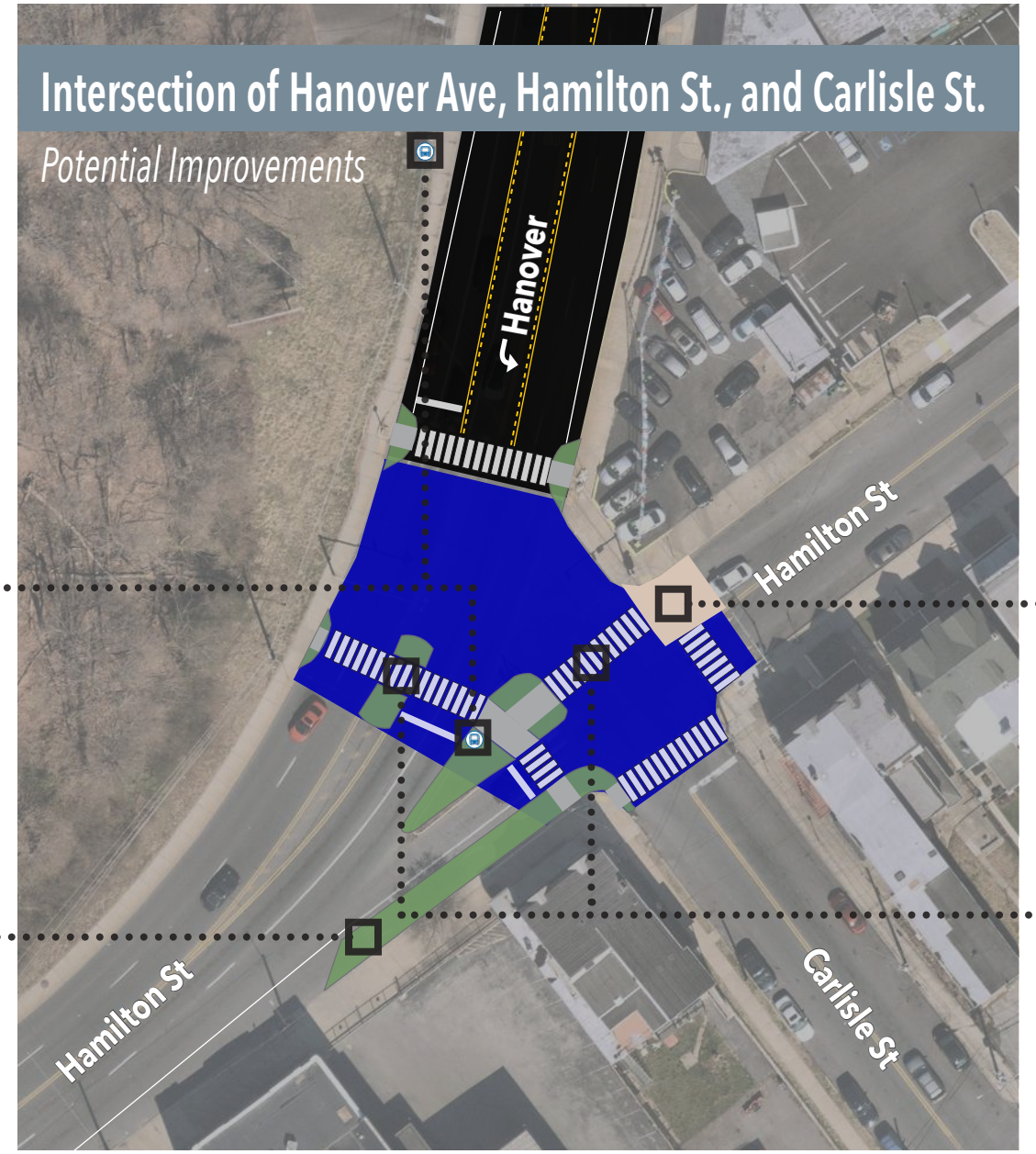
Pedestrian island with no connections and bus stop with difficult boarding area

Pedestrians use most direct path, but unprotected route to cross from bus stop island

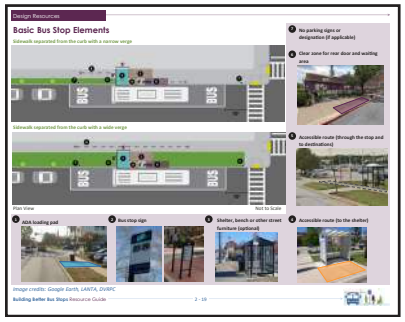
Existing pedestrian route is inconvenient and requires multiple legs

Intersection of Hanover Ave, Hamilton St., and Carlisle St.

Potential Improvements



Enhanced Bus Stops
(Source: PennDOT, PPTA)

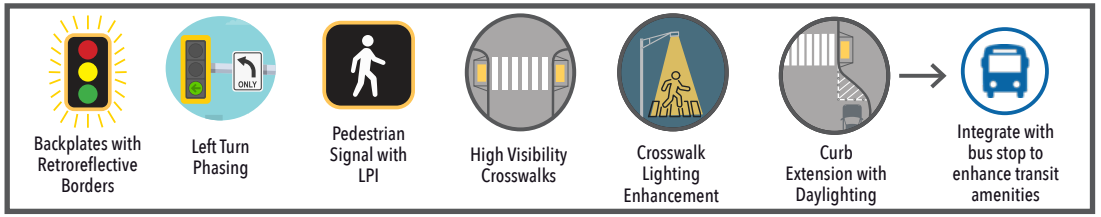


Enhancements to improve transit access, safety, and comfort at existing high volume stops.

Eliminate right turn slip lane and add curb extension to decrease crossing distance. Add no turn on red signage.

Creating dead end for westbound direction to eliminate the most unpredictable turning movement and decrease conflicts.

Upgrading existing pedestrian crossings and adding additional legs could make crossings more predictable and increase visibility. Combining this with leading pedestrian intervals, and no turning on red restrictions could help minimize conflicts.



LEHIGH STREET CORRIDOR

Corridor Overview

This corridor includes a high speed, grade separated interchange with I-78/SR 309 as well as a diverse mix of big box retailers, smaller scale commercial uses and residential areas. Lehigh Street is State Route 2005 and under the jurisdiction of PennDOT.

Section 1 - Oxford Drive to South 12th Street

The area is primarily commercial with some residential to the west, no on-street parking is permitted, and sidewalks on both sides.

Concept Plans

- Oxford Drive to Route 309
- Route 309 to Downyflake Lane
- Downyflake Lane to South 12th Street
- Detail: Jefferson Street & Lehigh Street
- Detail: Jefferson Street Traffic Calming

Section 2 - South 12th Street to West Wyoming Street

The area is a mix between residential to the north and commercial to the south. On-street parking is permitted along southwest bound traffic.

Concept Plans

- South 12th Street to West Wyoming Street
- Detail: 12th Street & Lehigh Street
- Detail: Lehigh Parkway & Lehigh Street

Section 3 - West Wyoming Street to Cleveland Street

This area is primarily a residential housing area, no on-street parking is permitted, and there are sidewalks along both sides of the roadway.

Concept Plans

- West Wyoming Street to Cleveland Street

PLANNING LEVEL COST ESTIMATE

$4,039,000

Section 4 -Clevaland Street to MLK Jr. Drive

The area is primarily a residential housing area, on-street parking is permitted on the right side of traffic, sidewalks on both sides, and crosswalks at major intersections.

Concept Plans

- Cleveland Street to MLK Jr. Drive

PROPOSED IMPROVEMENTS

- Close gaps in the sidewalk network between 29th Street and 24th Street including ADA ramps, high visibility crosswalks, and warning signage at all I-78 on/off ramps.
- Include ADA ramp upgrades, lighting improvements, and leading pedestrian intervals (LPIs) at signalized intersections throughout the corridor.
- Add high visibility crosswalks at side roads and commercial driveways parallel to Lehigh Street.
- Consider installation of a modern roundabout at the intersection of Lehigh Street/Jefferson Street. This will serve as a major traffic calming element as well as a gateway to the City of Allentown.
- Complete adjacent traffic calming project along Jefferson Street.
- Remove slip lane from 12th Street and enlarge landscaped island.
- Add 6" white edgelines for parking lane in residential portions of the corridor.
- Narrow and realign the intersection of Lehigh Parkway South, Susquehanna Street and Lehigh Street.
- Consider intersection realignment, addition of stop bars, ADA ramps, high visibility crosswalks, and street lighting upgrades at Howard Street/Cumberland Street,
- Add one way street signs at 10th Street/Lehigh Street.
- Convert painted island to landscaped island at St. John Street/Lehigh Street.
- Convert front in angle parking to parallel parking along St. John Street between Lehigh Street and 8th Street.
- Remove excess pavement and realign intersection at Lehigh Street/Cleveland Street/7th Street.
- Ongoing intersection improvement project at Lehigh Street/Union Street.

Section 1 - Oxford Drive to South 12th Street

SPEED LIMIT 40

Four-lane cross-section with two travel lanes in each direction.

Roadway Context

- Primarily commercial with some residential to the west
- No on-street parking permitted
- Sidewalks along both sides of roadway
- Crosswalks at major intersections (numbered cross-streets and signal-controlled)

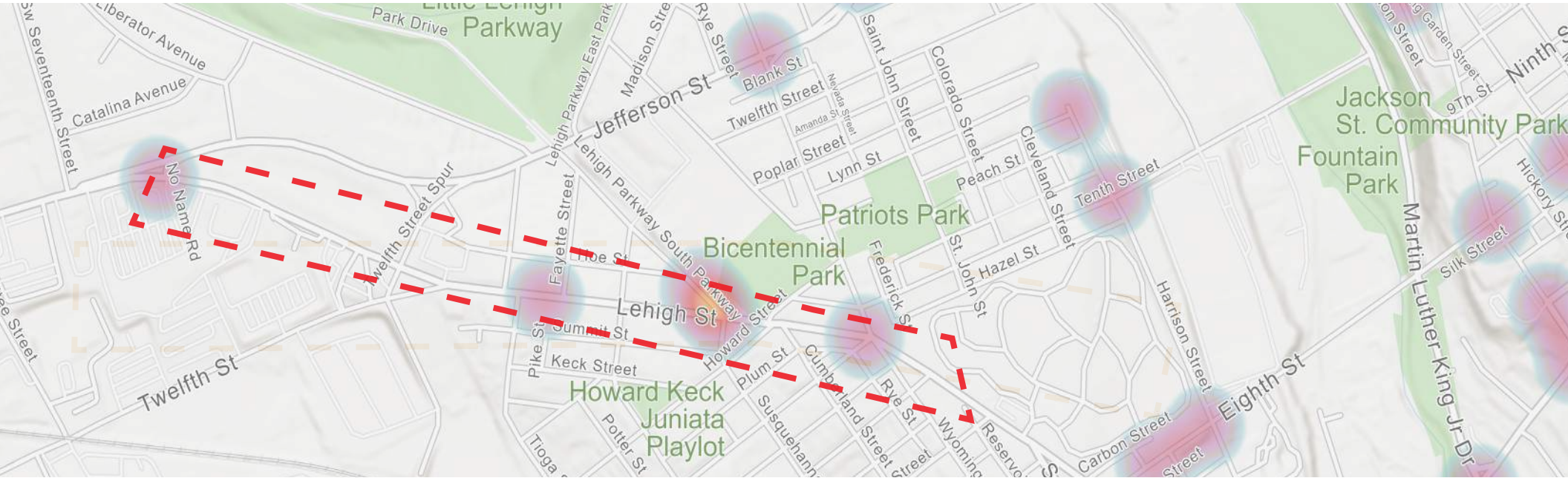
Section 2 - South 12th Street to West Wyoming Street

SPEED LIMIT 30

Three-lane cross-section with two travel lanes in southwest direction and one travel lane in northeast direction.

Roadway Context

- Mix between residential to the north and commercial to the south
- On-street parking permitted along southwest bound traffic
- Sidewalks along both sides of roadway
- Crosswalks at major intersections (signal-controlled)



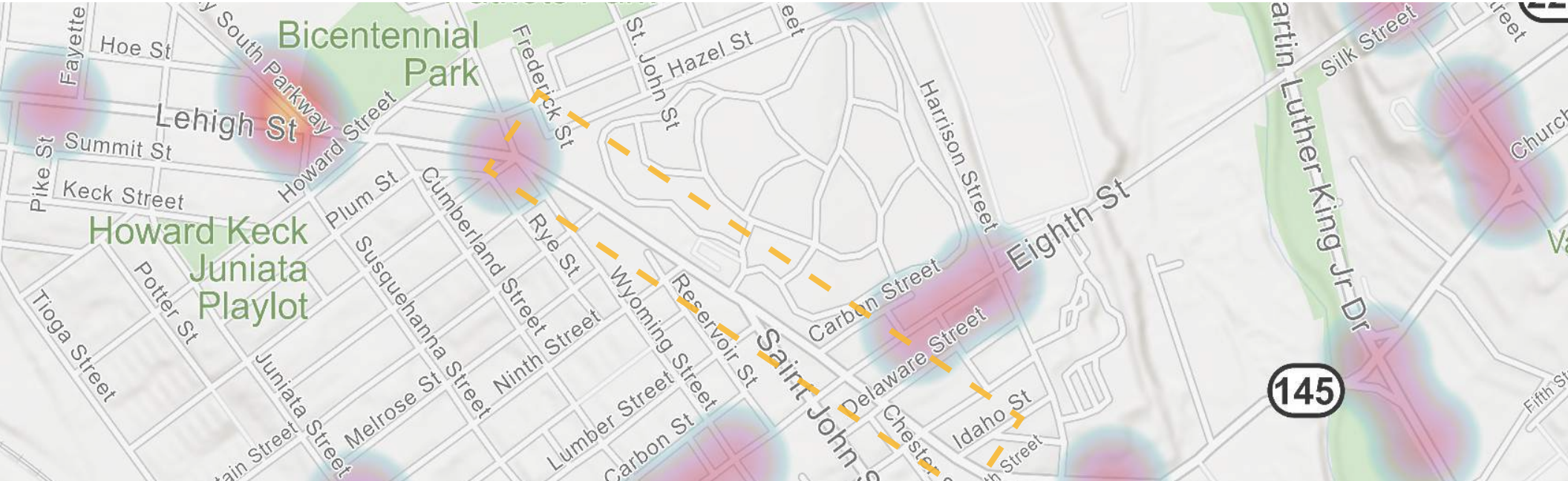
Section 3 – West Wyoming Street to Cleveland Street

SPEED LIMIT 30

Three-lane cross-section with two travel lanes in southwest direction and one travel lane in northeast direction.

Roadway Context

- Primarily residential housing area
- No on-street parking permitted
- Sidewalks along both sides of roadway
- Crosswalks at major intersections (signal-controlled)



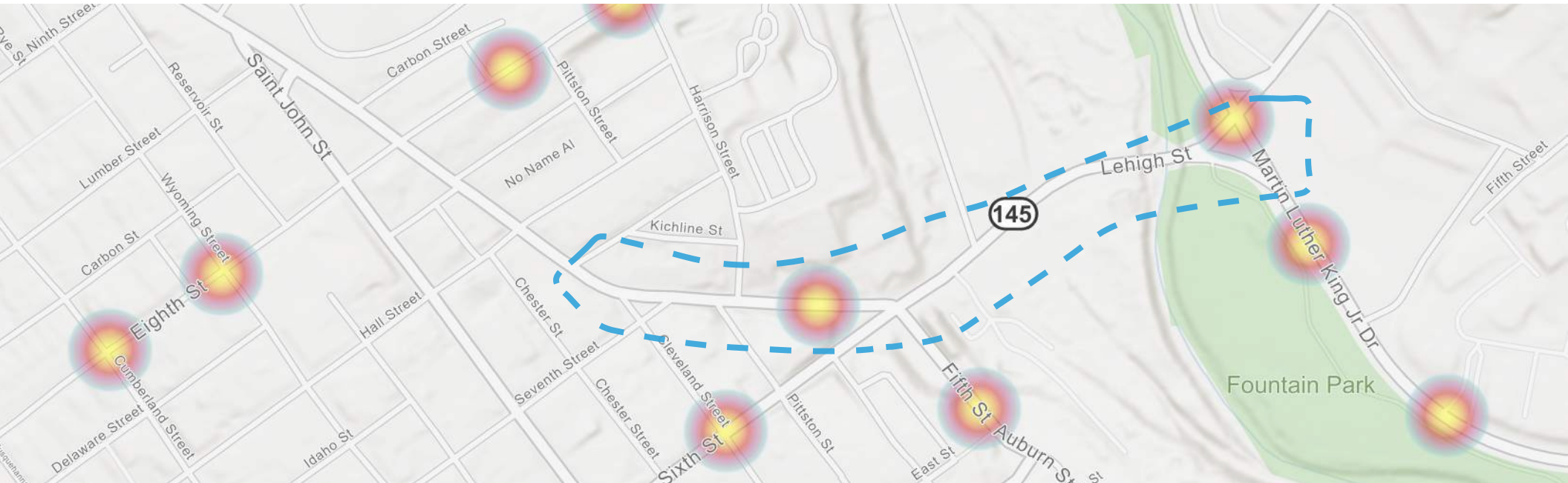
Section 4 – Cleveland Street to MLK Jr. Drive

SPEED LIMIT 25

Two-lane cross-section in southwest direction. One-way travel lanes.

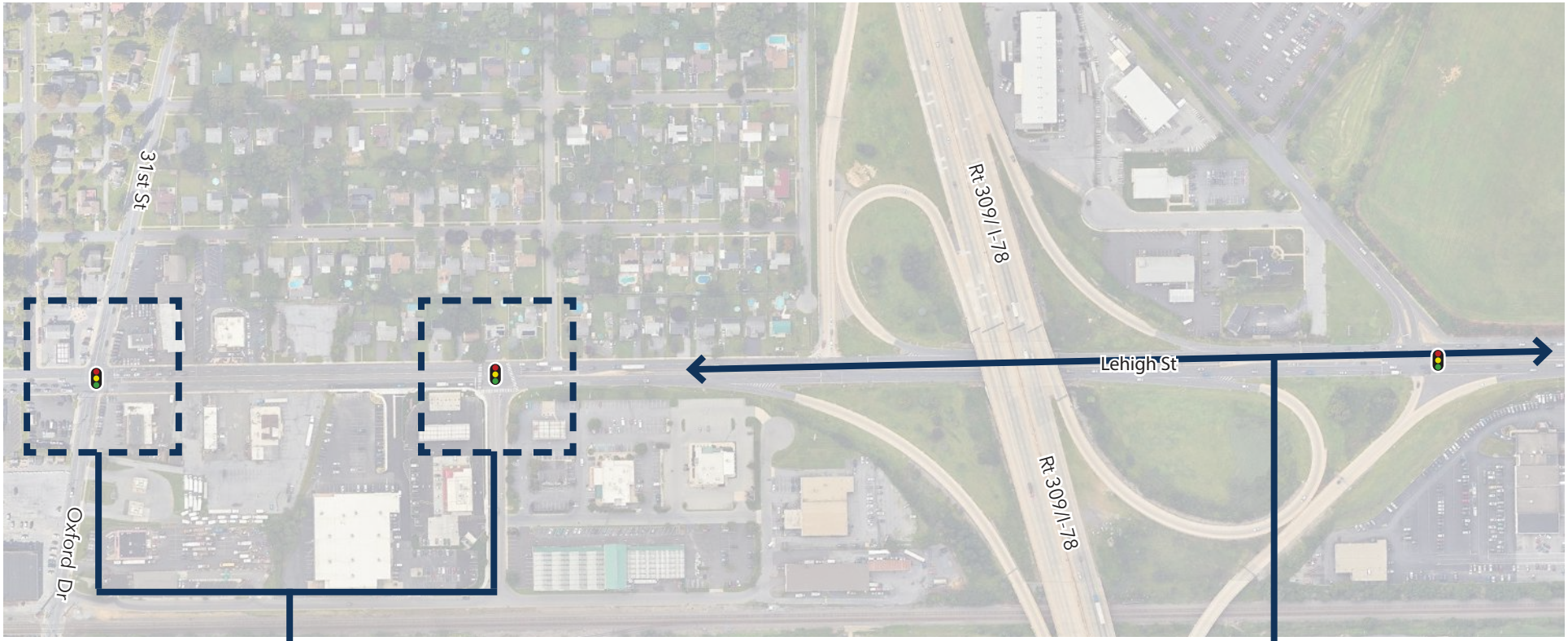
Roadway Context

- Primarily residential housing area
- On-street parking permitted on right side of traffic
- Sidewalks along both sides of roadway
- Crosswalks at major intersections (signal-controlled)
- One-way road



LEHIGH STREET CORRIDOR

Section 1 Concept Plan - Oxford Drive to I-78/Route 309



ADA upgrades

Lighting improvements

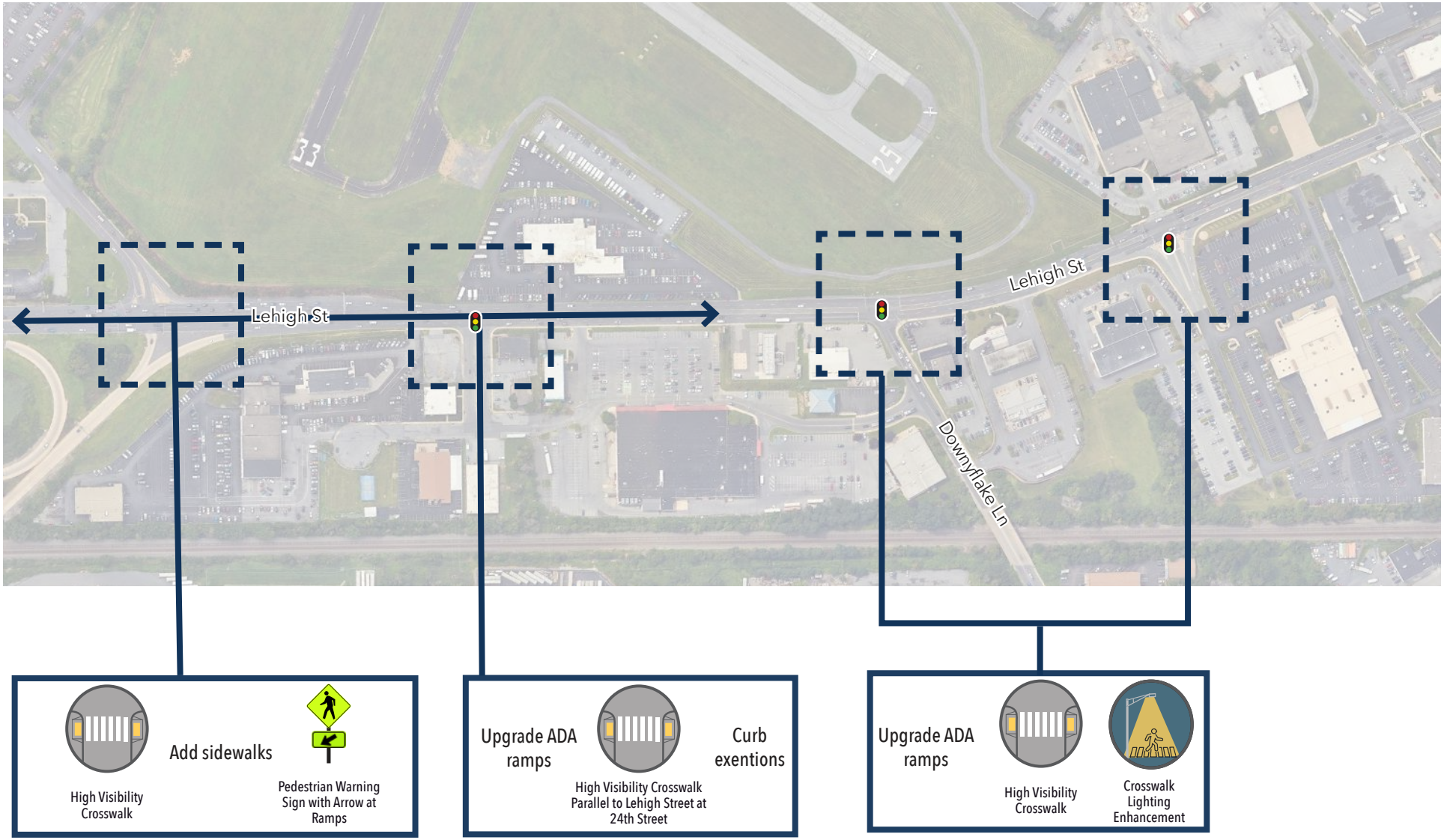
High Visibility Crosswalk

Pedestrian Signal with LPI

Add sidewalks and crosswalks. warning signs at ramps

LEHIGH STREET CORRIDOR

Section 1 Concept Plan - I-78/Route 309 to Downyflake Lane

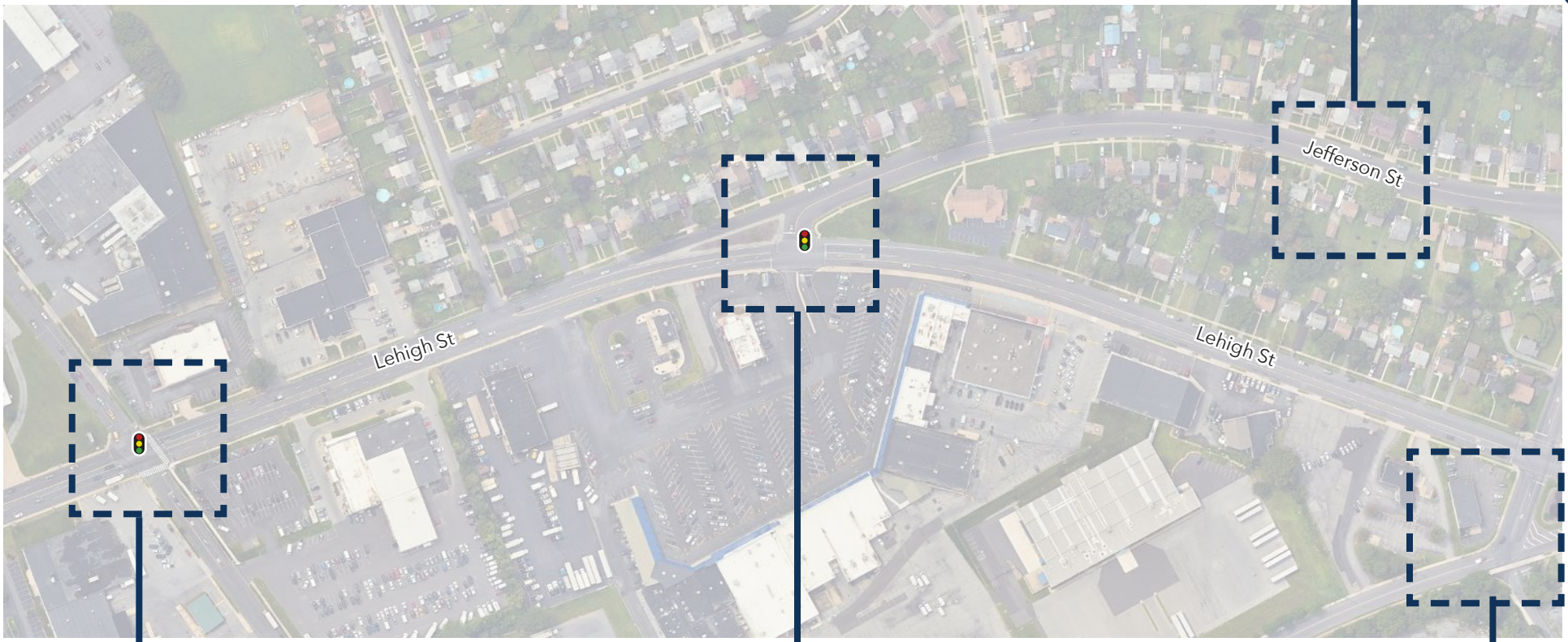


LEHIGH STREET CORRIDOR

Section 1 Concept Plan - Downyflake Lane to South 12th Street

DETAILED CONCEPT PLAN

Traffic calming plan for Jefferson Street



Upgrade ADA ramps

High Visibility Crosswalk

Crosswalk Lighting Enhancement

DETAILED CONCEPT PLAN

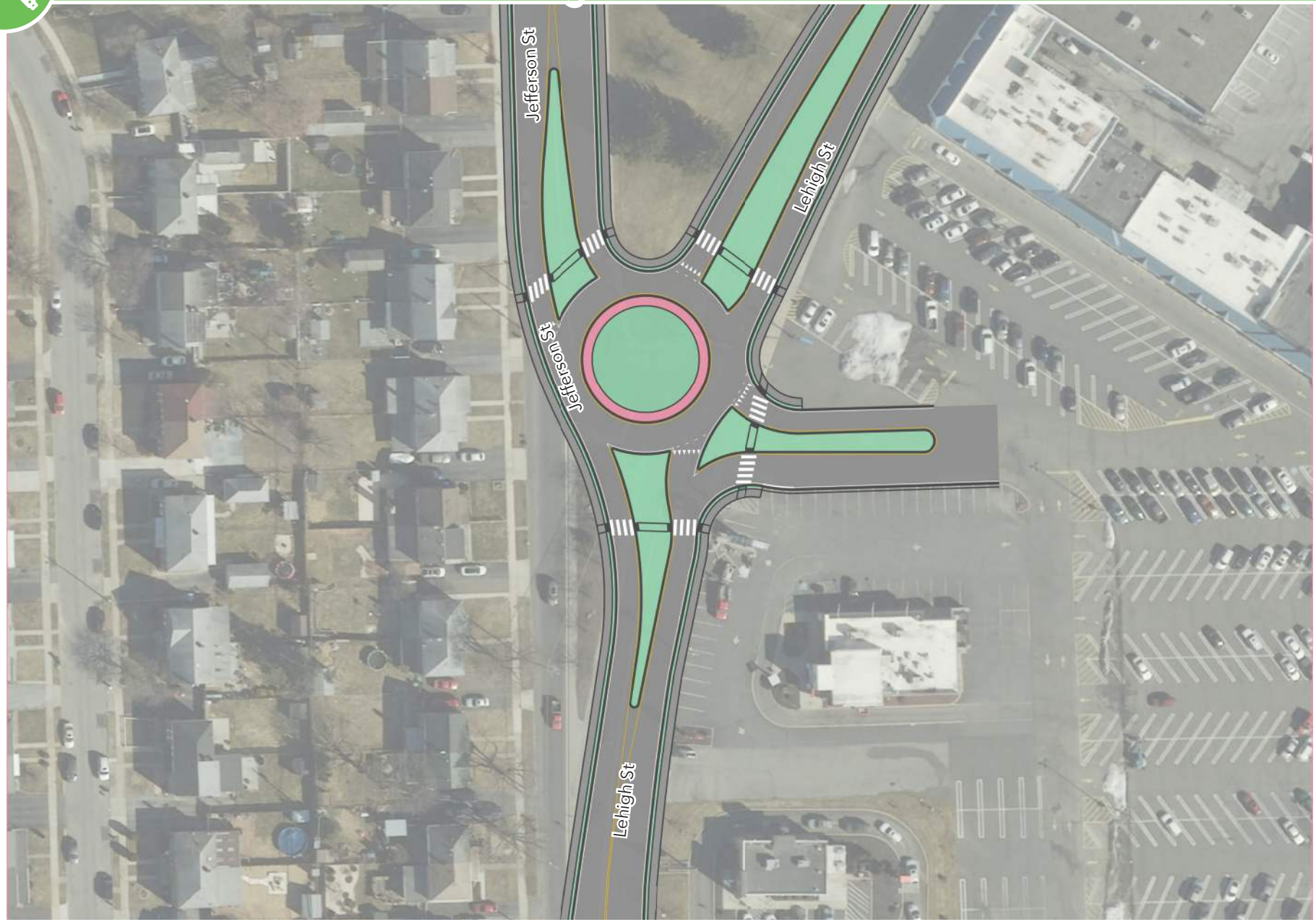
Install roundabouts to serve as gateway to the city and a traffic calming element

Assorted intersection improvements

DETAILED CONCEPT PLAN

LEHIGH STREET CORRIDOR

Jefferson Street and Lehigh Street

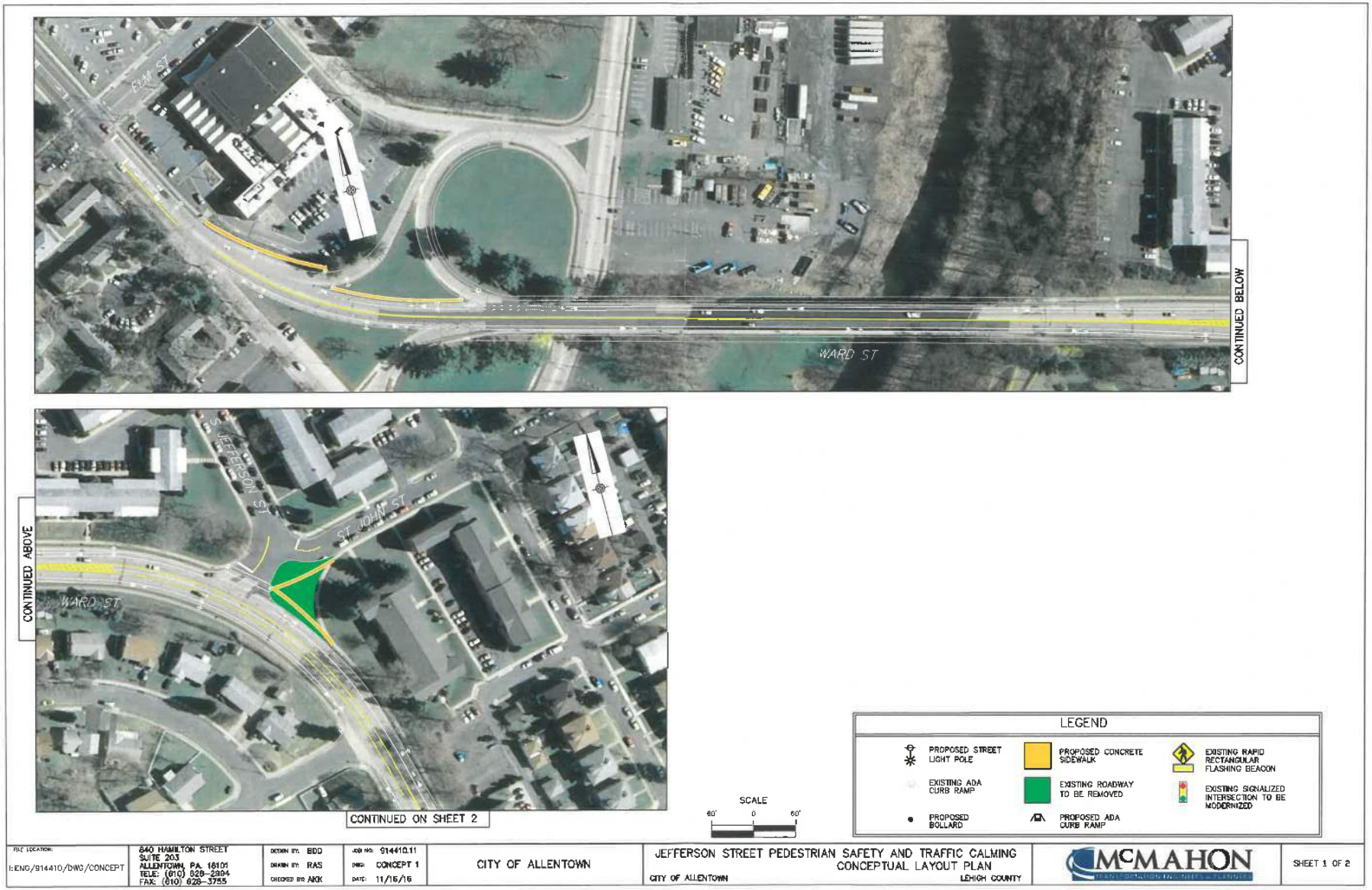


DETAILED CONCEPT PLAN

LEHIGH STREET CORRIDOR

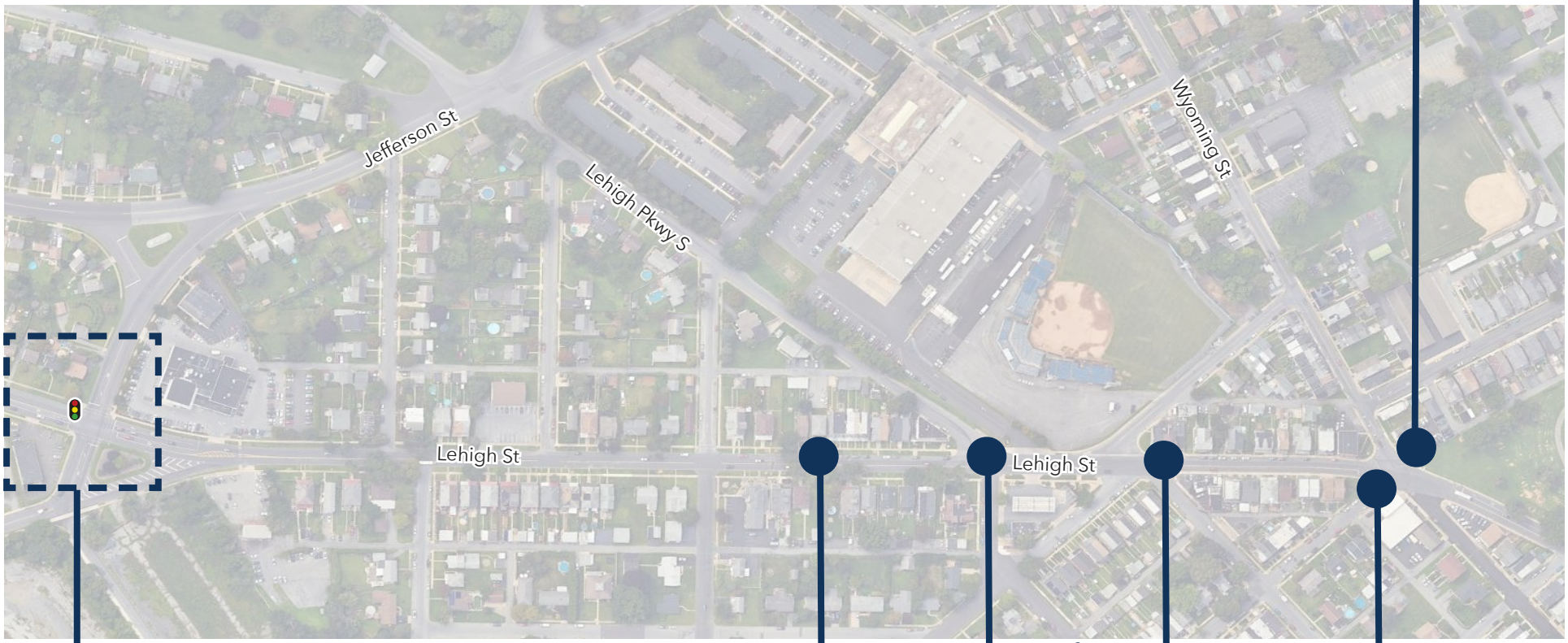
Jefferson Street Traffic Calming Improvements

LEHIGH STREET CORRIDOR



LEHIGH STREET CORRIDOR

Section 2 Concept Plan - South 12th Street to West Wyoming Street



Improve ADA ramps, high visibility crosswalks, intersection lighting

DETAILED CONCEPT PLAN

Upgrade ADA facilities at traffic signal

Remove slip lane from 12th street and enlarge landscape island. See detailed concept plan

Add edgelines for parking lane

Narrow and realign intersection

DETAILED CONCEPT PLAN

Consider intersection realignment, add stop bars, pavement markings, ADA ramps, high visibility crosswalks, and lighting

Add one way signs at intersection for 10th Street

DETAILED CONCEPT PLAN

LEHIGH STREET CORRIDOR

12th Street and Lehigh Street

DETAILED CONCEPT PLAN

LEHIGH STREET CORRIDOR

Lehigh Parkway and Lehigh Street

Section 3 Concept Plan - West Wyoming Street to Cleveland Street

Convert painted island to landscaped island

Upgrade ADA facilities at traffic signal

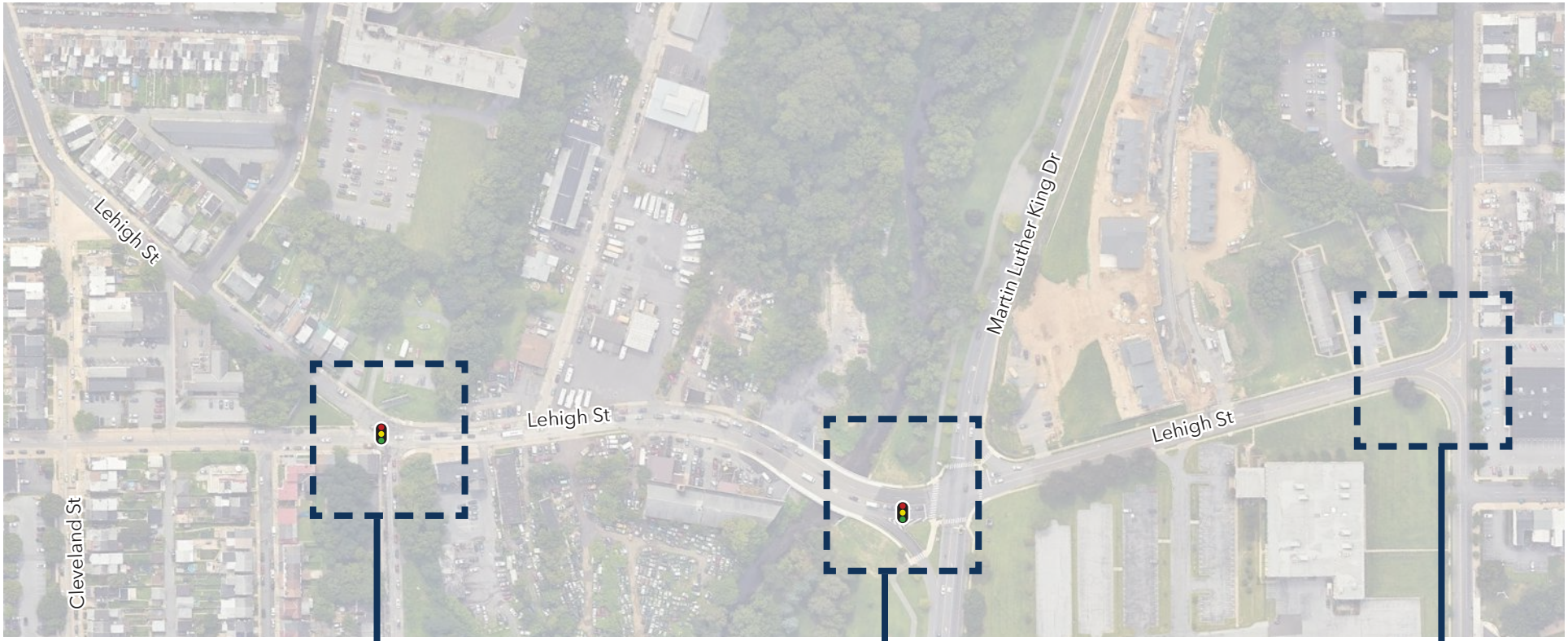
Convert front in parking to parallel parking

Improve ADA ramps, high visibility crosswalks, and intersection lighting

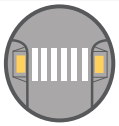
Remove excess pavement, realign intersection

LEHIGH STREET CORRIDOR

Section 4 **Concept Plan** - Cleveland Street to Martin Luther King Jr. Drive



Upgrade ADA ramps



High Visibility Crosswalk

Crosswalk Lighting Enhancement

Recent safety improvement project completed here in 2024

Ongoing Project: Upgrades to the traffic signals and signage around two intersections along Union Street including overhead street name signs, left turn yield on flashing yellow arrow, push button for walk signal with countdown timer, no turn on red, and left lane must turn left.

TILGHMAN STREET EAST

Corridor Overview

The Tilghman Street Corridor features the highest number of high-injury crashes within the city, with most crashes concentrated along the eastern portion of the corridor (15th Street to N Front Street). The corridor experiences high vehicle traffic volumes and is home to a variety of different road users including vehicles, transit users, pedestrians, and bicyclists. It also features a variety of land use contexts and was further subdivided into the sections described below to account for the shift in land use from commercial to dense residential. Tilghman Street is State Route 1002 under the jurisdiction of PennDOT.

Section 1 - 15th Street to 7th Street

This section is characterized by a two-lane roadway with no on street parking and primarily commercial land use on either side.

Concept Plans

- 15th Street to 14th Street
- 14th Street to 12th Street
- 12th Street to 10th Street
- 10th Street to Lumber Street
- Lumber Street to 7th Street

Section 2 - 7th Street to North Front Street

The corridor begins to transition to a mix of commercial buildings and medium density residential row houses. The roadway is more confined with parking on either side.

Concept Plans

- 7th Street to Penn Street
- Penn Street to Meadow Street
- Meadow Street to 2nd Street
- 2nd Street to Railroad Street
- Railroad Street to North Front Street

PLANNING LEVEL COST ESTIMATE

$1,803,200

PROPOSED IMPROVEMENTS

- Systemic intersection upgrades along corridor including:
  - Daylighting.
  - Curb extensions.
  - High visibility crosswalks.
  - Crosswalk lighting enhancements.
  - Rectangular rapid flashing beacons (RRFB).
  - Pedestrian signals with leading pedestrian intervals (LPIs).

TILGHMAN STREET EAST CORRIDOR

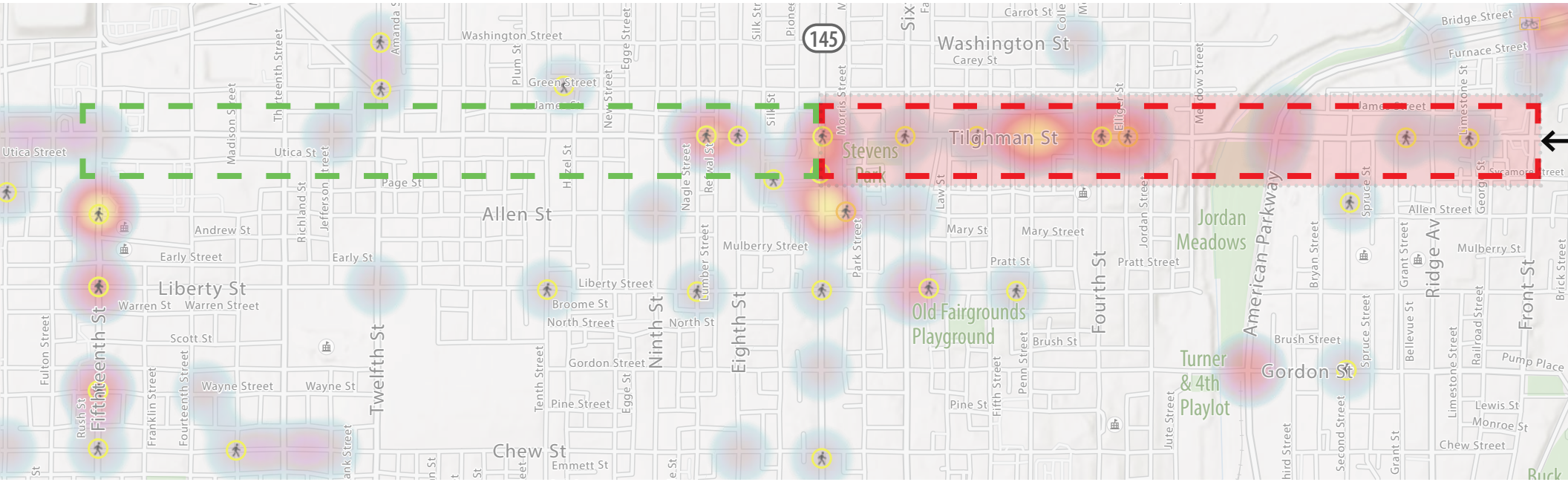
Section 1 - 15th Street to 7th Street

SPEED LIMIT 25

Two-lane (~34' wide) cross-section with dedicated left turn lanes at some signals.

Roadway Context

- Primarily commercial transitioning to medium density housing (row homes)
- High on-street parking
- Sidewalks along both sides of roadway
- Crosswalks at major intersections (numbered cross-streets, stop and signal control) and intermittently elsewhere



Section 2 - 7th Street to North Front Street

SPEED LIMIT 25

Two-lane (~36' wide) cross-section with dedicated left turn lanes at some signals.

Roadway Context

- Primarily medium density housing (row homes)
- High on-street parking
- Sidewalks along both sides of roadway
- Crosswalks at major intersections (numbered cross-streets, stop and signal-control) and intermittently elsewhere

High-Injury Crashes

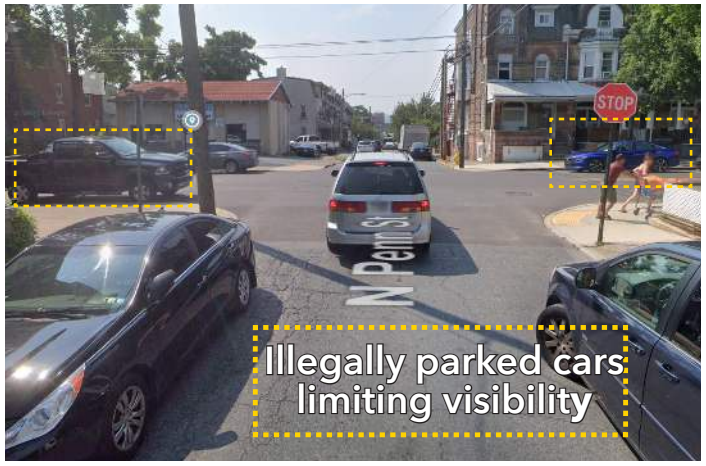
13	Fatal	Serious Injury
Vehicle Only	0	1
Pedestrian	1	6
Bicycle	0	0
Motorcycle	0	5
Totals	1	12

Over 29% of HI Crashes along corridor occurred within this 4,712' stretch

Crashes within the Corridor

Of the 45 crashes occurring throughout the 7.2 mile corridor, 13 (29%) occurred in this 4,712 ft segment and the corridor crash rate was over 10 times the statewide average for a similar roadway.

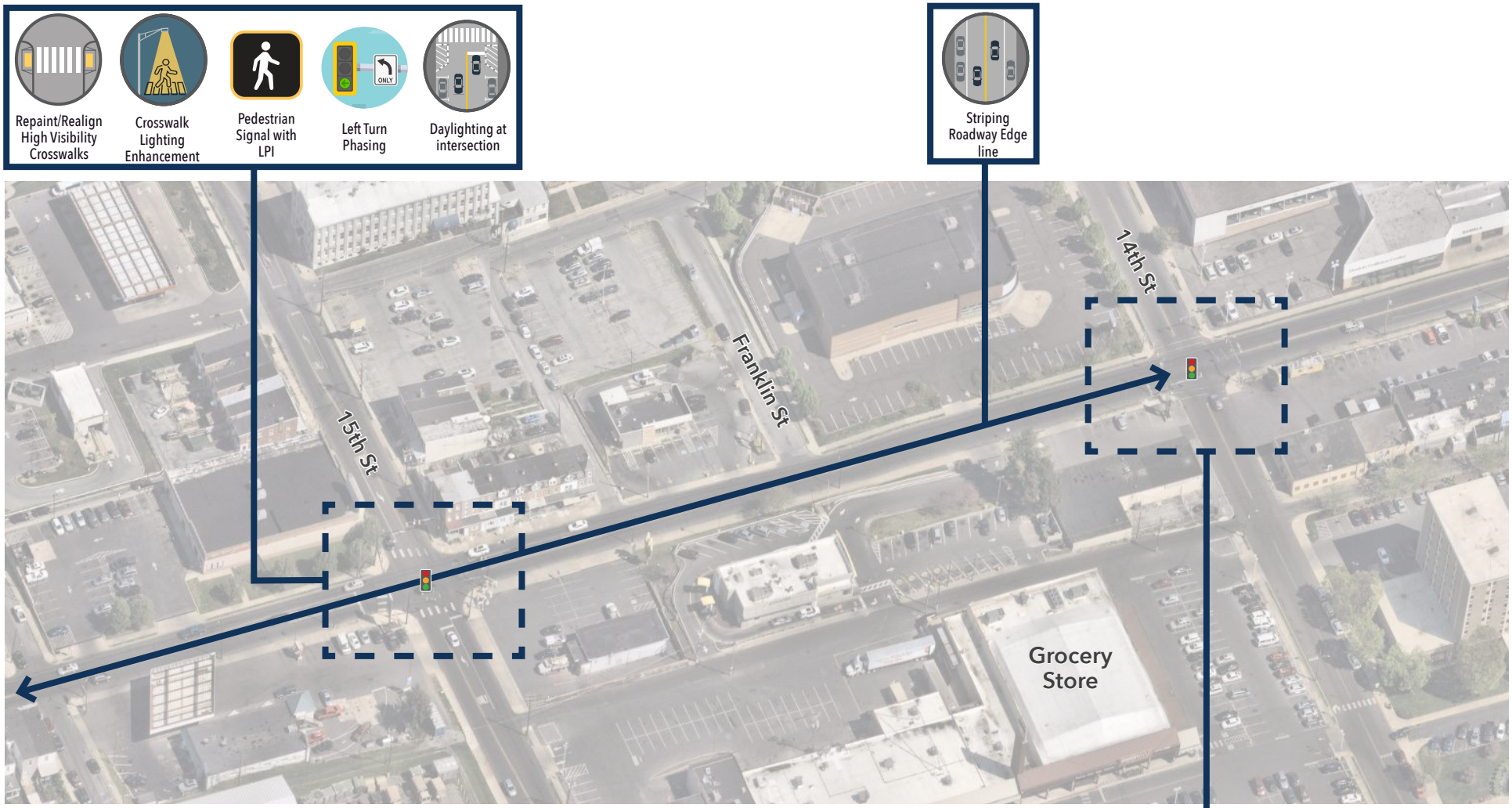
Over 53% (seven) of these incidents involved a pedestrian including one fatality. Nearly 70% of crashes occurred at either unsignalized intersections (39%) or midblock locations (31%).



Visibility concerns combined with high traffic speed/volumes and competing used lead to increased traffic conflicts.

TILGHMAN STREET EAST CORRIDOR

Section 1 Concept Plan - 15th Street to South 14th Street

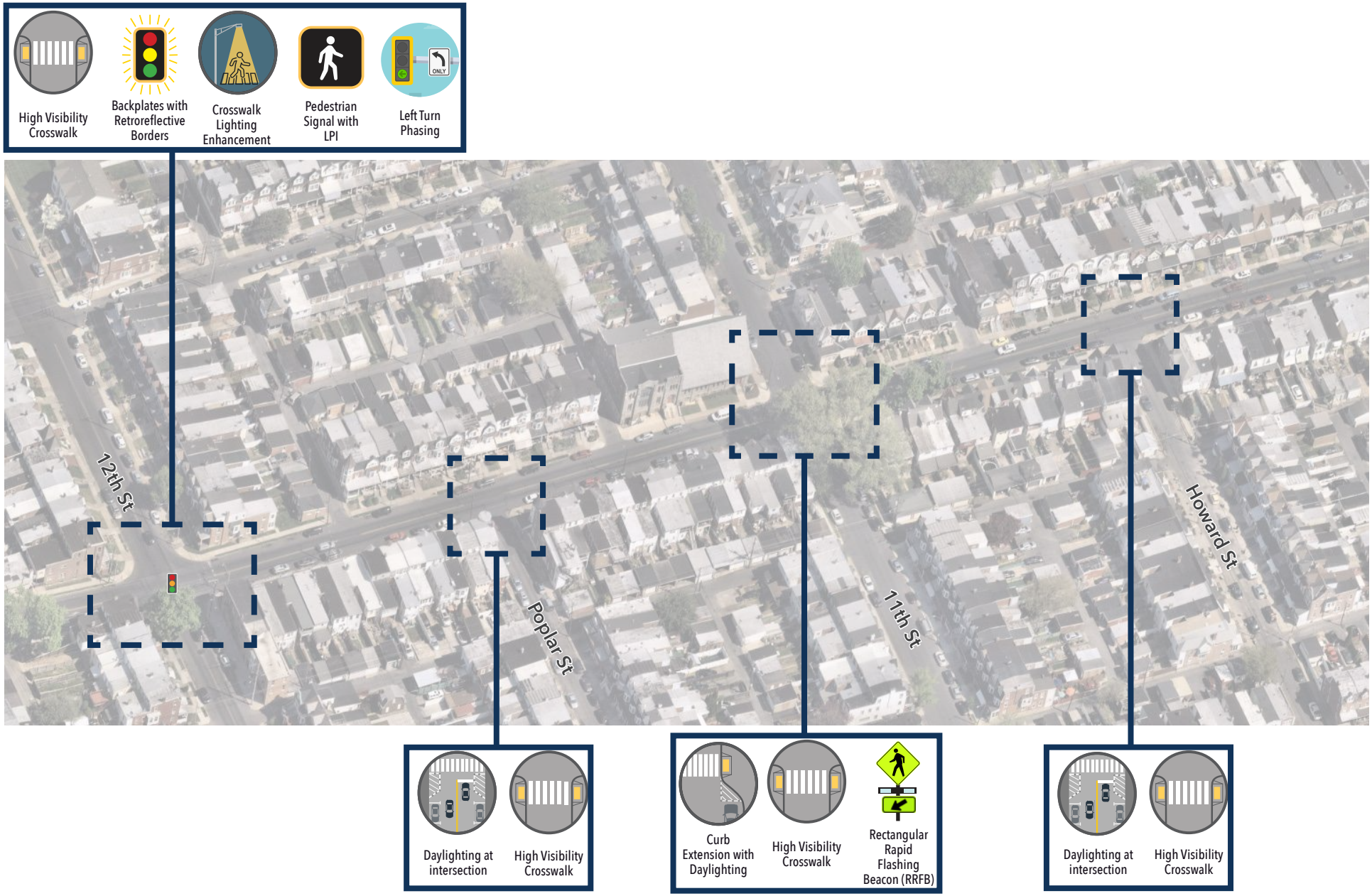


TILGHMAN STREET EAST CORRIDOR

Section 1 Concept Plan -14th Street to South 12th Street

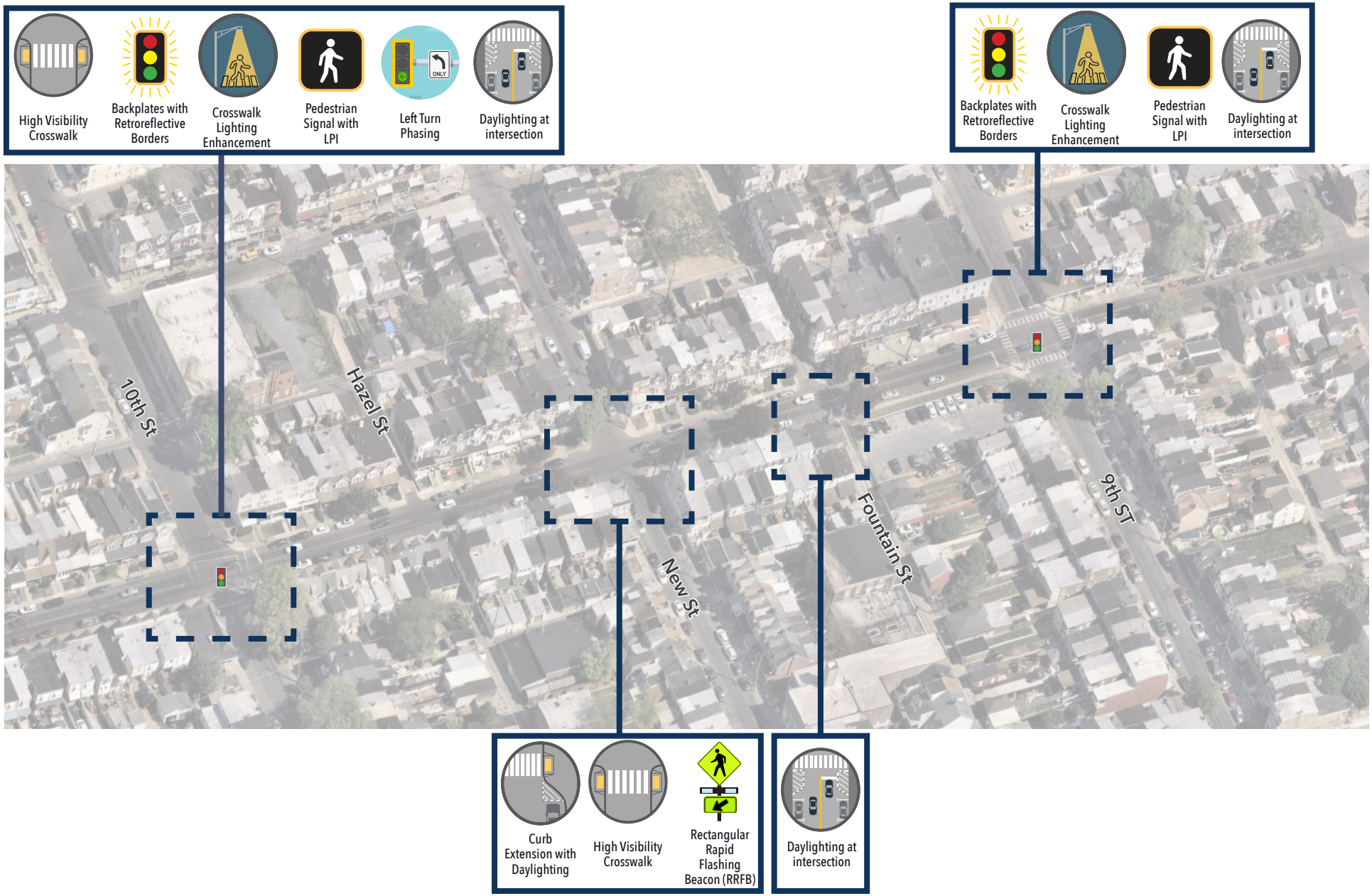
TILGHMAN STREET EAST CORRIDOR

Section 1 Concept Plan - 12th Street to 10th Street



TILGHMAN STREET EAST CORRIDOR

Section 1 Concept Plan - 10th Street to Lumber Street

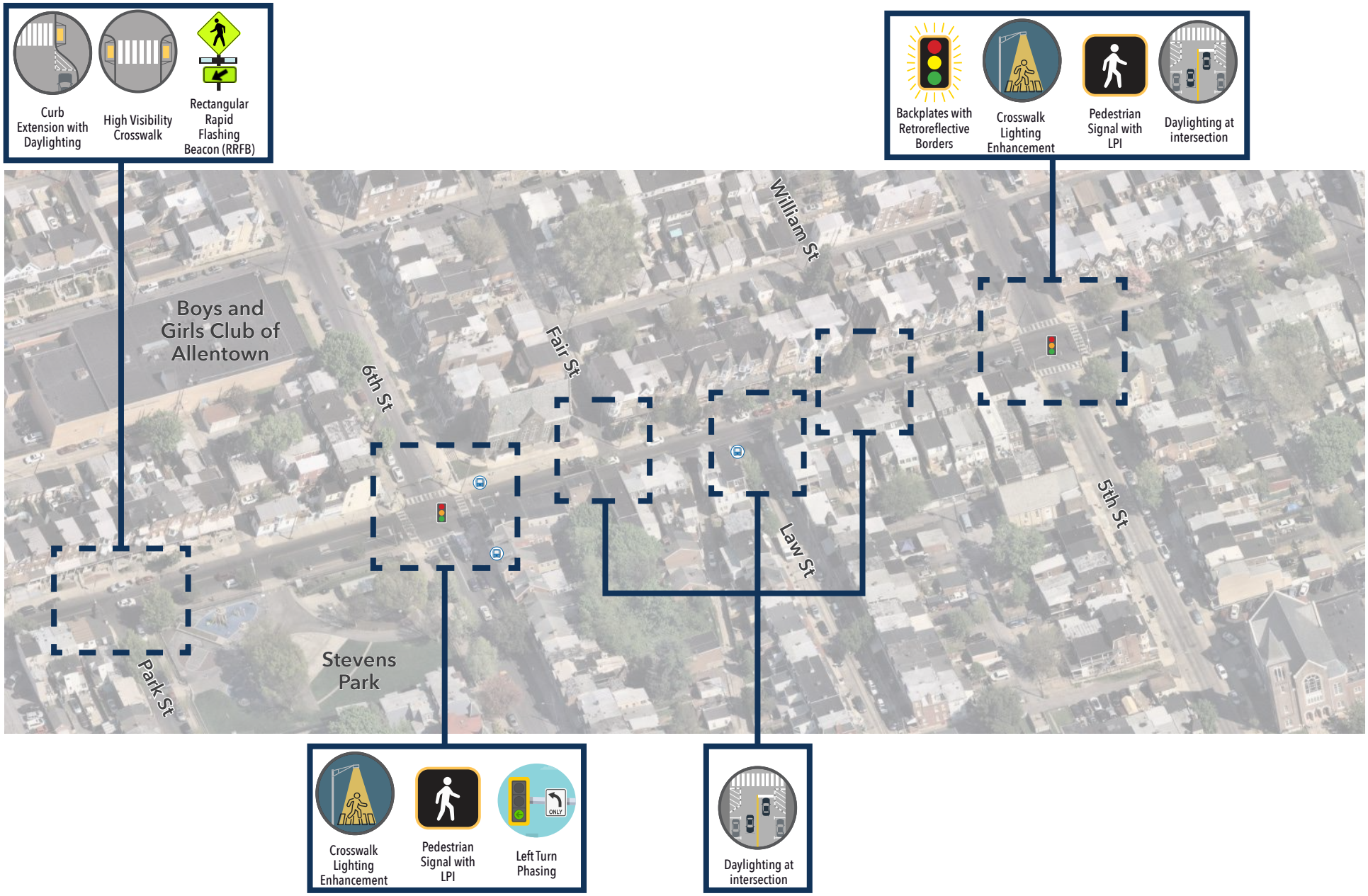


TILGHMAN STREET EAST CORRIDOR

Section 1 Concept Plan - Lumber Street to 7th Street

TILGHMAN STREET EAST CORRIDOR

Section 2 Concept Plan - 7th Street to Penn Street

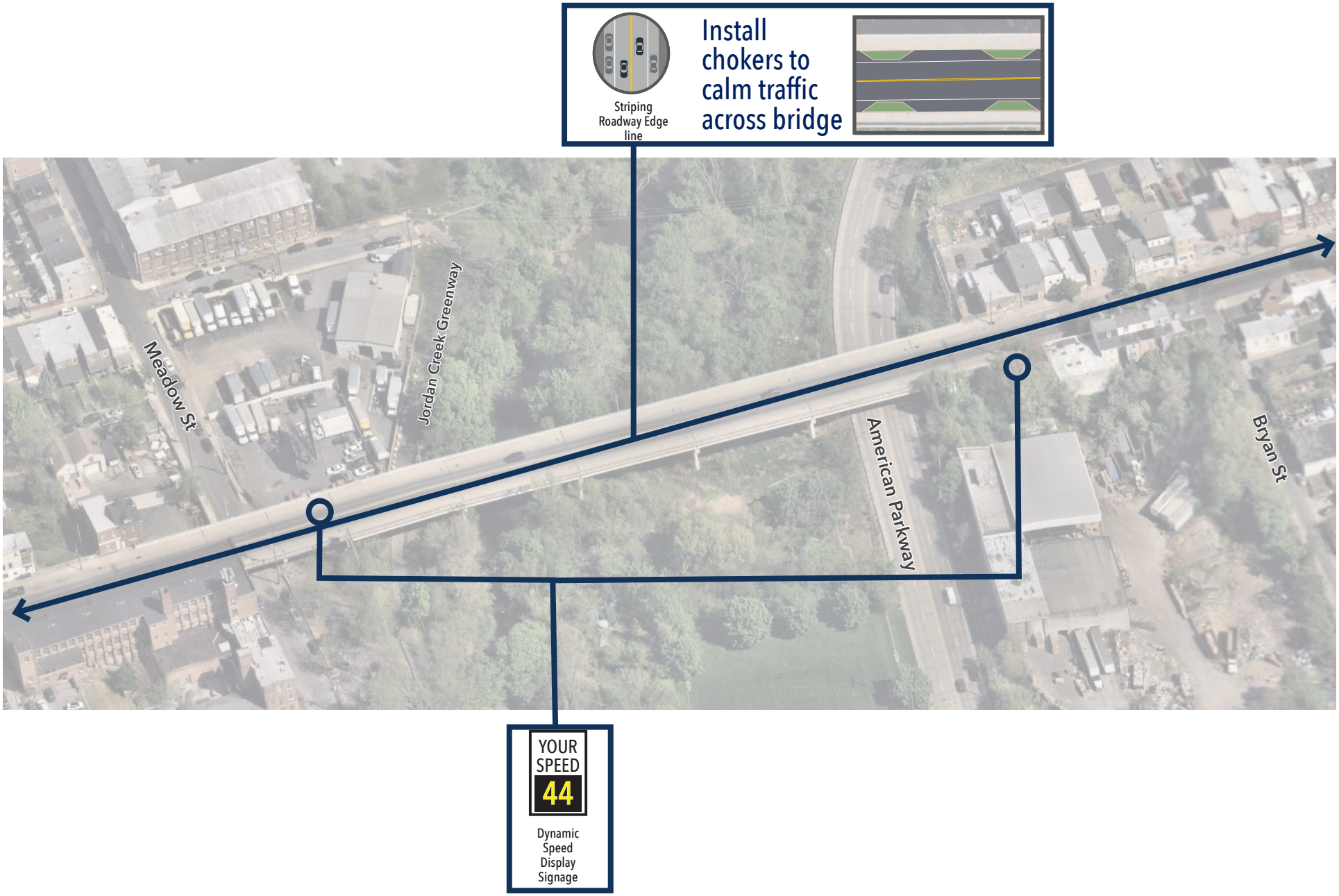


TILGHMAN STREET EAST CORRIDOR

Section 2 Concept Plan - Penn Street to Meadow Street

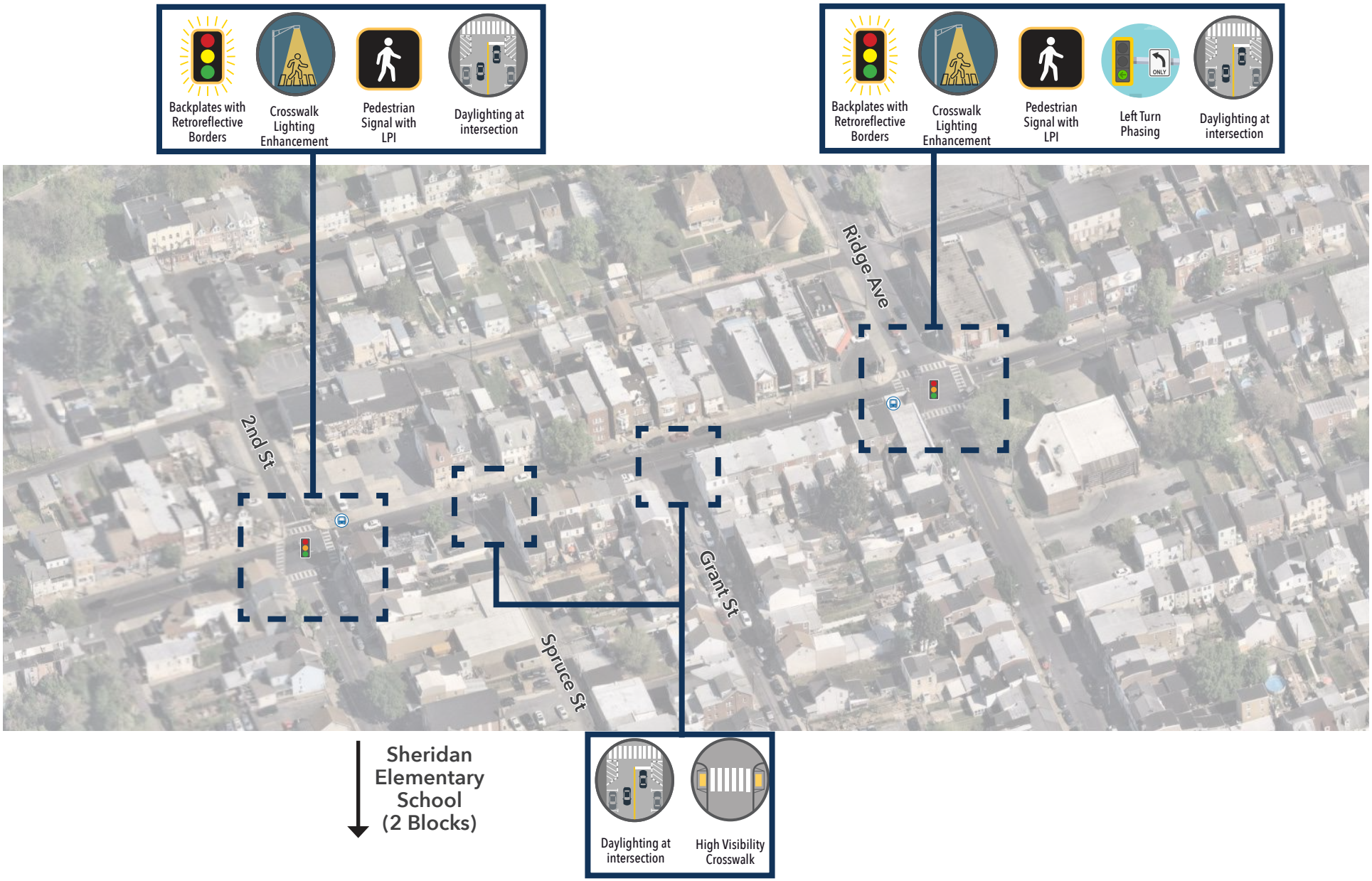
TILGHMAN STREET EAST CORRIDOR

Section 2 **Concept Plan** - Meadow Street to 2nd Street



TILGHMAN STREET EAST CORRIDOR

Section 2 Concept Plan - 2nd Street to Railroad Street



TILGHMAN STREET EAST CORRIDOR

Section 2 **Concept Plan** - Railroad Street to North Front Street

UNION BOULEVARD

Corridor Overview

The Union Boulevard Corridor features a wide roadway width throughout that shifts from four-lanes in the western portion to two-lanes as it nears the eastern border of the city. This currently leads to excessive speeds but also presents the opportunity for more space to add dedicated bus/bicycle infrastructure. There are a lack of stop-controlled intersections and protected pedestrian crossings along the corridor leading many people to cross at unsafe midblock locations. The corridor features many commercial uses that drive pedestrian foot traffic, along with nearby residential neighborhoods and local schools. The corridor is also an important transit route as part of LANTA's Enhanced Bus Service (EBS) Blue Line. Union Boulevard is State 1002 under the jurisdiction of [illegible] DOT.

PLANNING LEVEL COST ESTIMATE

$2,374,400

Section 1 - North Front Street to North Ellsworth Street

The area is characterized by commercial/light industrial use, with no on-street parking, sidewalks on both sides

Section 2 - North Ellsworth Street to Airport Road

This area is characterized by commercial/light industrial use with some residential south of the corridor, featuring no on-street parking, sidewalks along both sides, and crosswalks at intersections.

Section 3 - Airport Road to East City Limits

This section is characterized by a two-lane roadway with no on street parking and primarily commercial land use on either side.

Concept Plans

- Halstead Street to Jerome Street
- Detail: Roundabout
- Jerome Street to Maxwell Street
- Maxwell Street to Plymouth Street
- Plymouth Street to Sherman Street
- Sherman Street to Wall Street
- Wall Street to Eaton Avenue

PROPOSED IMPROVEMENTS

- Systemic intersection upgrades along corridor including:
  - » Daylighting.
  - » Curb extensions.
  - » High visibility crosswalks.
  - » Crosswalk lighting enhancements.
  - » Rectangular rapid flashing beacons (RRFB).
  - » Pedestrian signals with leading pedestrian intervals (LPIs).
- Intersection redesign at Union Boulevard/Airport Road/Irving Street.
- Installation of dedicated bus/bicycle infrastructure.

UNION BOULEVARD CORRIDOR

Section 1 - North Front Street to North Ellsworth Street

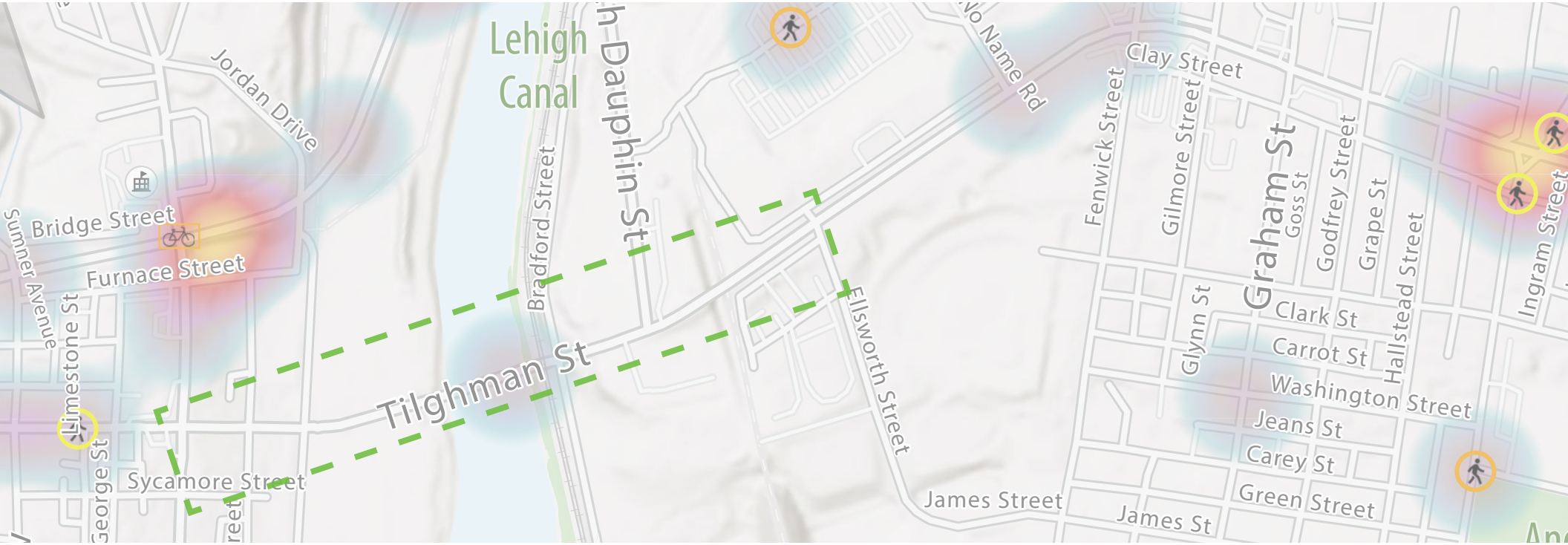
High-Injury Crashes 1

SPEED LIMIT 35

Three-lane (~36' wide) cross-section with turn lanes at intersections and two-way left center turn lane between intersections).

Roadway Context

- Commercial/light industrial
- No on-street parking
- Sidewalks along both sidesof roadway
- Crosswalk at North Ellsworth Street



UNION BOULEVARD CORRIDOR

Section 2 - North Ellsworth Street to Airport Road

High-Injury Crashes 3

SPEED LIMIT 35

Four-lane (~52' wide) cross-section with no turn lanes other than approaching the Airport Road intersection.

Roadway Context

- Commercial/light industrial with some residential south of corridor
- No on-street parking
- Sidewalks along both sides of roadway
- Crosswalks at intersections

Focus on Section 3 due to high number of high-injury crashes

Section 3 - Airport Road to East City Limits

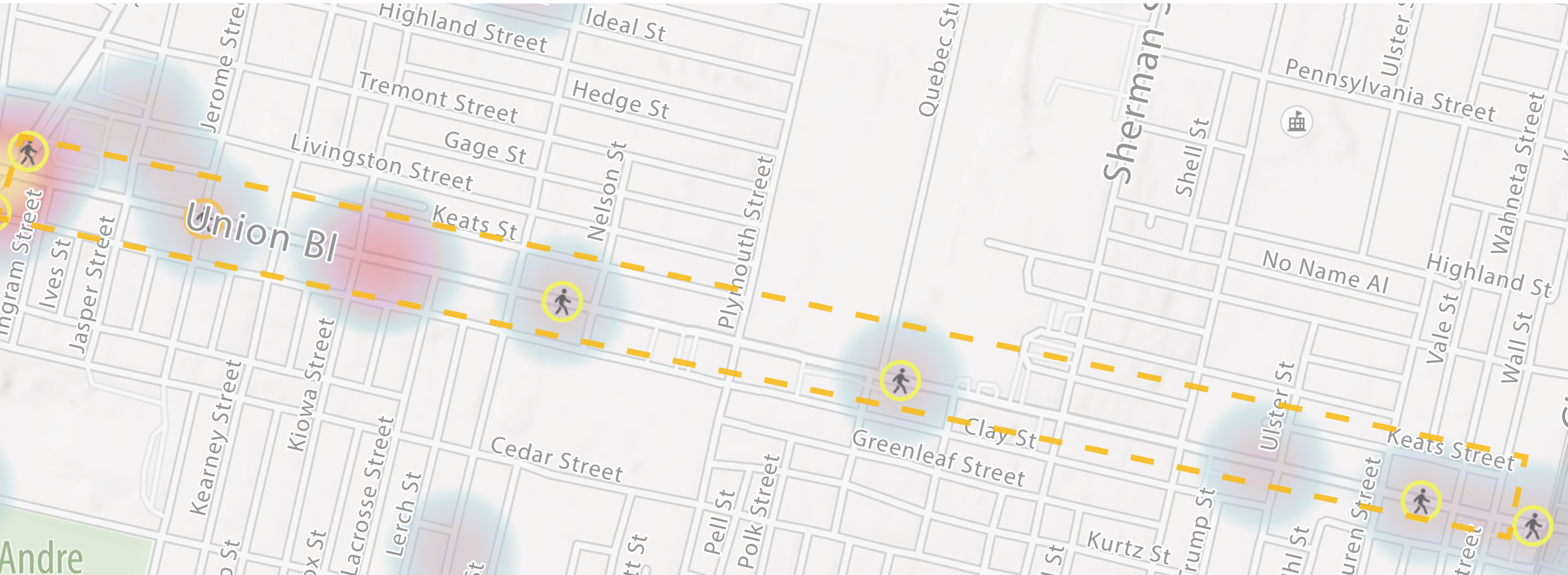
High-Injury Crashes **11**

SPEED LIMIT **35**

Two-lane (~50' wide) cross-section with no turn lanes.

Roadway Context

- Primarily commercial with residential to north/south
- Sidewalks both sides of roadway
- Intermittent on-street parking
- Crosswalks at intersections

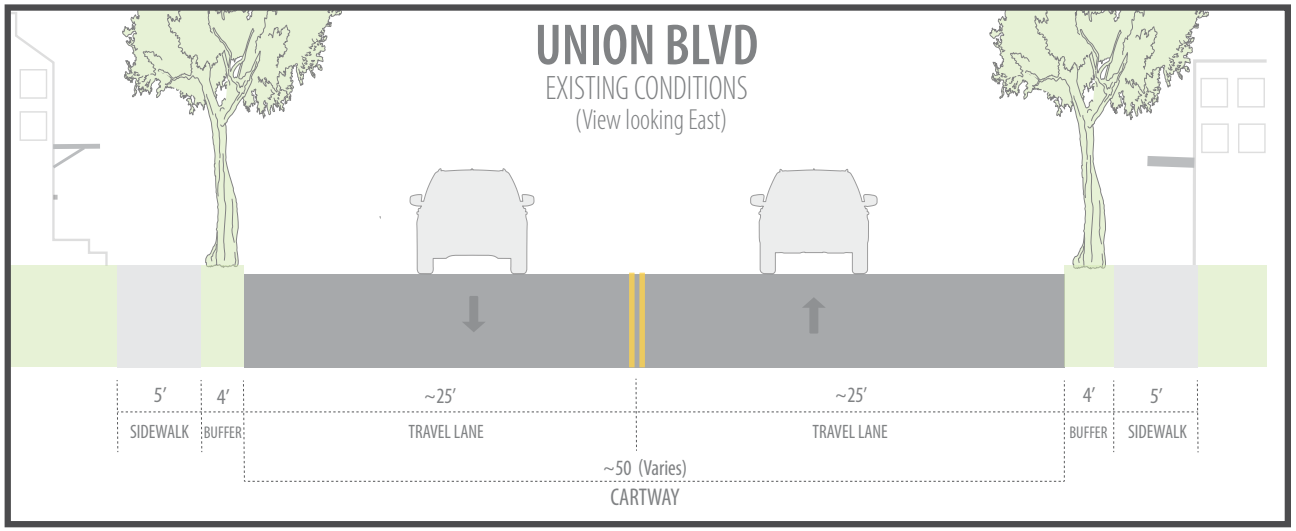


Corridor Wide Recommendations

Union Boulevard represents an important arterial corridor for vehicles, transit, pedestrians, and cyclists. These competing uses can lead to conflicts that result in high-injury crashes due to excessive vehicle speeds. The following cross sections provide some potential treatments that could be applied along the corridor to enhance safety for all road users.

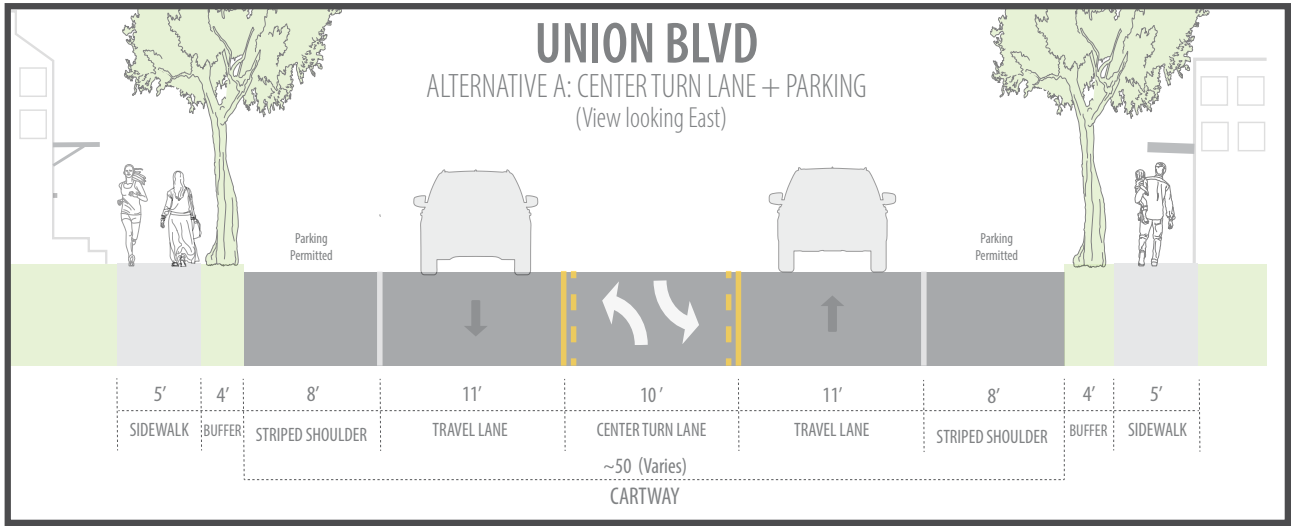
Existing Conditions

- Extremely wide travel lanes (~25').
- Intermittent/unmarked parking leads to unpredictability.
- Drivers often pass in shoulder area when waiting on others to make left turns onto side streets.
- Mature tree canopy which can limit visibility.



Center Turn Lane + Parking

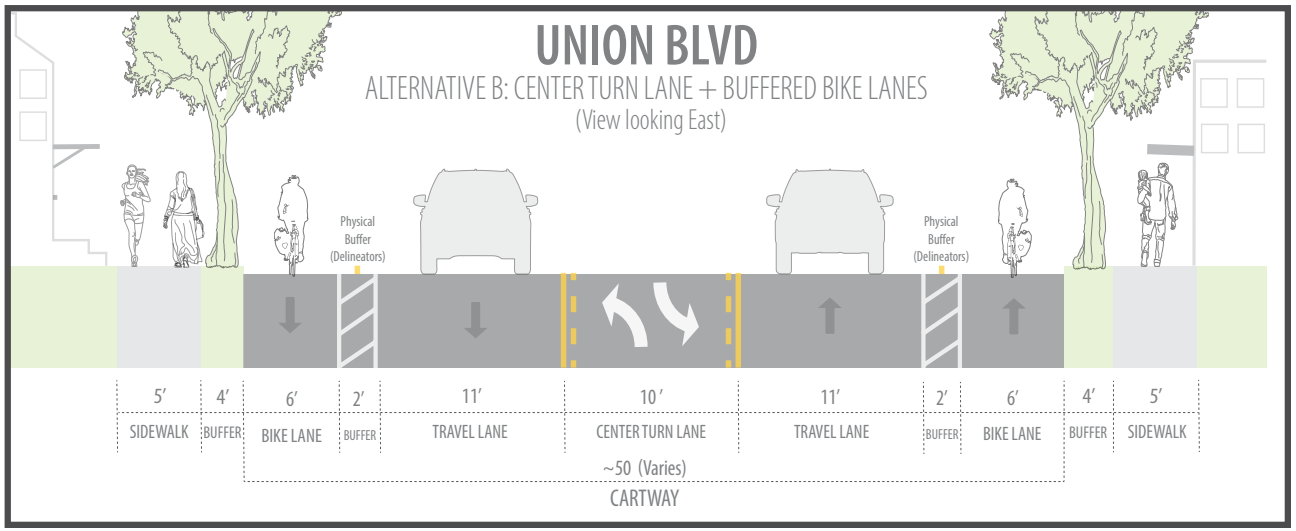
- Provides area for drivers to make predicable left hand turns.
- Permits parking but provides lane markings at shoulder to visibly narrow lane width and calm traffic.
- No specific accommodations for bicycles.



UNION BOULEVARD CORRIDOR

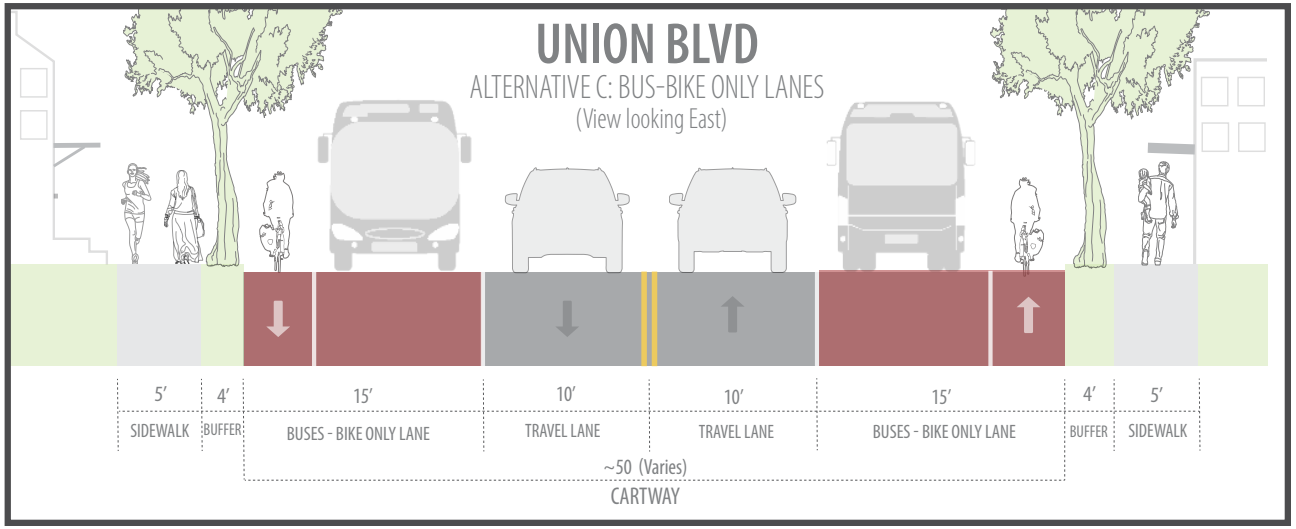
Center Turn Lane and Buffered Bike Lanes

- Provides area for drivers to make predicable left hand turns.
- Bike lanes with physical barrier between riders and traffic (potential issues for maintenance).
- Removes on-street parking.



Bus-Bike Only Lanes

- Prioritizes transit along LANTA EBS corridor by providing restricted area for bus and bike only travel.
- Would require additional enforcement.
- Removes on-street parking.
- Not as comfortable for bicyclists as a buffered bike lane option.

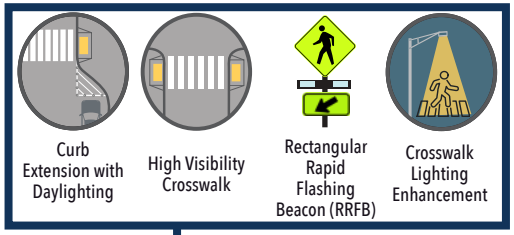


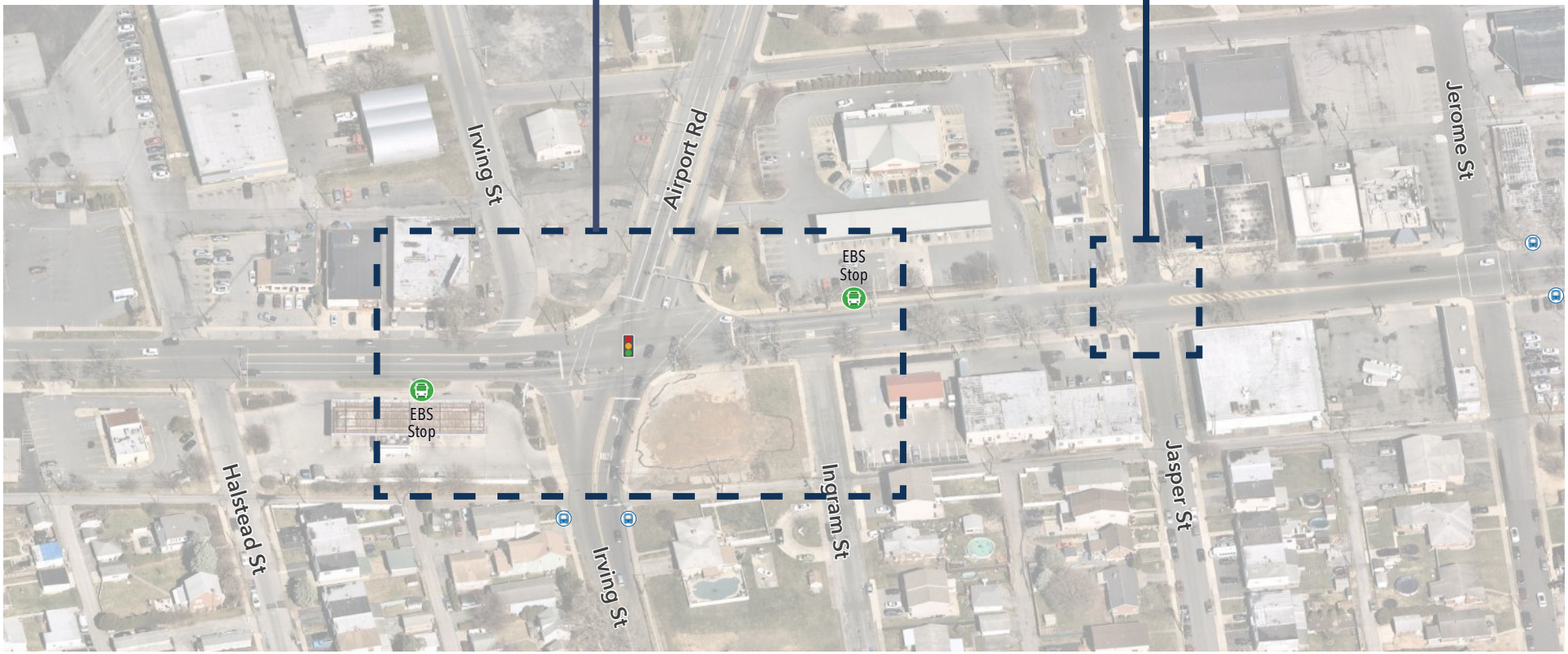
UNION BOULEVARD CORRIDOR

Section 3 Concept Plan - Halstead Street to Jerome Street

DETAILED CONCEPT PLAN

See Intersection Redesign Concept





Dieruff High School (1 Block)

Union Boulevard/Airport Road/ Irving Street Intersection - Existing

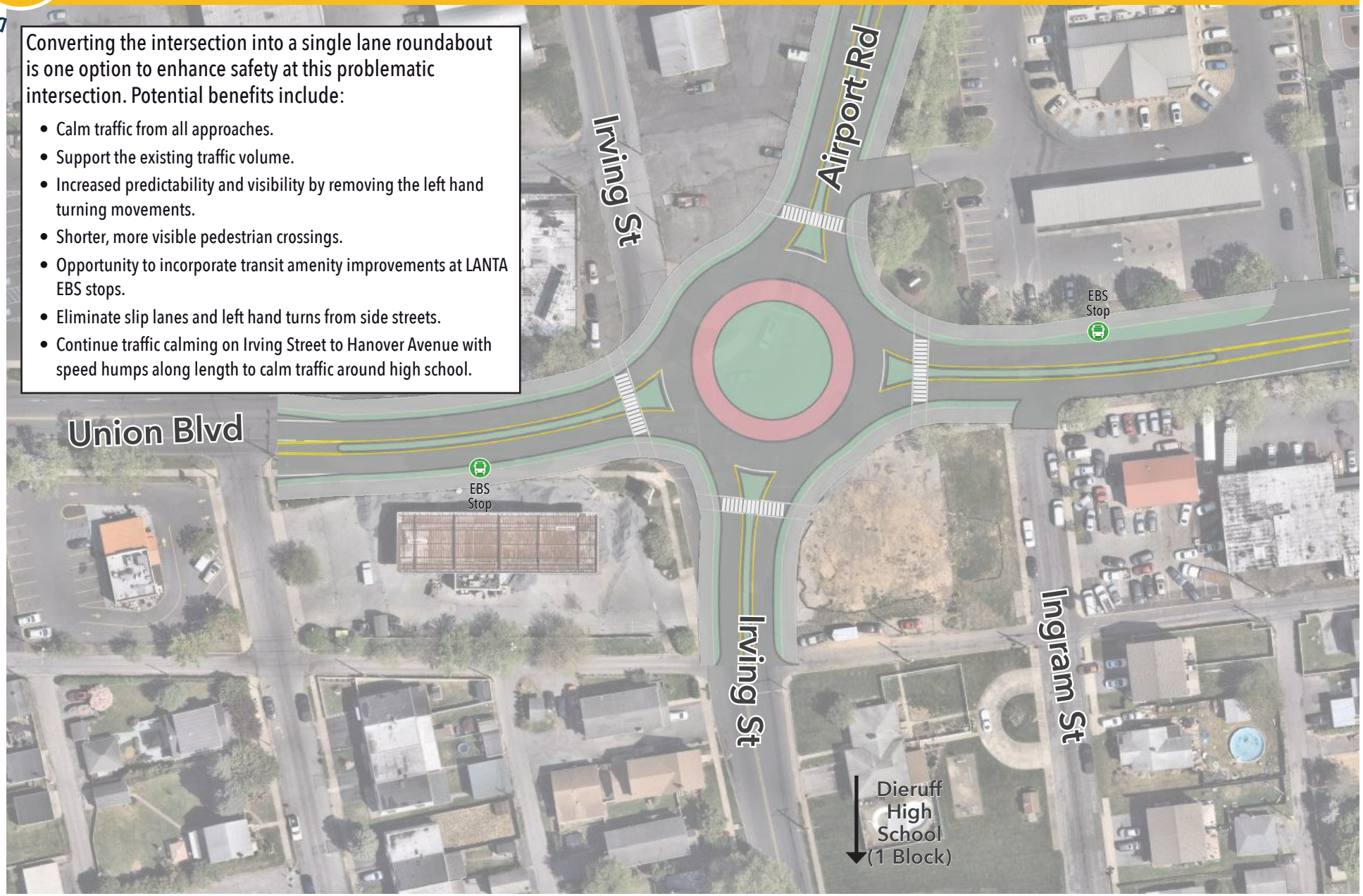
DETAILED CONCEPT PLAN

UNION BOULEVARD CORRIDOR

Potential Roundabout Treatment

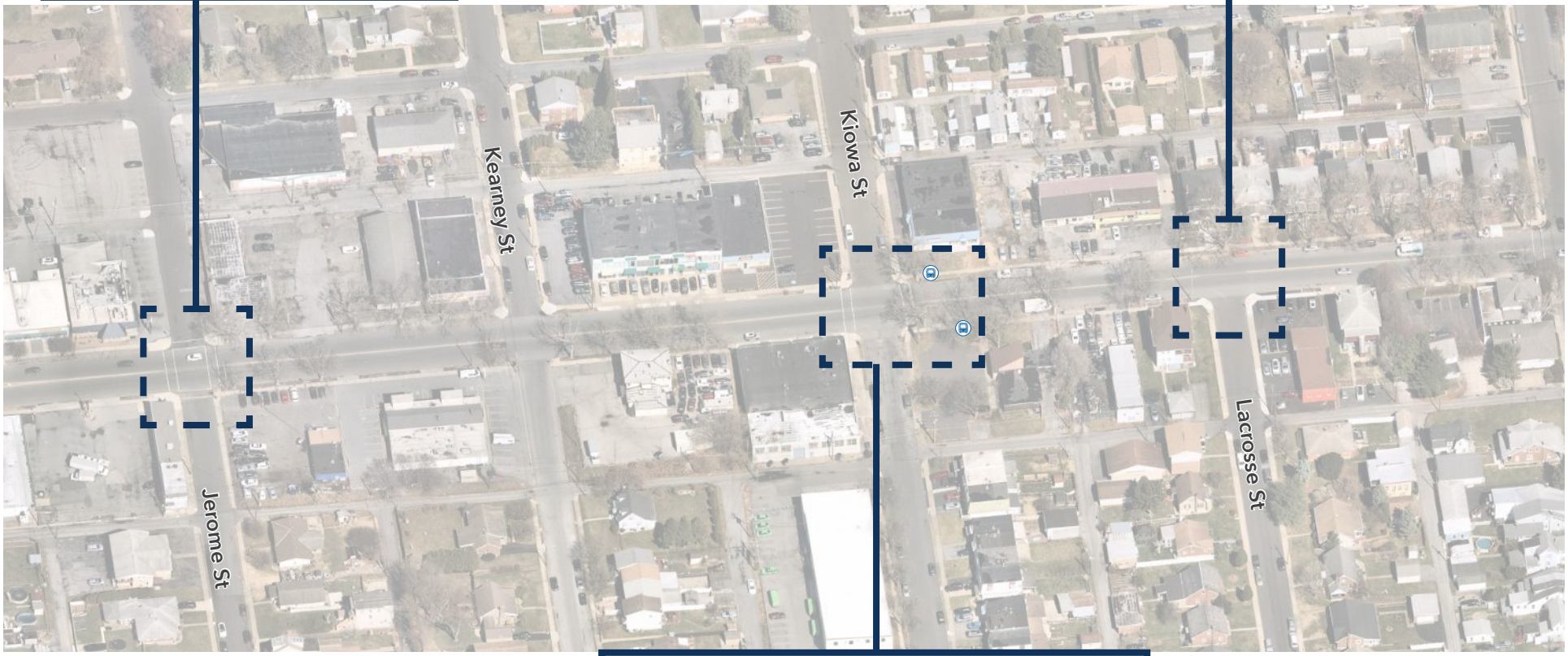
Converting the intersection into a single lane roundabout is one option to enhance safety at this problematic intersection. Potential benefits include:

- Calm traffic from all approaches.
- Support the existing traffic volume.
- Increased predictability and visibility by removing the left hand turning movements.
- Shorter, more visible pedestrian crossings.
- Opportunity to incorporate transit amenity improvements at LANTA EBS stops.
- Eliminate slip lanes and left hand turns from side streets.
- Continue traffic calming on Irving Street to Hanover Avenue with speed humps along length to calm traffic around high school.



UNION BOULEVARD CORRIDOR

Section 3 Concept Plan - Jerome Street to Maxwell Street



UNION BOULEVARD CORRIDOR

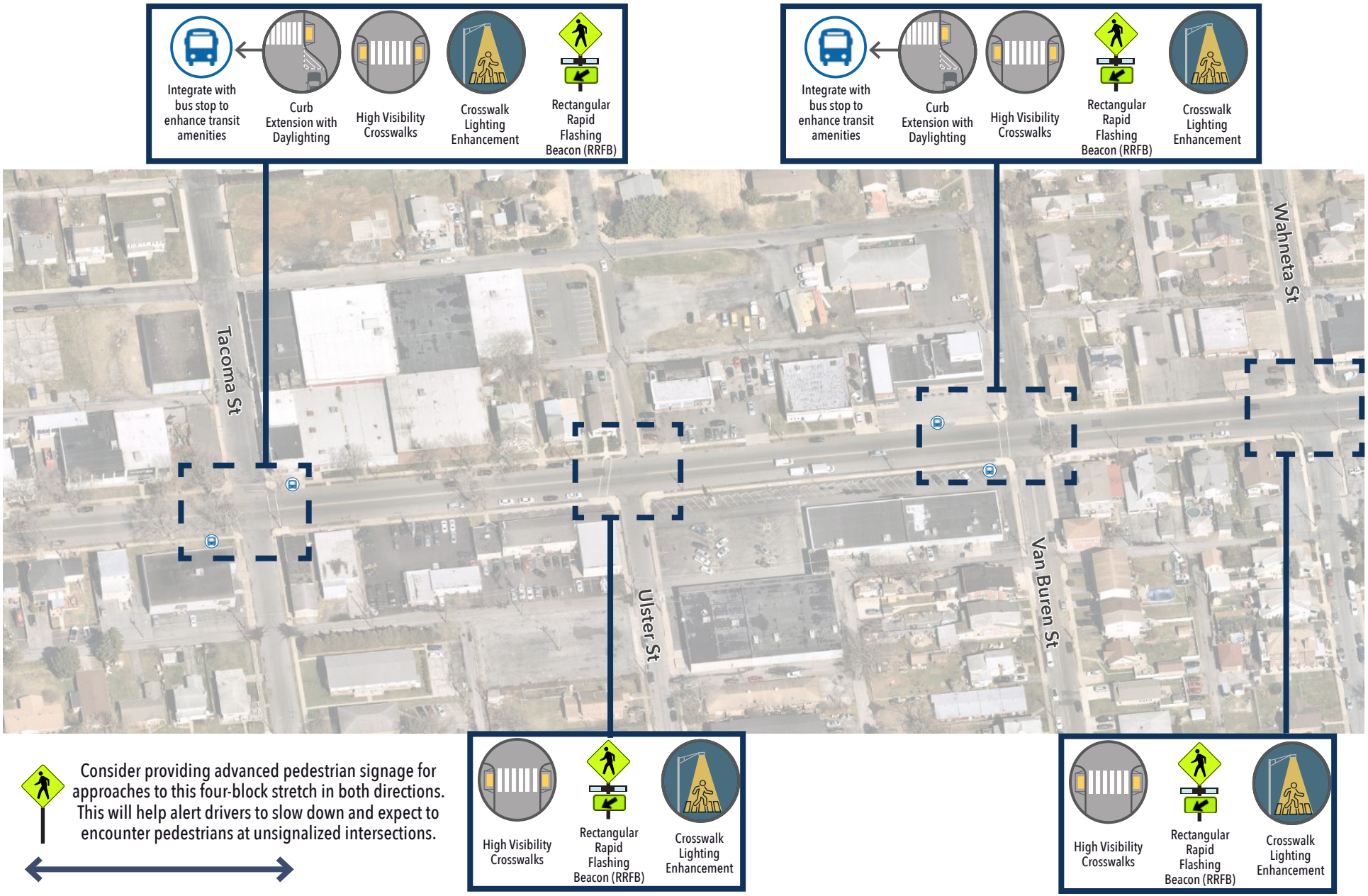
Section 3 Concept Plan - Maxwell Street to Plymouth Street

UNION BOULEVARD CORRIDOR

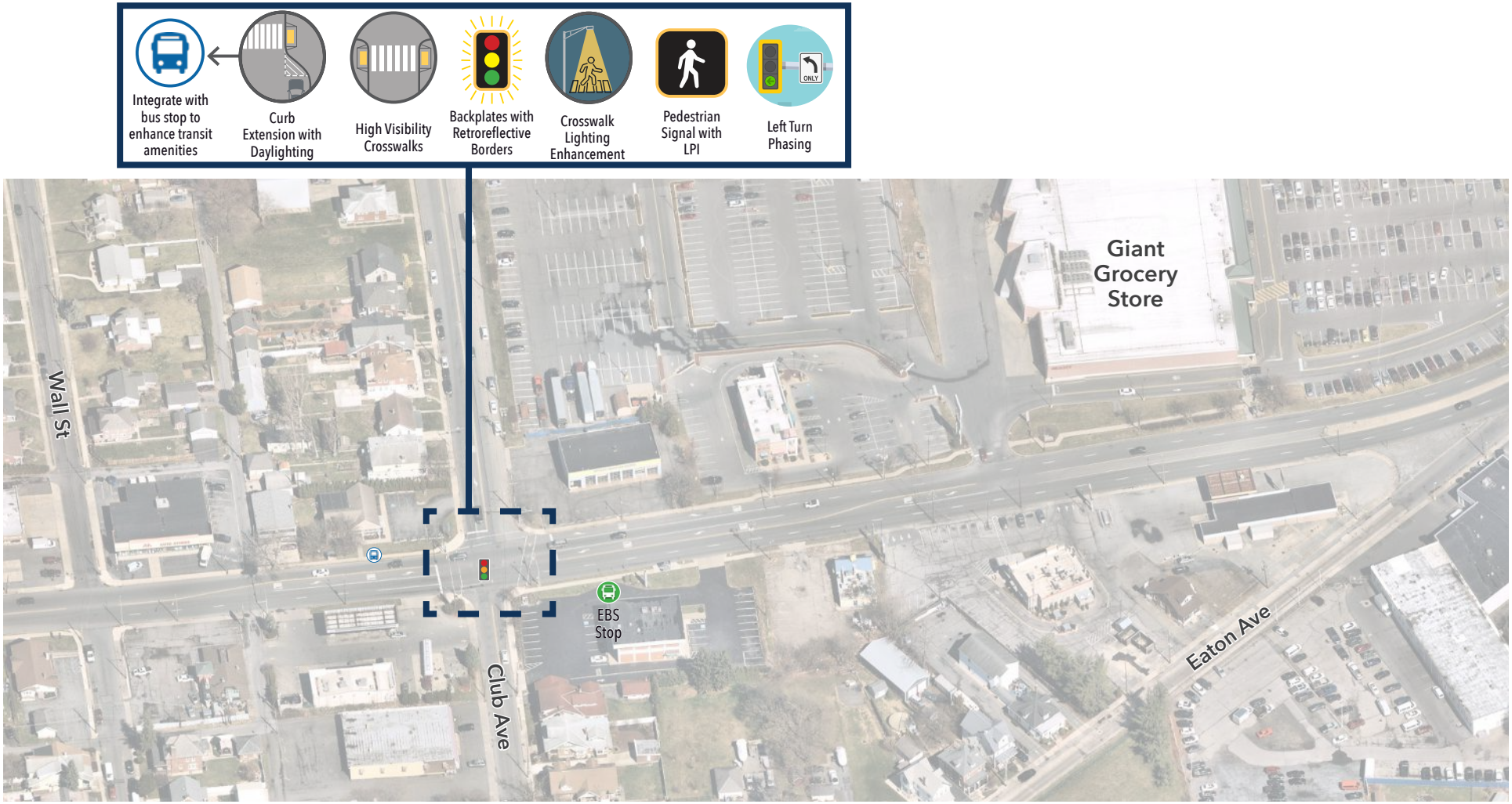
Section 3 Concept Plan - Plymouth Street to Sherman Street

UNION BOULEVARD CORRIDOR

Section 3 Concept Plan - Sherman Street to Wall Street



Section 3 Concept Plan - Wall Street to Eaton Avenue



Process Improvements

Efforts and recommendations in this section involve changes to internal procedures, policies, and practices used by City departments responsible for transportation planning in Allentown. These recommendations seek to ensure that there are processes in place that guide safety interventions in an intentional and efficient manner, aligned with the Safe System Approach.

Supports the following SS4A Action Plan Goals:

Ongoing Efforts

Advocacy for priority transportation projects during the Long-Range Transportation Plan (LRTP) update every four years and Transportation Improvement Program (TIP) cycle every two years.

The TIP is the Lehigh Valley's four-year plan to maintain and enhance the transportation system in Lehigh and Northampton Counties. It is updated every two years. Eligible projects from the TIP must be included in the Long-Range Transportation Plan (LRTP). The City of Allentown should continue to work closely with LVPC and the Lehigh Valley Transportation Study (LVTS) to advocate for inclusion of their priority projects in the LRTP and ultimately in the TIP. Since the LRTP and TIP cycle are continuous every four and two years respectively, the City of Allentown should integrate this coordination into their annual work plans for the years that correspond to the updates.

LVPC Lehigh Valley Planning Commission / LVTS Lehigh Valley Transportation Study

Recommendations

Advocate for state legislation that supports the SS4A Action Plan.

The City of Allentown and its partners should support state legislation for red light running cameras, speed enforcement cameras, use of radar guns by local police, and parking protected bike lanes on state routes and local roads throughout Allentown.

Formalize a request and review process for road safety concerns.

There is no formal reporting mechanism for road safety concerns in Allentown. A formal reporting and request process for road safety issues and traffic calming measures should be instituted. As shown through the SS4A Action Plan survey, residents are intimately familiar with road safety challenges because they use the city's streets every day. This process would standardize how residents, businesses, and local organizations report dangerous areas or request traffic calming interventions. This process would also include standard operating procedures for reviewing the requests, determining feasibility, and communicating an outcome to the community member who submitted the request. The review process would include using the prioritization scoring established in this Action Plan.

Fund and hire a traffic/roadway community outreach liaison.

The traffic/roadway community outreach liaison would work within either the Public Works Department or Police Department; however, this position is envisioned to be collaborative with other departments as well, including Planning and Zoning, Parks and Recreation, and Health. The outreach liaison would be responsible for implementing educational opportunities included in the **Progress and Transparency section** of this plan. Additionally, they can organize and participate in community meetings, workshops, and events to educate residents about roadway safety initiatives and gather feedback on local concerns. Acting as the primary point of contact, they can ensure effective communication between the City and the community, disseminating information about upcoming projects, road closures, and safety campaigns. They can advocate for the community's needs, working closely with local organizations, schools, and businesses to promote safety initiatives.

Develop a framework for scoring the sustainability impact of different roadway improvement countermeasures.

The sustainability score would take into account the relative frequency and cost of maintenance of the countermeasures (higher maintenance costs would receive a lower score), the expected life of the countermeasures (shorter life would receive a lower score), the extent to which the countermeasures enhance multimodal transportation (more enhancement receives a higher score), the extent to which the treatment incorporates green infrastructure and native plants (more receives a higher score), etc. The City of Allentown's Environmental Advisory Committee proposes to work with the City's Sustainability Coordinator and the City's Public Works Department in developing the sustainability scoring criteria and framework. The score could be considered for integration into the Safe Streets for All dashboard (see the **Progress and Transparency section**).

Fund and hire a full-time long-range transportation planner/engineer position.

There is currently no long-range transportation planner or engineer for the City of Allentown. The City of Allentown should invest in a long-range transportation planner or engineer who would be responsible for ushering the implementation of the SS4A Action Plan, analyzing data, engaging with the community, securing grants, and coordinating with regional and state agencies.

Adopt Complete Streets Policy and Design Standards

Complete Streets refers to the principle of designing streets with all road users (pedestrians, bicyclists, transit users, and drivers) in mind. To codify Complete Streets standards, the Safe System Approach, and recommendations set forth in the SS4A Action Plan, the City of Allentown should develop and adopt a Complete Streets Policy and Design Standards. The ordinance would include:

- **Applicability criteria:** The ordinance would be an application for any transportation improvement projects undertaken by the City or other agencies (e.g., LANTA, Allentown Parking Authority, etc.), privately constructed streets and parking lots, public utilities undertaking activities that involve a roadway, and any other person authorized to use or occupy the roadway via a permit, encroachment license, or other agreement.
- **Design standards:** Established Complete Streets design treatments (i.e., safety countermeasures) and design treatment suitability matrix for different street types. Compliance with modern ADA requirements for people of all abilities is a priority.
- **Performance measures:** Measures, such as number of crosswalk and intersection improvements, percentage of private and public projects applying complete streets principles within one-half mile of a school, etc., that can measure the success of the Complete Streets policy. These performance measures should align with the annual outcomes and implementation measures outlined in this Action Plan in the **Progress and Transparency section.**

- **Reporting:** Methods of reporting on Complete Streets policy implementation, such as updates to a website/webpage, reporting on performance measures.
- **Process:** Formalizing the process for intra-City coordination on roadway improvements and alignment with City plans, along with collaboration with stakeholders.
- **Incorporation Into Land Development Process:** These design standards should be incorporated in the Subdivision and Land Development Ordinance (SALDO). Improvements to the right-of-way can be a requirement of the land development process. Alternatively, the developer can provide fees in lieu of improvements. Fees will be used by the City as matching grant funds when the City applies for road safety grant programs.

Develop a Complete Streets Checklist.

A Complete Streets Checklist is a tool that can guide land development applicants, the Department of Public Works, and other stakeholders in ensuring that every project that includes street improvements accommodates all roadway uses, including pedestrians, cyclists, public transit riders, and drivers, and complies with the Complete Streets Design Standards. This checklist would consist of several different considerations that will need to be accounted for: land use and context, pedestrian facilities, bicycle infrastructure, transit accommodations, traffic calming and vehicle flow, maintenance, and long-term considerations. This checklist would be required when an applicant proposes any change to the curb line, encroachment into the right-of-way, or significant land development.

Incorporate Complete Streets Design Standards into routine maintenance and improvement projects.

The City of Allentown should work with PennDOT and LVPC to incorporate Complete Streets Design Principles into future road repair and improvement projects wherever feasible. For example, a street repaving project could be a prime opportunity to daylight an intersection or install bump outs.

Other Recommendations for Consideration

Other policy recommendations for consideration include:

- Development of an ADA ramp transition plan.
- Creation of a traffic calming policy.
- Complete and implement the Citywide Bike Plan which is currently ongoing.

COMPLETE STREETS POLICY AND GUIDE EXAMPLES

Many cities across the Commonwealth and the county have been implementing Complete Streets Policies and associated design guidelines and/or handbooks.

Smart Growth America facilitates the National Complete Streets Coalition (NCSC) which provides technical assistance to municipalities as well as a wide breadth of resources and templates for Complete Streets policies, guides, and projects.[1]

The National Association of City Transportation Officials (NACTO)'s Urban Street Design Guide is also a great resource for developing design guidelines and elements for complete streets.[2]

1 Smart Growth America. (2025) Complete Streets Resources. https://smartgrowthamerica.org/program/national-complete-streets-coalition/resources/

2 NACTO. (2025) Urban Street Design Guide. https://nacto.org/publication/urban-street-design-guide/

How to Use This Guide

Montgomery County developed this Complete Streets Design Guide to provide policy and design guidance to government agencies, consultants, private developers, and community groups on the planning, design, and operation of roadways for all users. This guide should be used in the following situations:

When designing future streets or reconstructed streets in an area experiencing land development

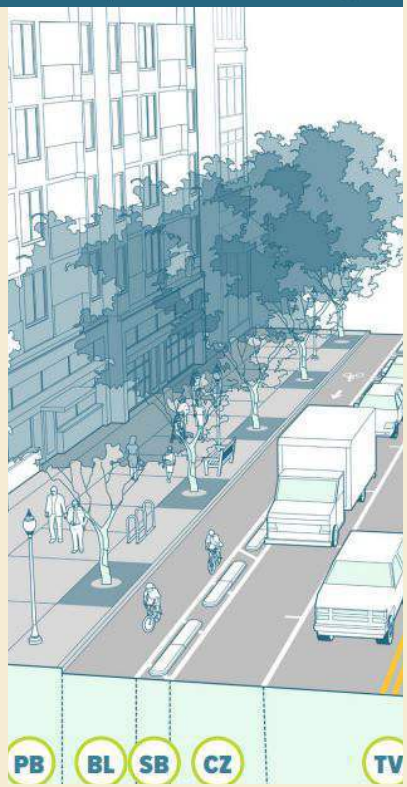
When implementing a capital improvement project, such as the construction or reconstruction of a street, intersection, or bridge

When resurfacing a street or conducting major work in the street, which may create an opportunity to reconsider some aspects of the street's design

Example: Montgomery County, Maryland

Montgomery County created a Complete Streets Design Guide to provide guidance to government agencies, private developers, and community members whenever a street is being developed or reconstructed, a capital improvement project is implemented, and resurfacing work is completed.

The document presents guidance for different street types, active zones (the area between the curb and property line), street zones (roadway between the curbs), bikeways, intersections, green streets, and speed management.[1]



STREET TYPOLOGY	MINIMUM[3,4,5]	PREFERRED	MAXIMUM
Commercial Connector	10'	11'	12'
Main Street	10'	10'	12'
Neighborhood Residential	9'	10'	10'
Mixed Use Boulevard	10'	10'	12'
Neighborhood Connector	10'	10'	12'
Parkways	10'	10'	11'
Industrial	11'	12'	13'
Shared Streets	N/A	N/A	N/A
Overlays	**Minimum**	**Preferred**	**Maximum**
Bicycle Network Streets	N/A	N/A	N/A
Transit Streets[6]	11'	11'	12'
Historic Streets and Alleys	N/A	N/A	N/A
Other	**Minimum**	**Preferred**	**Maximum**
Parking Lane	7'	8'	N/A
Two-way left turn lane	10'	12'	12'
Right or left turn lane	9'	10'	11'
Alley (one-way)	N/A	15'	N/A
Alley (two-way)	N/A	18'	N/A

Notes: A design exception may be required for some widths on federal or state-funded projects.

Example: Alexandria, Virginia

To accompany their Complete Streets Policy, the City of Alexandria created a Complete Streets Design Guide aimed to clearly communicate expectations for street design. The guidelines include an overview of street typologies and different complete streets design considerations for each street typology. Additionally, in-depth guidance regarding sidewalk and sidewalk features (e.g., street trees, plantings, wayfinding, and lighting), roadway, and intersection design is provided.[2]

1 Montgomery County, MD. (2025) Complete Streets Design Guide. https://montgomeryplanning.org/wp-content/uploads/2024/05/Montgomery-County-Complete-Streets-Design-Guide_v1.2.pdf

2 Alexandria, VA. (2025) Complete Streets. https://www.alexandriava.gov/CompleteStreets

Collaboration Opportunities

These recommendations promote collaboration between the Department of Public Works, internal stakeholders, and external stakeholders.

Ongoing Efforts

Coordination with PennDOT in the early stages of the planning process for state-owned road improvements.

The City of Allentown should continue to engage with PennDOT early in the planning stages of any state-owned corridor projects in Allentown to ensure that safety measures are integrated from the outset. PennDOT recognizes the importance of this coordination in their PennDOT Connects policy and program that aims to take a more holistic approach to planning by considering community needs at the beginning of the planning process to ensure the best allocation of resources.

Supports the following SS4A Action Plan Goals:

Facilitation of regular and ongoing communication regarding road safety between Allentown departments and authorities.

The Department of Public Works has established positive working relationships with City of Allentown departments and the Allentown Parking Authority. The Department of Public Works shares information on ongoing projects and coordinates on specific project details on an as needed basis with the relevant City department. This coordination should continue and could be strengthened through regularly occurring coordination meetings with the Allentown Police Department, Allentown Parking Authority, Bureau of Planning and Zoning, Department of Parks and Recreation, and Department of Public Works. The purpose of these meetings would be to continue to facilitate coordination on ongoing and upcoming projects, recurring road safety challenges, grant opportunities, SS4A Action Plan implementation and monitoring, and more.

Recommended Opportunities

Engage in regional collaboration facilitated by the Lehigh Valley Planning Commission.

Work closely with the Lehigh Valley Planning Commission (LVPC) to align Allentown's safety initiatives with the regional comprehensive plan, FutureLV, and the LRTP. Additionally partnership with the Lehigh Valley Transportation Study (LVTS) planning and programming efforts supported by the LVPC will increase alignment among transportation efforts. Close collaboration and coordination with the LVPC can also aid in better multi-municipal planning efforts. As part of the Allentown SS4A Action Plan planning process, the LVPC convened a stakeholder discussion with all the municipalities surrounding Allentown to better understand their needs, challenges, and initiatives. The City of Allentown should continue these conversations, facilitated by the LVPC, to identify and implement joint projects with neighboring municipalities that can address safety concerns that affect the broader region or cross municipal boundaries.

Coordinate with LANTA to ensure road improvements align with transit-supportive land use guidance and EBS network plans.

As outlined in the **Alignment with Other Planning Efforts section** in the **Introduction chapter**, LANTA is implementing a bus rapid transit project in the region, known as Enhanced Bus Service (EBS). LANTA is currently working on transit signal priority, bus lanes, and signal optimization along the EBS routes. Additionally, LANTA encourages transit-supportive land use and design around their transit stops and routes. In implementing the SS4A Action Plan, the City of Allentown needs to coordinate closely with LANTA during the planning and design stages of any road improvement project located near a transit stop and especially along an EBS route.

Coordinate with the Allentown School District on improvements around schools and along routes to schools.

Coordinate with the Allentown School District on road safety improvements around schools and along key walking routes to schools, along, with implementing safe pick-up and drop-off locations with clear signage. Long-term, the City of Allentown, Allentown Parking Authority, and Allentown School District should explore the feasibility of providing bussing for students to alleviate pick-up and drop-off congestion and challenges.

Collaborate with the Allentown Neighborhood Improvement Zone Development Authority (ANIZDA) on roadway safety projects in the Neighborhood Improvement Zone (NIZ).

The ANIZDA Public Improvement Process Guidelines, adopted on August 1, 2018, outline the procedures for financing public improvement projects within the Allentown NIZ.[1] The guidelines detail the roles of various parties, criteria for project approval, and the review process. The guidelines allow for the use of certified state and local tax revenues from qualified businesses within the NIZ to finance capital improvements, including complete streets and road improvements.

1 ANIZDA. (2018) Process Guidelines for Public Improvement Investments. https://allentownniz.com/wp-content/uploads/2018/08/ANIZDA-Public-Improvement-Process-Guidelines-adopted-Aug-1-2018.pdf

Progress & Transparency

When this Action Plan is adopted by City Council, the City will segue from planning to implementation. Planning is only one side of the coin; the other involves the real work of implementing plan recommendations. The City of Allentown is committed to implementing the plan recommendations and will seek to maintain the momentum necessary for a robust and successful implementation process. This includes a multi-pronged approach that will monitor progress and provide communication and transparency to stakeholders and the general public.

Recommendations

Create an Action Plan Steering Committee

The Action Plan Steering Committee will be reconstituted into an Implementation Committee. The Committee will guide City staff in plan implementation and help communicate the plan's direction to a broad spectrum of organizations and individuals, fostering community buy-in. The committee will also assist in furthering the **Collaboration Opportunities recommendations**.

Supports the following SS4A Action Plan Goals:

Develop and maintain an annual Safety Action Plan Report.

The Department of Public Works will develop and maintain an annual SS4A report. The adage "the things that get measured are the things that get done" is apt, and local government is increasingly putting more emphasis on performance-based planning and programming. The public-facing dashboard will assist in this task (see page 186).

To complement the dashboard, the City should produce an annual report that summarizes the implementation metrics and subsequent outcomes for the year. Such reporting will help ensure accountability while providing flexibility for adjustments in approaches. It is recommended that these reports be shared with City Council and posted on the dashboard for public viewing.

Annual Outcomes	Implementation Metrics
• Total number of fatal and serious injury crashes • Number of bicycle-involved crashes • Number of pedestrian involved crashes • Number of speed driving-involved crashes • Comparison to numbers over the last five years	• Number of projects implemented • Number of recommendations implemented • Number of collaboration meetings with stakeholders and community members

Conduct ongoing community education on roadway safety and maintenance.

To accompany the implementation of the Safe Streets for All Action Plan, the City of Allentown should create community-facing educational materials to be used in engagement efforts. These can include:

- **Process Guide:** As process and policy recommendations are implemented, a short guide on how community members can participate in the roadway safety project improvement process should be created. This guide could include information on the process for submitting concerns and a flow chart that outlines what happens after a community member submits a concern. The flowchart can illustrate the path that is taken for roadways owned by the state versus roadways owned by the City, along with the various constraints and opportunities within the process. The Lehigh Valley Transportation Study's Transportation Improvement Program is a great resource for better understanding the project selection process.[1]
- **Project Profiles:** Short one-pagers can be created for Public Works roadway improvement projects to share information about the purpose of the project, timing, and anticipated outcomes. This will help keep community members updated on the implementation of the plan and answer questions they may have on the proposed improvements.
- **Regular Updates/Reminders:** The City can utilize their various media channels to share updates on implementation of the SS4A Action Plan and remind community members that they can visit the website and dashboard to follow progress.
- **School Curriculum/Presentations:** The City can collaborate with local schools to integrate roadway safety education into curriculum through classroom presentations and activities.
- **Share Information About Partner Programming:** There are many organizations, such as the Highway Safety Netowork, that hosts safety trainings and workshop. The City can partner with these organizations and share information about these opportunities via their media channels.
- **"What's on the road?" Profiles:** As new countermeasures are installed around Allentown, the City can share a series of educational posts illuminating the different interventions, why they were installed, and what they mean for pedestrians, cyclists, and drivers.
- **Community Demonstration Events:** A demonstration event (also known as tactical urbanism), is an engaging way to include the community in learning about, installing, and using temporary, low-cost interventions to test out and showcase potential long-term improvements. Examples of roadway demonstration events can include interventions like street and crosswalk murals, temporary bike lanes, and temporary curb extensions.

Temporary curb extension demonstration event. Source: Big Car | https://www.bigcar.org/project/tactical-urbanism-toolkit/

1 Lehigh Valley Transportation Study. (2023) Transportation Improvement Program 2023-2026. https://www.flipsnack.com/9A575F88B7A/final-2023-2026-tip-made-easy/full-view.html

Dashboard

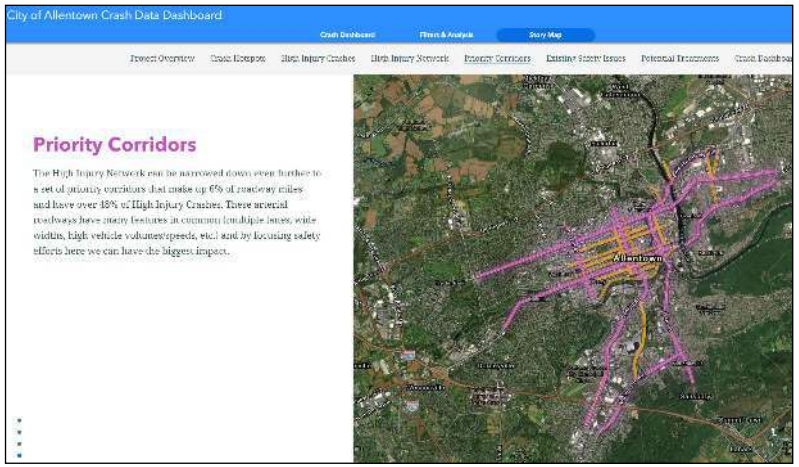
The Vision Zero Crash Dashboard is a comprehensive, data-driven tool designed to enhance traffic safety and support informed decision-making for City officials and community stakeholders committed to eliminating traffic-related fatalities and severe injuries. Aligned with the Vision Zero initiative, which aims to create safer road environments for all users, this dashboard aggregates and visualizes crash data to identify high-risk areas and trends, guiding effective interventions and policy actions. Crash data is obtained through the PennDOT Pennsylvania Crash Information Tool and is updated on a yearly basis when new data for the previous year is released.

The dashboard presents user-friendly access to a range of crash metrics, including the frequency, severity, and type of incidents occurring within a defined area over a specific time frame. Key features include interactive maps, charts, and filtering tools that allow stakeholders to drill down by variables such as location, time of day, road conditions, weather, and crash causes.

By displaying this data visually, it empowers city planners, transportation officials, law enforcement, and the public to quickly identify safety hot spots and target resources where they are most needed.

The dashboard helps track the progress of Vision Zero goals by providing a clear picture of crash trends over time. It also supports transparent reporting and community engagement, allowing residents to stay informed about local safety efforts and outcomes. Ultimately, the Vision Zero Crash Dashboard serves as a critical tool for data-driven decision-making, fostering safer streets and contributing to the overarching goal of eliminating traffic fatalities and serious injuries.

The dashboard can be accessed at: https://experience.arcgis.com/experience/5d083389cc504254844180ace818b878/page/Crash-Dashboard/#data_s=id%3AdataSource_9%3A4



Snapshots of dashboard. Left Image: Crash map with statistics by year and severity. The map and data can be filtered. Right Image: Part of the StoryMap that explains the Safety Analysis of the plan.

Rendering of possible roundabout design at the intersection of Hamilton Boulevard and Ott Street (see **Hamilton Street Concept Plan** for more detail).


BB&T
The Right Time To Refinance
$525 TOTAL Closing Costs
145

05 IMPLEMENTATION

This chapter includes an implementation matrix that consolidates ongoing efforts and proposed recommendations in this Action Plan, along with identifying lead implementers, partners, and time frames for implementation. The implementation matrix does not include physical improvements proposed in the concept plans. Instead, a prioritization framework is provided for consideration when implementing the physical improvements. A funding glossary is also included with funding opportunities for the design and construction of the physical improvements. Finally, an early implementation item from the SS4A Action Plan process, a traffic calming demonstration project, is summarized as an example of how to start implementing physical improvements included in the concept plans.

Implementation Matrix

The implementation matrix table in the pages that follow include the following columns for each recommendation.

Status of Implementation

- **Ongoing Effort:** An effort that has been ongoing since before the SS4A Action Plan planning process.
- **In-Progress:** A project/effort that has recently been started during the SS4A Action Plan.
- **Not Started**

Time Frame for Implementation

- **Short-Term**: Implemented within 0 – 2 years
- **Medium-Term:** Implemented within 3 – 5 years
- **Long-Term:** Implemented within 6 – 10 years
- ***** : Indicates that while initial implementation might occur during time frame, the effort will be ongoing.
- **N/A:** Not applicable because it is an ongoing effort.

Leads and Partners for Implementation

Acronyms are used in the table for community organizations and agencies. Acronyms not previously defined in the plan are detailed below.

- **DPW:** City of Allentown Department of Public Works
- **APD:** Allentown Police Department
- **APA:** Allentown Parking Authority
- **DCED**: City of Allentown Department of Community and Economic Development, includes the Bureau of Planning and Zoning
- **ASD:** Allentown School District
- **DIT:** City of Allentown Department of Information and Technology

Recommendation	Lead	Partners	Time Frame	Status
Physical Improvements - System-Wide				
Establish a district-wide speed limit through the application of a residence district.	DPW	PennDOT	Medium-Term	Not started.
Restore one-way streets in Allentown's core to two-way streets.	DPW	PennDOT	Short-Term (Feasibility Study) Long-Term	Not started.
Leverage demonstration projects to pilot safety countermeasures.	DPW		Short-Term*	In-Progress.
Evaluate and upgrade street lighting.	DPW	APD; Community Organizations	Short-Term*	Not started.
Implement system-wide Complete Streets improvements.	DPW	Utilities	Medium-Term*	Not started.
Study the feasibility of using the network of alleys ways for a low stress bike network.	DPW	CAT; DCED	Medium-Term	Not started.
Collaboration Opportunities				
Coordination with PennDOT in the early stages of the planning process for state-owned roads.	DPW	PennDOT; LVPC	N/A	Ongoing effort.
Facilitation of regular and ongoing communication regarding road safety between Allentown departments and authorities.	DPW	APD; APA; DCED	N/A	Ongoing effort.
Engage in a regional collaboration facilitated by the LVPC.	DPW	LVPC; Neighboring Municipalities	Short-Term*	In-Progress.
Coordinate with LANTA to ensure road improvements align with transit-supported land use guidance.	DPW	LANTA	Short-Term*	In-Progress.
Coordinate with the Allentown School District on improvements around schools and along routes to school.	DPW	ASD	Medium-Term*	Not started.
Collaborate with the Allentown Neighborhood Improvement Zone Development Authority (ANIZDA) on roadway safety projects in the Neighborhood Improvement Zone (NIZ).	DPW	ANIZDA	Short-Term	Not started.

Recommendation	Lead	Partners	Time Frame	Status
Process Improvements				
Advocacy for priority transportation projects during the LRTP update every four years and TIP cycle every two years.	DPW	LVPC	N/A	Ongoing effort.
Advocate for state legislation that supports the SS4A Action Plan.	DPW	Community Organizations; Local Business Community	Short-Term*	Not started.
Formalize a request and review process for road safety concerns.	DPW	DIT	Short-Term*	Not started.
Fund and hire a traffic/roadway community outreach liaison.	DPW/ APD		Medium-Term	Not started.
Fund and hire a full-time long-range transportation planner/engineer.	DCED/ DPW		Medium-Term	Not started.
Develop a framework for scoring the sustainability impacts of different roadway improvement countermeasures.	EAC	DPW	Short-Term	Not started.
Adopt a Complete Streets Policy and Design Standards.	DPW	DCED; City Council	Short-Term	Not started.
Develop a Complete Streets Checklist.	DPW	DCED	Short-Term	Not started.
Incorporate Complete Streets Design Standards into routine maintenance and improvement projects.	DPW		Short-Term*	Not started.
Progress & Transparency				
Conduct ongoing community education on roadway safety and maintenance.	DPW	Community partners	Short-Term*	Not started.
Develop and maintain an annual Safety Action Plan Report.	DPW		Short-Term*	Not started.
Create an Action Plan Steering Committee.	DPW		Short-Term*	In-Progress.

Prioritization Framework

The following tables can be used to help with prioritization of roadway improvements.

Cost Summary of All Concept Plans

Concept Plan	# of High-Injury Crashes (2019-2023)	Cost Estimate
4th Street/Basin Street (Emaus Avenue to Union Street)	13	$333,000
7th Street (Sumner Avenue to Union Street)	11	$684,000
15th Street (Ward Street to Roth Avenue)	11	$2,150,960
American Parkway (Union Street to Airport Road)	14	$1,696,000
Emmaus Avenue (31st Street to 4th Street)	11	$1,509,200
Hamilton Street (Ott Street to 5th Street)	15	$4,041,000
Hamilton Street and Hanover Avenue (6th Street to Carlisle Street)	14	$505,400
Lehigh Street (6th Street to Oxford Drive)	13	$4,039,000
Tilghman Street East (Oxford Drive to MLK Jr. Drive)	45	$1,803,200
Union Boulevard (North Front Street to Eastern City Limits)		$2,374,400

Prioritization Considerations

Based on input throughout the planning process, the following factors can be used to assess prioritization of physical improvement projects based on their location. A scoring rubric is included for guidance. The more points awarded, the higher the priority.

Location	Description	Points
Within the High-Injury Network	See the High-Injury Network Map included in the **Safety Analysis chapter**. Corridors include: 4th Street/Basin Street, 7th Street, 15th Street, American Parkway, Emmaus Avenue, Hamilton Street/Hanover Avenue, Lehigh Street, Tilghman Street/Union Boulevard	5
Within 0.25 miles of a School	Areas within a quarter-mile of a school, including primary, secondary, and post-secondary schools.	4
Within the Recompete Area[1]	Recompete Area includes: Census Tracts 4, 5, 9, 10, 18, and 20. These areas are known as the Franklin Park, Center City, and 1st and 6th Wards.	3
Intersections are within 0.10 miles of a LANTA EBS Stop[2]	The EBS Green Line in Allentown runs south on 7th Street to the Allentown Transit Center, then north on 6th Street and east on Tilghman Street/Union Boulevard. The EBS Blue Line in Allentown runs along Chew Street from Ott Street to 7th Street, Turner Street from 17th Street to 7th Street, and then north on 6th Street to Tilghman Street/Union Boulevard following the Green Line route.	2
Along a LANTA Bus Route[3]	Streets that have a LANTA bus route.	2
Within a Census Tract with a High Socioeconomic Score According to PennEnviroScreen (>74.8)	See the Socioeconomic Score map in **Appendix A: Community Profile.**	1

1 City of Allentown. (2024) Recomplete Plan. https://www.allentownpa.gov/Portals/0/adam/Content/KSJgenYZtUCT_sHKLqN38g/Url/CITY%20OF%20ALLENTOWN%20RECOMPETE%20PLAN_ONE-PAGER.pdf

2 LANTA. (2024). EBS. https://lantabus.com/ebs/

3 LANTA. (2024) Routes and Schedules. https://lantabus.com/routes-and-schedules/

Funding Glossary

Securing adequate funding for the design and construction of roadway safety improvement projects can be a challenge. The following is a list of possible funding sources for aspects of this plan:

City of Allentown Recompete Plan – Alternative Transportation Mini-Grant Program

Operate an alternative transportation mini-grant program. This project will establish an annual $10,000 alternative transportation mini-grant program to support community-based, micro-mobility interventions within the Recompete Area. Awarded projects will support Recompete goals associated with urbanizing opportunities and walk-to-work priorities. Anticipated projects will include: community safety demonstrations, supportive projects, and educational programs.

Allentown Neighborhood Improvement Zone Financing

ANIZDA provides funding for the construction of public improvements but does not cover maintenance, operations, or programming costs. Complete streets and road improvements are considered eligible projects under the guidelines. This includes enhancements that improve safety, accessibility, and connectivity for all users, including pedestrians, cyclists, transit riders, and motorists. Projects may include elements such as improved crosswalks, ADA-accessible curb ramps, bike lanes, enhanced lighting, landscaping, and other streetscape improvements.

Safe Streets for All (SS4A) Implementation Grants

The Bipartisan Infrastructure Law (BIL) established the Safe Streets and Roads for All (SS4A) discretionary program with $5 billion in appropriated funds over 5 years, 2022-2026. The SS4A program funds regional, local, and Tribal initiatives through grants to prevent roadway deaths and serious injuries. Almost $2 billion is still available for future funding rounds.

Primary Purpose: Improving roadway safety for all users.

Amount: $2,500,000 to $25,00,000, 20% match

Application Window: Early 2025 (Anticipated)

https://www.transportation.gov/grants/SS4A

Local Share Account - Commonwealth Financing Authority (CFA) (Statewide)

As required under Act 71 (the Gaming Act), the CFA has developed program guidelines for Local Share Account funds in Northampton and Lehigh Counties. LSA funds may be used for economic development, community development and public interest projects.

Primary Purpose: Infrastructure, Planning, Acquisitions,

Engineering, Demolition (May Include Sidewalk Replacement)

Amount: Up to a $1,000,000 (No Matching Requirement)

Application Window: November 2025 (Anticipated)

https://dced.pa.gov/programs/local-share-account-lsa-statewide/

Local Share Account – CFA (Northampton and Lehigh Counties)

Primary Purpose: Infrastructure, Planning, Acquisitions, Engineering, Demolition

Amount: Up to a $1,000,000 (No Matching Requirement)

Application Window: July – September 2025

https://dced.pa.gov/programs/local-share-account-lsa-northampton-and-lehigh-counties/

PennDOT ARLE Funding Program

The Automated Red Light Enforcement Transportation Enhancements Grant Program (ARLE Funding Program) was established in 2010 as a PennDOT-administered competitive grant program in accordance with Vehicle Code (75 Pa.C.S.) §3116(l)(2), §3117(m)(2), and §3370(m)(2) §3117(m)(2). Funding for the program is generated from the net revenue of fines collected through Automated Red Light Enforcement Systems and Automated Speed Enforcement Systems. Grant applications are accepted annually during the month of June.

https://www.dot.state.pa.us/public/Bureaus/BOMO/Portal/TSPortal/FUNDARLE.html

Green Light-Go: Pennsylvania's Municipal Signal Partnership Program

The "Green Light–Go Program", is a competitive state grant program designed to improve the efficiency and operation of existing traffic signals located in the Commonwealth of Pennsylvania. Established by Act 89 of 2013 and revised by Act 101 of 2016, the program is administered by the Pennsylvania Department of Transportation, Bureau of Maintenance and Operations. The Green Light-Go Program is a reimbursement grant program and applicants are required to provide a minimum 20% match.

https://www.dot.state.pa.us/public/Bureaus/BOMO/Portal/TSPortal/FUNDGLG.html

Pennsylvania Transportation Alternatives Program

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

https://www.penndot.gov/ProjectAndPrograms/Planning/Pages/Transportation%20Alternatives%20Set-Aside%20-%20Surface%20Trans.%20Block%20Grant%20Program.aspx

DCED Act 13 Grants: Greenways, Trails and Recreation Program (GTRP)

Act 13 of 2012 establishes the Marcellus Legacy Fund and allocates funds to the Commonwealth Financing Authority (the "Authority") for planning, acquisition, development, rehabilitation and repair of greenways, recreational trails, open space, parks and beautification projects using the Greenways, Trails and Recreation Program (GTRP).

https://dced.pa.gov/programs/greenways-trails-and-recreation-program-gtrp/#:~:text=Act%2013%20of%202012%20establishes%20the%20Marcellus%20Legacy,space%2C%20parks%20and%20beautification%20projects%20using%20the%20Greenways

DCED Multimodal Transportation Fund

The Multimodal Transportation Fund provides grants to encourage economic development and ensure that a safe and reliable system of transportation is available to the residents of the commonwealth. Funds may be used for the development, rehabilitation and enhancement of transportation assets to existing communities, streetscape, lighting, sidewalk enhancement, pedestrian safety, connectivity of transportation assets and transit-oriented development.

https://dced.pa.gov/programs/multimodal-transportation-fund/

PennDOT Multimodal Transportation

Act 89 also established a dedicated Multimodal Transportation Fund that stabilizes funding for ports and rail freight, increases aviation investments, establishes dedicated funding for bicycle and pedestrian improvements, and allows targeted funding for priority investments in any mode.

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

PENNDOT – Surface Transportation Program

The Twelve Year Transportation Program (as required by Act 120 of Pennsylvania State Law and its amendments) targets the Commonwealth's improvement efforts in all major transportation modes: highways, bridges, aviation, rail and transit. Transportation projects that focus on improving safety, enhancing mobility, moving goods and preserving the existing system are key to achieving the Department's goals and objectives. The Division will continue to focus on incorporating the philosophy of the most current Federal and State Regulations in the continuous update of the Program; this includes the tie-in of planning requirements for Transportation Improvement Programs (TIPs), and the all encompassing State TIP (STIP). Additionally, projects should align with the region's Long Rage Transportation Plan through the Lehigh Valley Transportation Study. This program also involves the preparation of comprehensive information packages for key Department staff, the State Transportation Commission (STC), and elected state and federal legislators and officials. These packages facilitate and communicate the development of a transportation system responsive to the needs of the Commonwealth, monitors progress on key programs and projects, and aids in resolving outstanding Transportation Program issues. Staff and support services are also provided to the STC and other Program Center functions to prepare improvement programs which maintain and enhance the existing transportation system.

https://lvpc.org/

Robert Wood Johnson Foundation

The mission of the Robert Wood Johnson Foundation is to improve the health and health care of all Americans. Our goal is clear: To help our society transform itself for the better.

https://www.rwjf.org/en/grants.html

National Parks Service – Trails Assistance Program

The Rivers, Trails, and Conservation Assistance (RTCA) Program is the community assistance arm of the National Park Service. RTCA supports community-led natural resource conservation and outdoor recreation projects. RTCA staff provides technical assistance to communities so they can conserve rivers, preserve open space, and develop trails and greenways.

http://www.nps.gov/ncrc/programs/rtca/

PA Department of Conservation and Natural Resources – Keystone Grant Program and Recreational Trails Program

Established on July 1, 1995, the Pennsylvania Department of Conservation and Natural Resources is charged with maintaining and preserving the 117 state parks; managing the 2.1 million acres of state forest land; providing information on the state's ecological and geologic resources; and establishing community conservation partnerships with grants and technical assistance to benefit rivers, trails, greenways, local parks and recreation, regional heritage parks, open space and natural areas.

Local governments, county governments and non-profit organizations can apply for Community Conservation Partnerships Program (C2P2) funding to assist them with addressing their recreation and conservation needs as well as supporting economically beneficial recreational tourism initiatives.

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

Demonstration Project

In Fall 2024, the City of Allentown was awarded a $384,000 Planning & Demonstration Award through the U.S. Department of Transportation's Safe Streets and Roads for All program. This funding will support the Traffic Calming/Safety Demonstration Project and Feasibility Study, advancing efforts to make Allentown's streets safer for pedestrians, cyclists, and drivers.

This grant will fund demonstration activities that align with and complement Allentown's SS4A Plan. Key initiatives include:

- Pavement markings to narrow lanes and enhance roadway delineation via a "road diet."
- Installation of high-visibility crosswalks and updated signage to prioritize pedestrian safety.
- Deployment of temporary and permanent speed humps near schools and parks to deter speeding.
- Testing and evaluating other traffic-calming measures across strategic locations in the city.

These enhancements will target high-priority areas, ensuring improved safety for all road users and creating a more accessible and welcoming environment for residents and visitors.

APPENDICES

The following appendices are referenced throughout the plan and provide additional detail on how the SS4A Plan was developed.

Appendix A: Community Profile

Related to Data Collection, Community and Stakeholder Engagement, and Equity Analysis Tasks

A profile of socioeconomic data that was used to better understand existing conditions within Allentown and identify communities disproportionately impacted by road safety issues. This data helped inform the Community and Stakeholder Engagement Work Plan for the SS4A planning process. This data was also used to help inform the recommendations in this plan and equitable project prioritization.

Appendix B: Community & Stakeholder Engagement Report

Related to Community and Stakeholder Engagement Task

A report that summarizes the Community and Stakeholder Engagement Work Plan and engagement efforts, and findings from the survey.

Appendix C: Peer City Comparison Report

Related to the Data Collection Task

This report looks at cities with similar characteristics within Pennsylvania to assess the respective crash rates per capita to see where Allentown compares to peer cities an help determine benchmarking to reduce high-injury crashes to meet the City's Vision Zero goal.

Appendix D: Small City Vision Zero Review

Related to the Data Collection Task

A review of Vision Zero programs from small cities throughout the US was conducted to identify best practices and strategies that have been successfully implemented in cities with similar size and characteristics to the City of Allentown.

Appendix E: Safety Toolkit

Related to the Implementation Task

The Safety Toolkit serves as a glossary of safety countermeasures that are applied in the recommended concept plans and can continue to be applied during routine maintenance throughout the city. The Safety Toolkit can also be used as an external communication tool when sharing project updates with the community.

Appendix F: Transportation Improvement Program Projects Along or Near the High-Injury Network

Related to the Implementation Task

A list of projects included in the 2023-2026 Transportation Improvement Program that are along or near the high-injury network.

APPENDIX A: COMMUNITY PROFILE

A

Summary

A key part of the equity analysis was identifying Communities of Concern (COCs). COCs is a term that refers to populations that are historically disadvantaged and/or disproportionately impacted by roadway safety issues, including by not limited to low income, minority, Limited English Population, persons with disabilities, zero-vehicle households, seniors, at-risk youth, rent burdened households, and more.[1]

To understand the locations of the COCs, the consultant team used the socioeconomic factors data from the Pennsylvania Department of Environmental Protection (DEP)'s PennEnviroScreen tool.[2] The socioeconomic factors are potential indicators of vulnerability, disadvantage, and/or historic marginalization. The PennEnviroScreen methodology provides rationale for each of these indicators.[3] DEP compiled the data at the census block group and uses census data to develop percentile scores for each block group.

The following socioeconomic data is included in this profile:

- Race
- Poverty
- Unemployment
- Low educational attainment
- Age (youth under 5 years old and adults over 65 years old)
- Limited English households
- Housing burdened households
- Disability
- Cars in Household

1 Center for Transportation, Equity, Decisions, and Dollars. (2021) Transportation Equity Toolkit: Transportation Needs Assessment and Project Prioritization. https://cutr.usf.edu/wp-content/uploads/2021/09/CTEDD-Transportation-Equity-Toolkit-04212021.pdf

2 PA DEP. (2024) PennEnviroScreen. https://gis.dep.pa.gov/PennEnviroScreen/

3 PA DEP. (2023) Pennsylvania Environmental Justice Mapping and Screening Tool Methodology Documentation. https://files.dep.state.pa.us/PublicParticipation/Office%20of%20Environmental%20Advocacy/EnvAdvocacyPortalFiles/2023/015-0501-003-InterimFinal.pdf

For each of these socioeconomic factors, two maps are provided: one shows the percentage of the socioeconomic factor in the block group and one shows a percentile based on statewide distribution values. For example, if a census block group receives a score of 70.5 for unemployment, it means that 70.5% of the state's block groups have a lower level of employment and 29.5% of the state's block groups have a higher level of unemployment. The percentile provides insight into how areas within Allentown compare to the rest of the state, whereas the percentage map shows how areas of Allentown compare with each other.

Two socioeconomic score maps, included as Figure A.1 and Figure A.2, show a composite of the socioeconomic factors, including race, poverty, unemployment, low educational attainment, age (youth under 5 years old and adults over 64 years old), limited English households, housing burdened households, and disability status. These maps will help guide targeted outreach and community engagement events. Figure A.1 shows the composite socioeconomic score within each Census Block Group in Allentown. Figure A.2 shows the composite socioeconomic score as a percentile compared to a statewide distribution.

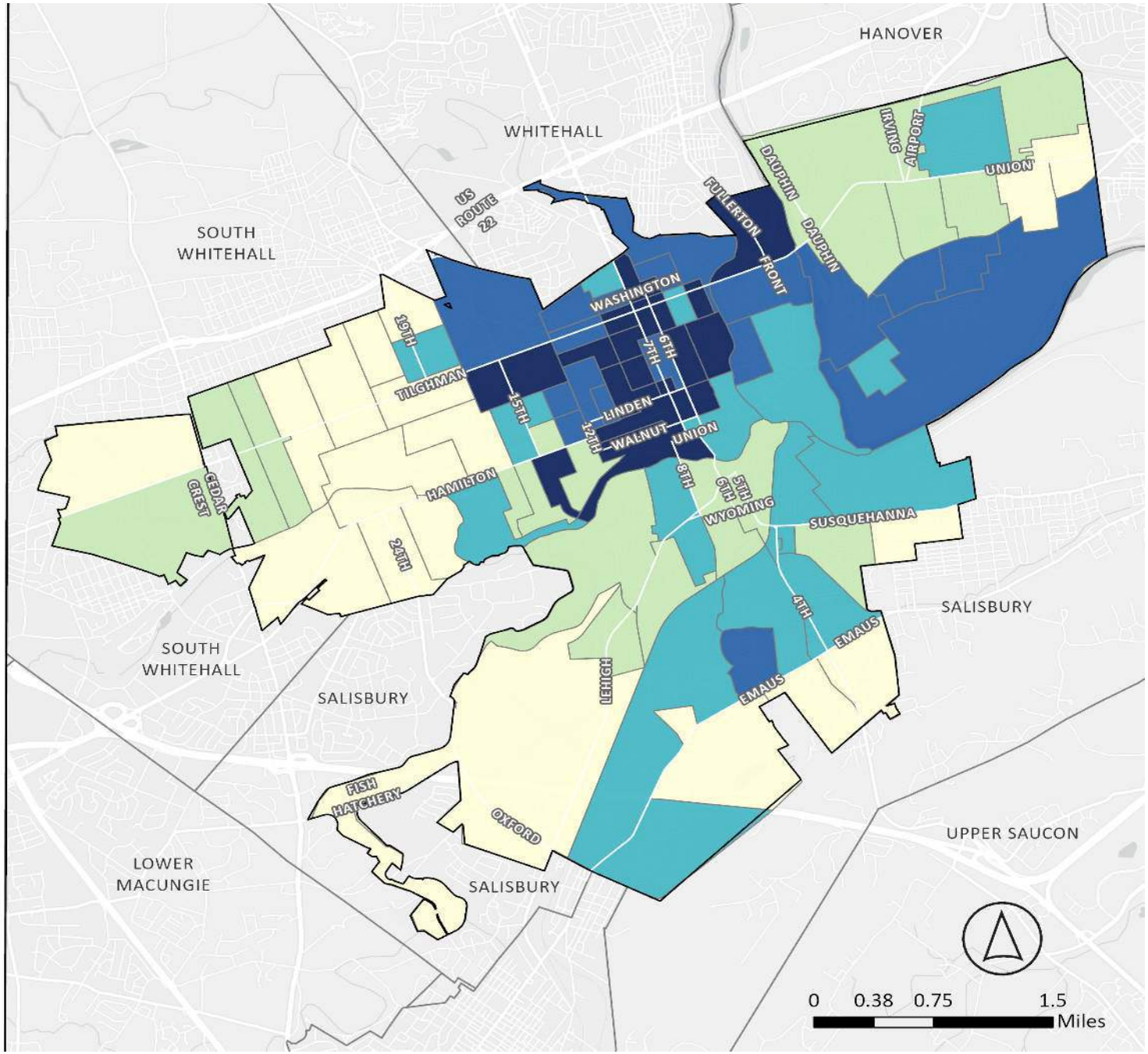
From this data, the following COCs have been identified:

In Allentown, 68 out of the 86 census block groups rank in the 80th percentile or higher for socioeconomic scores when compared to the rest of the state. 48 census blocks rank in the 90th percentile or higher. This score is the average of the percentiles of all the socioeconomic indicators of vulnerability including:

- **Educational Attainment:** 20% of Allentown's population that is 25 or older has a bachelor's degree or higher. The majority of residents (38%) are high school graduates.
- **Linguistic Isolation:** In Allentown, 22% of residents face limited English proficiency, which surpasses the state average of 3%. Among households with limited English proficiency, Spanish is the predominant language, accounting for 19% of such households in Allentown.
- **Housing-Burdened Low-Income Households:** Housing burdened households includes households who spend more than 30% of their income on rent, mortgage, or other housing needs. In Allentown, 43% of households are housing cost burdened. This is slightly higher than the state rate of 39%.
- **Poverty:** 19% of households in Allentown are experiencing poverty. Poverty is determined based on a set of money income thresholds that vary by family size and composition. If a family's total income falls below their specific threshold, every individual in that family is considered to be in poverty. This is higher than the state rate of 11%.
- **Unemployment:** The current unemployment rate in Allentown is 7.6% this is slightly higher than the State unemployment rate of 4.3%
- **Race:** 55% of residents in Allentown or Hispanic or Latino. This is higher than the state rate of 9%.
- **Age Over 64:** In Allentown, residents over the age of 64 make up a 13% share of the city. This is lower than the state average of 20%. This large difference highlights how the City of Allentown's population skews younger with the largest age bracket being 25 to 29 years old.
- **Age Under 5:** 5% of the population in Allentown is currently under the age of 5. This is equal to the state average.
- **Disability:** In Allentown, 16.9% of residents are currently living with a disability. This is 2% higher than the state average of 14.5%.

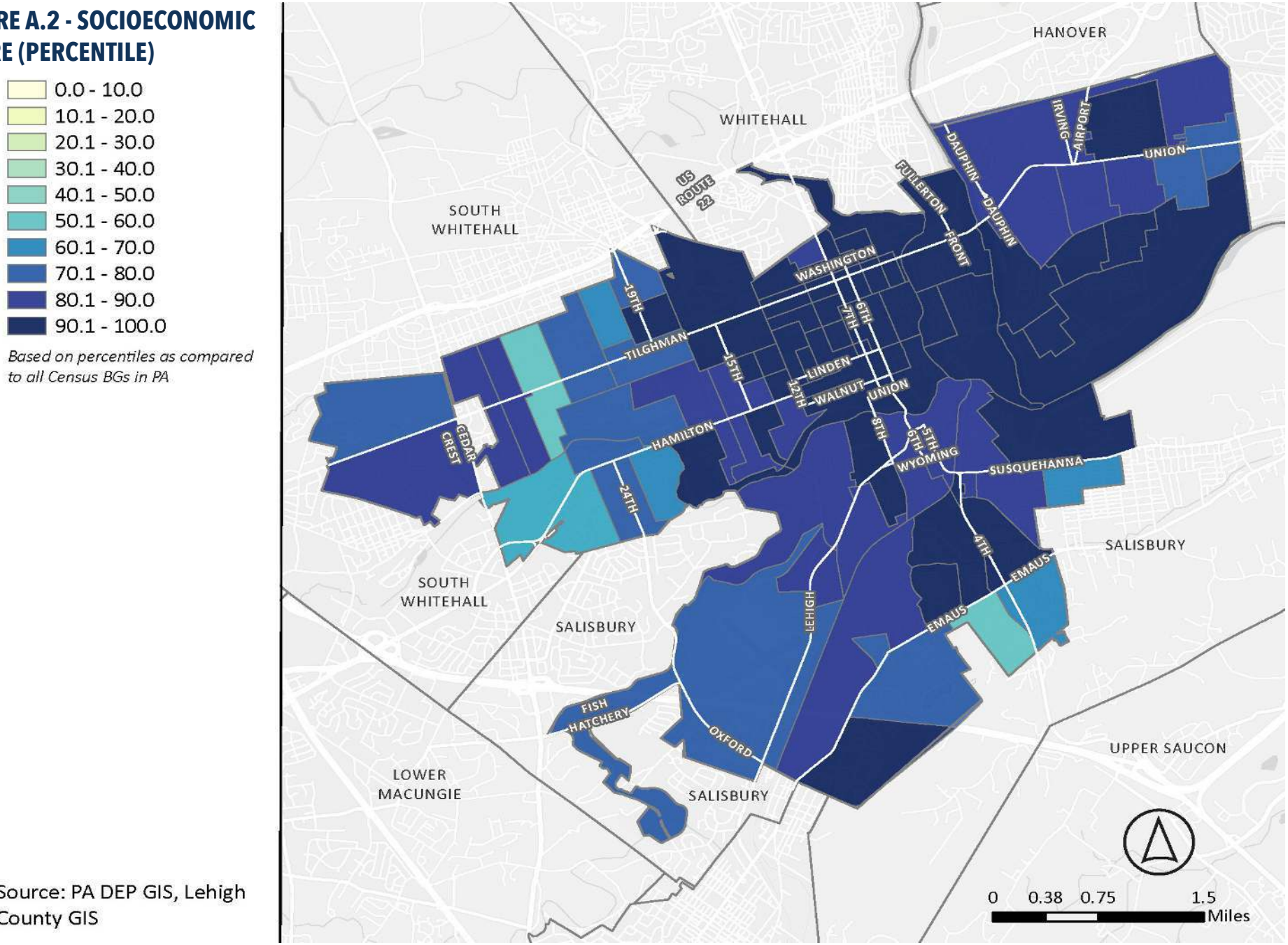
In addition to the socioeconomic factors above, it should be noted that 13.9% of households in Allentown have no access to a vehicle. This is more than 3% higher than the state average of 10.5%.

FIGURE A.1 - SOCIOECONOMIC SCORE

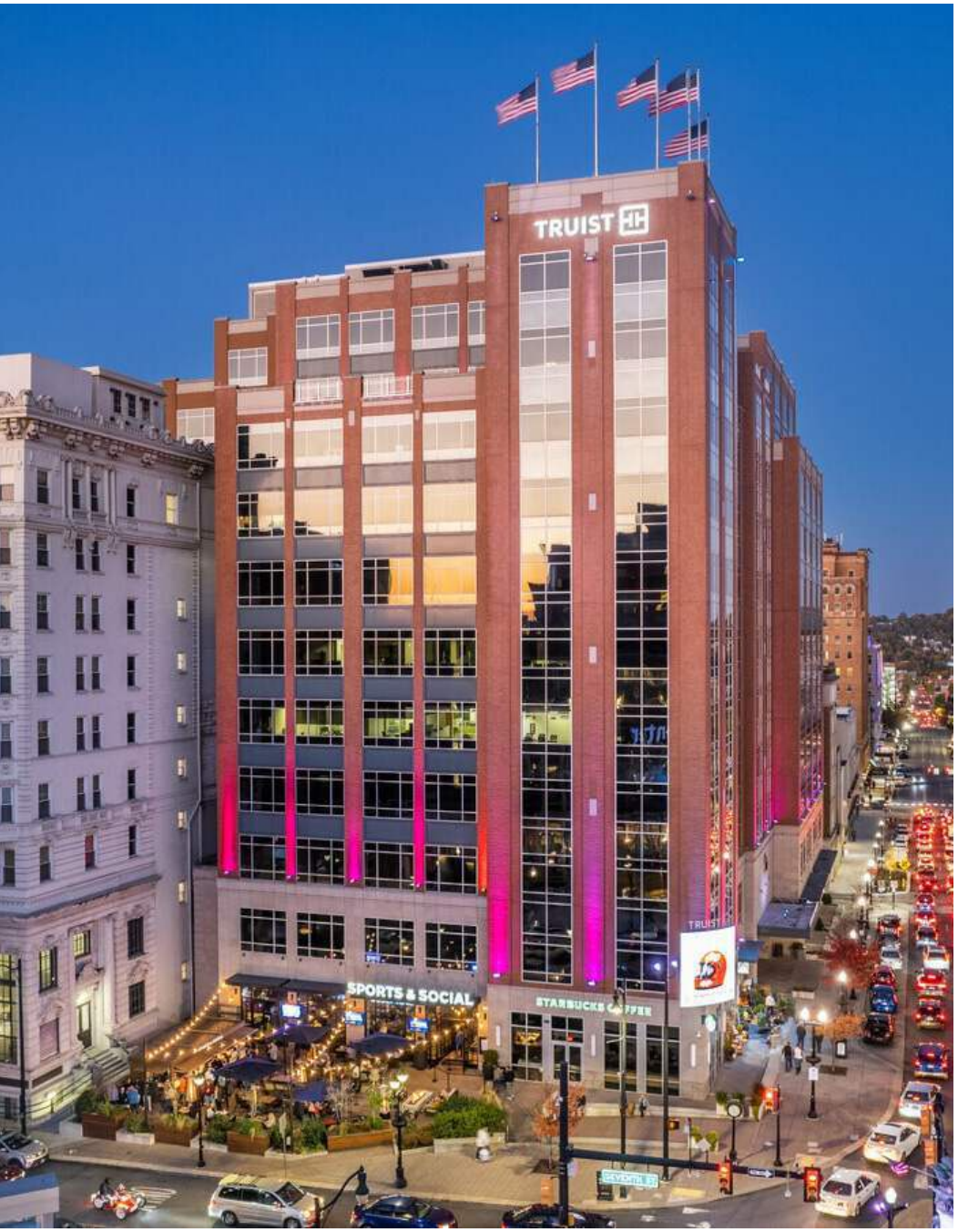


Source: PA DEP GIS, Lehigh County GIS

FIGURE A.2 - SOCIOECONOMIC SCORE (PERCENTILE)



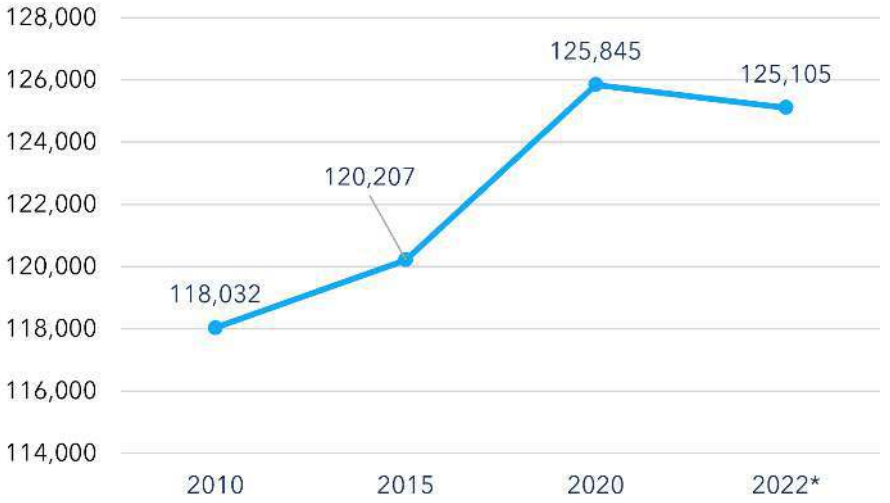
Source: PA DEP GIS, Lehigh County GIS



Socioeconomic Data

Below is information sourced from the U.S. Census that aided in the identification of Communities of Concern (COCs). COCs is a term that refers to populations that are historically disadvantaged in relation to transportation, including but not limited to low-income, minority, Limited English Population, persons with disabilities, zero-vehicle households, seniors, at-risk youth, rent-burdened households, and more. These figures will be used to ensure and informative and equitable planning process.

Total Population (2010-2022)



Year	Total	Male	Female
2010	118,032	56,869	61,163
2015	120,207	60,626	59,581
2020	125,845	60,577	65,268
2022*	125,105	62,556	62,549

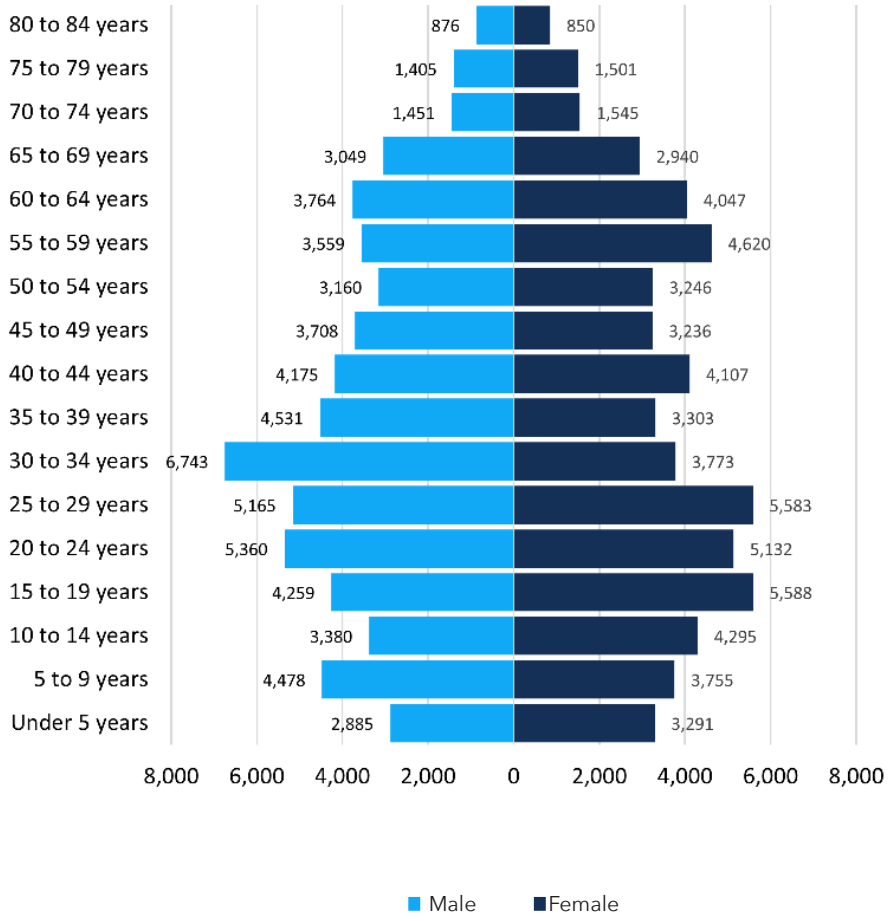
*US Census, Decennial Census P1, *American Community Survey DP05*

Age & Sex

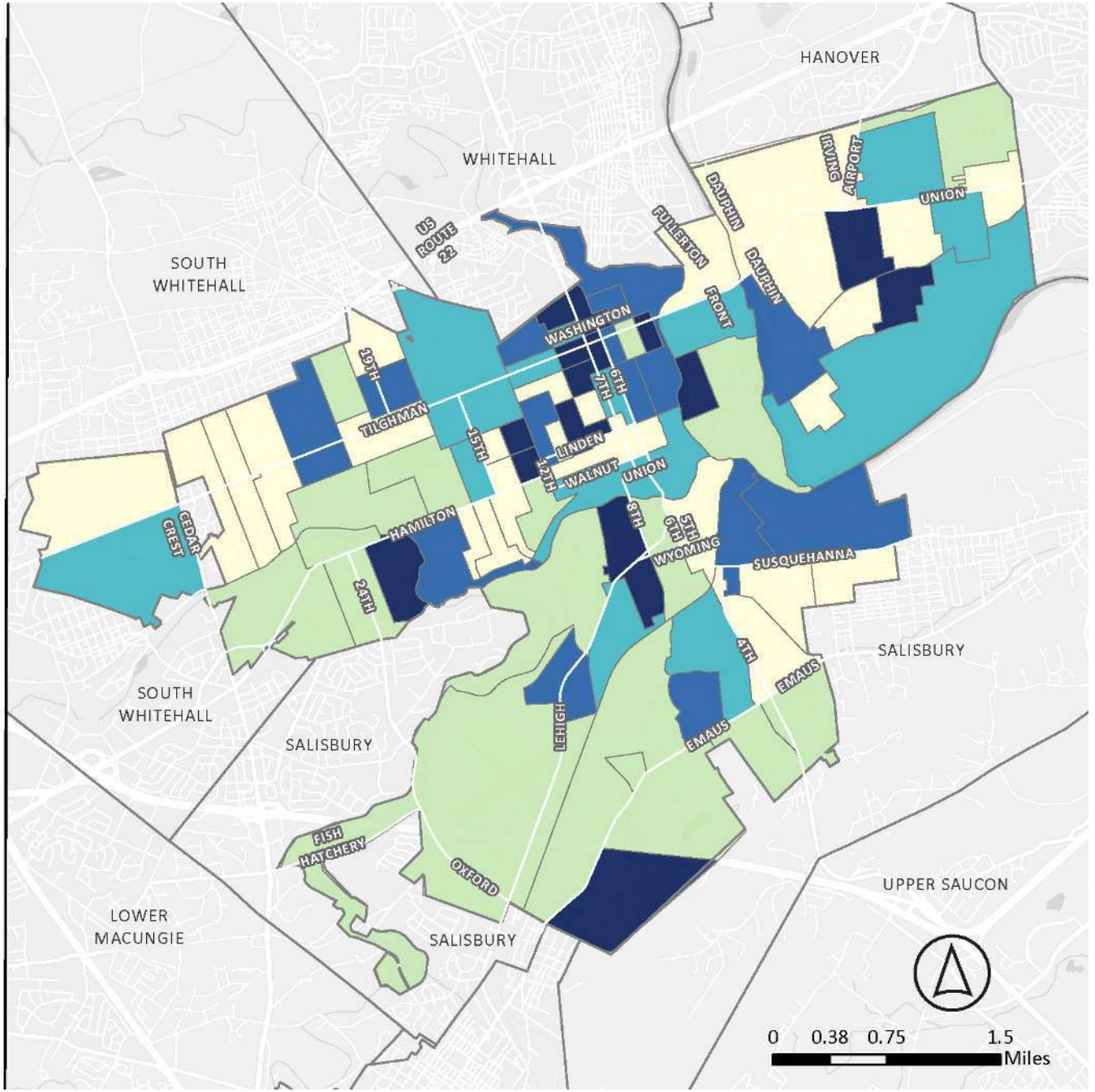
The median age in Allentown is 34.3. It is lower than the state median of 40.9.

Age Categories	Male	Female	Total
Under 5 years	2,885	3,291	6,176
5 to 9 years	4,478	3,755	8,233
10 to 14 years	3,380	4,295	7,675
15 to 19 years	4,259	5,588	9,847
20 to 24 years	5,360	5,132	10,492
25 to 29 years	5,165	5,583	10,748
30 to 34 years	6,743	3,773	10,516
35 to 39 years	4,531	3,303	7,834
40 to 44 years	4,175	4,107	8,282
45 to 49 years	3,708	3,236	6,944
50 to 54 years	3,160	3,246	6,406
55 to 59 years	3,559	4,620	8,179
60 to 64 years	3,764	4,047	7,811
65 to 69 years	3,049	2,940	5,989
70 to 74 years	1,451	1,545	2,996
75 to 79 years	1,405	1,501	2,906
80 to 84 years	876	850	1,726
85 years and over	608	1,737	2,345
Total	62,556	62,549	125,105

American Community Survey S0101, 2022



PERCENT OF RESIDENTS AGES 5 AND UNDER

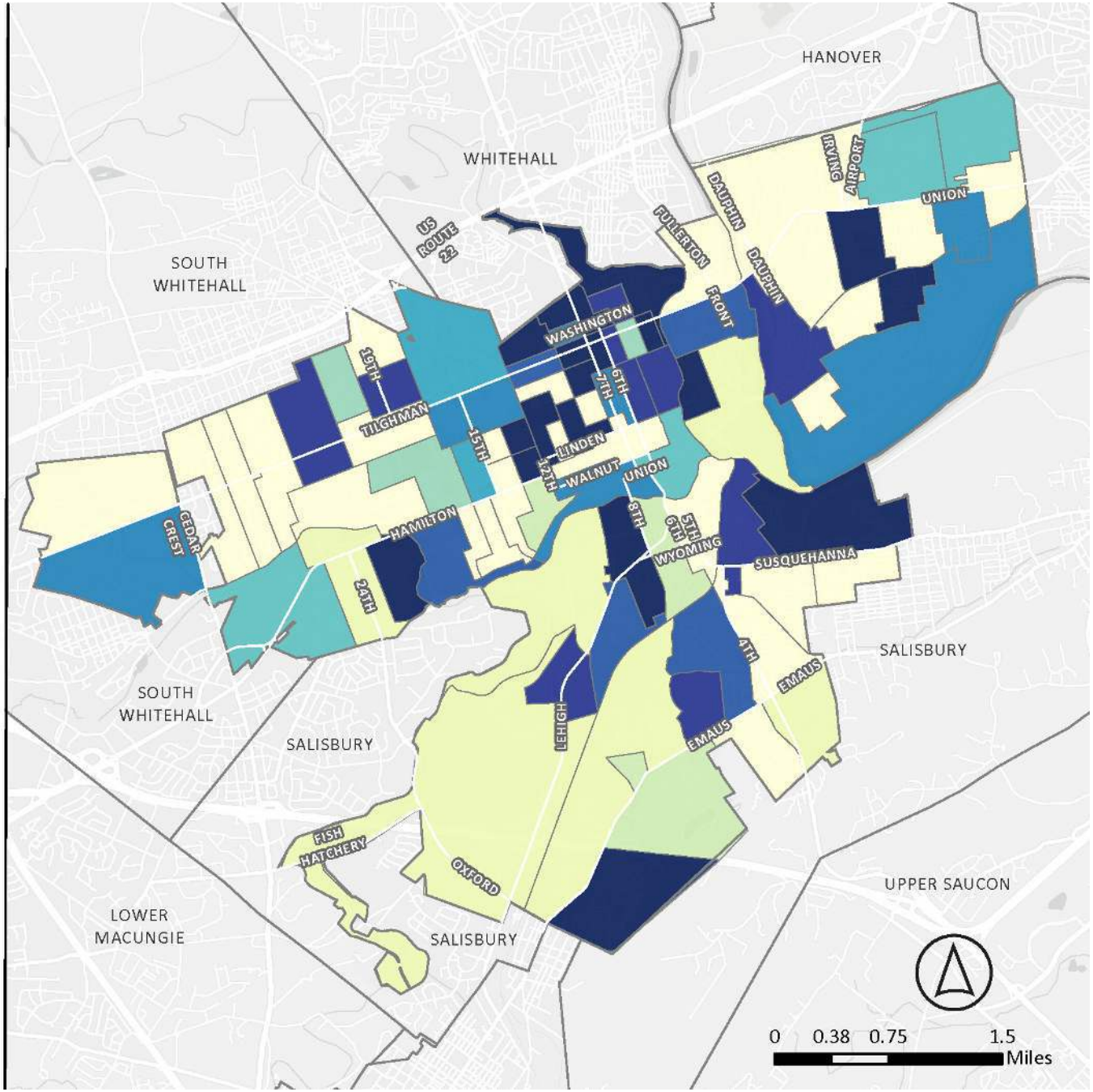


Source: PA DEP GIS, Lehigh County GIS

RESIDENTS AGES 5 AND UNDER (PERCENTILE)

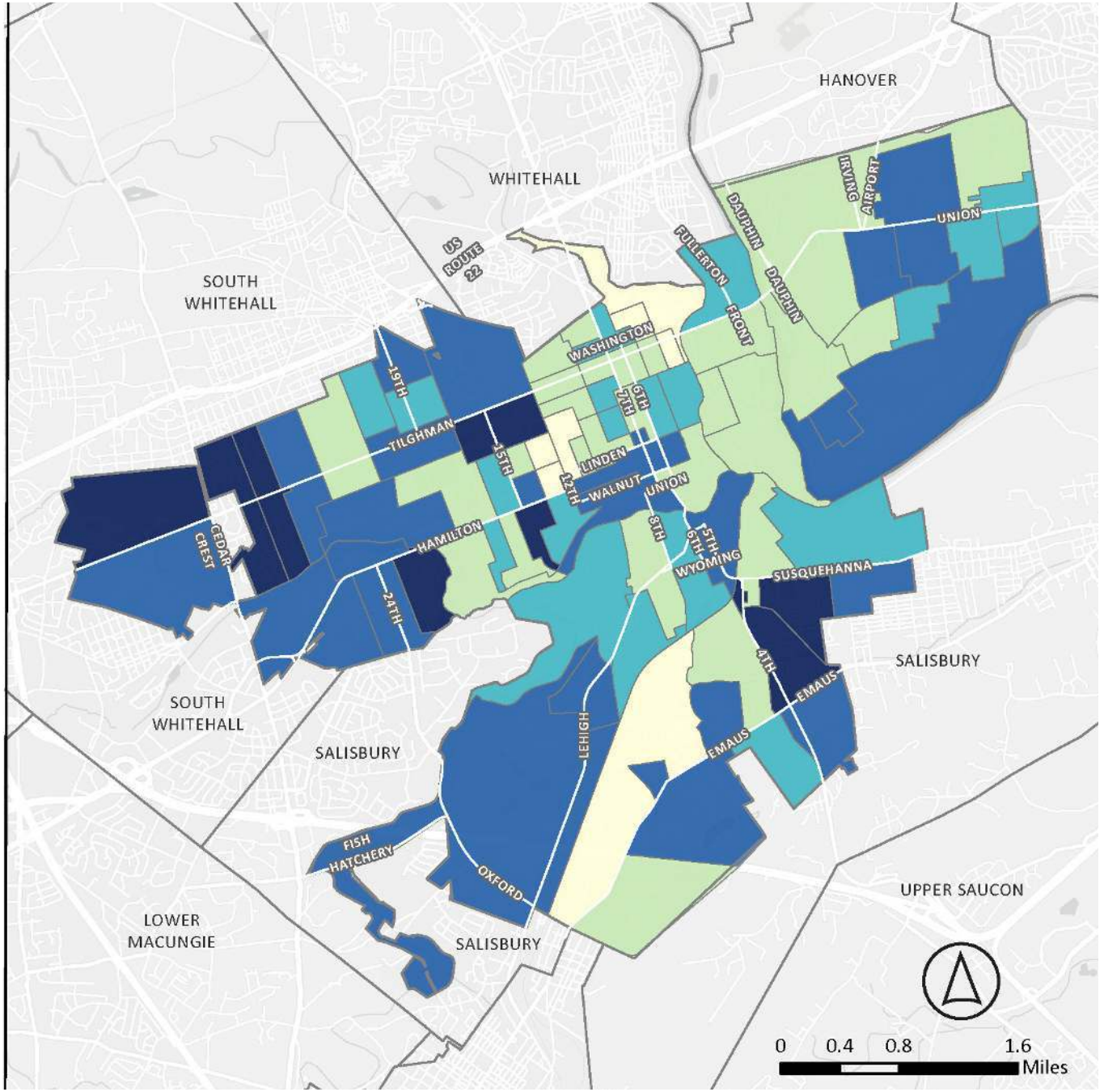
- 0.0 - 10.0
- 10.1 - 20.0
- 20.1 - 30.0
- 30.1 - 40.0
- 40.1 - 50.0
- 50.1 - 60.0
- 60.1 - 70.0
- 70.1 - 80.0
- 80.1 - 90.0
- 90.1 - 100.0

Based on percentiles as compared to all Census BGs in PA



Source: PA DEP GIS, Lehigh County GIS

PERCENT OF RESIDENTS AGES 65 AND OLDER

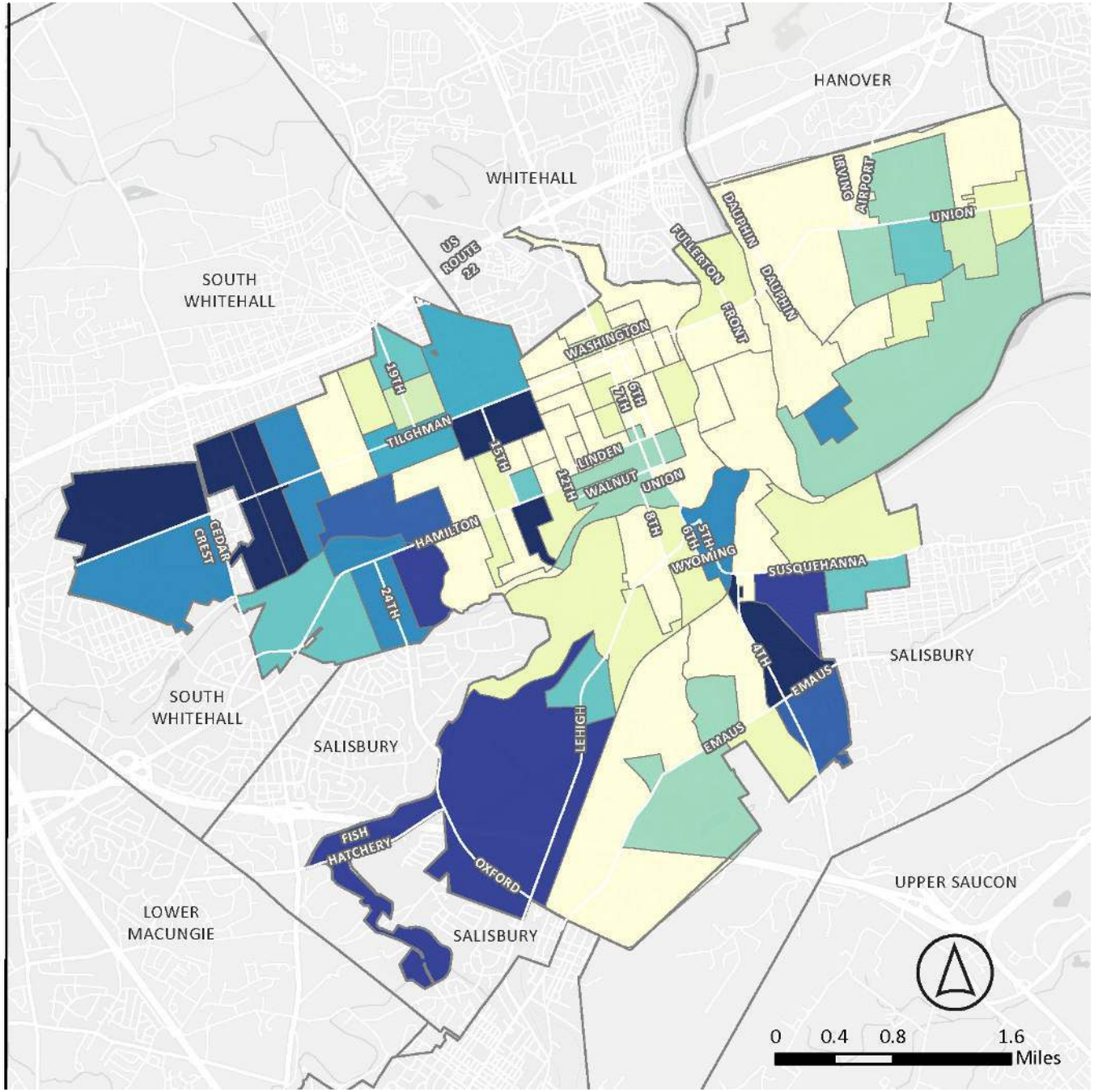


Source: PA DEP GIS, Lehigh County GIS

RESIDENTS AGES 65 AND OVER (PERCENTILE)

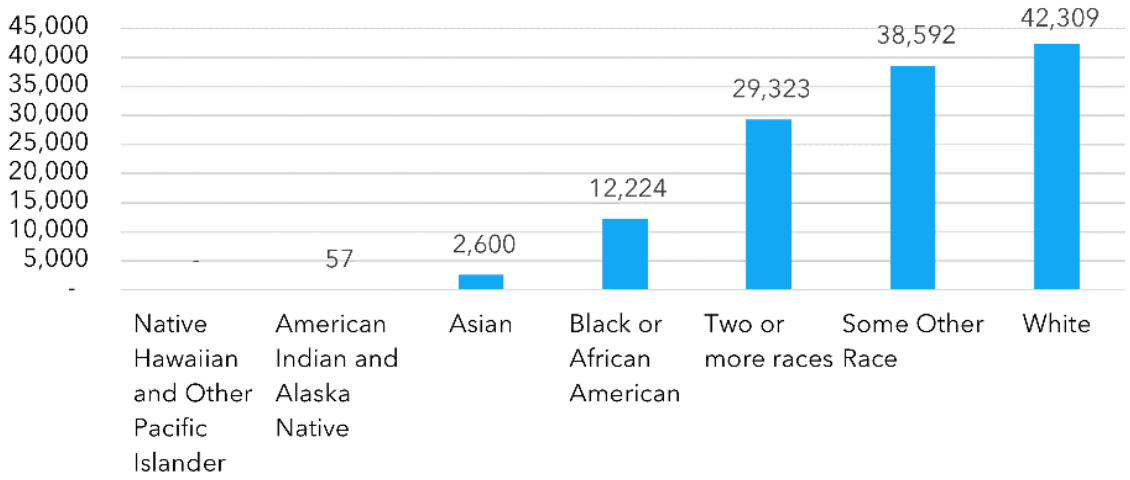
- 0.0 - 10.0
- 10.1 - 20.0
- 20.1 - 30.0
- 30.1 - 40.0
- 40.1 - 50.0
- 50.1 - 60.0
- 60.1 - 70.0
- 70.1 - 80.0
- 80.1 - 90.0
- 90.1 - 100.0

Based on percentiles as compared to all Census BGs in PA

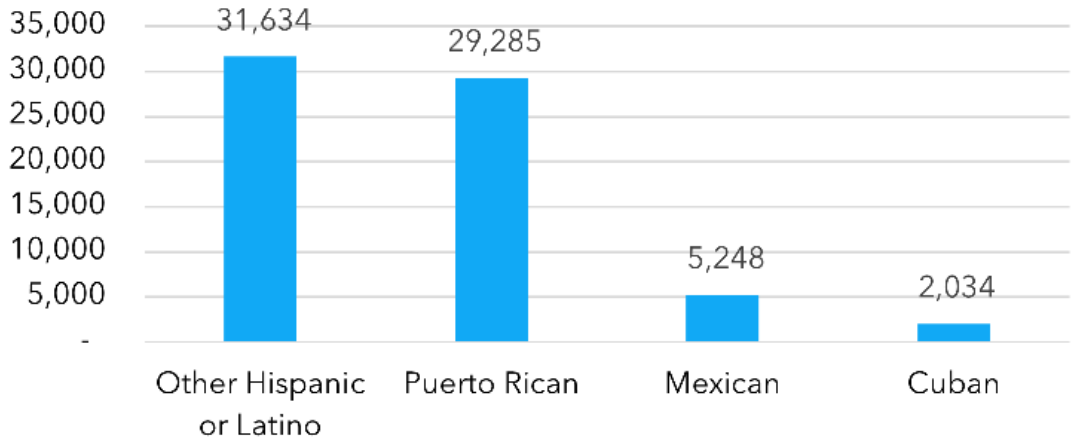


Source: PA DEP GIS, Lehigh County GIS

Race & Ethnicity



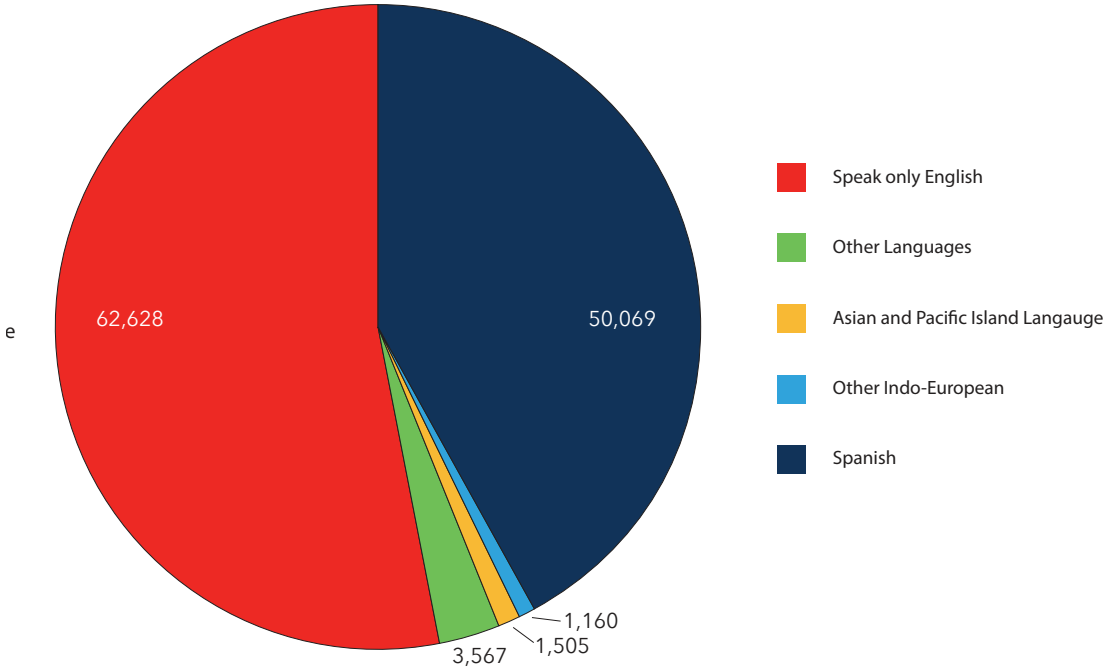
Race	Totals
Native Hawaiian and Other Pacific Islander	-
American Indian and Alaska Native	57
Asian	2,600
Black or African American	12,224
Two or more races	29,323
Some Other Race	38,592
White	42,309
Total	125,105



Hispanic or Latino	Totals
Other Hispanic or Latino	31,634
Puerto Rican	29,285
Mexican	5,248
Cuban	2,034
Total	68,201
Not Hispanic or Latino	56,904
Total	125,105

American Community Survey DP05, 2022

Language Spoken at Home

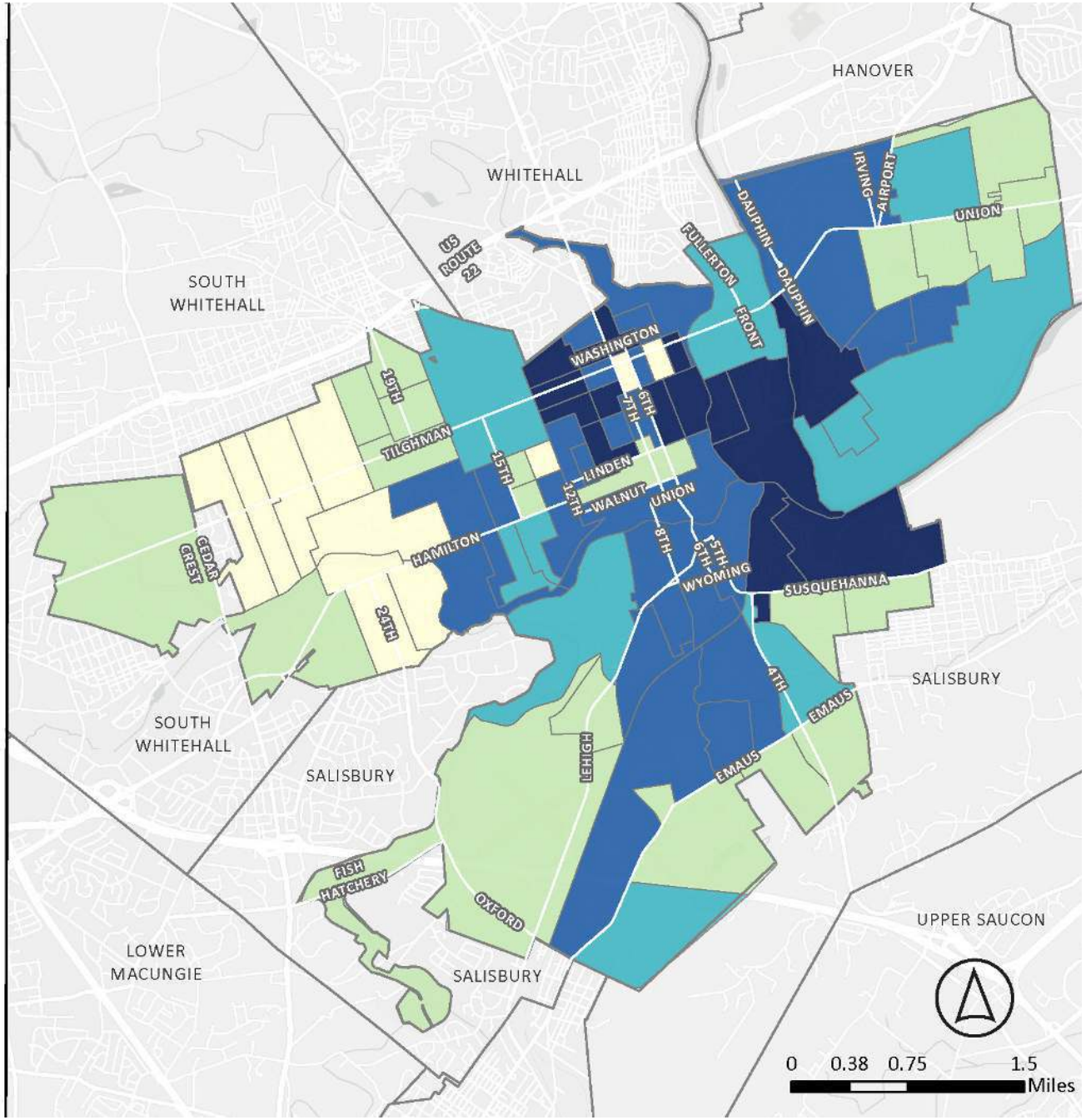


Language	Estimates	Percent
Spanish	50,069	42%
Other Indo-European	1,160	1%
Asian and Pacific Island Languages	1,505	1%
Other Languages	3,567	3%
Speak Only English	29,323	53%
Total	118,929	100%

American Community Survey S1601, 2022

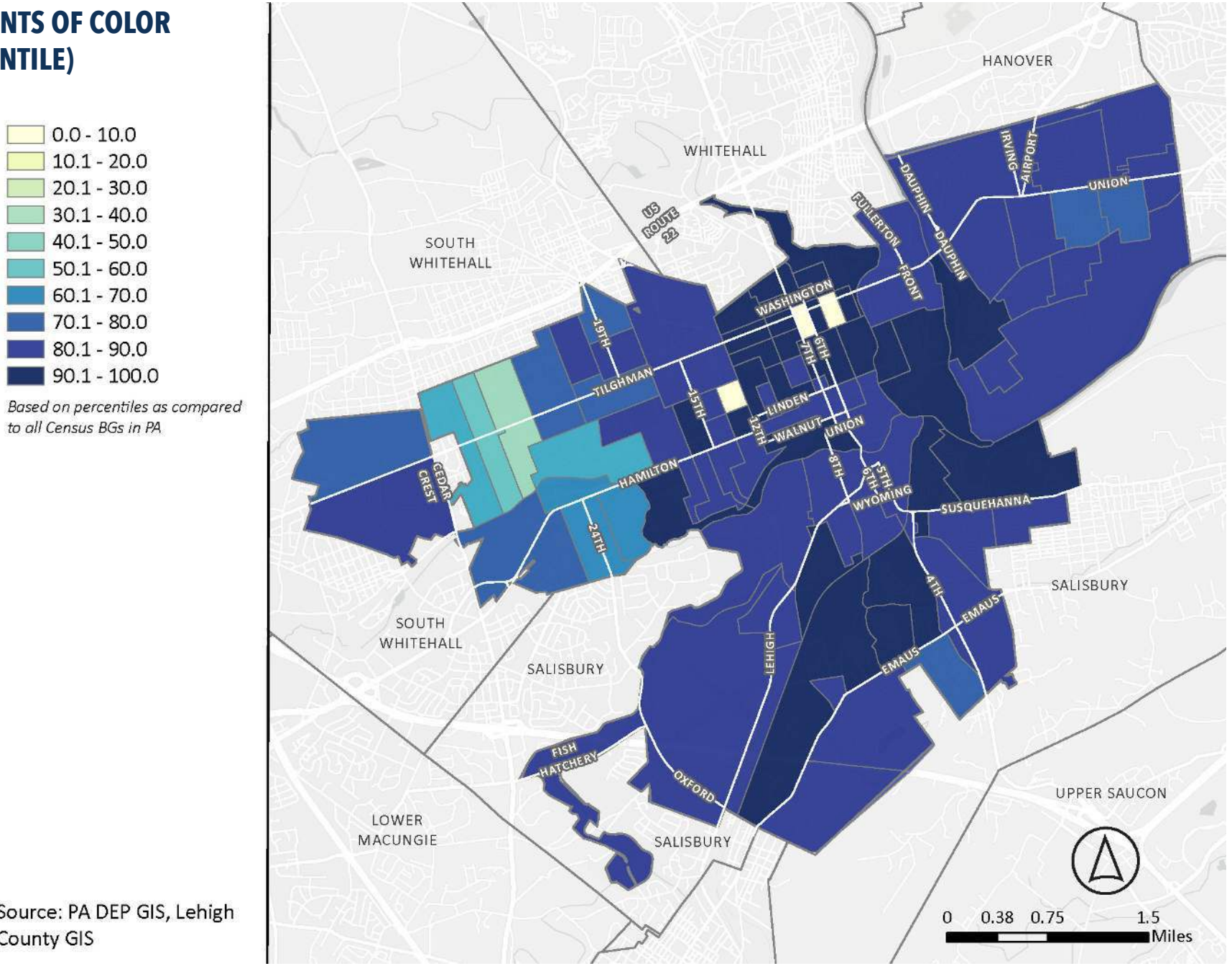
Example of bilingual materials used throughout the SS4A engagement process.

PERCENT OF RESIDENTS OF COLOR



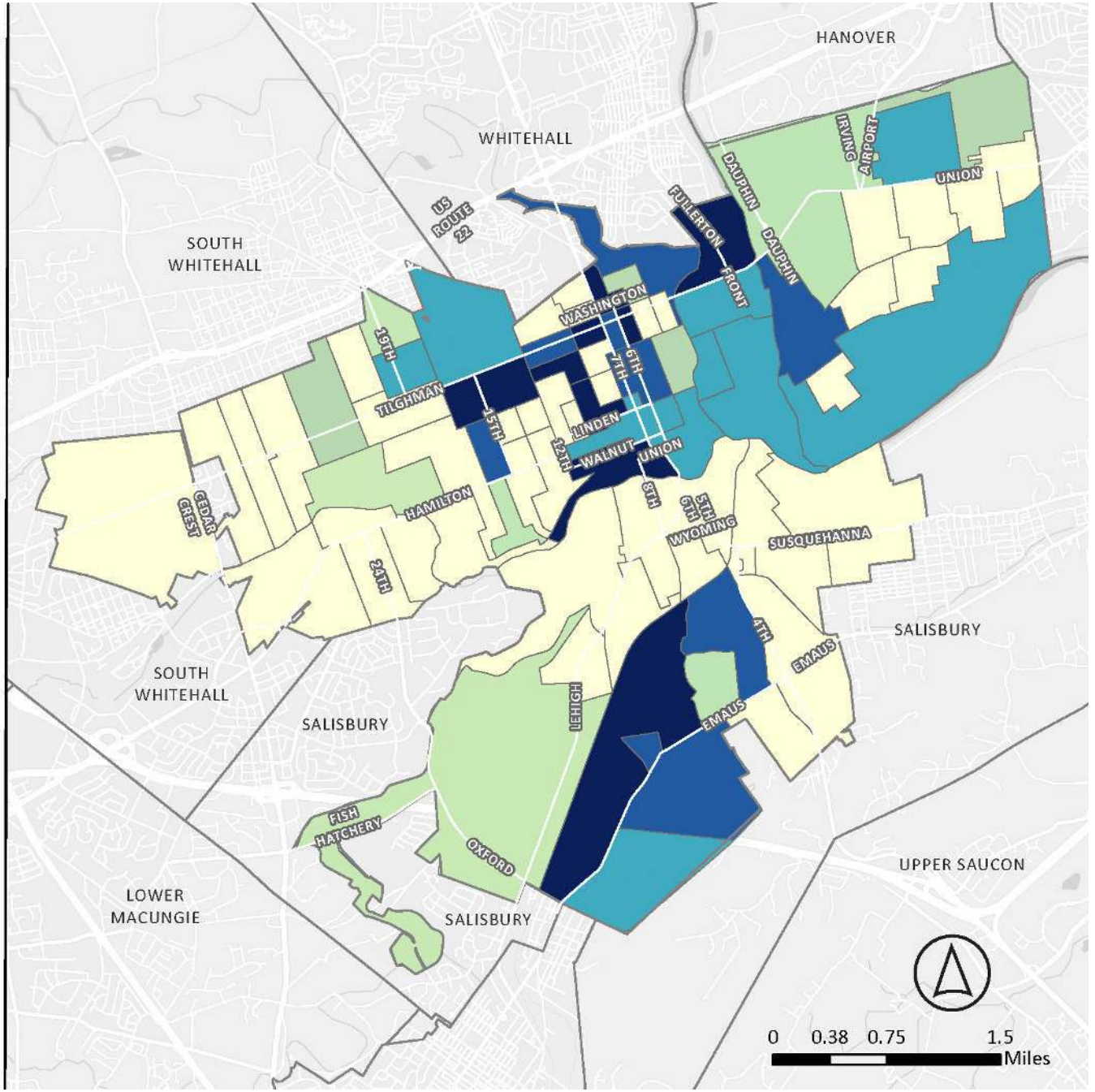
Source: PA DEP GIS, Lehigh County GIS

RESIDENTS OF COLOR (PERCENTILE)



Source: PA DEP GIS, Lehigh County GIS

PERCENT OF RESIDENTS WITH LIMITED ENGLISH PROFICIENCY

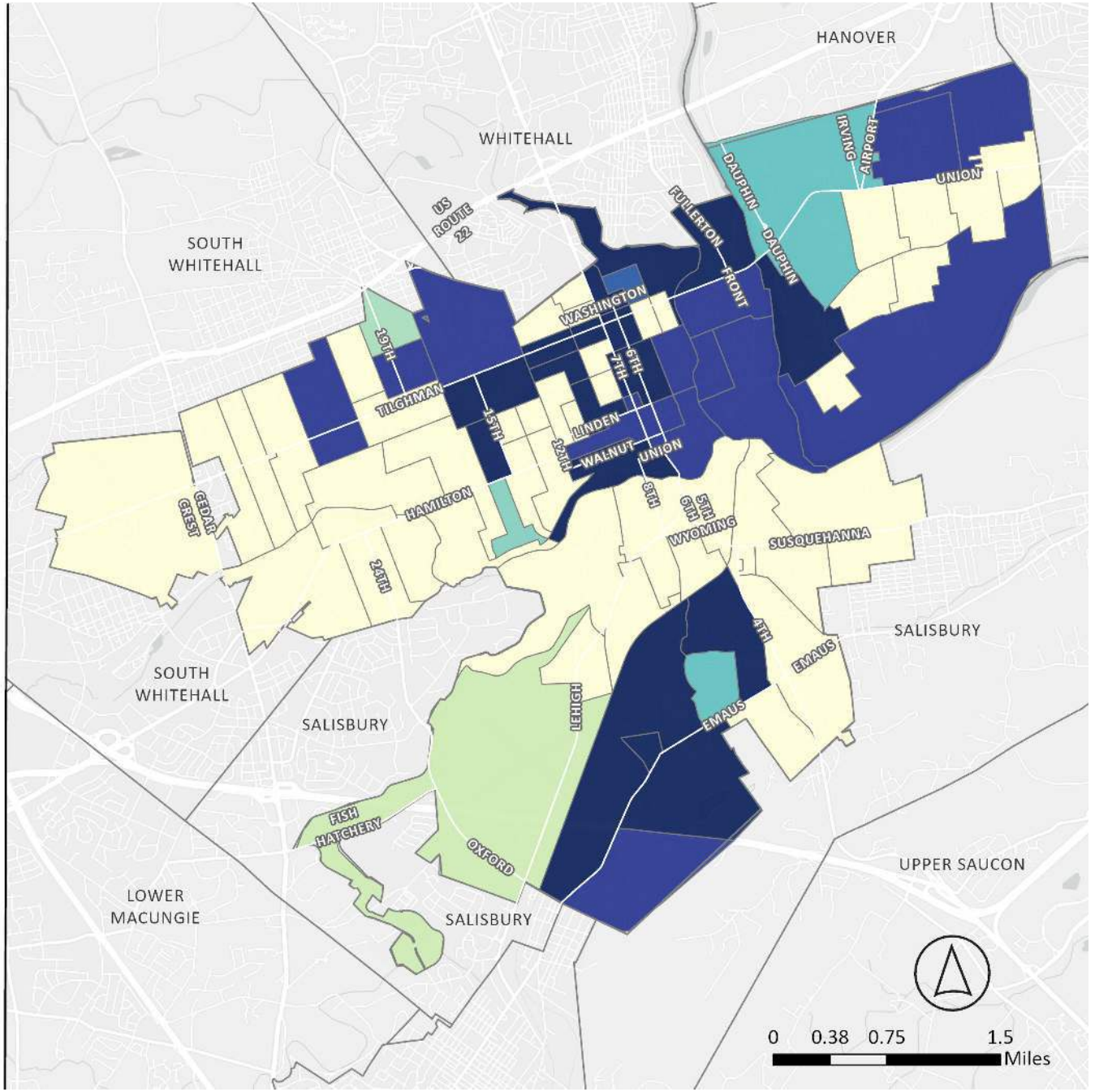


Source: PA DEP GIS, Lehigh County GIS

RESIDENTS WITH LIMITED ENGLISH PROFICIENCY (PERCENTILE)

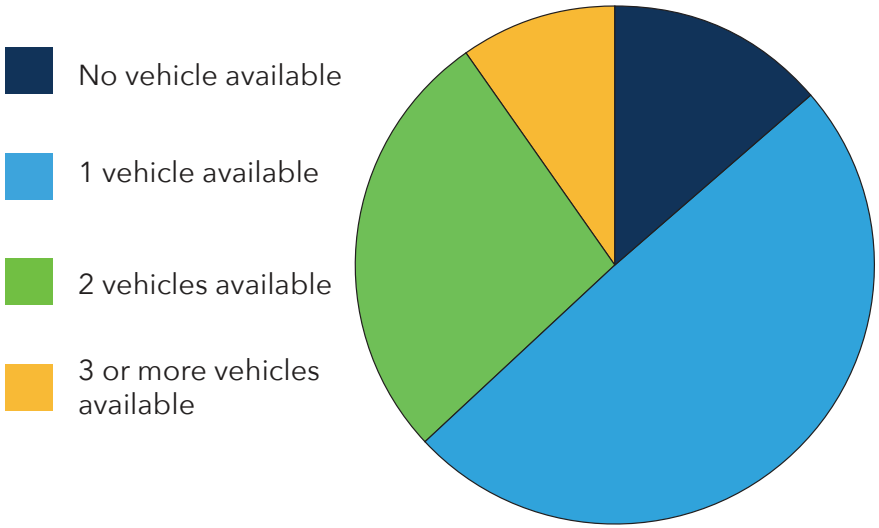
- 0.0 - 10.0
- 10.1 - 20.0
- 20.1 - 30.0
- 30.1 - 40.0
- 40.1 - 50.0
- 50.1 - 60.0
- 60.1 - 70.0
- 70.1 - 80.0
- 80.1 - 90.0
- 90.1 - 100.0

Based on percentiles as compared to all Census BGs in PA



Source: PA DEP GIS, Lehigh County GIS

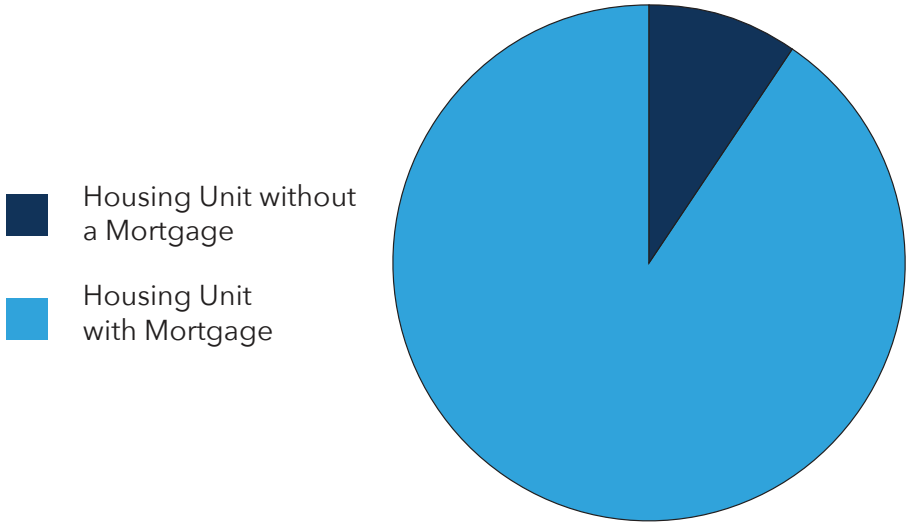
Cars in Household



Vehicles Available	Estimates
No vehicle available	6,453
1 vehicle available	22,956
2 vehicles available	12,651
3 or more vehicles available	4,476

American Community Survey S2504, 2022

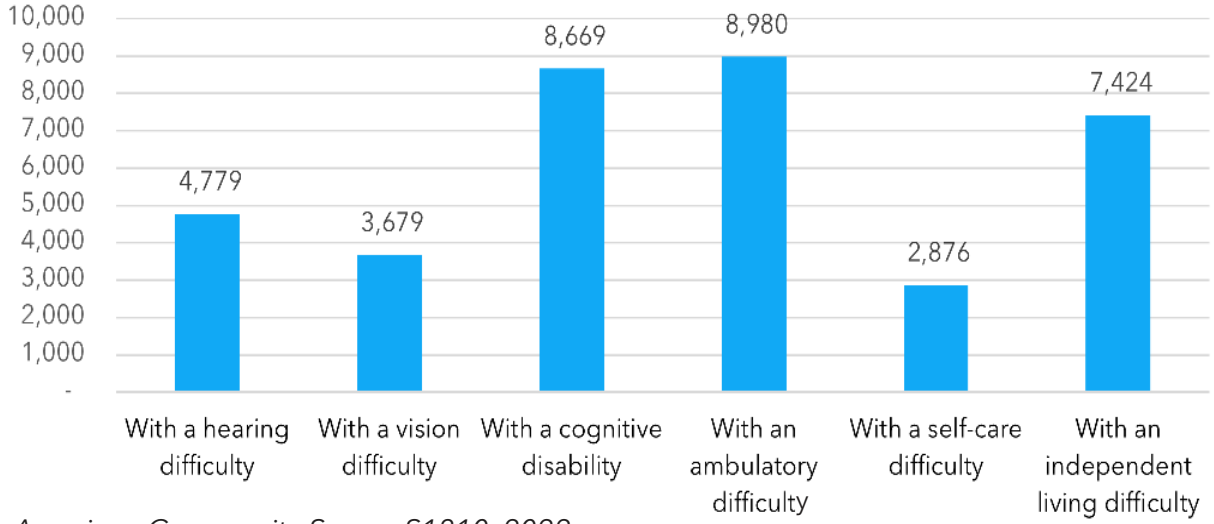
Housing Cost Burden



Housing Cost Burden	Estimates	Percent
Housing Unit without a Mortgage	286	4.1%
Housing Unit with a Mortgage	4,637	38.6%
Total	4,923	42.7%

American Community Survey DP04, 2022

Disability Status

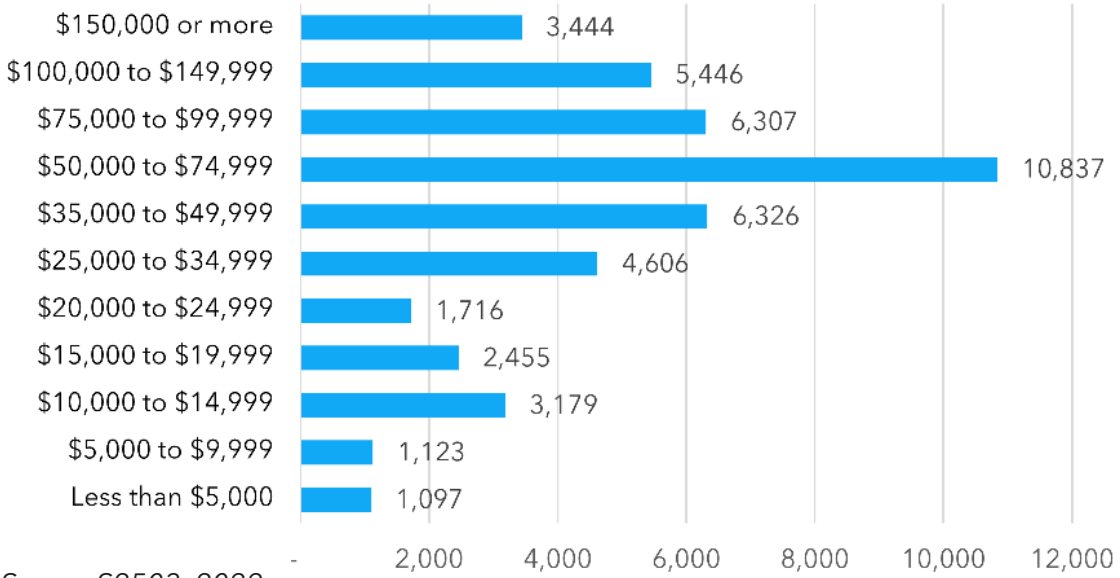


Disability Type	Estimates
With a hearing difficulty	4,779
With a vision difficulty	3,679
With a cognitive disability	8,669
With an ambulatory difficulty	8,980
With self-care difficulty	2,876
With an independent living difficulty	7,424
Total	36,407

American Community Survey S1810, 2022

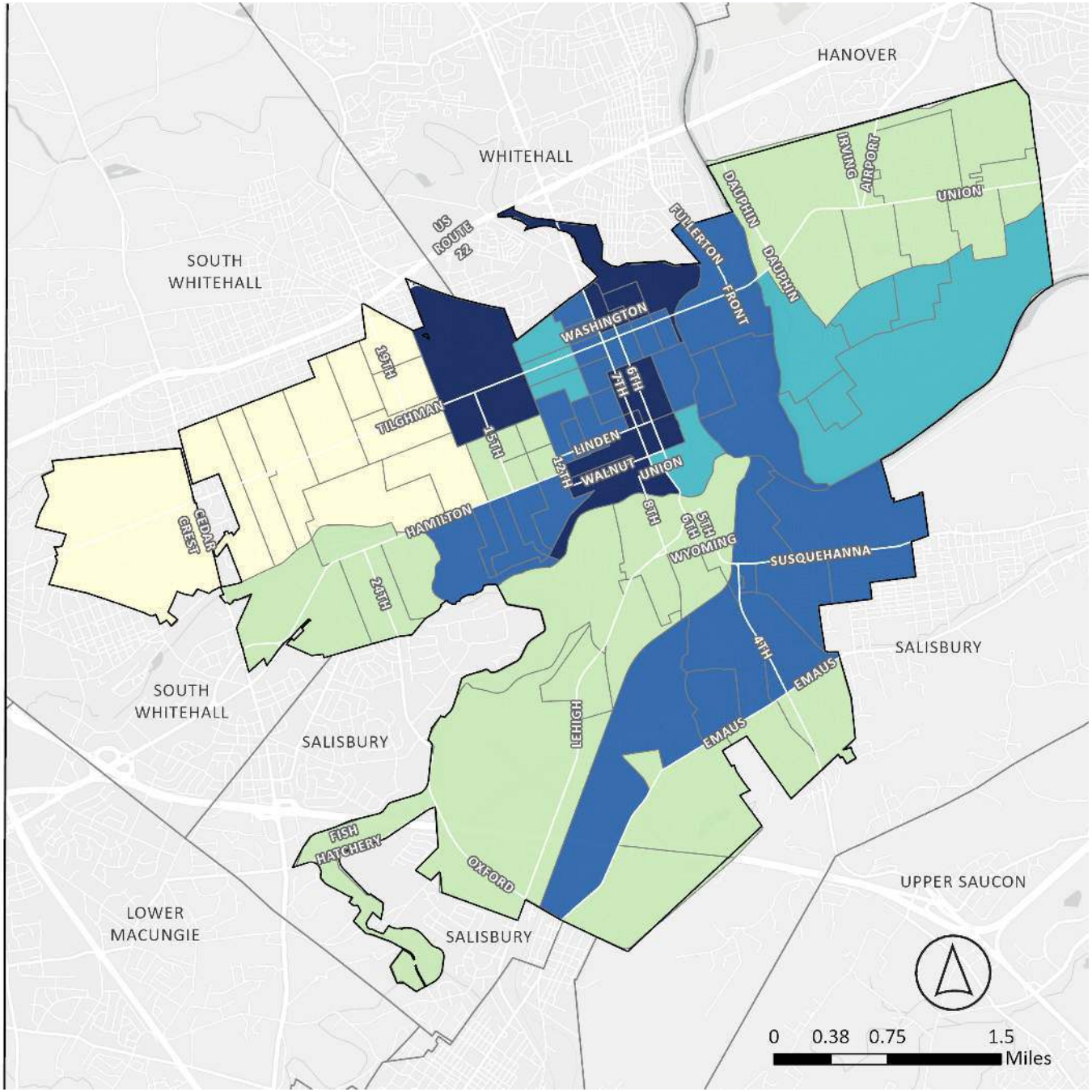
Household Income in the Past 12 Months (in Inflation-Adjusted Dollars)

Median household income: $55,949



American Community Survey S2503, 2022

PERCENT OF RESIDENTS WITH A DISABILITY

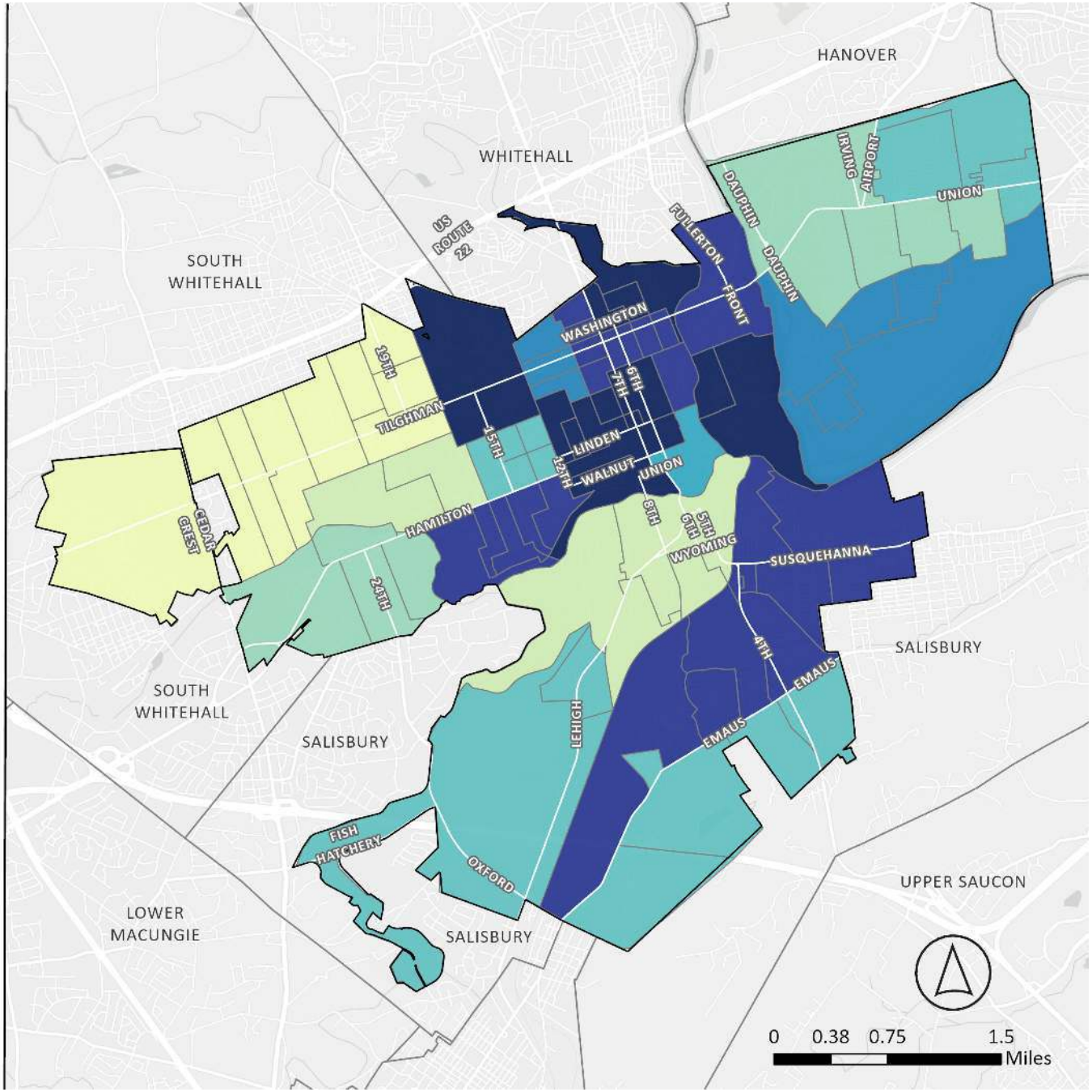


Source: PA DEP GIS, Lehigh County GIS

RESIDENTS WITH A DISABILITY (PERCENTILE)

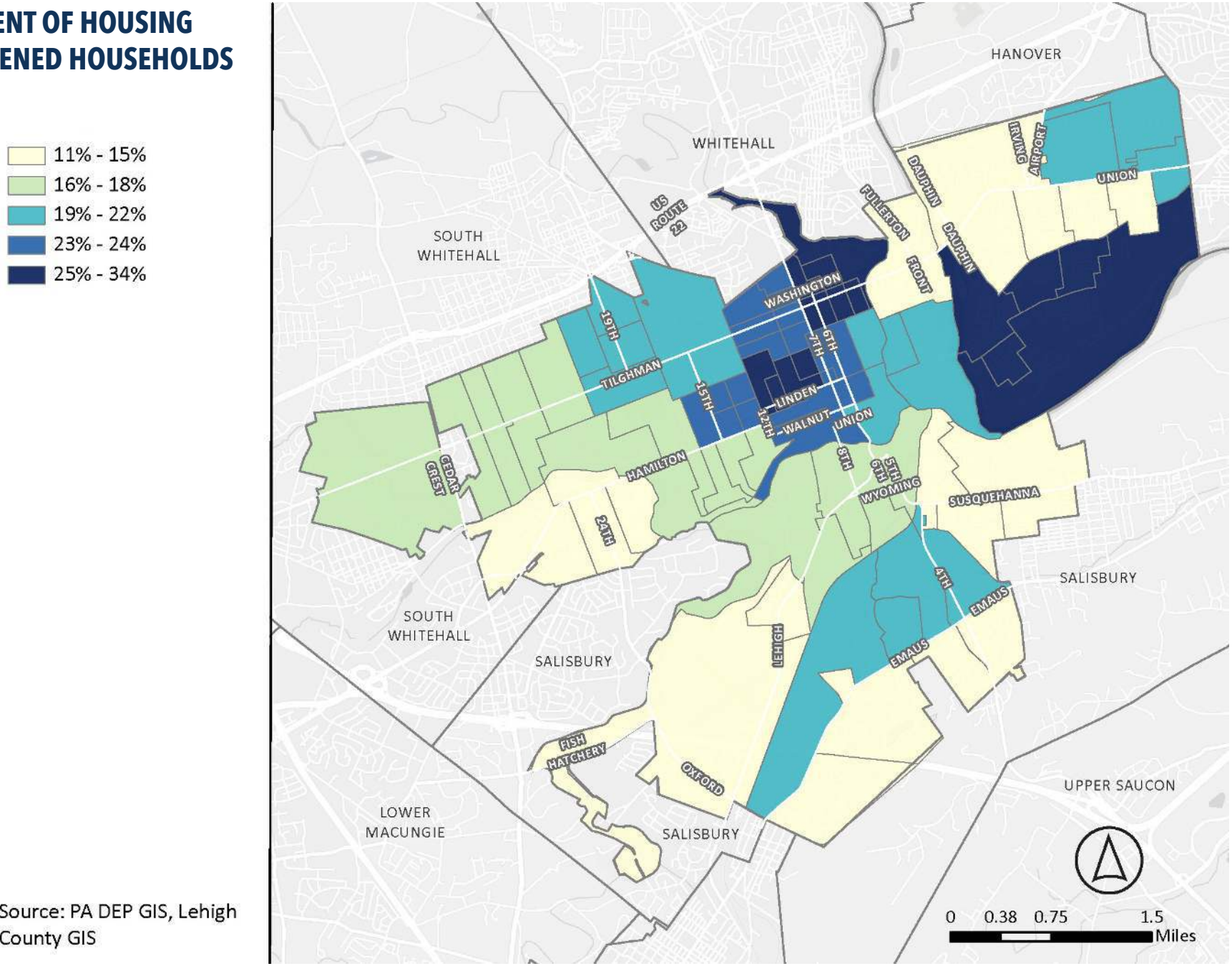
- 0.0 - 10.0
- 10.1 - 20.0
- 20.1 - 30.0
- 30.1 - 40.0
- 40.1 - 50.0
- 50.1 - 60.0
- 60.1 - 70.0
- 70.1 - 80.0
- 80.1 - 90.0
- 90.1 - 100.0

Based on percentiles as compared to all Census BGs in PA



Source: PA DEP GIS, Lehigh County GIS

PERCENT OF HOUSING BURDENED HOUSEHOLDS

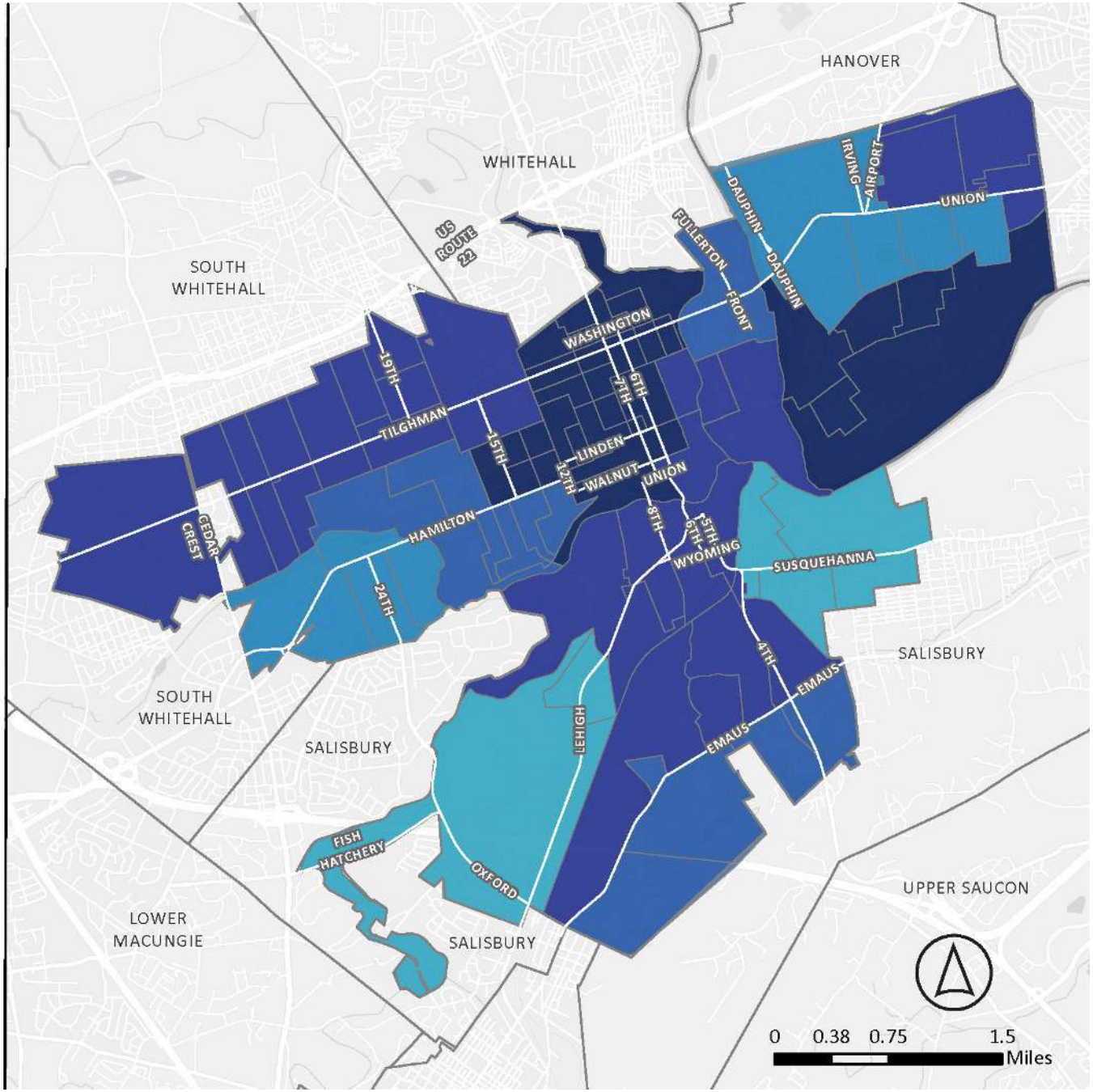


Source: PA DEP GIS, Lehigh County GIS

HOUSING BURDENED HOUSEHOLDS (PERCENTILE)

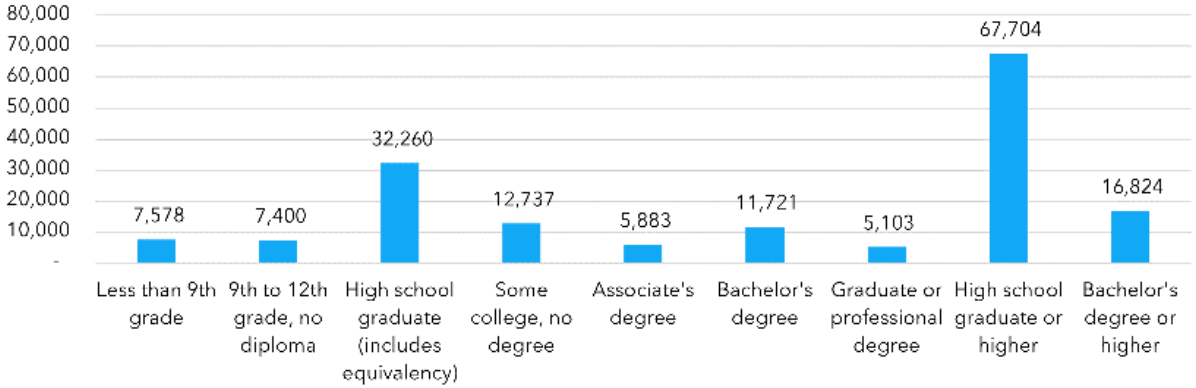
- 0.0 - 10.0
- 10.1 - 20.0
- 20.1 - 30.0
- 30.1 - 40.0
- 40.1 - 50.0
- 50.1 - 60.0
- 60.1 - 70.0
- 70.1 - 80.0
- 80.1 - 90.0
- 90.1 - 100.0

Based on percentiles as compared to all Census BGs in PA



Source: PA DEP GIS, Lehigh County GIS

Educational Attainment for Population 25 Years and Older



Educational Attainment	Percent
Less than 9th grade	9.2%
9th to 12th grade, no diploma	8.9%
High School graduate (includes equivalency)	39.0%
Some college, no degree	15.4%
Associates degree	7.1%
Bachelor's degree	14.2%
Graduate or professional degree	6.2%
High school graduate or higher	81.9%
Bachelor's degree or higher	20.3%

American Community Survey S1501, 2022

Unemployment

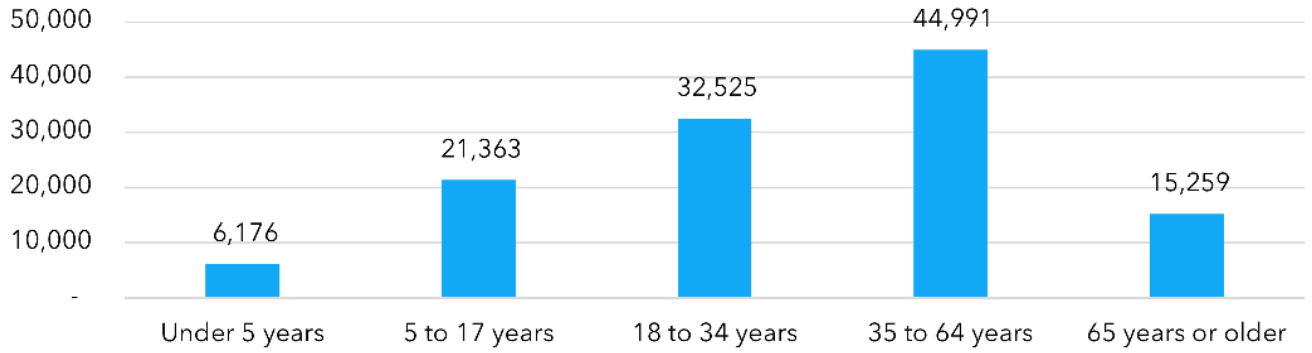
Location	Unemployment Rate
Allentown	7.6%
Lehigh County	4.5%

American Community Survey DP03, 2022

Poverty

Location	Percent
Allentown	19.1%
Lehigh County	11.5%

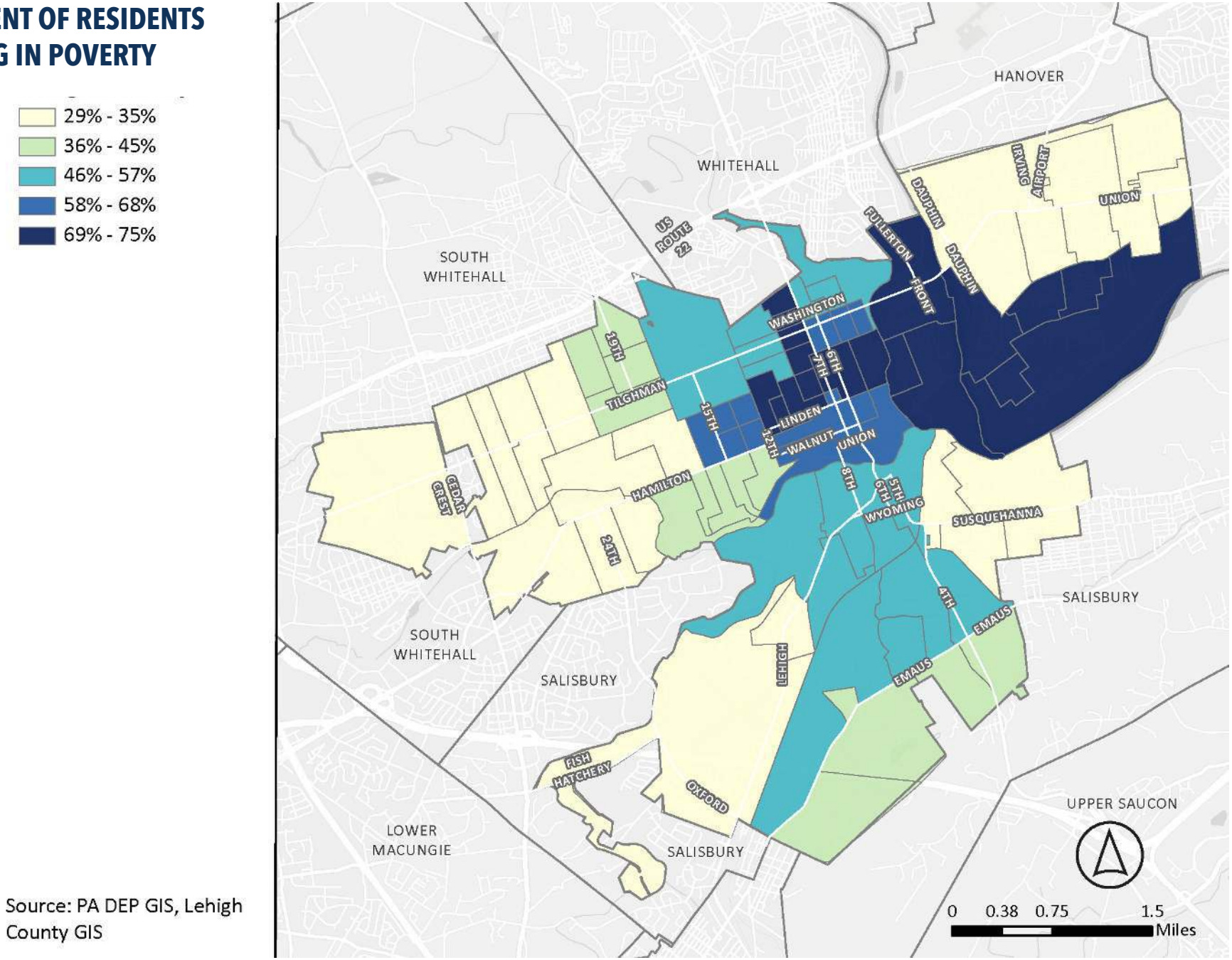
Poverty by Age



Age	Estimate	Precent
Under 5 years	6,176	5%
5 to 17 years	21,363	18%
18 to 34 years	32,525	27%
35 to 64 years	44,991	37%
65 years or older	15,259	13%
Population for whom poverty status is determined	120,341	100%

American Community Survey S1701, 2022

PERCENT OF RESIDENTS LIVING IN POVERTY

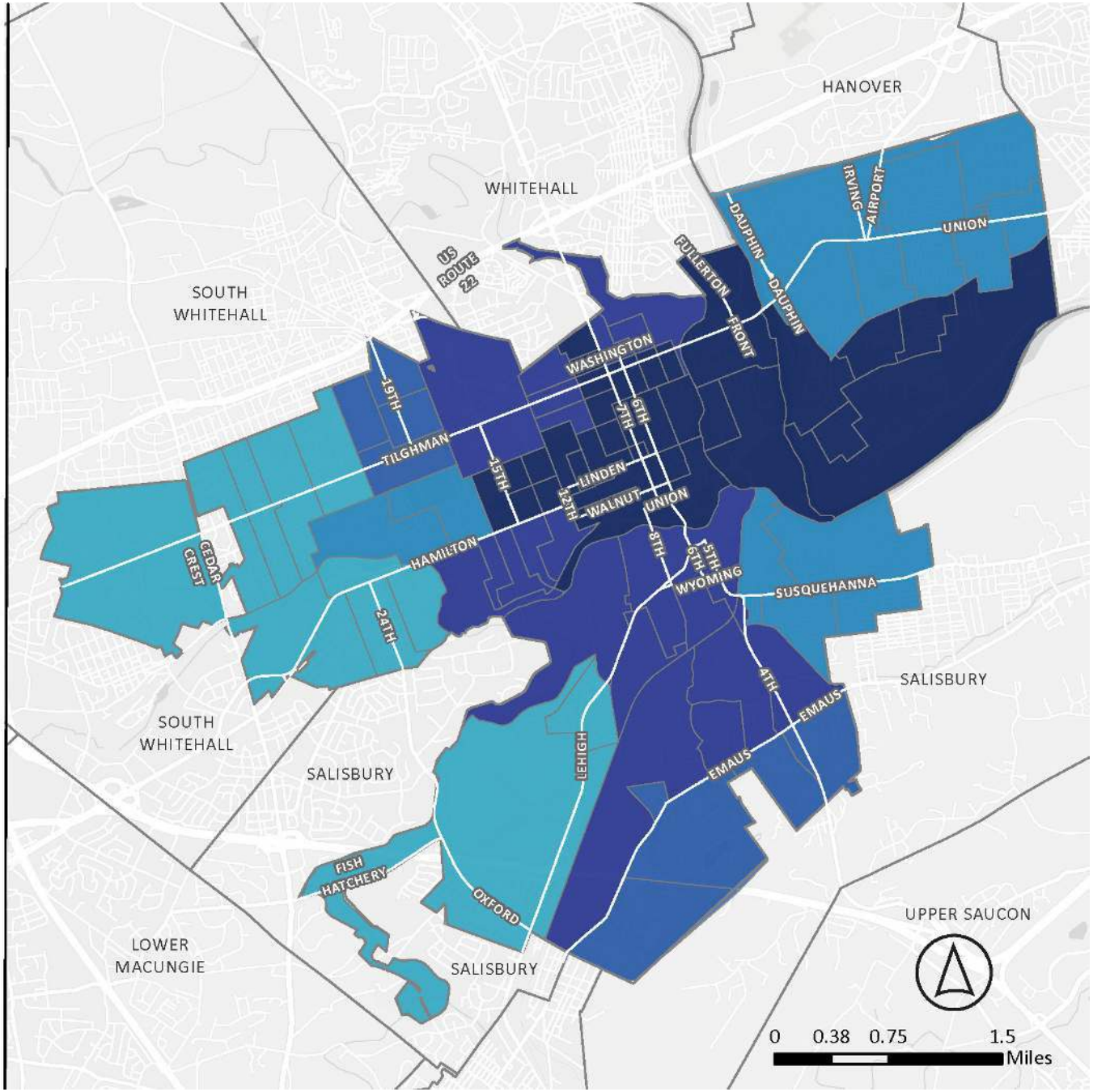


Source: PA DEP GIS, Lehigh County GIS

RESIDENTS LIVING IN POVERTY (PERCENTILE)

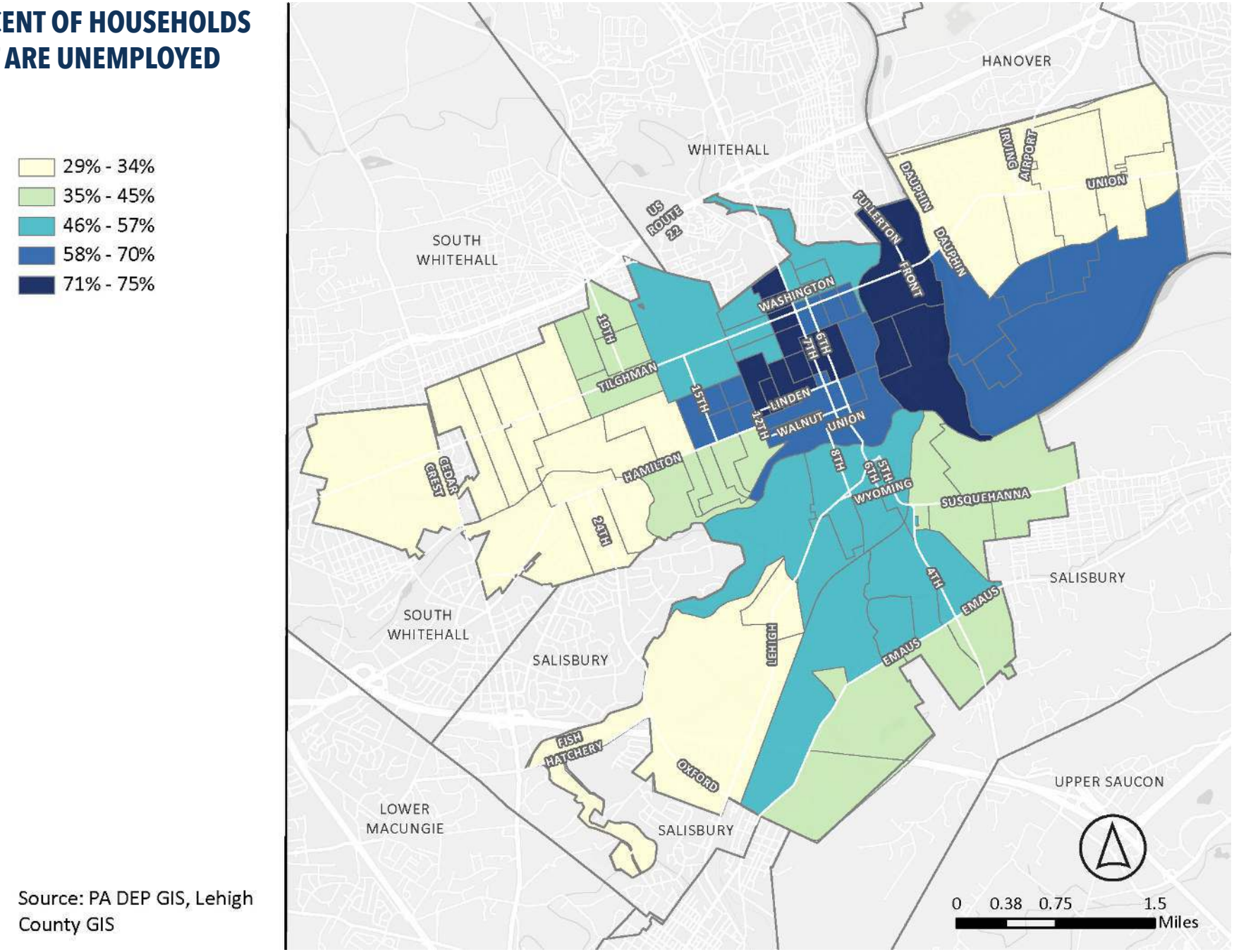
- 0.0 - 10.0
- 10.1 - 20.0
- 20.1 - 30.0
- 30.1 - 40.0
- 40.1 - 50.0
- 50.1 - 60.0
- 60.1 - 70.0
- 70.1 - 80.0
- 80.1 - 90.0
- 90.1 - 100.0

Based on percentiles as compared to all Census BGs in PA



Source: PA DEP GIS, Lehigh County GIS

PERCENT OF HOUSEHOLDS THAT ARE UNEMPLOYED

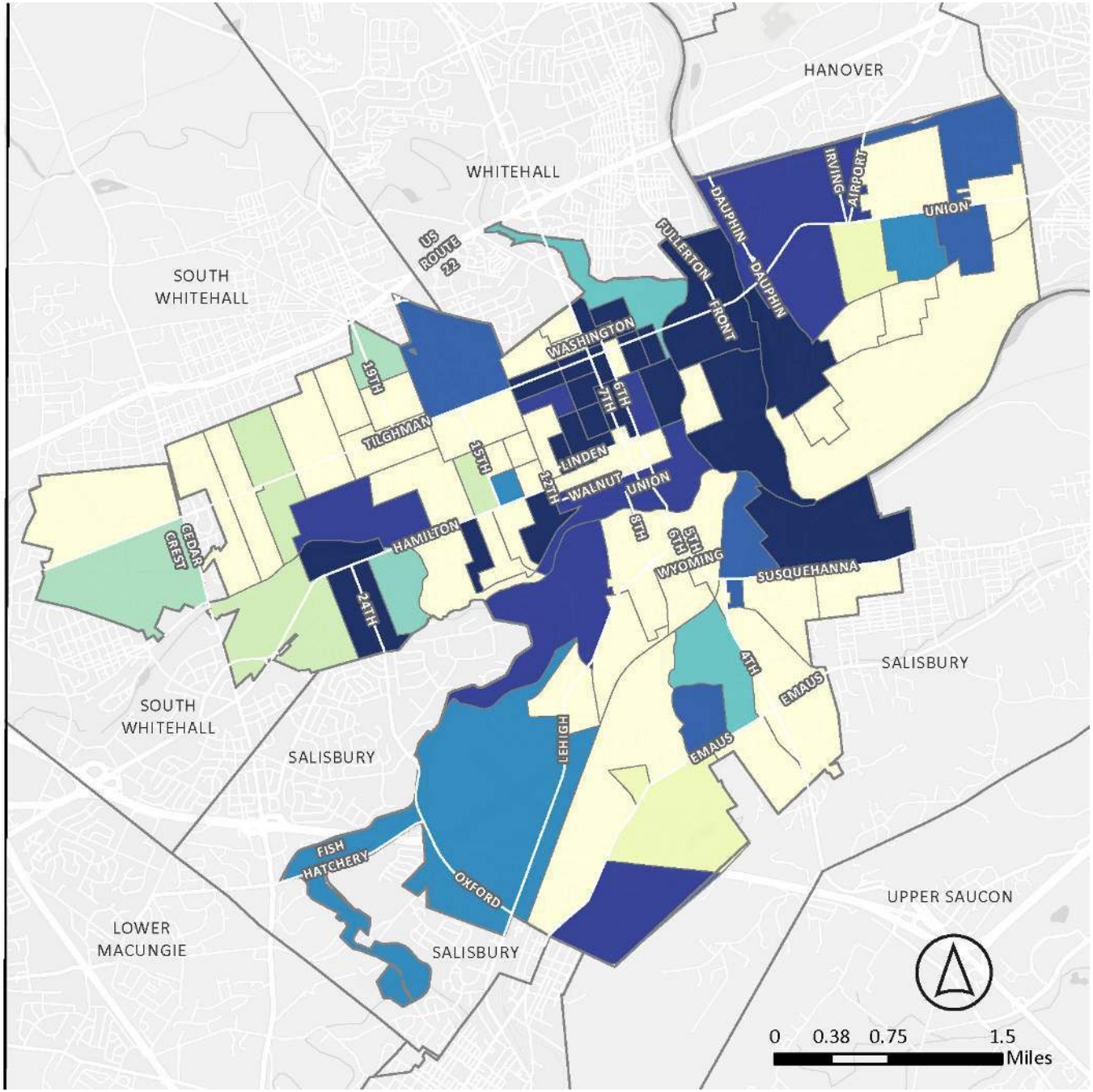


Source: PA DEP GIS, Lehigh County GIS

UNEMPLOYMENT HOUSEHOLDS (PERCENTILE)

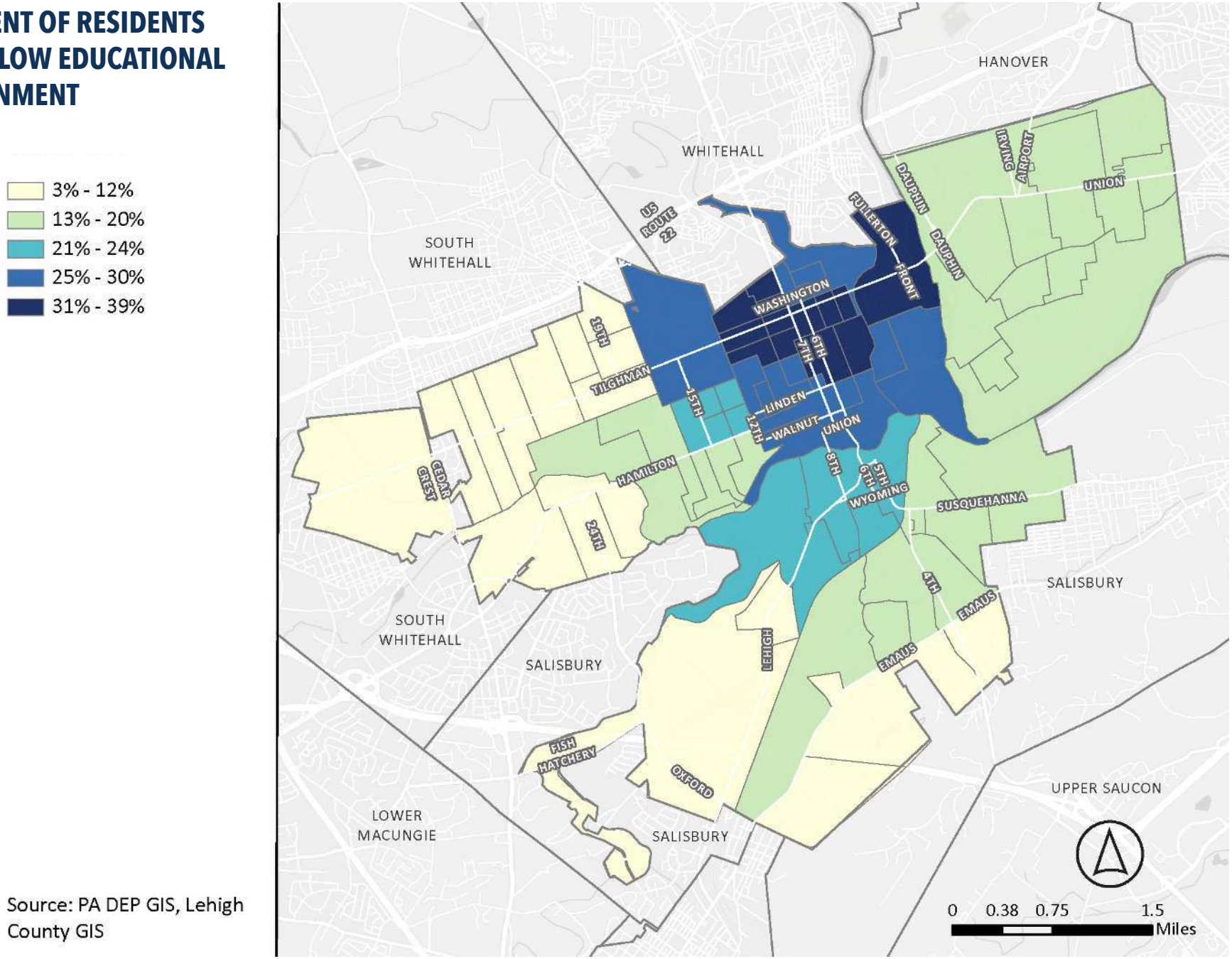
- 0.0 - 10.0
- 10.1 - 20.0
- 20.1 - 30.0
- 30.1 - 40.0
- 40.1 - 50.0
- 50.1 - 60.0
- 60.1 - 70.0
- 70.1 - 80.0
- 80.1 - 90.0
- 90.1 - 100.0

Based on percentiles as compared to all Census BGs in PA



Source: PA DEP GIS, Lehigh County GIS

PERCENT OF RESIDENTS WITH LOW EDUCATIONAL ATTAINMENT



Source: PA DEP GIS, Lehigh County GIS

RESIDENTS WITH LOW EDUCATIONAL ATTAINMENT (PERCENTILE)

- 0.0 - 10.0
- 10.1 - 20.0
- 20.1 - 30.0
- 30.1 - 40.0
- 40.1 - 50.0
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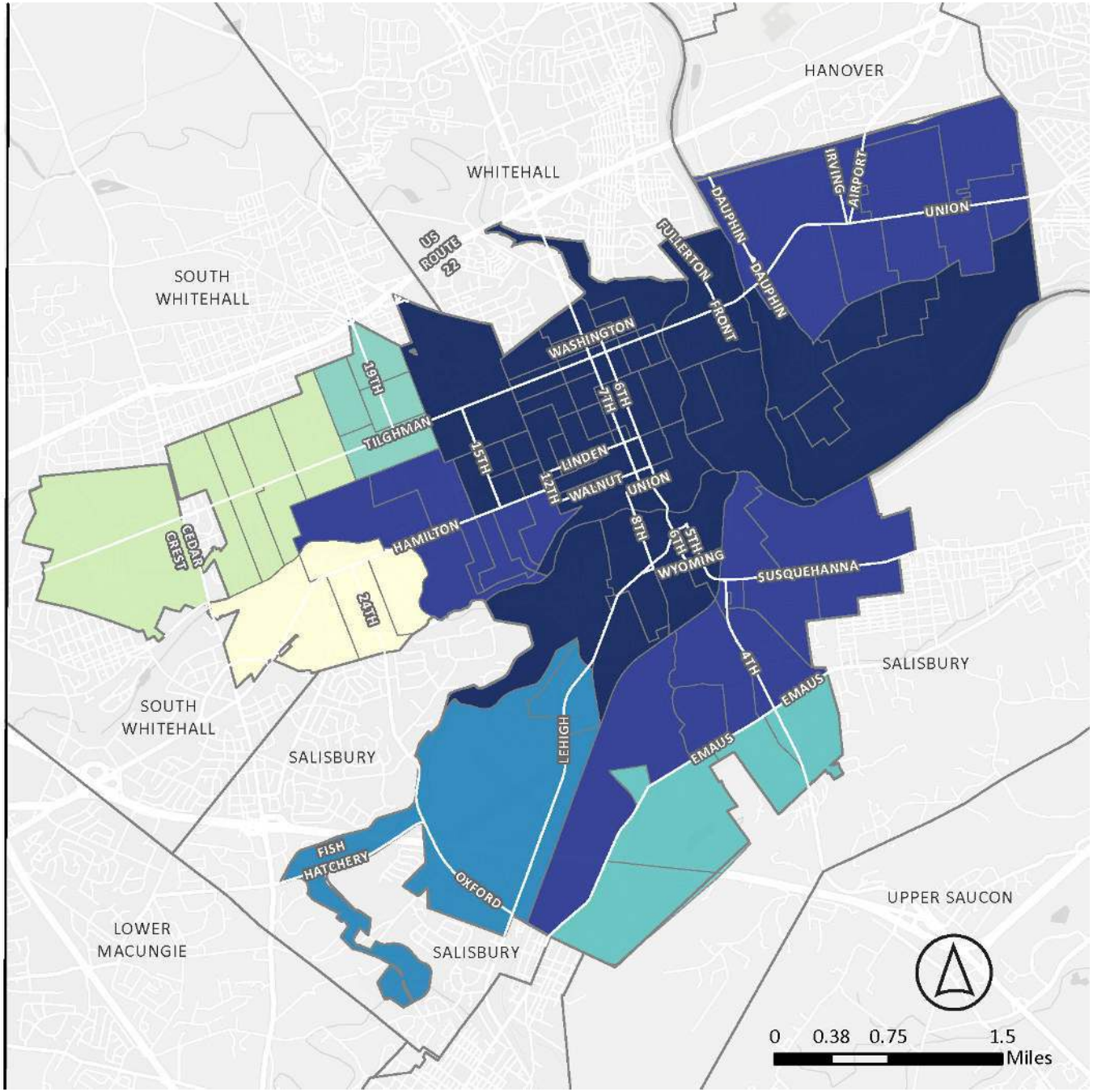
Based on percentiles as compared to all Census BGs in PA



Source: PA DEP GIS, Lehigh County GIS

APPENDIX B - STAKEHOLDER AND COMMUNITY ENGAGEMENT REPORT

B

Steering Committee

A Steering Committee of City staff, key stakeholders, and community representatives was developed to guide the SS4A Plan development. The Steering Committee provided local insight, as well as direction and recommendations on approach and progress. The committee met nine times throughout the process. Members on the Steering Committee had the following affiliations:

- AARP
- Allentown School District
- Business Owners
- Coalition for Appropriate Transportation (CAT)
- Community Members Representing Areas of Allentown
- City of Allentown - City Council
- City of Allentown – Environmental Advisory Council (EAC)
- City of Allentown - Health Bureau
- City of Allentown - IT/GIS
- City of Allentown – Mayor
- City of Allentown - Parks & Recreation
- City of Allentown - Planning & Zoning
- City of Allentown - Police
- City of Allentown - Public Works
- Greater Lehigh Valley Chamber of Commerce
- Lehigh and Northampton Transportation Authority (LANTA)
- Lehigh Valley Health Network (LVHN) – Cedar Crest
- Lehigh Valley Planning Commission (LVPC)
- PennDOT District 5-0
- PennDOT Local Technical Assistance Program (LTAP)
- United Way

Pop-Up Events

A series of pop-up events were conducted throughout the months of June and July. These pop-up events allowed the City to meet the communities where they were at in order to get the word out about the survey and gather feedback on relevant safety issues through

interactive activities that supplemented the survey prompts. Over two months, there were four pop-up events throughout the city:

- Puerto Rican Cultural Preservation Association (PRCP) Childrens Fest on June 8th
- Juneteenth Celebration on June 15th
- Movie in the Park at Mack Pool July 13th
- LV Disability Pride on July 20th

By holding events throughout the city, the project team was able to reach a diverse set of residents allowing for varying opinions to be included in the engagement portion of this plan.

In addition to the four SS4A hosted pop-ups, information about the SS4A plan was shared by CAT at a bike event with the Mayor and at the Movie in the Park in Jordan Park.

In October and November, four pop-up events were held to share the survey results and an update on the SS4A plan. The pop-ups were held at:

- Halloween Parade in Downtown on October 26th
- City Hall at the Table (CHATT) at Jefferson Elementary on November 18th
- West End Tree Lighting in the West End on November 30th
- CHATT at City Hall on December 17th

Pop-up Event at PRCP Childrens Fest

Pop-up Event at Mayor Matt Turek's Bike to Work Week

Pop-up Event at Juneteenth Celebration

Pop-up Event at LV Disability Pride

Outreach & Survey Report

City of Allentown
Safe Streets for All (SS4A)
Survey Report

Allentown

Michael Baker INTERNATIONAL

August 2024

Overview

Outreach & Engagement Activities

Pop-Up Events to Promote Survey

Email blasts to 100+ stakeholders

Online survey business cards distributed at key locations

City Website Update, Social Media Posts, La Fatima FM Radio Spots

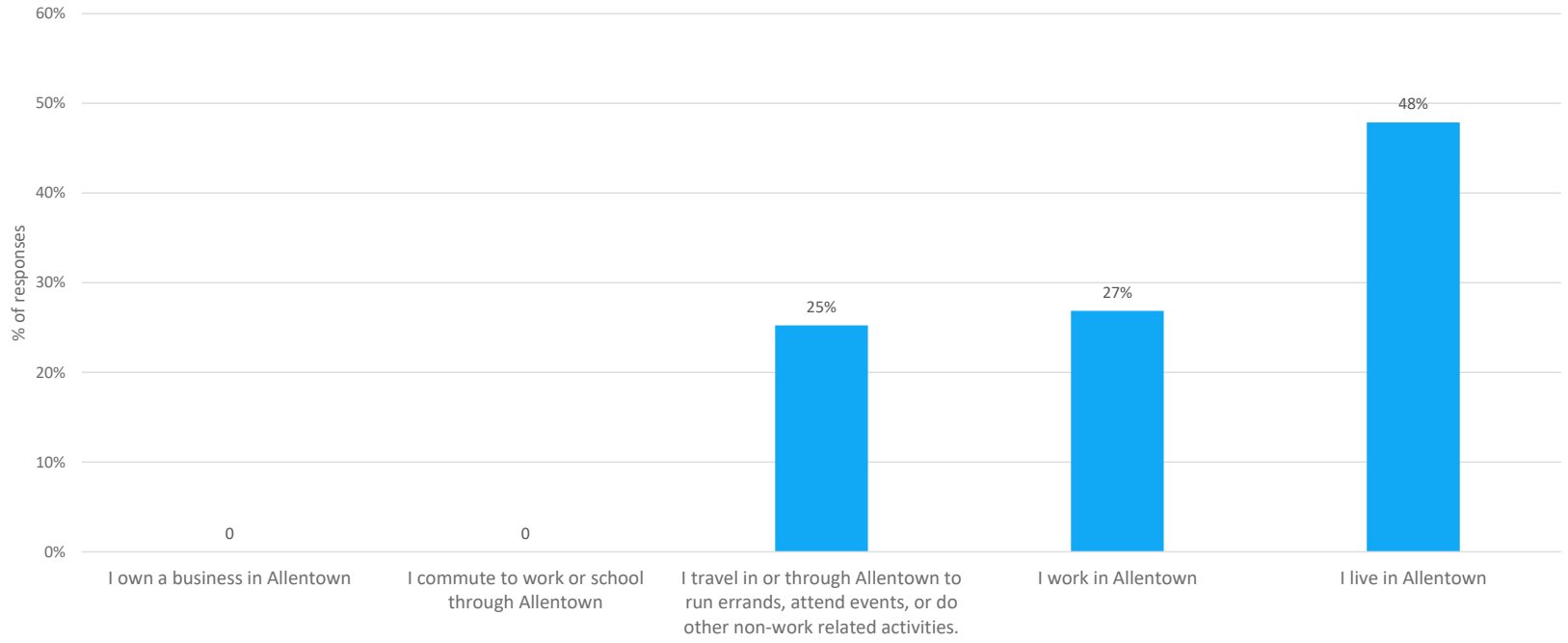
Stakeholder groups (neighborhood associations, Housing Authority, City Center, etc.) shared survey with their communities

Community Responses

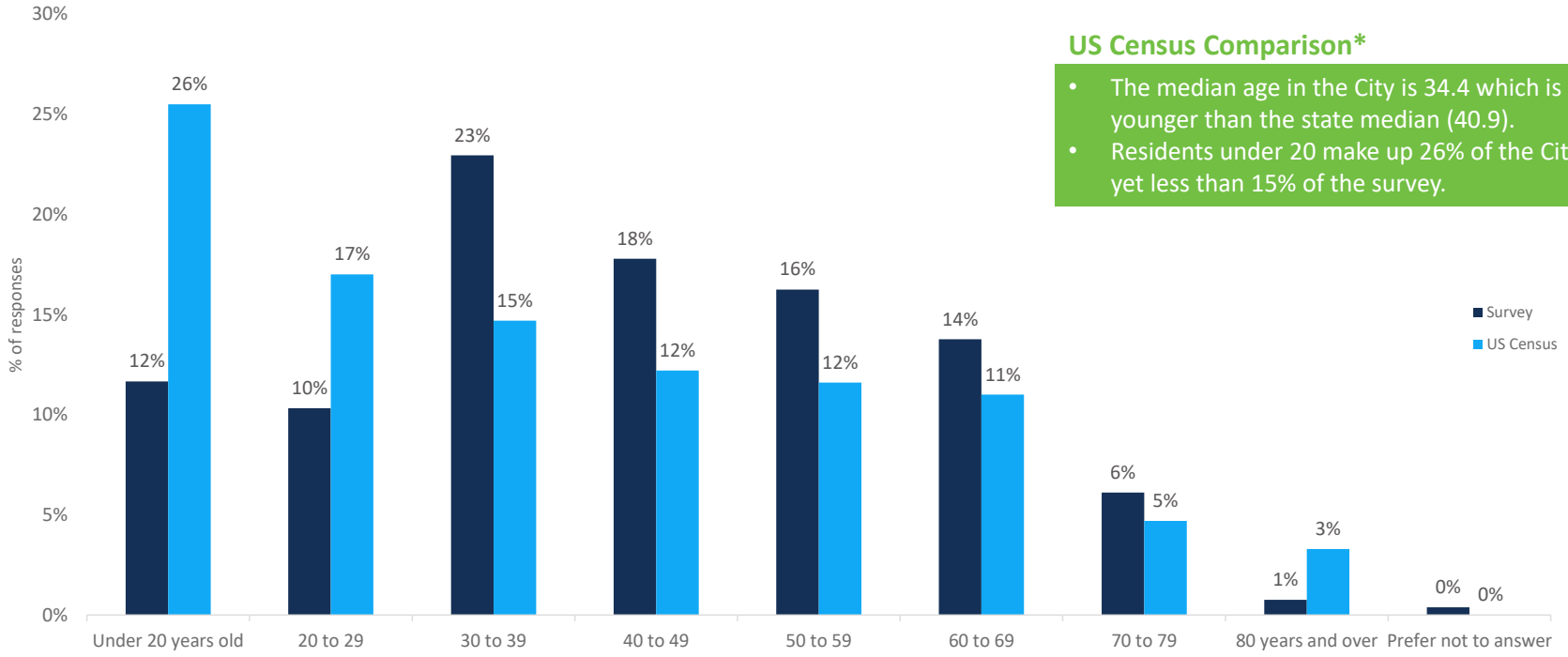
Total Survey Responses: 1,455

- This report includes data collected from the survey.
- Over 581 responses to the welcome survey and 874 points.
- Over 700 comments on the survey.

Survey Demographics | Primary Relationship to Allentown



Survey Demographics | Age



US Census Comparison*

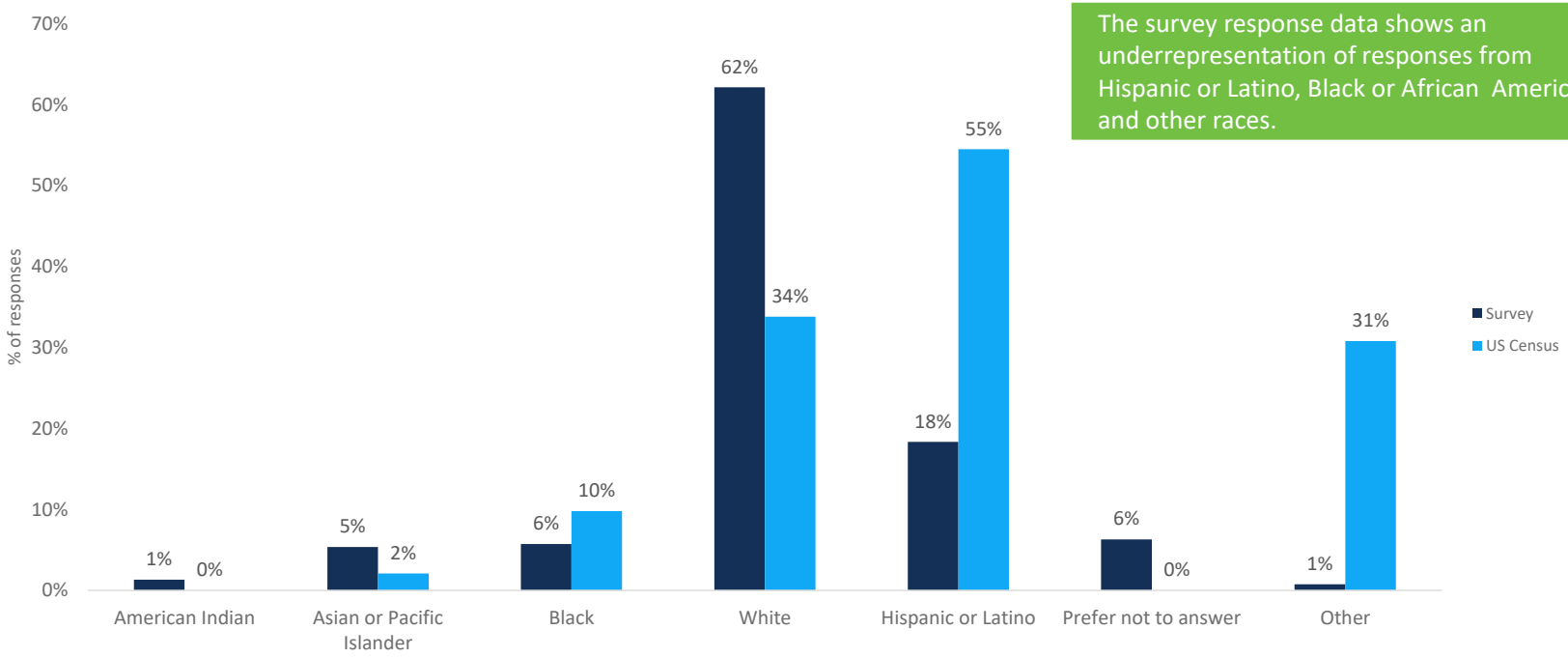
- The median age in the City is 34.4 which is younger than the state median (40.9).
- Residents under 20 make up 26% of the City yet less than 15% of the survey.

**All Census comparisons are City of Allentown municipal numbers.*

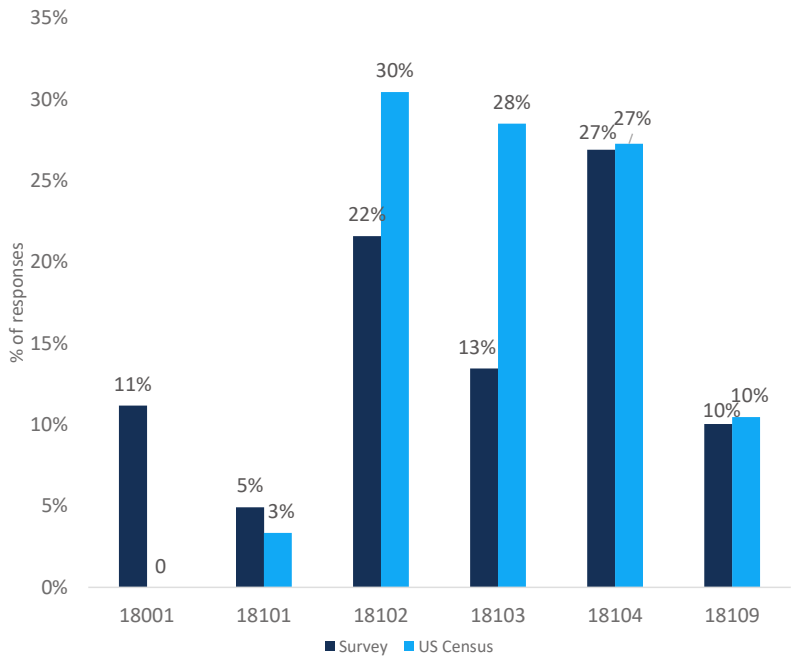
Survey Demographics | Race and Ethnicity

US Census Comparison

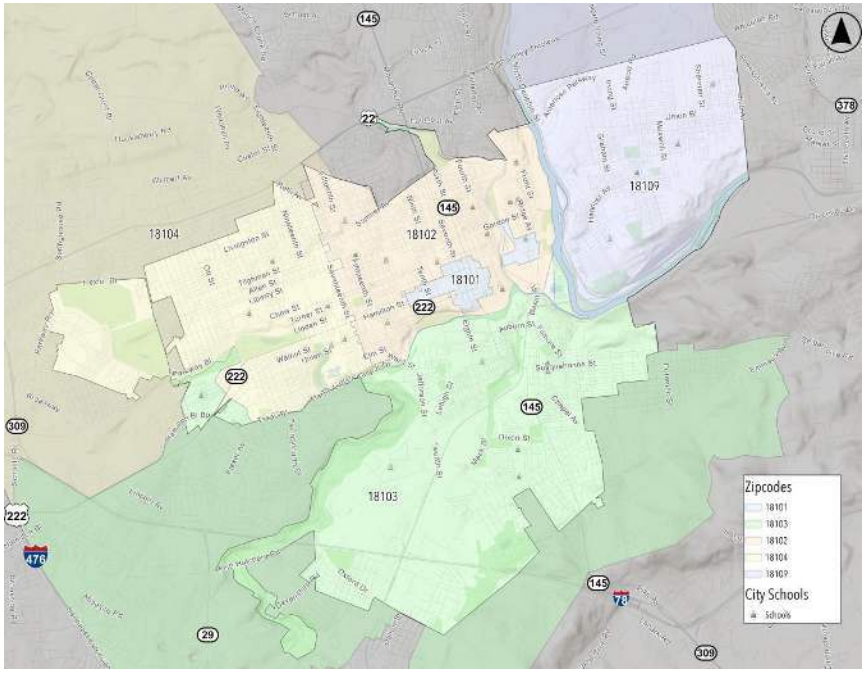
The survey response data shows an underrepresentation of responses from Hispanic or Latino, Black or African American, and other races.



Survey Demographics | Location in Allentown

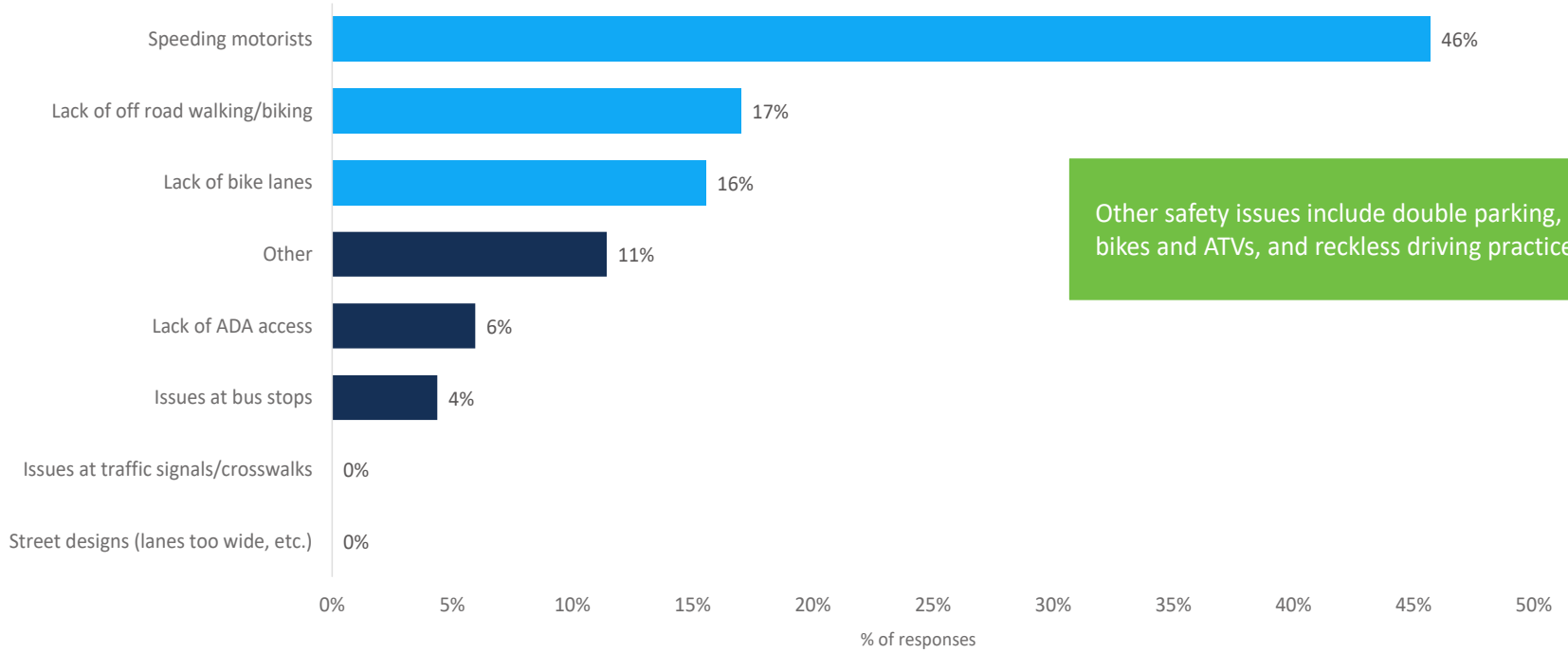


*12% of survey respondents said they did not live in the City or did not know their zip code



Priorities & Key Takeaways Welcome Survey

What do you think are the biggest safety issues on Allentown Streets?



Other safety issues include double parking, dirt bikes and ATVs, and reckless driving practices.

What do you think are the biggest safety issues on Allentown Streets? | Additional Comments & Takeaways

- Double parking is one of the top comments and cause for concern.
- Lack of pedestrian infrastructure and maintenance of existing infrastructure (fading crosswalks, missing sidewalk segments, etc.)
- Motorized vehicles like motorbikes and ATVs not obeying traffic laws.
- Motorists not stopping at stops signs and ignoring signals.

*"People are in a rush in Allentown and they always cause accidents. Also the **double parking** on every street is crazy. Can't go down a single street without a car double parking in the middle"*

*"Uneven sidewalks so people walk in the streets, double parking, people wearing dark clothes, and the **streetlights are not bright** enough or are obscured."*

"Double parking/parking in travel lanes"

*"Lack of enforcement of existing laws, speed limits, **illegal vehicles**, dirt bikes, four wheelers, etc"*

What do you think would improve safety the most on Allentown streets? | Additional Comments & Key Takeaways

- More bicycle and pedestrian infrastructure is desired.
- Speed bumps, road diets, and other measures to help curb speeding were mentioned.

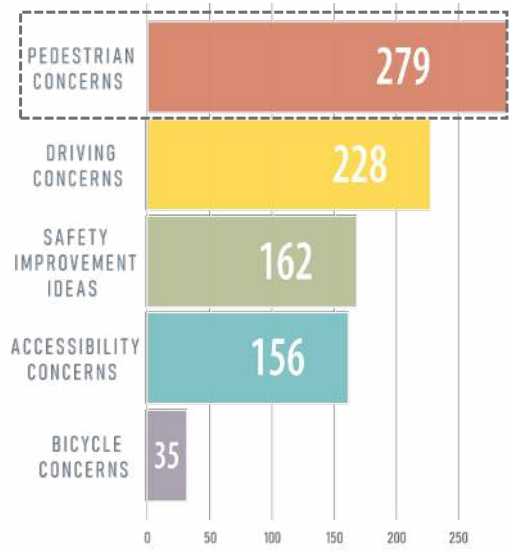
"More lighting in dim lit roadways. Mirrors to see at intersections when cars park to close to corner. Double parking in front of the smoke shops and at barber shops."

*"**Repaint** street markings."*

*"Sidewalks around the park with multiple crosswalks, maybe with **flashing signs.**"*

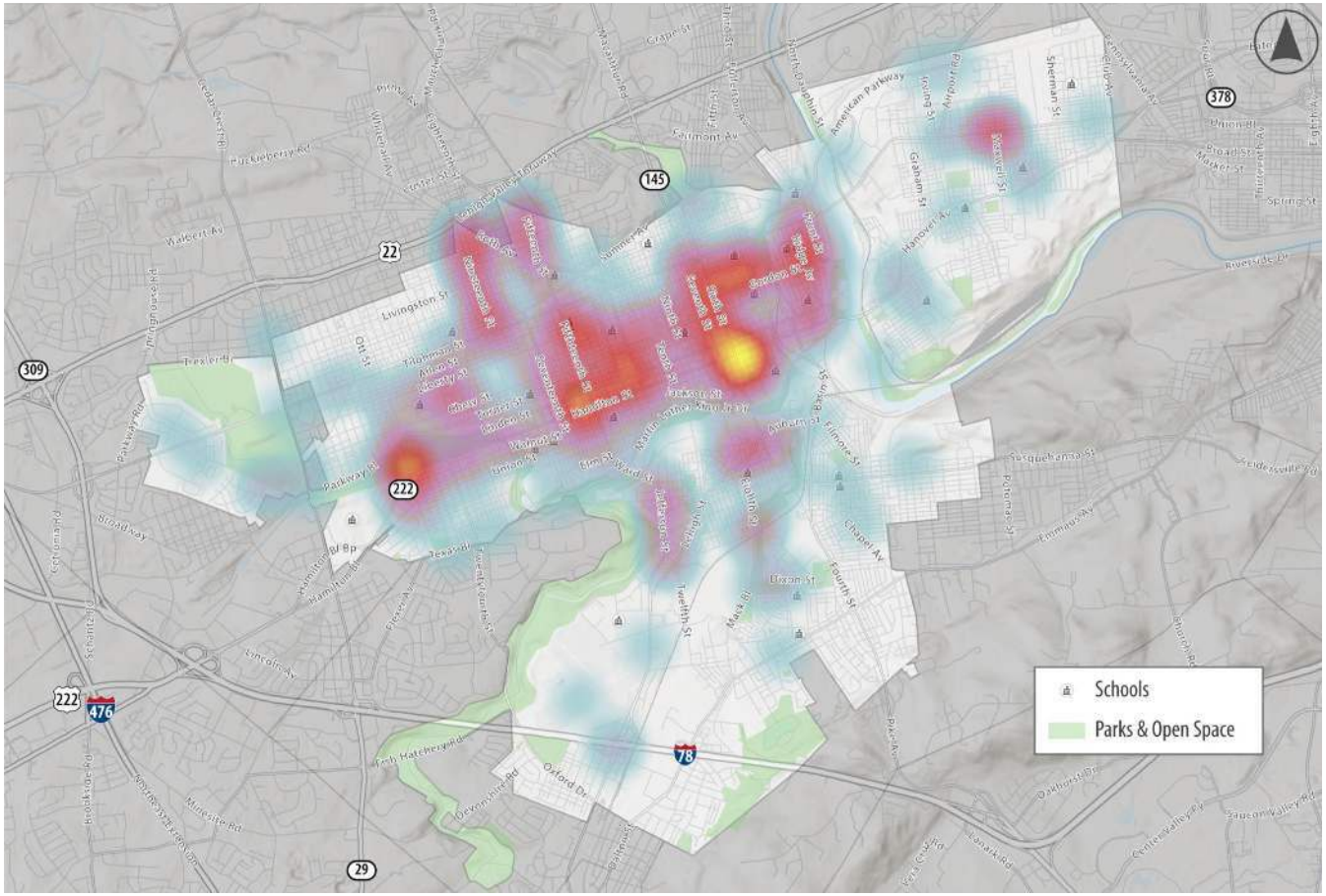
*"Set up traffic detour **further in advance** for events and add more merging sings when the events start."*

Priorities & Key Takeaways Point Data

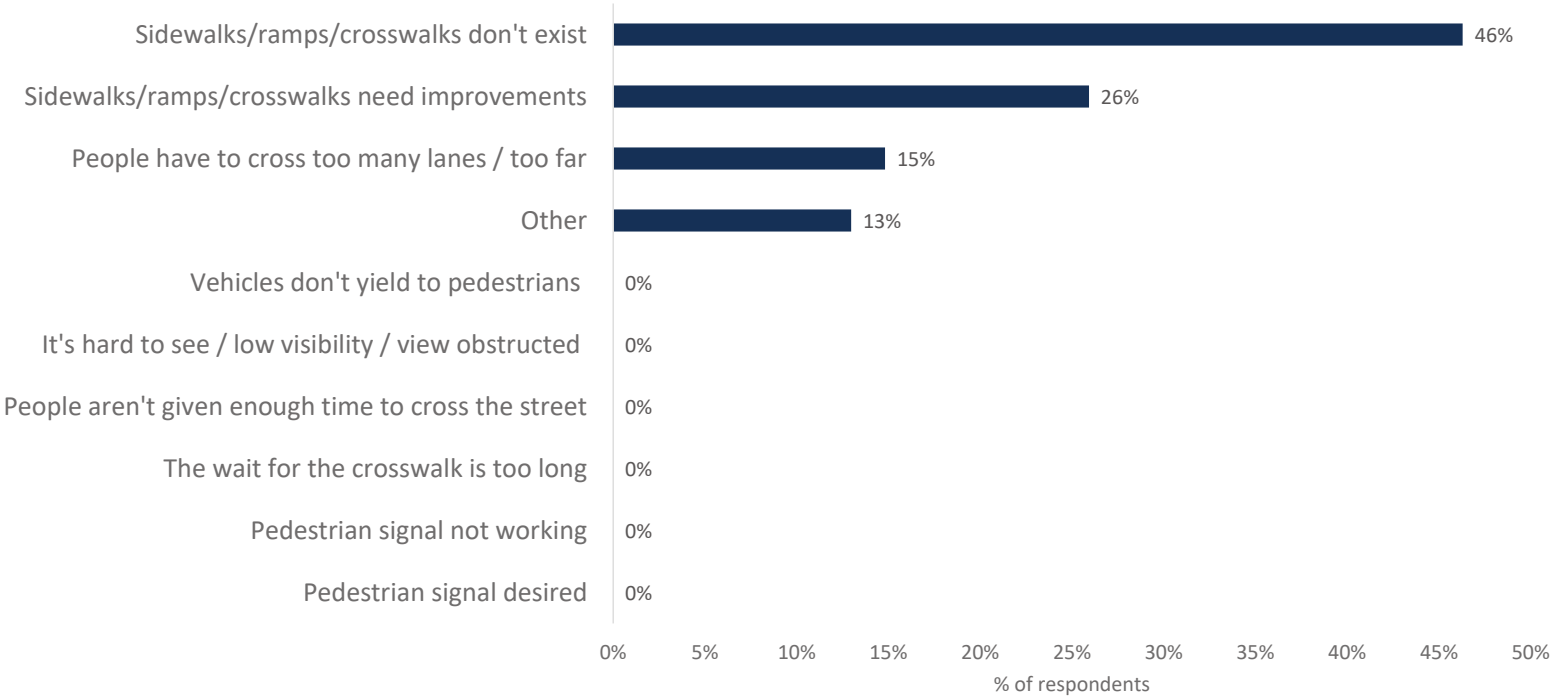


Frequently mentioned areas:

- Hamilton Street
- Tilghman Street
- Union Boulevard
- 17th Street
- Auburn Street
- Turner Street



Pedestrian | Key Takeaways



Pedestrian | Key Takeaways

Desire for comprehensive pedestrian safety improvements including:

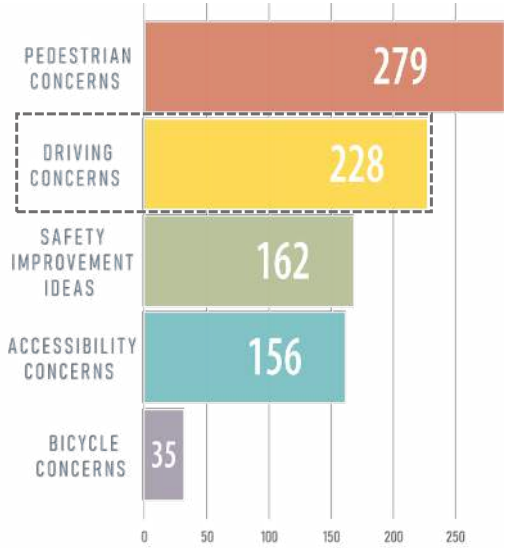
- Pedestrian Signal upgrades
- Crosswalk installations
- Visibility/lighting upgrades
- Measures to slow traffic across multiple locations
- Connecting sidewalk gaps
- Traffic calming/enforcement

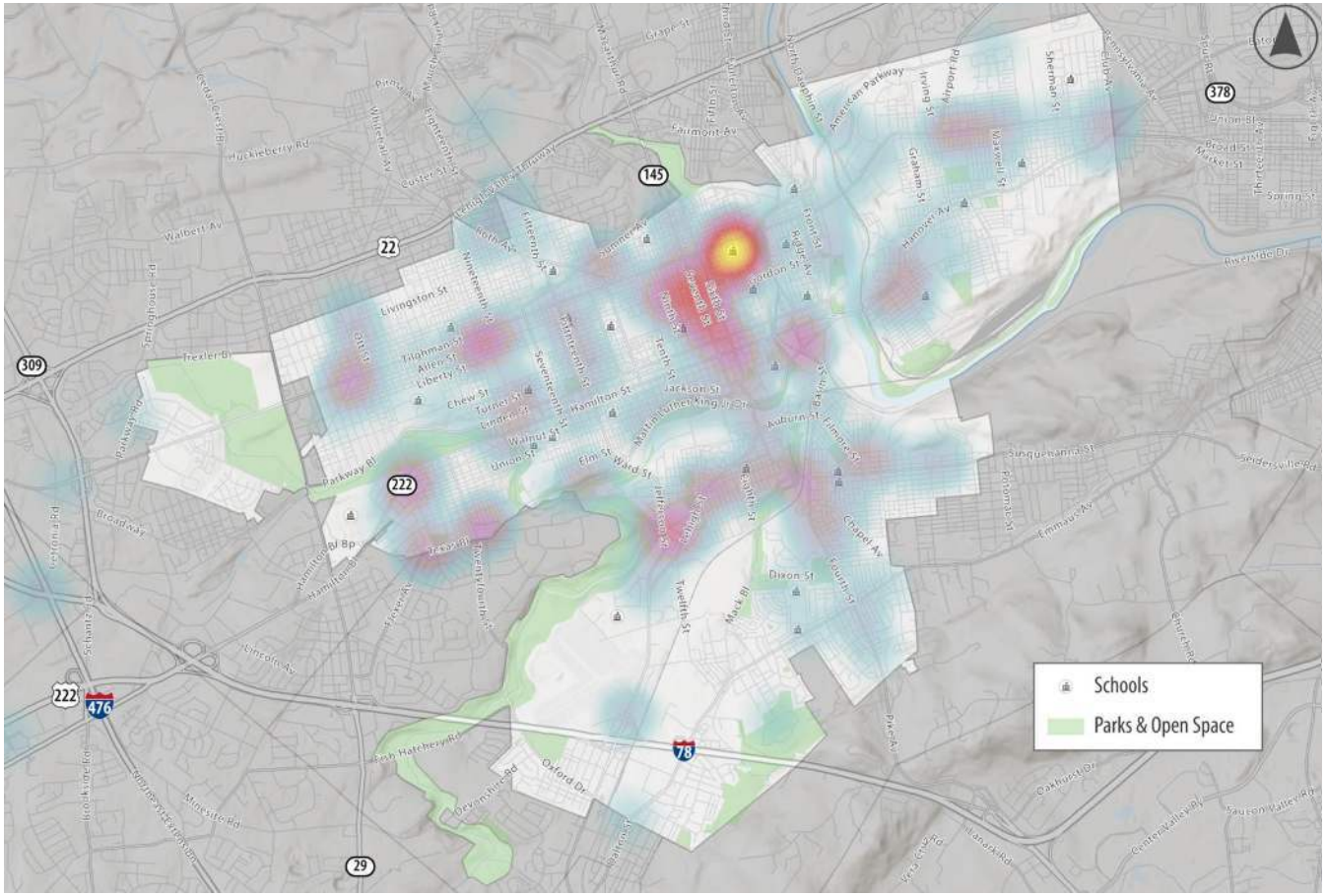
"People drive way too fast, especially during the day. It is very hard to cross the street and feel safe."

"Crosswalks are not clearly marked."

"This stretch of Turner St is very dark. Not well lit, making it hard to see as a driver + be seen as a pedestrian."

"Despite multiple crosswalks in this stretch of Tilghman, vehicles do not yield or, if they do, other vehicles attempt to go around them."

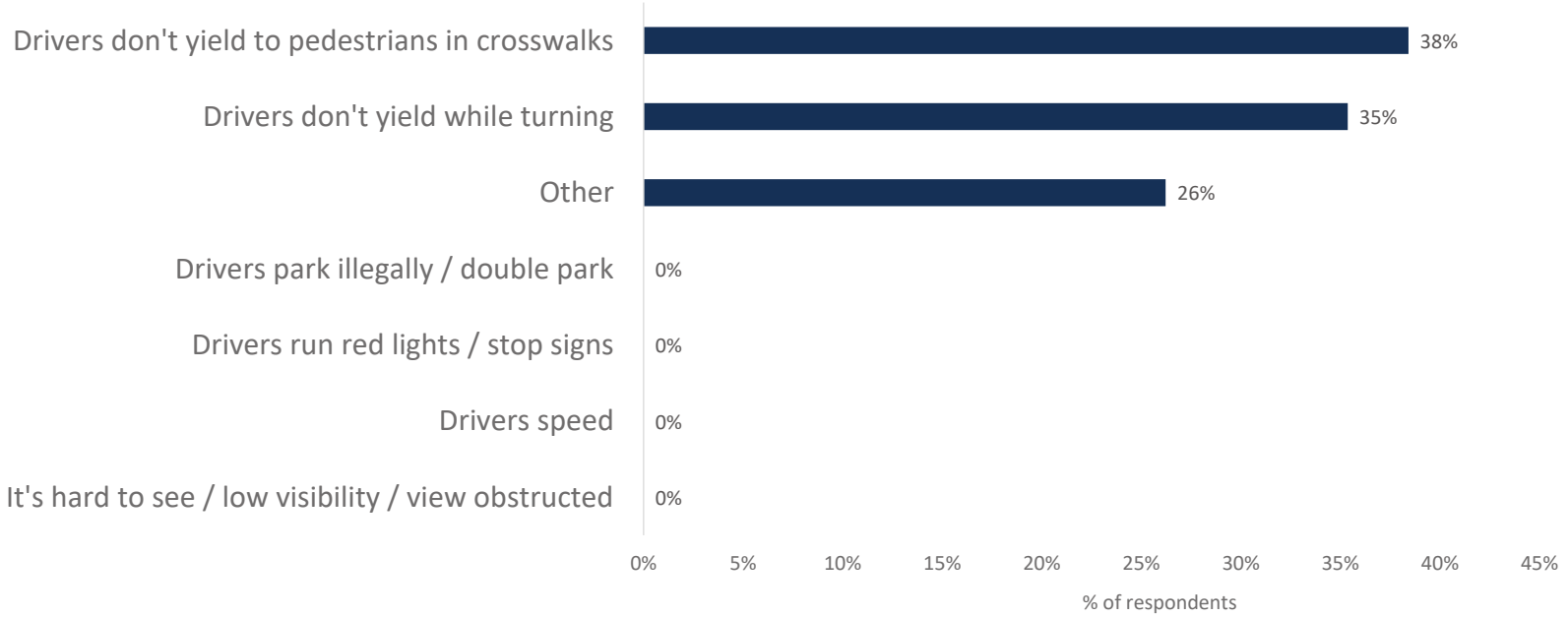




Frequently mentioned areas:

- Hanover Avenue
- American Parkway
- Susquehanna Street
- Lehigh Street
- Martin Luther King Jr. Drive
- 7th Street
- 4th Street

Driving | Key Takeaways



Driving | Key Takeaways

Primary Concerns:

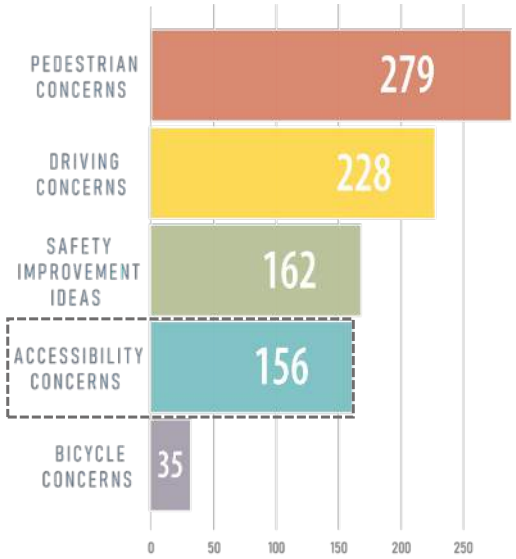
- Illegal parking
- Speeding
- Ignoring stop signs/lights
- Visibility issues
- Intersection design
- Traffic congestion
- Pedestrian safety
- Road conditions
- Driver behavior

"Time and time again I watch people blow through this intersection (Union Blvd/Airport Rd). It's amazing more accidents don't happen here but you learn to wait before going through on a fresh green light as people often just speed through a red."

"Rolling stops are common."

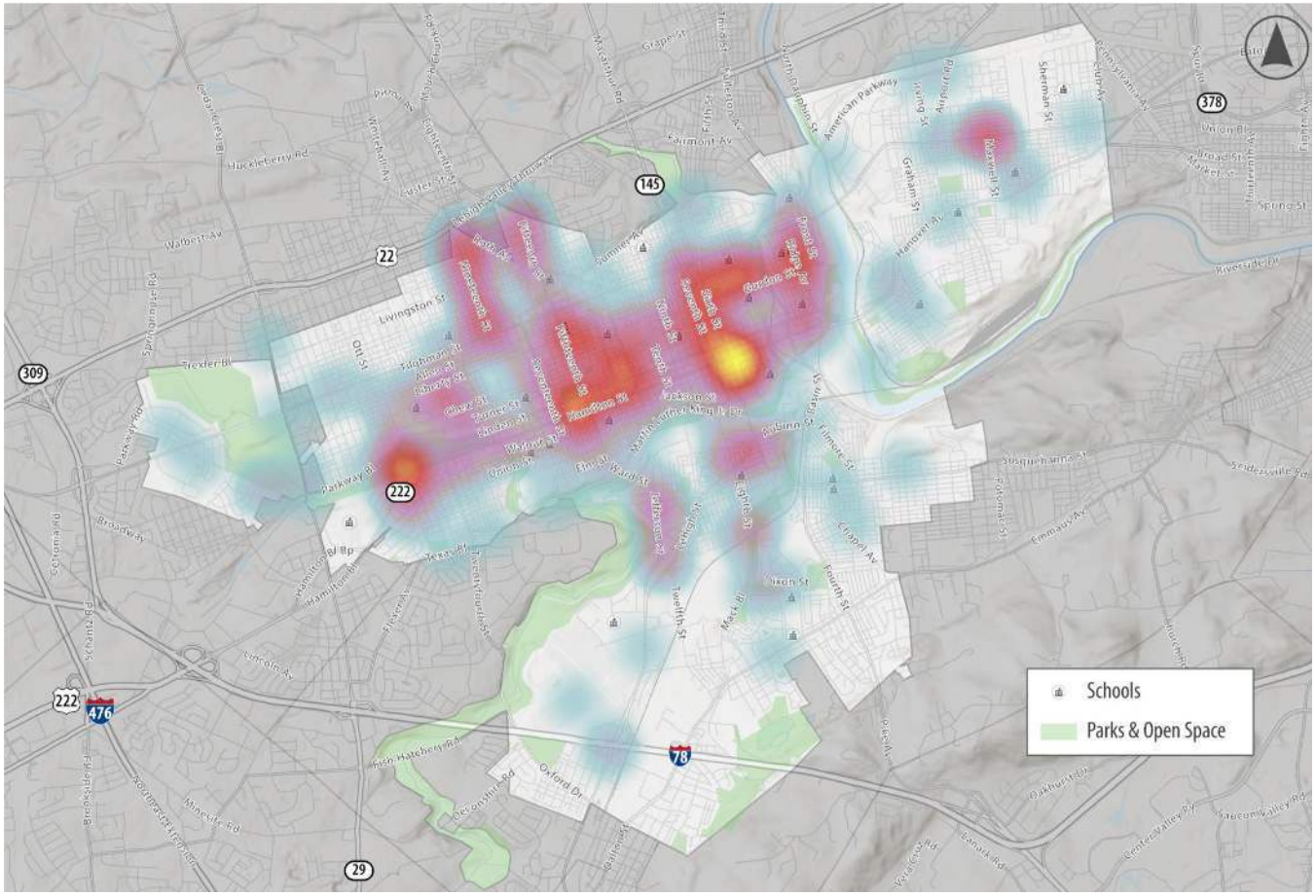
"Cars do not stop for school bus."

"We have lived on Hanover Ave for 27 years. The way the people speed on this road is insane."

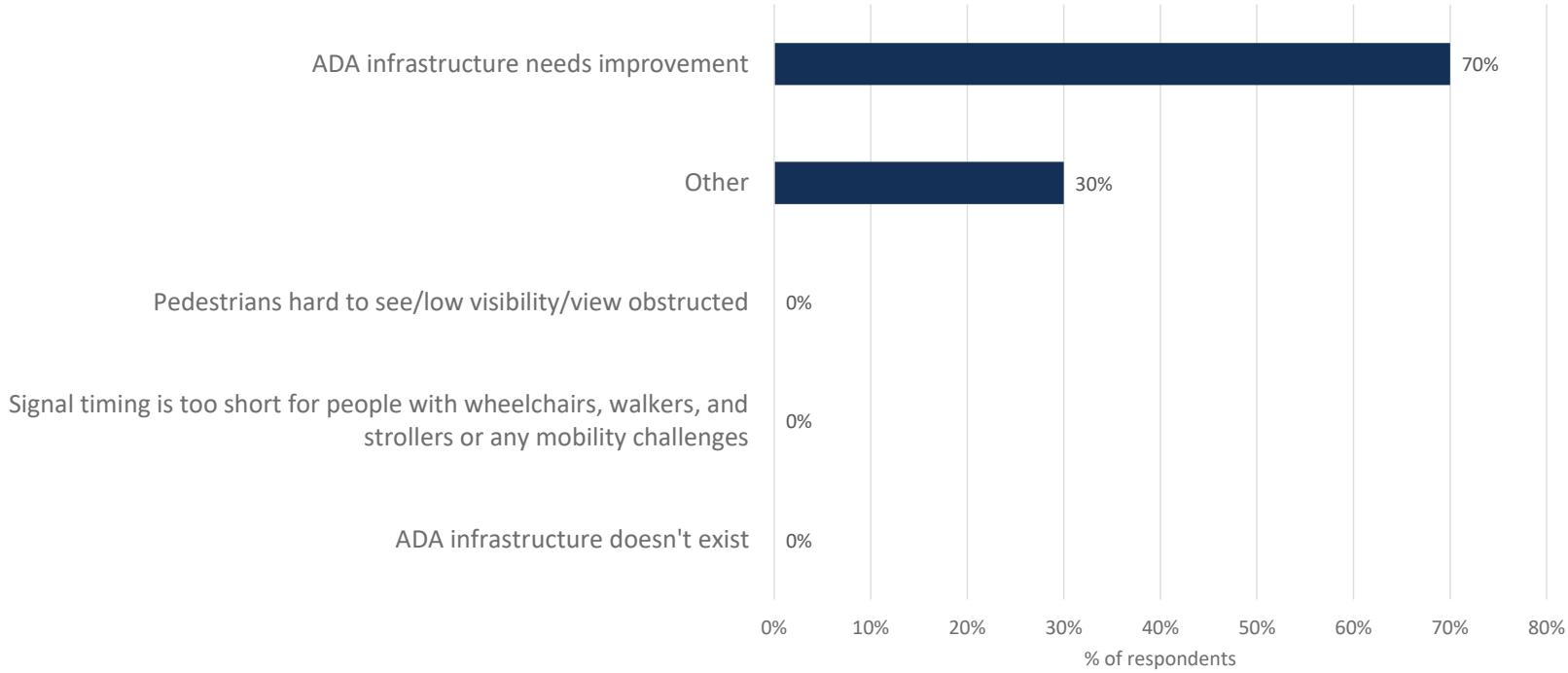


Frequently mentioned areas:

- Hamilton Boulevard
- 6th Street
- Jordan Creek Corridor
- Canal Park



Accessibility | Key Takeaways



Accessibility Concerns| Key Takeaways

Primary Concerns:

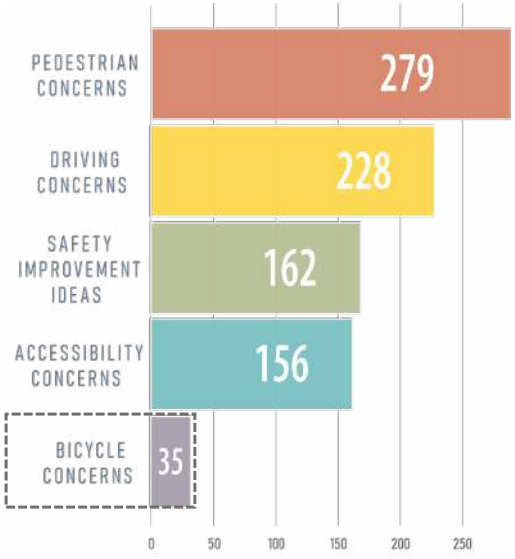
- Many intersections lack ADA accessible infrastructure
- Areas of sidewalk in disrepair
- Difficulty accessing transit
- Missing ADA accessible connections to parks and trails
- Litter and debris

"So, although there is a curb ramp, it leads to a grassy area, no sidewalk, which is frustrating, especially since there is a LANTA bus stop right here.

"The sidewalk is obstructed, and it is not wide enough to be accessible."

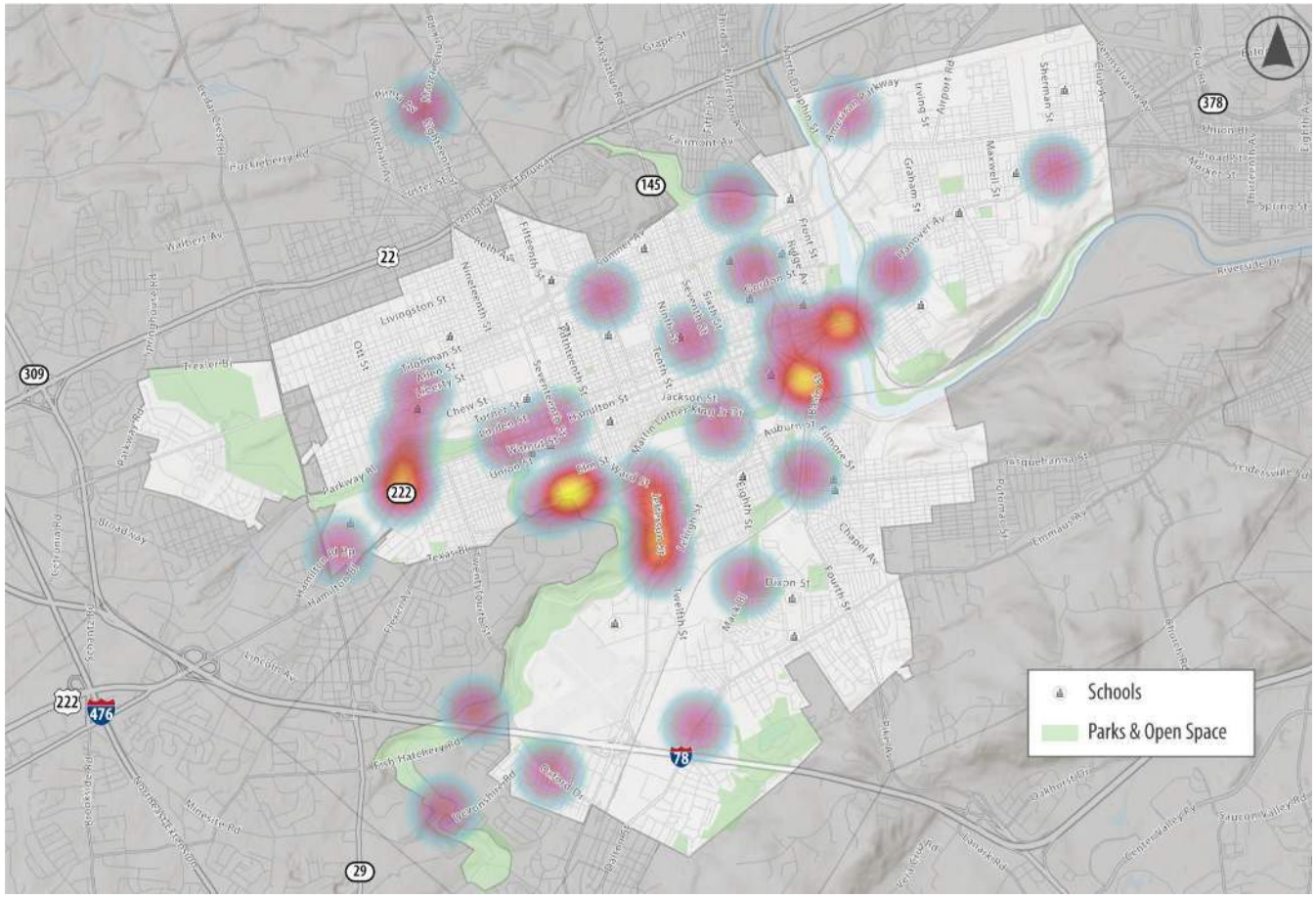
"This intersection is not completely accessible. ADA infrastructure does not exist on all corners."

"Infrastructure connecting the D&L and Canal Park does not exist and traversing Albert Street by foot is extremely dangerous for groups due to the lack of a sidewalk and blind curve off Hamilton."

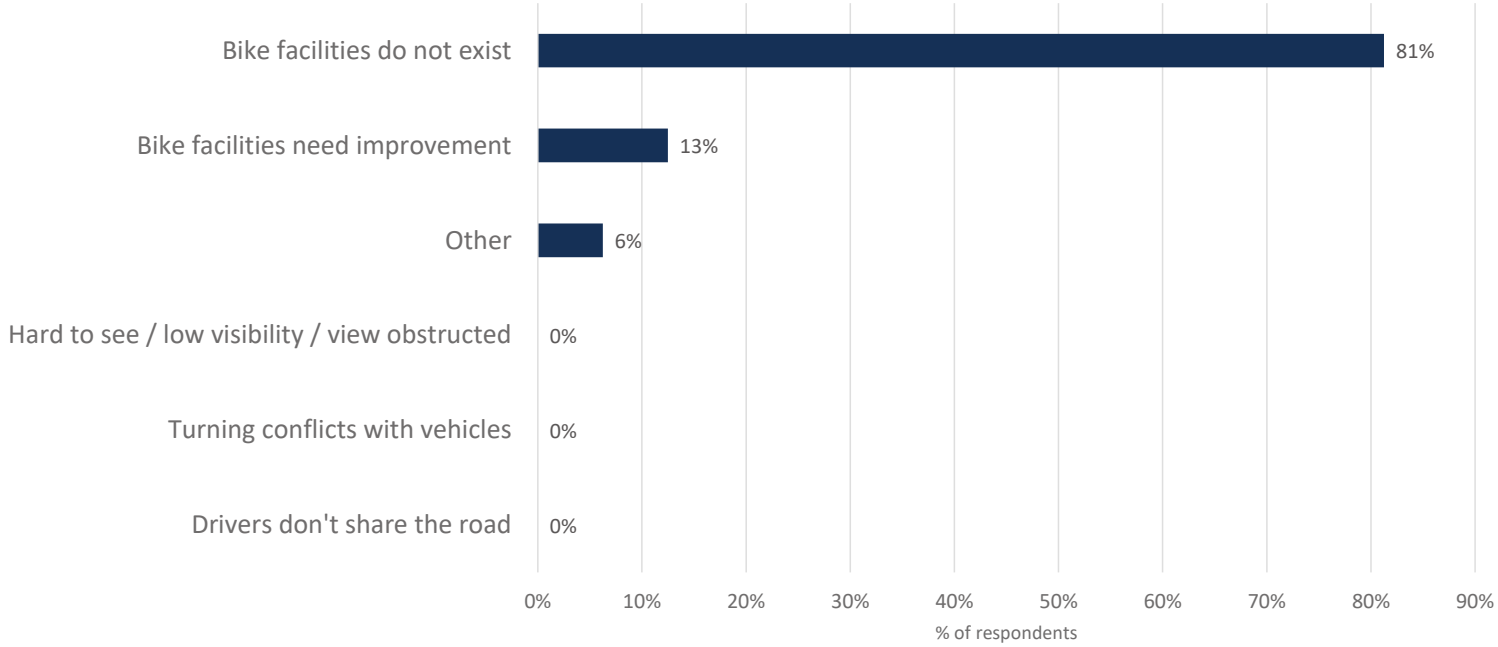


Frequently mentioned areas:

- Martin Luther King Jr Drive
- Hamilton Boulevard
- Hanover Avenue
- American Parkway
- Jefferson Street



Bicycle | Key Takeaways



Bicycle Concerns| Key Takeaways

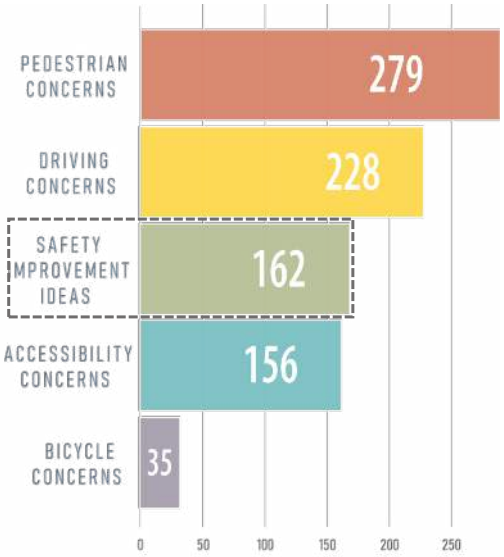
- Primary Concerns:
  - High speed traffic
    - Biking eastbound on Hamilton was noted as a particularly difficult area to bike.
  - Lack of bike infrastructure
  - Connectivity issues
  - Driver and bicyclist education
- Proposed Solutions:
  - More dedicated bike lanes
  - Protected bike lanes on higher-traffic roads are desired.
  - Connected on/off road network
  - Traffic calming measures

"This is a citywide issue. Cyclist ride on the wrong side of the street (facing oncoming cars) and the wrong way on one-way streets. They are required to follow the same rules as car drivers. It's not just kids."

"Traffic is too fast to comfortably share a lane or navigate across lanes when having to make a turn."

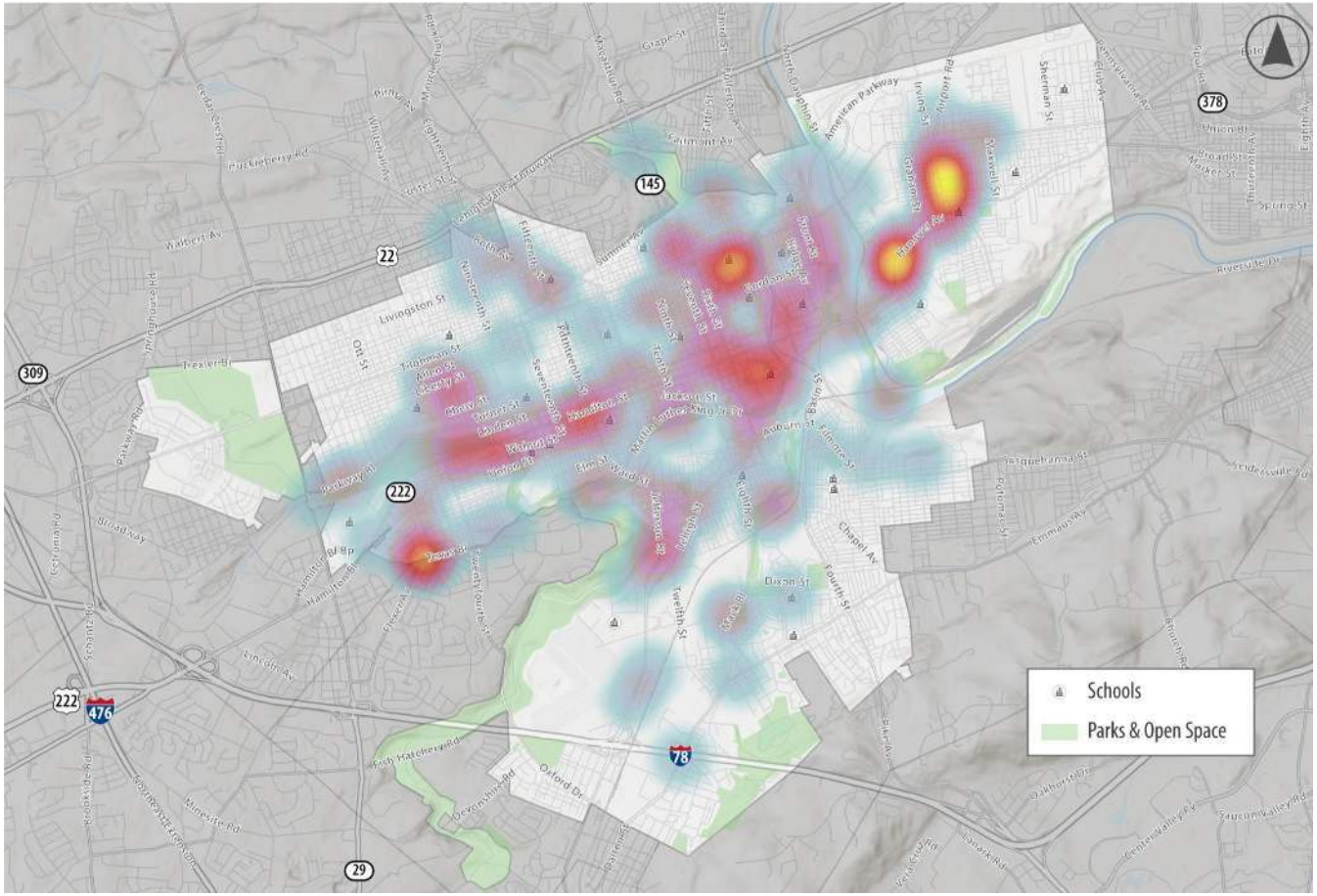
"Please stop with the sharrows, no bike user wants to share the road and gamble their life."

"Hanover Ave is the most dangerous street in Allentown. I've personally witnessed multiple accidents and even some deaths that have occurred on these curves."

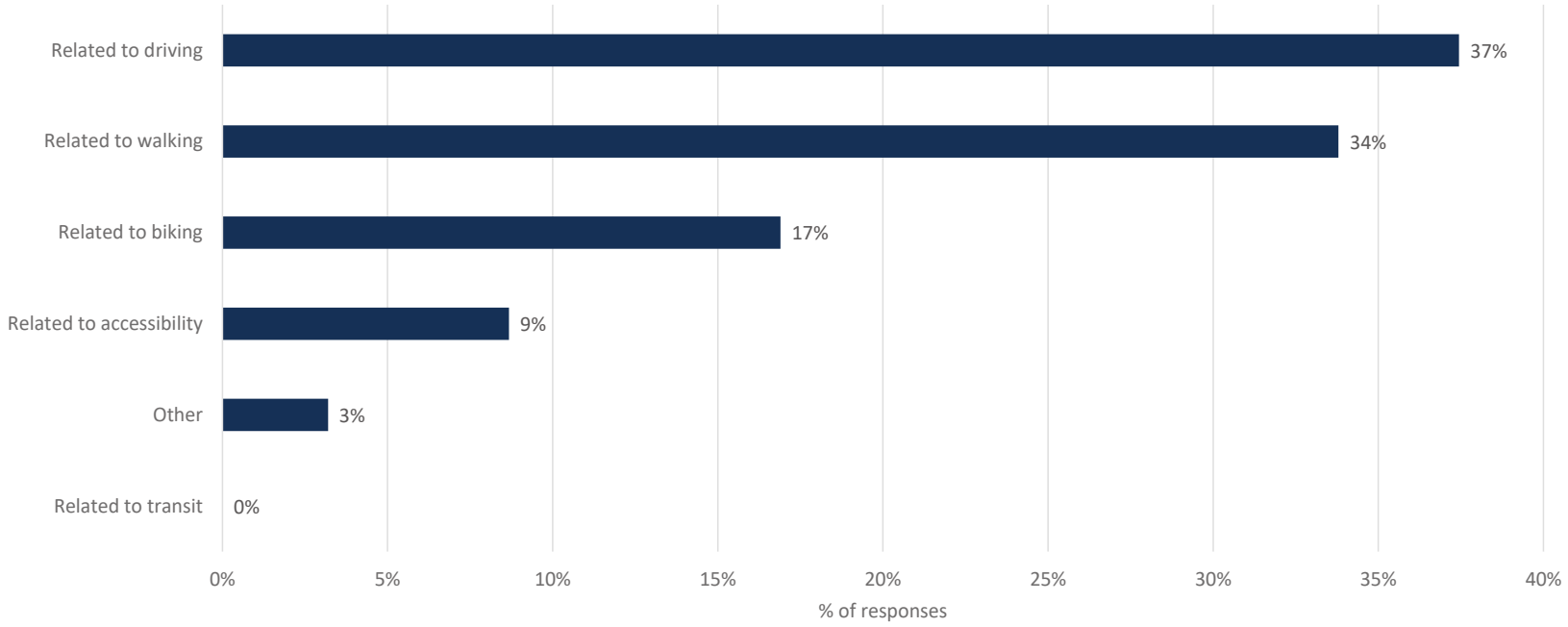


Frequently mentioned areas:

- Hamilton Street
- Chew Street
- 4th Street and Martin Luther King Jr Dr
- Union Boulevard
- 7th Street
- Lehigh Parkway



Safety Improvement Ideas | Key Takeaways



Safety Improvement Ideas | Key Takeaways

- Road diets and speed bumps are among the most desired improvements.
- Most improvements wanted stem from concerns over speeding.
- Increasing street lighting was a popular "other" solution.
- Proposed Safety Ideas include:
  - Pedestrian Crossings & Walkways
  - Traffic Calming Measures
  - Street & Intersection Redesign
  - Bicycle & Pedestrian Prioritization
  - Lighting & Visibility Improvements
  - Traffic Law Enforcement
  - Bridge & Roadway Enhancements

"Awkward intersection (15th St/Hamilton Blvd) that could be reconfigured for pedestrian and driver safety."

"This block (Washington St) is not well lit after dark. This street is busy for drivers coming onto/off 7th street, and it should receive appropriate lighting."

"Convert 7th St from a one-way to a two-way, with bike lanes! This will slow down traffic and allow pedestrians and bikers to travel safely."

"Drivers FLY down Hamilton. The road is wide, and there is no traffic signal between 24th and 19th street. Either install traffic signals, reduce road width, or both!"

Next Steps

Survey findings will be used…

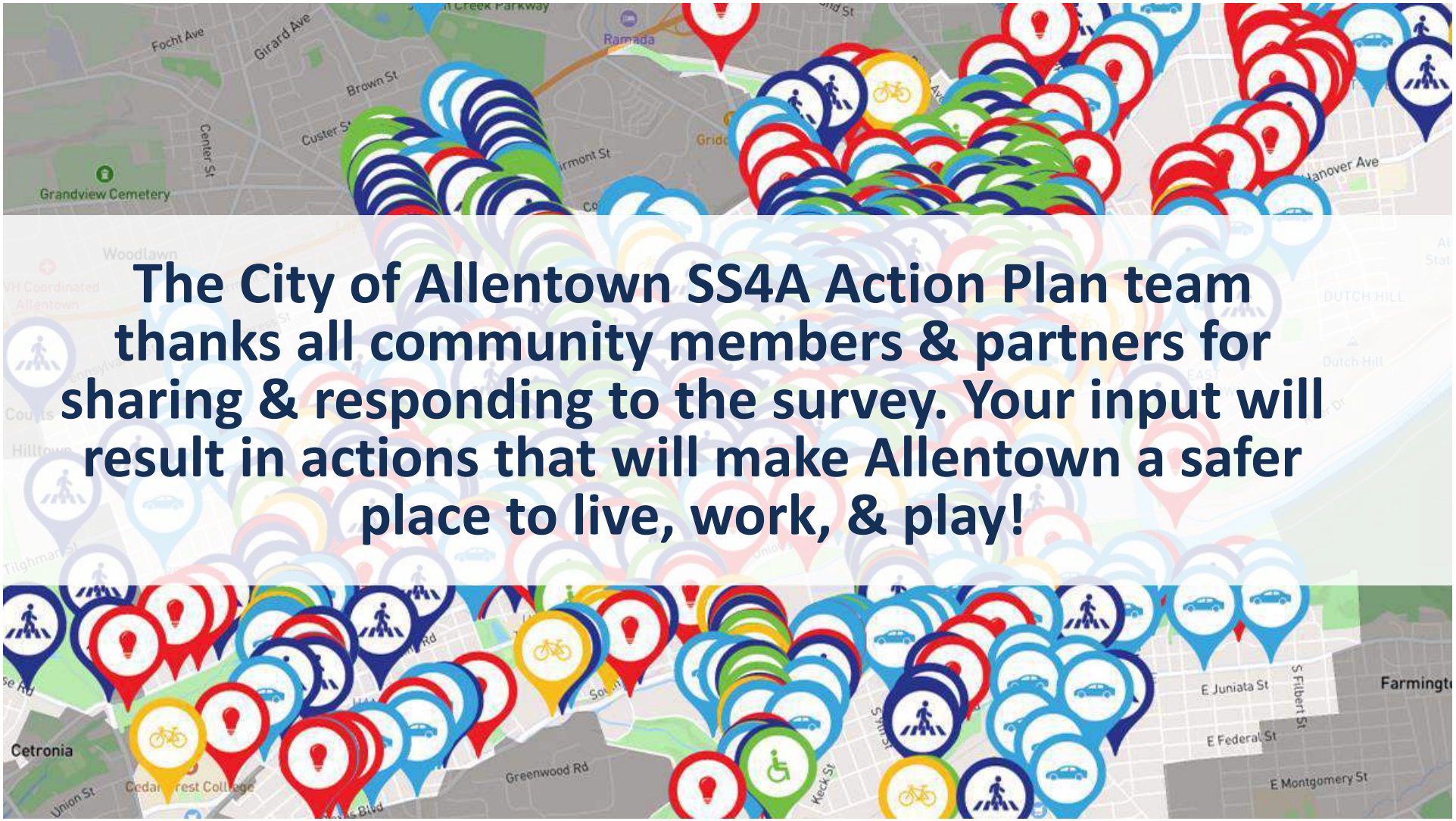
… to inform safety improvement concept plans that will be included in the SS4A Action Plan.

… to inform the priority recommendations within the SS4A Action Plan.

… as a reference document for future safety improvements. Comments associated with specific locations will be referenced whenever safety improvements, paving, or utility work is performed in that area.

Continuing to Cultivate Community Buy-In

- Continued community engagement in transportation safety planning is a goal of the SS4A plan.
- The SS4A project team will be hosting pop-ups in the community in Fall 2024 to share:
  - The survey findings and how they will be incorporated into the plan.
  - A draft of the Allentown SS4A Safety Toolkit (i.e., countermeasures that the City can use to address the concerns raised in the survey).
  - How community members can continue to provide feedback on safety concerns and monitor SS4A progress (i.e., the Allentown SS4A Dashboard).
- Public presentation of the Allentown SS4A Action Plan to City Council in early 2025.



The City of Allentown SS4A Action Plan team thanks all community members & partners for sharing & responding to the survey. Your input will result in actions that will make Allentown a safer place to live, work, & play!

APPENDIX C: PEER CITY COMPARISON REPORT

C

As Safe Streets for All efforts have grown across the nation, there are a variety of examples of best practices and lessons learned that can be pull from to develop a Safe System Approach that fits the City of Allentown. Although there are many examples to draw from, it is essential to remember the importance of context when fine tuning measures that best fit the city. What works in New York City or Los Angeles might not be appropriate for the unique context of Allentown so finding examples of cities with similar population sizes, topography, traffic patterns, and land use is vital. This not only helps identify effective strategies based on local context but also aids in establishing measurable goals and attainable timelines to meet them.

To help with this process, the project team conducted a Peer City Analysis to look at cities with similar characteristics within Pennsylvania to assess the respective crash rates per capita to see where Allentown compares to peer cities an help determine benchmarking to reduce high-injury crashes to meet the city's Vision Zero goal. The analysis looked at the following cities (Philadelphia, Pittsburgh, Reading, Bethlehem, Lancaster, and Easton) and used the 2020 US Census population counts and PennDOT crash data for High-injury crashes (Fatal or Suspected Serious Injury) from 2019-2023. Based on these two data sources, a crash rate was created (high-injury crashes per 10,000 population) to compare across municipalities.

High-Injury Crashes

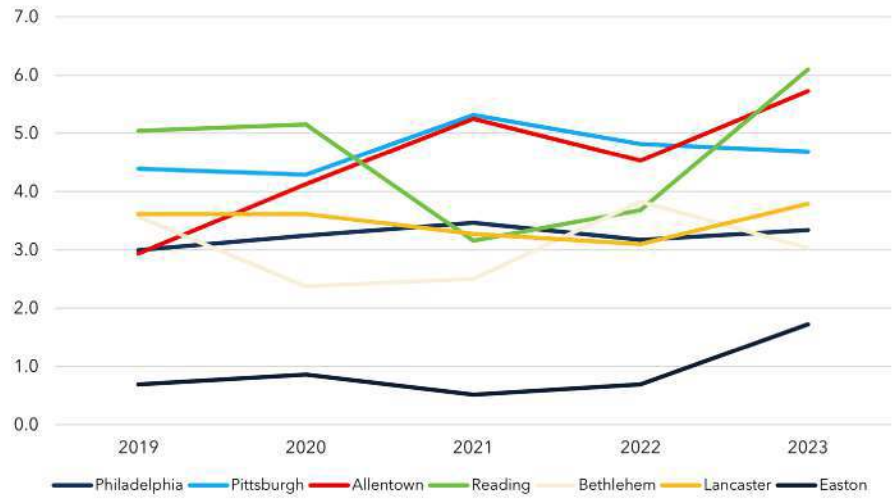
Municipality	2019	2022	2021	2022	2023	Total	Population	Rate
Philadelphia**	480	520	556	508	536	**2,600**	1,603,797	16.2
Pittsburgh**	133	130	161	146	142	**712**	302,971	23.5
Allentown	37	52	66	57	72	**284**	125,845	22.6
Reading	48	49	30	35	58	**220**	95,112	23.1
Bethlehem**	27	18	19	29	23	**116**	75,781	15.3
Lancaster**	21	21	19	18	22	**101**	58,039	17.4
Easton	4	5	3	4	10	**26**	28,127	9.2
**Rate= Crashes per 10,000 population | ** Vision Zero Policy*							Average	18.2

Based on the analysis, the average crash rate among the peer cities was 18.2 high-injury crashes per 10,000 population over the five-year period. Allentown ranked third among peer cities with a rate 22.6, just behind Reading and Pittsburgh. Notably, the three of the cities with the lowest crashes rates (Bethlehem, Lancaster, and Philadelphia) have well established Vision Zero programs.

It is also helpful to look at the crash rates by municipality by year to identify directional trends in the data. Based on this analysis, we can see that Allentown saw its highest crash rate (5.7) in 2023 as well an overall upward trend since a low of 2.9 in 2019.

Despite lower overall rates, it is important to note that many of the cities in the analysis have also seen increases in High-injury crashes in recent years, which is indicative of overall trends at a statewide level. This shows that there is still work to do to reach a goal of Vision Zero and moving towards a Safe System Approach is an iterative process that does not happen overnight and requires an holistic approach and commitment across all aspects of the community.

Crash Rate Per 10,000 People by Year (2019-2023)



Crash Rate by Year

Municipality	2019	2022	2021	2022	2023	Population
Philadelphia	3.0	3.2	3.5	3.2	3.3	1,603,797
Pittsburgh	4.4	4.3	5.3	4.8	4.7	302,971
Allentown	2.9	4.1	5.2	4.5	5.7	125,845
Reading	5.0	5.2	3.2	3.7	6.1	95,112
Bethlehem	3.6	2.4	2.5	3.8	3.0	75,781
Lancaster	3.6	3.6	3.3	3.1	3.8	58,039
Easton	0.7	0.9	0.5	0.7	1.7	28,127

**Rate= Crashes per 10,000 population*

APPENDIX D: SMALL CITY VISION ZERO REVIEW

D

In addition to the Peer City analysis, a review of Vision Zero programs from small cities throughout the US was conducted to identify best practices and strategies that have been successfully implemented in cities with similar size and characteristics to the City of Allentown. The following cities were reviewed as part of this effort: Richmond, VA; Minneapolis, MN; Bethlehem PA; An Arbor, MI; Lancaster, PA; and Pittsburgh, PA. A brief overview of each plan is provided below that highlight key findings including equity considerations, key metrics, and reporting strategies.

Vision Zero: Safer Roads for All Modes Update – Richmond, VA (2023)

The City of Richmond's Vision Zero plan calls for the establishment of the Safe and Healthy Streets Commission (SHSC), a multi-disciplinary advisory board to guide the development and implementation of Vision Zero in the city. The plan includes a set of 12 prioritized actions. Each of the 12 prioritized actions have responsible organizations that will lead the implementation of the action and performance metrics have been identified to track progress. Each year, safety partners and the SHSC will review and revise the actions in the plan as needed to mobilize resources to those issues with the greatest need. Relevant metrics include the number of safety treatments installed on the high-injury street network, the installation of pedestrian safety improvements at two identified transit access locations, and the number of public campaigns initiated.

Vision Zero Action Plan 2023-2025 – Minneapolis, MN (2023)

Minneapolis's Vision Zero plan takes an in-depth look at equity in transportation safety, noting from analysis of crash data that, for instance, Native American residents are most disproportionately impacted by traffic deaths. Equity concerns are meaningful factors in the prioritization of improvements. The city issues annual Vision Zero reports, which are available on a city website. Some metrics are reported annually while others are reported every two or three years. Reported metrics include change in total combined number of traffic deaths and injuries, percentage change in drivers exceeding 30 miles per hour and median traffic speeds on select streets, and percentage of high-injury streets with new traffic safety treatments.

Vision Zero Plan 2022-2027 – Bethlehem, PA (2022)

The City of Bethlehem Vision Zero plan emphasizes its multi-disciplinary approach to transportation safety, involving elected officials, the health bureau, the police department, professionals in traffic engineering and planning, and community partners. The city produces yearly reports on Vision Zero's accomplishments, trends in the data, and efforts that will be undertaken in the coming year. Metrics that are tracked include total number of crashes and fatalities, total number of crashes and fatalities among pedestrians and bicyclists, and violations related to driver, pedestrian, and bicyclist behaviors.

Moving Together Towards Vision Zero – Ann Arbor, MI (2021)

Ann Arbor's plan is described as a Comprehensive Transportation Plan and, accordingly, it sets out goals and strategies that are beyond the purview of a typical Vision Zero action plan, including transit service improvements, parking policies, and reducing emissions. The plan recommends tracking metrics across a range of topic areas, including safety, mobility, accessibility for all, healthy people and sustainable places, and regional connectivity. It collects baseline data where available for each metric and sets a goal (along with a time horizon) to reach.

Vision Zero Action Plan – Lancaster, PA (2020)

As has been observed in other plans, the city of Lancaster's Vison Zero plan notes in its analysis of crash data that there is a higher concentration of crashes in low-income communities, communities of color, and/or communities with low car ownership. The city committed to annual tracking of metrics including the number of serious and fatal crashes, the number of intersection re-design projects (including one of the top 10 each year), and the number of improved signal timing projects.

Pedestrian Safety Action Plan – Pittsburgh, PA (2020)

This plan from the City of Pittsburgh is focused on pedestrian safety. Similar to other Vision Zero plans, it utilizes hot spot and risk-based analysis to identify locations in need of safety review. Relative to reporting, the city's Department of Mobility and Infrastructure (DOMI) reports at least annually on metrics including pedestrian crashes per year, the annual pedestrian crash rate, the number of pedestrian commuters per month, and the number of road safety audits and walkability audits conducted per year.

APPENDIX E: SAFETY TOOLKIT

E

This Safety Toolkit describes the countermeasures that are applied in recommendations throughout this plan. The features described are adapted from the PennDOT Pub383[1] and the U.S. DOT's National Highway Traffic Safety Administration's Counter Measures That Work Guide.[2] This toolkit is intended to be a reference for the City of Allentown, residents, developers, and other stakeholders when planning roadway safety improvements.

The selection of the countermeasure to apply shall be based on:

1. The feature's potential to address traffic problems on affected roadways;
2. The type of roadway; and
3. Physical constraints.

The countermeasures are listed in alphabetical order.

Backplates with Retroreflective Borders

Enhances traffic signal visibility by outlining signal backplates with reflective material, improving safety in low-light conditions.

Crosswalk Lighting Enhancement

Improves visibility of pedestrians at crosswalks, particularly at night or in low-light conditions, to enhance safety.

1 PennDOT. (2012). PennDOT Traffic Calming Handbook - Publication No. 383. https://www.dot.state.pa.us/public/pubsforms/Publications/PUB%20383.pdf

2 U.S. DOT - NHTSA. (2023). Countermeasures That Work: A Highway Safety Countermeasure Guide For State Highway Safety Offices (11th Edition). https://www.nhtsa.gov/document/countermeasures-that-work-11th-edition-2023

Curb Extension with Daylighting

A traffic calming and pedestrian safety feature where the curb is extended into the roadway at intersections or mid-block crossings. The extension reduces the crossing distance for pedestrians and narrows the roadway, encouraging vehicles to slow down. Daylighting refers to the practice of keeping the area near the curb extension clear of parked cars or obstructions, improving visibility for drivers and pedestrians.

Daylighting at Intersection

Daylighting at intersections improves safety by increasing visibility for drivers, pedestrians, and cyclists. This involves clearing parked cars or other obstructions near the intersection or crosswalk to create unobstructed sightlines. Often achieved through no-parking zone,s curb extensions, bollards, or landscaping, daylighting reduces the risk of collisions by ensuring that all road users can see and react to each other effectively. It's a simple yet impactful measure to enhance safety in urban and residential areas.

Dynamic Speed Display Signage

Displays drivers' real-time speeds to encourage adherence to posted speed limits and promote safer driving.

High Visibility Crosswalks

Uses bold pavement markings, such as ladder-style or zebra patterns, to make pedestrian crossings ore noticeable to drivers. These crosswalks are often paired with reflective paint or thermoplastic materials to enhance visibility in low-light or adverse weather conditions. They are typically installed at busy intersections, near schools, or in areas with significant pedestrian traffic to improve safety and awareness.

Intersection Stop Bar

A thick, white pavement marking placed across travel lanes at intersections, typically aligned with a stop sign or traffic signal . It indicates where vehicles must stop to comply with traffic controls while maintaining clear sightlines fro crossing pedestrians or other vehicles. Proper placement ensures that sopped vehicles do not encroach into crosswalks or intersections.

Left Turn Phasing

Provides dedicated left-turn signals to separate turning vehicles from oncoming traffic and pedestrians, reducing conflicts.

Left Turn Yield to Pedestrians

Reminds drivers turning left to yield to pedestrians in the crosswalk, prioritizing pedestrian safety.

Marked On-Street Parking

Designated parking spaces on a roadway that are outlines with pavement markings, such as painted lines or symbols. These markings clearly indicate where vehicles can park, helping to organize parking, prevent encroachment into travel lanes or intersections, and optimize the use of available space.

New Signalized Intersection

A newly installed traffic signal at an intersection to manage traffic flow and improve safety for all users

No Parking Zones

Visibility is important for both drivers and pedestrians alike. By painting no parking zones, both can benefit from increased visibility near and around high-traffic intersections and crosswalks.

No Turn on Red

Prohibits right turns on red signals, preventing potential conflicts with pedestrians and cross-traffic.

One-Way Signage

Directs vehicles to travel in a single direction, reducing traffic conflicts. Note: This refers only to one-way signage for existing one-way streets. Further conversion to one-way streets is not recommended.

Pedestrian Refuge Island

A protected area in the center of the road that allows pedestrians to pause safely while crossing. Typically located at wide or high-traffic roads, these islands improve pedestrian safety by breaking the crossing into two shorter segments and providing a visible space where pedestrians can wit for traffic to clear.

Pedestrian Signal with Leading Pedestrian Interval (LPI)

Gives Pedestrians a head start to enter the crosswalk before vehicles, enhancing visibility and safety.

Pedestrian Warning Sign with Arrow

Alerts drivers to the presence of pedestrians and indicates the specific location of a crossing area.

Raised Crosswalk

A pedestrian crossing that is elevated above the road surface, effectively acting as a speed table. It slows vehicular traffic, enhances pedestrian visibility, and provides a level crossing surface. This feature is especially useful in high pedestrian traffic areas such as near schools, parks, or commercial zones.

Rapid Rectangular Flashing Beacon (RFFB)

A user-activated flashing light system that alerts drivers to pedestrians crossing at unsignalized crosswalks.

Resurfacing

Involves applying a new layer of asphalt or concrete, to an existing roadway to restore its surface quality and extend its lifespan. This process smooths out cracks, potholes, and uneven sections, improving the safety and comfort of drivers, cyclists, and pedestrians by eliminating the need for avoidance of obstacles and low traction areas. In Allentown, resurfacing is currently done in coordination with utility projects and covers shorter distances, opening up the opportunity for further unevenness on roads. Identified areas for resurfacing include Sumner Ave and alleys.

Road Diet

A roadway configuration that improves safety by reducing the width or number of travel lanes on a road.

Speed Cushions

A traffic calming device designed to slow vehicles while allowing emergency vehicles to pass without significant delay. it consists of a series of raised rectangular areas, spaced to allow the wheels of larger vehicles (e.g., fire trucks) to pass without impact, while smaller vehicles are required to reduce speed to cross them comfortably.

Striping Roadway Edge Line

Refers to printed lines, usually white or yellow, places along the edges of a roadway to define its boundaries and guide drivers. These markings are particularly useful in low-visibility conditions, such as at night or during inclement weather.

Visibility Enhancements

A term that collectively refers to high-visibility crosswalks, lighting, and signing and pavement markings that can be used in tandem to make crosswalks more visible.

APPENDIX F: TRANSPORTATION IMPROVEMENT PROGRAM PROJECTS ALONG OR NEAR THE HIGH-INJURY NETWORK

F

The Metropolitan Planning Organization arm of the Lehigh Valley Planning Commission, the Lehigh Valley Transportation Study approved the Long Range Transportation Plan (LRTP) of FutureLV: The Regional Plan in 2023. It sets out a 25-year plan to maintain and enhance the transportation network. The Transportation Improvement Program (TIP) allocates funds to regional transportation projects. It covered the most current four year period of the LRTP. The following are projects along the high-injury network (i.e., the corridors that were the focus for concept plans in this Action Plan). These projects align with the direction of the concept plans for the corridors. Projects on the TIP are high priority and are projects proposed to be implemented with federal funding.[1] As such, the City should consider the concept plans that align with these TIP projects for short- to medium-term implementation.

1 Lehigh Valley Transportation Study. (2023) Transportation Improvement Program 2023-2026. https://www.flipsnack.com/9A575F88B7A/final-2023-2026-tip-made-easy/full-view.html

Project Name	Cost	Project Sponsor
Bridges		
North Dauphin Street (State Route 1007) over Tributary to Lehigh River - Preventative maintenance activities	$65,000	PennDOT
Jordan Creek Bridge Replacement - Bridge rehabilitation/replacement	$10,000,000	PennDOT
Bogert's Bridge Rehabilitation - Rehabilitation of Bogert's Covered Bridge	$1,300,00	City of Allentown
Fish Hatchery Road (State Route 2010) - Rehabilitation/replacement of bridge over Little Lehigh Creek	$2,400,000	PennDOT
Hamilton Street Bridge - Rehabilitation/replacement of bridge carrying Hamilton Street over railroad tracks and Jordan Creek	$16,374,239	Lehigh County
Fourth Street Bridge - Replacement of bridge carrying Fourth Street in the City of Allentown over Sumner Avenue and Jordan Creek	$16,374,239	Lehigh County
Hamilton Street Bridge - Rehabilitation/replacement of bridge carrying Hamilton Street over Albert Street, railroad tracks and Lehigh River	$60,000,000	Lehigh County
Union Boulevard Bridge (State Route 1002) - Rehabilitation/replacement over former New England Railroad	$3,400,000	City of Allentown
Canal Park Bridge - Rehabilitation/replacement of bridge over Lehigh Canal	$2,050,000	City of Allentown
South 10th Street Bridge - Rehabilitation/replacement of bridge over Little Lehigh Creek	$3,250,000	City of Allentown
South 5th Street Bridge - Rehabilitation/replacement of bridge over Trout Creek	$2,550,000	City of Allentown
Union Boulevard (State Route 1002) - Rehabilitation/replacement of bridge over abandoned railroad	$3,400,000	PennDOT

Roads		
Lehigh Street Betterment - Resurface of Lehigh Street (State Route 2005) from State Route 29 to State Route 145	$582,452	PennDOT
American Parkway - Ridge Avenue to Union Street milling, paving, Americans with Disabilities Act ramps, concrete repair, striping and crosswalks	$1,036,347	City of Allentown
Lehigh Street (State Route 2005) Betterment - Resurface of Lehigh Street (State Route 2005) from State Route 29 to State Route 145	$8,183,504	PennDOT
Tilghman Street (State Route 1002) Resurface Betterment Project - from State Route 100 in Upper Macungie Township, through South Whitehall Township to North Dauphin Street (State Route 1007) in Allentown	$12,195,000	PennDOT
Emmaus Avenue/Broadway (State Route 2002) Resurface Betterment Project - Resurface from State Avenue in Allentown to Lehigh/Northampton county line in Fountain Hill Borough	$10,740,000	PennDOT
Martin Luther King Jr. Drive - Union Street to 24th Street milling, paving, American with Disabilities Act ramps, striping and crosswalks	$6,140,340	City of Allentown
7th Street (State Route 145) Resurface Betterment - Resurface from Washington Street to the Sumner Avenue Bridge in Allentown	$1,875,00	PennDOT
Sumner Avenue Betterment Project - Resurfacing and Americans with Disabilities Act upgrades from American Parkway to 17th Street	$1,500,000	City of Allentown
State Route 1003 Airport Road Resurfacing Betterment Project - Repaving and traffic signal upgrades along the corridor and creating center turn lanes at Union Boulevard and Congress Street	$4,500,000	City of Allentown
Chestnut Street/State Avenue/Lehigh Street (State Route 2005) Resurface Betterment Project - Resurface from Cedar Crest Boulevard in Emmaus Borough to St. John Street in Allentown	$12,480,000	City of Allentown, Emmaus Borough
Hamilton Boulevard (State Route 222) Resurface Betterment Project - Resurface from Interstate 78 in South Whitehall Township to 15th Street in City of Allentown	$9,300,000	City of Allentown, South Whitehall and Lower Macungie Townships
Oxford Drive/24th Street (State Route 2007) Resurface Betterment Project - Resurface from Lehigh Street (State Route 2005) in Sailsbury Township to Hamilton Boulevard (State Route 222) in Allentown	$4,005,000	PennDOT

Road Reconstruction, Modernization, and Automation		
Allentown Martin Luther King (MLK) Jr. Drive - Pedestrian enhancements along MLK Jr. Drive at 4th Street and Lehigh Street	$56,208	Allentown
Lehigh Valley Transportation Study Vulnerable Road User Project - Tier 1 - Vulnerable Road User (VRU) safety improvements	$1,050,350	PennDOT
Traffic Management Center Upgrades - Remove and upgrade existing equipment to implement individual work stations to provide more capacity and efficiency	$575,00	PennDOT
Allentown LED Streetlight Conversion - Upgrade all pedestrian lighting infrastructure to high-efficiency LED technology across the city	$10,000,000	City of Allentown
Allentown Adaptive Traffic Systems Improvements - Installation of adaptative traffic signal technologies at various intersections across the city	$1,500,000	City of Allentown
Allentown Wayfinding Signage - Implementation of recommendations for signage in the city-wide wayfinding plan	$200,000	City of Allentown
Emmaus Avenue Intersection Upgrades - Eight intersection upgrades	$6,140,340	City of Allentown
South 4th Street/Pike Avenue (State Route 145) Corridor Improvements - Reduce congestion and improve safety along the corridor between Emmaus Avenue (State Route 2002) in Allentown and Rock Road/Summit Lawn in Salisbury Township	$5,000,000	PennDOT
American Parkway Pedestrian Improvements - Improvements at ten intersections on American Parkway, from Union and Third Streets to Airport Road. Project to include new mast arms, signal heads, base-mounted controller cabinet, pedestrian countdown signal indication, Americans with Disabilities Act ramps, GPS emergency preemption and transit priority green operation	$6,140,340	City of Allentown
Tilghman Street/Union Boulevard (State Route 1002) - Modernization of 27 intersections along the corridor and integration with Allentown's Traffic Management Center	$14,500,00	City of Allentown
Emmaus Avenue (State Route 2002) Signal Improvements - Upgrade traffic infrastructure and timing to allow for automated traffic signal performance measures improvements along the corridor at approximately six intersections	$3,500,000	PennDOT
Lehigh Street and Union Street Intersection and Corridor Improvements - Install new traffic signal at Lehigh Street and Union Street and conversion of existing one-way condition to two-way traffic on Union Street from 7th Street to 8th Street	$4,500,000	City of Allentown

Road Reconstruction, Modernization, and Automation (continued)		
Allentown Center Square Project - Upgrade intersection of Hamilton Street and 7th Street, including creation of an urban plaza and multimodal transportation enhancements from Center Square to 7th and Linden Streets	$4,500,000	City of Allentown
Rectangular Rapid Flashing Beacon Installation & Adaptive Signal Upgrades - North Albert Street to North Wahneta Street and Hanover Avenue and East Linden Street	$12,357,433	City of Allentown
American Parkway - Intersections at Hamilton Street, Linden Street & Gordon Street - Improvements to include widening intersections, milling, paving, accessible ramps, concrete repair, striping and crosswalks. The Hamilton Street/American Parkway, the Linden Street/American Parkway, and the Gordon Street/American Parkway intersections are proposed to be widened to establish dedicated left turn lanes	$7,061,391	City of Allentown
Hamilton Street/Hanover Avenue Corridor Study and Construction - Plan for and construct turn lanes, bicycle facilities and resurfacing of the corridor from South Albert Street to Irving Street	$1,650,000	City of Allentown
Tilghman Street (State Route 1002) Signal Improvements - Upgrade traffic infrastructure and timing to allow for automated traffic signal performance measures improvements along corridor at approximately 22 intersection	$11,000,000	PennDOT
19th and Roth Avenue Intersection Improvements - Pedestrian multimodal upgrades at the city gateway near the overpass of US Route 22	$1,500,000	City of Allentown
Emmaus Avenue Safety Improvement Project - Modernization of eight intersections along the corridor from 31st Street to South Albert Street, including Americans with Disabilities Act upgrades, transit and emergency service preemption technology with integration into the city's Traffic Management Center. Evaluate the feasibility of a roundabout at Mack Boulevard and Emmaus Avenue	$2,800,000	City of Allentown
Road Reconstruction, Modernization, and Automation		
Riverside Drive Extension - Construction of a complete street extension of the in progress Riverside Drive project starting in Allentown. This project would continue the complete street from Wood Avenue to Lehigh Street in the Township	$8,187,120	PennDOT and LVPC

Multimodal		
Riverside Drive RAISE Grant - Convert approximately 2 miles of abandoned railroad bed along the west side of the Lehigh River from Lehigh Ave (Whitehall Township) to Furnace St (City of Allentown) to a complete two-lane street with an adjacent multi-use path	$40,499,000	LVTS
Hanover Avenue and Hamilton Street Bridge Pedestrian - Improving bicycle and pedestrian accessibility via separated bike lanes, multi-use paths and traffic-calming from North 6th Street to Union Boulevard	$2,944,600	LVTS
Hamilton Street - Create separated bicycle lanes, improve trail crossing at Yocco Drive intersection, and lane restriping from 6th Street to 26th Street	$1,971,601	LVTS
Hamilton Street Bridge Trail Connection - Study, design and construction to connect the Lehigh Landing area on the western side of the Lehigh River to the D&L Trail on the eastern side, utilizing the Hamilton Street Bridge. (PennDOT bridge Key ID 23510)	$2,000,000	City of Allentown
Union Street Portal Parks - Multimodal enhancements and gateways to various trail networks within the city	$300,000	City of Allentown
Lehigh Landings - Construction of a trailhead and trails to connect the Riverfront Development, D&L Trail, Jordan Creek Greenway and Martin Luther King Trail networks	$600,000	City of Allentown
Gordon Street Pedestrian and Bicycle Improvements - Create multimodal connections to Jordan Creek Greenway, Jordan Meadows and Bucky Boyle Park	$1,100,000	City of Allentown
Educational Programming - Education programs and public events in schools, community centers and public spaces	$153,509	Coalition of Appropriate Transportation
Educational Programming - Education programs and public events in schools, community centers and public spaces	$130,892	Coalition of Appropriate Transportation
Martin Luther King, Jr. Drive Pedestrian Improvements - Improve multimodal transportation infrastructure along the corridor, including Americans with Disabilities Act ramps, traffic control devices and crosswalks	$300,000	City of Allentown
Martin Luther King (MLK) Jr. Trail Extension - Construct the next phase of the MLK trail network to connect from the corridor to Cedar Creek Parkway trail network	$623,060	LVTS

Planning & Research		
Summit Lawn to American Parkway Connectivity Study - Connectivity study Summit Lawn exit of Interstate 78 to American Parkway	$300,000	LVTS
Jordan Creek to Lehigh River Feasibility Study - Conduct feasibility study to determine a safe, navigable bicycle and pedestrian connection from Sumner Avenue/American Parkway and ending at Riverside Drive at the Waterfront	$92,105	Wildlands Conservancy
Union Boulevard (State Route 1002) Betterment Corridor Study - Develop recommendations for multimodal improvements and streetscape enhancements along the corridor	$700,000	City of Allentown
Hanover Avenue Corridor Study - Identify multimodal improvements along the corridor from Hamilton Street Bridge over Lehigh River to Club Avenue	$50,000	City of Allentown
Safe Routes to School		
Allentown Safe Routes to School (SRTS) School Zone Upgrades - Modernize 59 existing school zone traffic control devices and install eight new devices	$1,850,000	City of Allentown

Allentown

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