BELLEVUE IN MOTION

A Plan for Walking, Biking, and Accessing Transit

Bellevue Borough, Allegheny County, Pennsylvania
Adopted July 22, 2025
Edited September 8, 2025



ACKNOWLEDGMENTS

This Plan was put together with the assistance of the project Steering Committee, Borough Staff, Bona Fide Bellevue, and the Borough's elected and appointed officials. This Plan reflects a significant contribution of time, expertise, advice, and feedback from the following individuals along with input and feedback from a variety of stakeholders that live, work, or otherwise have a vested interest in the community. This Plan would not have been possible without their valuable participation.

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Funding for this Plan was provided by the Pennsylvania Department of Health through the Preventative Health and Health Services Block Grant from the Centers for Disease Control and Prevention.



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EXECUTIVE SUMMARY

Bellevue in Motion, the active transportation plan for Bellevue Borough, outlines a vision for a vibrant, walkable community where residents and visitors of all ages and abilities can move safely and easily—whether walking, biking, using transit, or driving. Developed through extensive public engagement and collaboration with local and regional stakeholders, the Plan sets a clear direction for enhancing Bellevue's transportation network to support healthier, more connected, and more accessible mobility options.

The Plan is anchored by three primary goals: **improving safety**, **enhancing connectivity**, and **fostering vibrancy**. To improve safety, the Plan proposes measures such as traffic calming, updated policies and ordinances, and public education campaigns aimed at reducing crashes and promoting safer interactions among all roadway users. Connectivity is addressed through strategies to complete and maintain a comprehensive sidewalk network, develop low-stress bike routes, improve crossings, and enhance access to transit and regional destinations. The vibrancy goal focuses on integrating natural elements into streetscapes, promoting active transportation through events and programs, and implementing placemaking strategies that make public spaces more inviting and engaging.

These goals are supported by a framework known as the Six Es—engagement, equity, engineering, encouragement, education, and evaluation—which guide the Plan's holistic approach. A series of prioritized infrastructure projects are identified, including, but not limited to, high-visibility crosswalks, bike boulevards, trail connections, and improvements to Route 65/Ohio River Boulevard. For each project probable cost,

timeline, and potential funding sources are provided in implementation tables intended to guide future action.

To bring the Plan to life, Bellevue will rely on a mix of external grants, internal funding mechanisms, and partnerships with agencies, nonprofits, and community members. The Plan provides a roadmap for transforming Bellevue into a safer, more accessible, and more vibrant place to live, work, and travel—on foot, by bike, or by bus.



Image of Fremont Avenue and Lincoln Avenue intersection looking west from the southeast corner.

INTRODUCTION

Overview

Bellevue in Motion, the active transportation plan for Bellevue Borough, was undertaken to help determine the best path forward for improving safety and connectivity when walking, biking, using a mobility device, and connecting with transit to access everyday destinations. This Plan aims to identify existing infrastructure and its shortcomings and propose an action plan that incorporates community input to establish buy-in for implementation. The adoption of this Plan is the first step forward in creating a safe and complete active transportation network for Bellevue.

The Study Area

The Borough of Bellevue in Allegheny County, Pennsylvania is located just six miles northwest of the City of Pittsburgh, between the neighborhood of Brighton Heights and Avalon Borough. Bellevue offers a blend of small-town appeal, historical character, and urban convenience. The Ohio River makes up the Borough's southern boundary, with Route 65/ Ohio River Boulevard running east/west through the Borough just north of the river. Moving further north towards the center of the community, Lincoln Avenue serves as Bellevue's main street, surrounded by shops, restaurants, and local businesses.

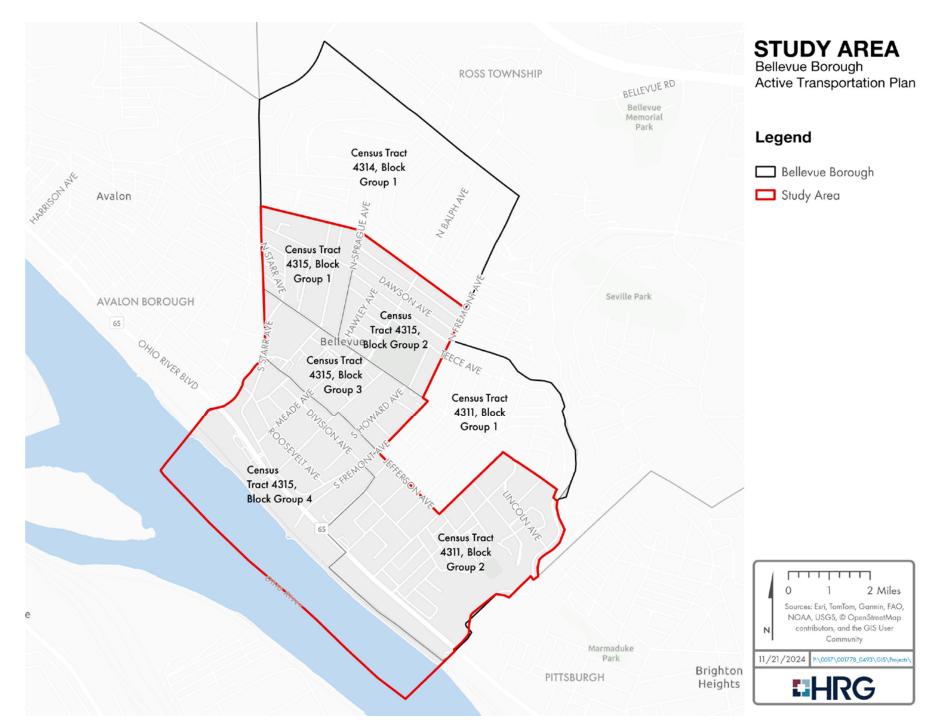
This planning process focuses on the southern portion of the Borough, defined by Census block groups 4311-001, 4311-002, 4315-001, 4315-002, 4315-003, and 4315-004, as shown as the study are in the map on the

following page. These Census block groups were defined as priority areas by PA WalkWorks, the funding entity for this Plan, based on environmental, health, and socioeconomic factors. While this planning process focuses on these block groups, transportation functions as a connected network, so consideration will be given to the relationship between this defined study area, the Borough as a whole, and the surrounding area. The map on the following page depicts the Study Area in comparison to the Borough's boundaries.



Image of the Bellevue sign located at the intersection of Route 65/Ohio River Boulevard and Riverview Avenue.

Photo Credit: Leann Chaney



PLAN PURPOSE & PROCESS

Plan Purpose

Bellevue Borough embarked on an active transportation plan to improve multi-modal safety, accessibility, and mobility within the Borough, and connectivity to the surrounding region. The primary objective for the Bellevue in Motion plan is to establish a framework for creating a safe, accessible, connected walking and biking network through the identification of specific projects and routes that can be developed or enhanced to improve safety and increase access to transit and other everyday destinations. This Plan was undertaken with the objective to capture existing conditions in the Borough, including factors that drive demand for active transportation, like demographics, socio-economic conditions, land use patterns, and current transportation trends and conditions; gather public input about current perceptions and needs; analyze gaps and areas for improvement throughout the existing network; and to establish planninglevel recommendations for improvements, funding, and implementation. Program and policy recommendations will also be developed that when implemented will help to support and encourage active transportation for all ages and abilities, and improve safety for all roadway users.

All of these recommendations are summarized in the Implementation Tables and Project Table included at the end of this document. These tables provide additional guidance for achieving the overall vision for active transportation in the Borough. The end of this report provides a summary of the first ten recommended steps to be taken towards this effort.



View of a mid-block crosswalk moving north along Balph Avenue.

'Mid-block' refers to a crossing that is not at an official roadway intersection. This may be needed along roadways without frequent cross streets to ensure walkers and bikers can cross conveniently. However, because these crossings are not always anticipated by drivers, additional signage is needed for safety. This particular crossing should be improved with ADA compliant curb ramps and more visible crosswalk striping, given the nature of the roadway.

What is Active Transportation?

To better understand the purpose of this Plan, it's important to understand what is meant by active transportation. Active transportation generally refers to any form of travel that involves physical activity as the primary means of movement, such as walking, biking, using a wheelchair, skateboarding, or rollerblading. It emphasizes human-powered mobility. This also includes connections to mass transit and the use of motor-assisted transportation devices, like e-scooters or bikes, and other powered mobility devices. A complete active transportation network provides for a variety of transportation modalities, including bike lanes and routes, sidewalks, and multi-use trails, as well as connections to transit access. These facilities provide for users of all ages and abilities, helping to ensure safe, convenient, and independent travel, without the use of a personal vehicle.

Implementing active transportation infrastructure is beneficial for communities for a variety of reasons, including, but not limited to:

- Creating community cohesion and identity
- Improving regional economics
- Reducing vehicle emissions
- Encouraging exercise to improve both physical and mental health
- Fostering equitable accessibility for all community members

All active transportation improvements must be compliant with guidelines set forth by Americans with Disabilities Act (ADA) and Public Right-of-Way Accessibility Guidelines (PROWAG) standards to help ensure equitable mobility for all users. Compliance with the Architectural Barriers Act (ABA) is also critical for helping to ensure that users of all ages and abilities can safely reach their final destination.

Americans with Disabilities Act (ADA)

Adopted in 1990, ADA is a federal law that prohibits discrimination in employment, transportation, public accommodations, communications, access to government programs, and access to telecommunications on the basis of mental and/or physical disabilities. ADA Standards for Accessible Design establish accessibility requirements for buildings or facilities.

Public Right-of-Way Accessibility Guidelines (PROWAG)

PROWAG provides standards for accessibility within the public right-of-way. This set of guidelines establishes best practices for facilities like sidewalks; non-motorized crossings; curb ramps and detectable warnings; and much more. While PROWAG is not yet enforceable, these guidelines have been generally accepted as industry standard and provide much needed instruction for creating accessible public spaces.

Architectural Barriers Act (ABA)

Originally adopted in 1968, ABA requires that facilities designed, built, altered, or leased with federal funds be accessible to individuals with physical disabilities. It is codified in 42 U.S. Code § 4151 through 4157 and mandates that the Administrator of General Services set standards for accessibility in these buildings. ABA helps to ensure that users of all ages and abilities can safely access their final destination, even after leaving public sidewalks.

Planning Process

The planning process for Bellevue in Motion began in July of 2024 when Bellevue Borough was awarded \$30,000 through the PA WalkWorks program to develop an active transportation plan for the southern portion of the Borough, a priority area identified by the program. Bellevue Borough Council awarded development of the plan to HRG. Bona Fide Bellevue, a local non-profit community development organization, provided support for all aspects of the Plan on behalf of the Borough.

The planning process kicked off on September 17, 2024 with the first Steering Committee meeting. The project's Steering Committee incorporated diverse community representation, including elected officials, Northgate School District, BikePGH, Quaker Valley Council of Governments (QVCOG), Allegheny County Economic Development, local community organizations, and local business owners. Following the kickoff, two additional Steering Committee meetings were held in January and May of 2025.

Work on the development of the report began with a review of related plans, policies, and documents. This review helps to ensure that this Plan will be consistent with existing efforts in the region. A list of the documents reviewed is included below and the findings of this review can be found in Appendix A.

Local Documents

- Together At Our Best Joint Comprehensive Plan for the Borough of Avalon, Bellevue, Ben Avon, and Ben Avon Heights (2017)
- Borough of Bellevue Borough Parks Master Plan (2016)
- Avalon-Bellevue-Ben Avon Joint Zoning Ordinance (2009)
- Other relevant Bellevue Ordinances

Regional Documents

- QVCOG Route 65 Corridor Study & Strategic Design Guide (2022)
- SPC Smart Moves for a Changing Region: Long Range Transportation Plan & Transportation Improvement Program (2023)
- SPC 2025-2028 Transportation Improvement Program
- SPC Regional Active Transportation Plan (2019)
- SPC Regional Transportation Demand Management (TDM) Action Plan (2019)
- Complete Streets Policy for Southwestern Pennsylvania (2024)
- PRT NEXTransit Plan (2024); PRT Proposed Service Cuts (2025)
- Friend of the Riverfront Three Rivers Heritage Trail Economic Study (2024)

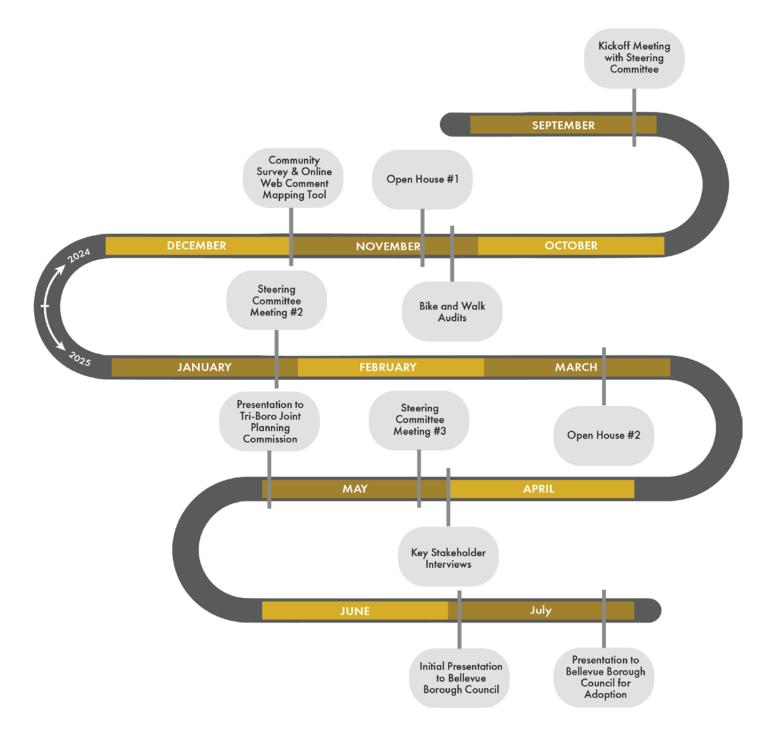
County Documents

- Allegheny Places: The Allegheny County Comprehensive Plan (2008)
- Active Allegheny (2010)
- Live Well Allegheny (ongoing)

State Documents

- PennDOT 2045 Long-Range Transportation Plan (LRTP)
- PennDOT Active Transportation Plan (2019)

Next, an existing conditions report was created, capturing current demographics, physical character, community destinations, existing transportation conditions, and travel behavior. From there, the Plan was developed over an approximately eleven-month timeline. A complete overview of the planning process can be seen in the graphic on the following page. Public engagement efforts are summarized in the following section.



Public Engagement

During the planning process, a series of public engagement activities were conducted between November 2024 and March 2025 to gather input from community members. These efforts included a community survey, a student survey, an online comment mapping tool, two public open houses, and a series of online engagement exercises. The complete report of public engagement results can be found in Appendix B, and the complete results of the community and student surveys can be found in Appendices C and D, respectively. Walking and biking audits of Lincoln Avenue, and a walking audit of Route 65/Ohio River Boulevard were also performed in November of 2024. Finally, Key Stakeholder interviews were also performed in May of 2025 to gain additional insight into active transportation and demand in the Borough. The following section provides a general overview of all the public engagement efforts.

Public Open House #1

The first open house, held on November 20, 2024, had 17 attendees and featured an introductory presentation, Dream Box visioning activity, interactive mapping, and informational boards. Common themes that emerged from the engagement activities included the need for safer sidewalks, improved bike routes, better pedestrian access to Memorial Park, traffic calming along Lincoln Avenue, more greenery, and enhanced lighting and maintenance of walking paths.



Open House #1 attendees and introductory presentation.



Results from the Open House #1 Meeting Mapping Activity

Online Engagement Activities

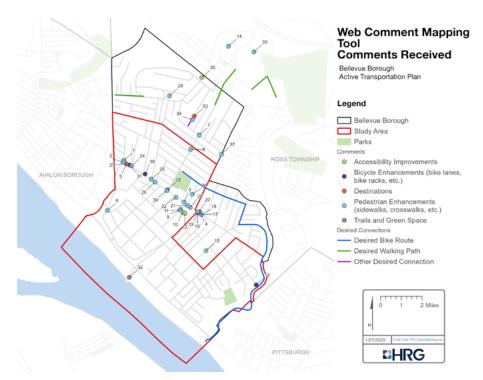
Following the open house, there was an online engagement period that offered digital versions of the exercises, extending opportunities for feedback to those who were unable to attend the in-person meeting. Online participants shared similar concerns, emphasizing a desire for safer, more comfortable walking and biking routes—particularly on Lincoln Avenue—as well as better connectivity to trails and local destinations. The web-based mapping tool received 39 comments and five proposed new connections. These comments identified accessibility issues such as damaged sidewalks, missing ramps, and inadequate crosswalks, along with suggestions for bicycle infrastructure, pedestrian safety improvements, and trail access enhancements. The following map shows the comments received via the online mapping tool. The mapping comments were generally consistent with comments received for the virtual Dream Box and informational boards. Those comments are included in the complete Public Engagement Results in Appendix B.

Community Survey

Between November 7 and December 31, 2024, a Community Survey was conducted to understand how residents use active transportation and what improvements they desire. The survey gathered 234 responses, primarily from Bellevue residents, with the majority being women aged 25–44. While 80% of respondents had access to a personal vehicle and most drove alone to work, 94% reported walking or hiking within the Borough. However, many cited unsafe conditions on major roads like Route 65/Ohio River Boulevard and Lincoln Avenue. Poor sidewalk conditions, unsafe crossings, high vehicle speeds, and a lack of continuous infrastructure were major barriers to walking, with 82% of respondents saying they would walk more

if improvements were made. Key suggestions included repairing sidewalks, adding high-visibility crosswalks, and improving trail connections.

While fewer people reported that they bike in the Borough (only 27% reported biking regularly), many respondents noted feeling moderately safe biking, though streets like Lincoln and Balph were seen as hazardous. High traffic, lack of bike lanes, and unsafe conditions were the primary barriers to biking, and most respondents indicated that separated or buffered bike lanes would encourage them to ride more. About 56% stated they would bike more if biking conditions were improved, although interest in e-bike purchases and bike share programs was moderate.

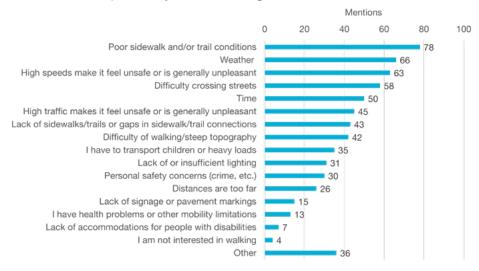


A mapped summary of comments received from the online mapping activity, categorized by comment types.

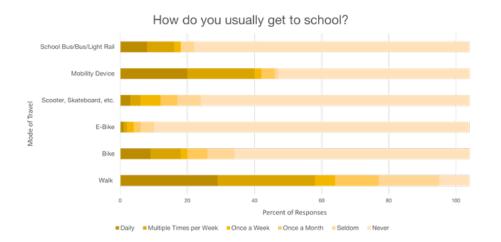
In terms of public transit, around 46% of respondents felt safe accessing bus stops. A strong majority agreed that Bellevue's streets should be designed for all users, even if it meant slowing car traffic. Prioritized improvements identified by respondents included repairing sidewalks, adding bike lanes, creating better pedestrian crossings, and enhancing Safe Routes to School programming. Lincoln Avenue, connections to Memorial Park, and the Three Rivers Heritage Trail were cited as key areas for future improvements. Overall, the survey revealed strong community support for expanding and improving Bellevue's active transportation infrastructure to make walking, biking, and transit safer and more accessible.

In addition, students at Bellevue Elementary School participated in a Student Survey in November 2024, providing insight from a younger population. Of the 104 responses, most students found walking or biking to school "okay," but cited weather, parental restrictions, and distance as the main barriers. Students indicated that walking and biking would be more enjoyable with more friends joining and safer infrastructure. Over half expressed interest in a walking or biking to school group. When asked about neighborhood safety, students generally felt safe "most of the time" but emphasized the need for safer crossings, more sidewalks and trails, and better driver behavior to improve their experience. Common destinations students wished they could walk or bike to included friends' houses, the swimming pool (at Bellevue Memorial Park), and other recreational facilities. The graph to the bottom right indicates a significant number of students use mobility devices to get to school on a daily basis, reinforcing a need for accessible routes. For this question, students could also indicate if they drove to school, but a 0% response rate may indicate a communication error with this question. Overall, student feedback reinforced the broader community's concerns about safety and connectivity for active transportation.

What prevents you from walking more often in Bellevue?



Graph of Community Survey Question 31 results.



Graph of Student Survey Question 7 results.

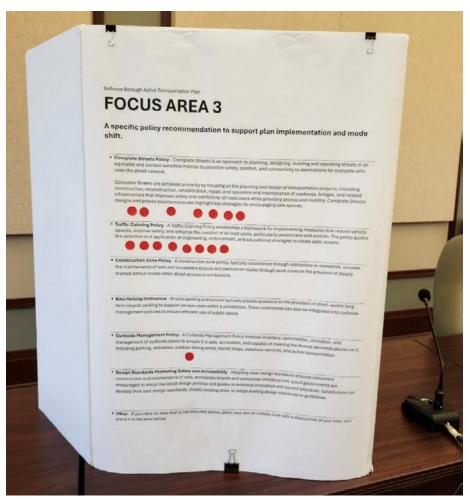
Walking & Biking Audits

Walking and biking audits are assessments used to determine how viable walking or biking is in a specific area. The goal of these audits is to assess a specific environment, making notes of the specific features and characteristics that may make it more or less conducive to active transportation. As part of this planning process, three audits were performed- a biking audit of Lincoln Avenue from Starr Avenue to Jack's Run Bridge, a walking audit of Lincoln Avenue from Starr Avenue to Harrison Avenue, and a walking audit of Route 65/Ohio River Boulevard from Riverview Avenue to Shiloh Avenue. The results and recommendations from these audits can be found in Appendix E.

Open House #2

The second public open house, held in March 2025, attracted approximately 15 attendees and focused on refining the plan's priorities and branding. Three engagement exercises were conducted- Focus Area Prioritization, Vision Statement Selection, and a Report Name Suggestion Box. During the Focus Area Prioritization exercise, participants were asked to help prioritize implementation efforts for each of the four focus areas- a quick implementation built project, a program or campaign to enhance awareness, a specific policy recommendation, and a primary infrastructure construction project to seek funding for right away. Respondents were also asked to prioritize a program or activity to implement prior to the Plan's adoption to increase awareness and enthusiasm. In each case, participants were able to select from a pre-defined list of projects, programs, or policies that was developed based on the previous public and Steering Committee input received. The complete results can be found in Appendix B. Similarly, a list of potential vision statements were provided to vote on, resulting

in the selection of the vision statement used for the Plan. In the Report Name Suggestion Box, attendees submitted creative ideas for naming the final plan. Seven suggestions were received, reflecting the community's aspirations for an active, well-connected, and vibrant Bellevue.



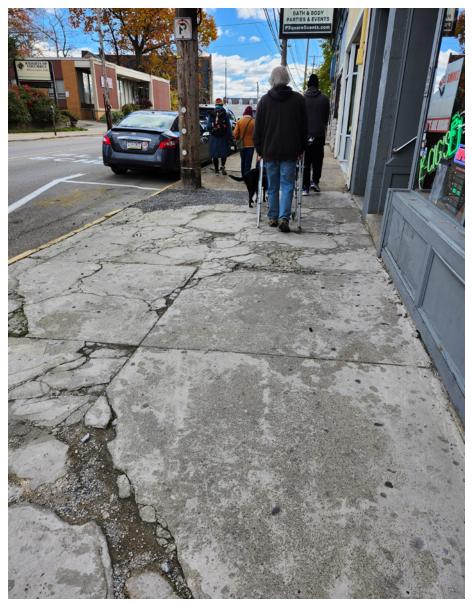
Voting results from the Focus Area Prioritization activity during Public Open House #2.

Key Findings

Plan Purpose: Bellevue in Motion was developed with the central goal of creating a community where people can safely, conveniently, and comfortably use active modes of transportation. Active transportation refers to any form of travel that involves physical activity as the primary means of movement, such as walking, biking, using a wheelchair, skateboarding, or rollerblading. It emphasizes human-powered mobility. This also includes connections to mass transit and the use of motor-assisted transportation devices, like e-scooters or bikes, and other powered mobility devices. A complete active transportation network provides for all modes of transportation to ensure safe, convenient, and independent travel, without the use of a personal vehicle. To help ensure this, infrastructure should be compliant with relevant regulations, like ADA, PROWAG, and ABA. This is beneficial for communities because it promotes economical opportunity and vitality, physical and mental health for residents, improves environmental health, and fosters a sense of community.

Planning Process: During the eleven month planning process, the project team worked to gather input from the Steering Committee and public, which informed this planning process. Efforts were made to ensure consistency with existing planning and regulatory efforts in the region, and to understand existing conditions. All of this information informed the development of goals and recommendations captured within this report.

Public Engagement: Across all the engagement activities, several priorities consistently emerged: the need for improved safety and traffic calming measures, improved pedestrian and bicycle connectivity, better infrastructure for users of all ages and abilities, and more green space and street trees to enhance the overall walking and biking environment.



Participants in the Lincoln Avenue walk audit traversing a sidewalk segment with poor surface condition.

<u>COMMUNITY OVERVIEW</u>

Overview

The following section summarizes the findings of the Existing Conditions report to provide an overview of the community. A basic understanding of the Borough's existing conditions is important for understanding the factors driving public comment and the recommendations included in this report. General demographics, physical character, and the transportation network were included as part of this report. The complete Existing Conditions Report, which includes additional details about community character and the existing transportation network, can be found in Appendix G. Throughout this section and the report, American Community Survey (ACS) 2023, 5-year estimates are used. This data is collected by the U.S. Census Bureau using a surveying process. Therefore, the values shown are estimates and not exact counts.

Demographics

In 2023, Bellevue Borough's population was estimated to be 8,186. With an area of approximately 1.1 square miles, that makes Bellevue a very densely populated community with about 7,442 people per square mile, denser than the City of Pittsburgh with 5,476 people per square mile. The Borough's population has been stable over the past ten years, never varying by more than about two-percent during that time. Distributed by age, the largest percentage of residents are between 25 and 39 years old, with the median age being 36.5, which is significantly lower than the median age in Allegheny County (40.6). Racial distribution is also lower

Demographics Overview

Bellevue Borough, 2023



POPULATION & DENSITY

8,186 total population | 1.1 square miles 7,442 people/sq mi 5,476 people/sq mi in Pittsburah



AGE & HOUSEHOLDS

36.5 average age | Largest age group: 25-394,127 total households17% of households have children under 18



ECONOMICS

\$64,888 average household income 9.6% below the poverty level 4.9% unemployment



TRANSPORTATION

95.2% of workers have access to at least one vehicle almost 2/3 commute to work in a car, alone

in the Borough, compared to the County, with 83.0% of Borough residents identifying as white alone, versus 76.9% in the County. Additionally, only 5% of household in Bellevue identify as being foreign-born, compared to approximately 15% in the County.

Bellevue has a total of 4,127 households and an average household size of 1.97. An average household size of less than 2.00 likely indicates a significant number of single-person households, which may facilitate walking, biking, and using transit as primary modes of transportation, as many people cite the need to care for/transport of children as a primary reason for not being able to more readily use these modes. In the Borough, an estimated 708 households have children under 18 years of age, about 17% of the total households. However, this does not discount the need to provide infrastructure that facilitates use of active modes by children, parents, and families, it only indicates that there may be a greater demand for these modes in certain areas.

The median household income in Bellevue Borough is \$64,888. This is lower than Allegheny County's median household income, which is \$76,393. In 2023, it was estimated that 9.6% of households in Bellevue Borough were below the poverty level. This is slightly lower than the Allegheny County's 11.9%. Similarly, in 2023 the Borough had a slightly lower unemployment rate than Allegheny County, at 4.9% versus 5.2%. Demand for non-motorized infrastructure may be spurred by economic need. Based on a report from the Institute for Transportation & Development Policy, in 2022 the average household expenditure on transportation, including purchasing, fueling, and insuring of personal vehicles, was \$12,295 in the U.S., which is almost 19% of the average household income in Bellevue. Given how expensive it is to own and operate a personal vehicle, having

more limited financial resources may motivate some households to depend more greatly on walking, biking, and transit for daily commutes and other necessary trips.

In 2023, almost two-thirds of Bellevue's workforce drove to work alone. The next most common commute method was carpooling. This is not shocking in a community where 95.2% of workers 16 years and older had access to at least one vehicle in 2023. As more employers implement return to work policies, it can be anticipated that the number of employees working from home will decrease. Facilitating convenient commuting without a personal vehicle will become even more critical.

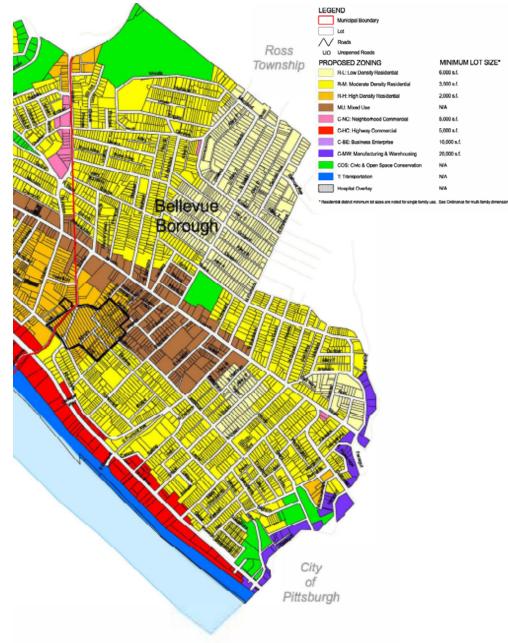
Facilitating access to active modes of transportation is not only necessary for economic vitality, but for public health. The Allegheny Health Network (AHN) is required to create a Community Health Needs Assessment every three years, documenting current public health trends and needs in the area. The 2024-2025 CHNA for Allegheny General Hospital, which includes Bellevue as part of its primary service area, indicated that Allegheny County's overall health ranking worsened for overall health outcomes, referring to the result of a health intervention; morbidity, referring to overall occurrence of disease; and physical environment, which refers to the presence of clean air, safe housing, and recreational facilities. Allegheny County Health Department's Community Health Assessment, released in 2022 indicated high rates of chronic disease. Physical activity can not only help to decrease the likelihood of many chronic diseases, like obesity, heart disease, type 2 diabetes, Alzheimer's disease, and many others, but it can help to manage related symptoms. Increasing access to convenient active transportation would help to ensure increased physical activity in the Borough and the County.

Physical Character

From its natural features to its development patterns, the Borough's landscape plays a critical role in the comfort and convenience of walking, biking, and using transit in the community. While the steep slopes common to Southwestern Pennsylvania may demotivate some residents from walking and biking in Bellevue, the generally urban character, with small lot sizes and shorter blocks, reduces the distance between destinations, making walking and biking more feasible. However, accessing some destinations, especially beyond the Borough's boundaries may be more difficult given existing roadway design, available right-of-way, slopes, and the need for inter-governmental coordination.

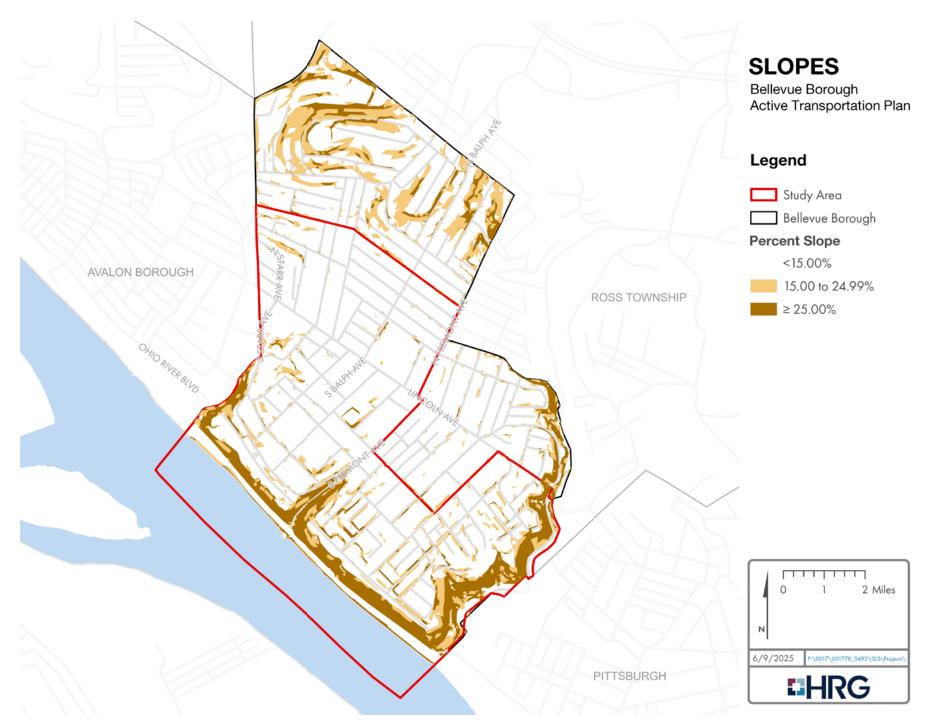
The map on the following page depicts the percent slope in Bellevue, categorized by the severity of the slope. Most of the Borough is shown in white, indicating less than 15% slope, which is generally considered to be compatible with sidewalk construction. Primarily in the northern portion of the Borough, and along the southern and eastern boundaries, steeper slopes are present. The map also indicates small areas of steep slopes that run along the roadway in many locations, which may limit or complicate the installation of sidewalks in some areas.

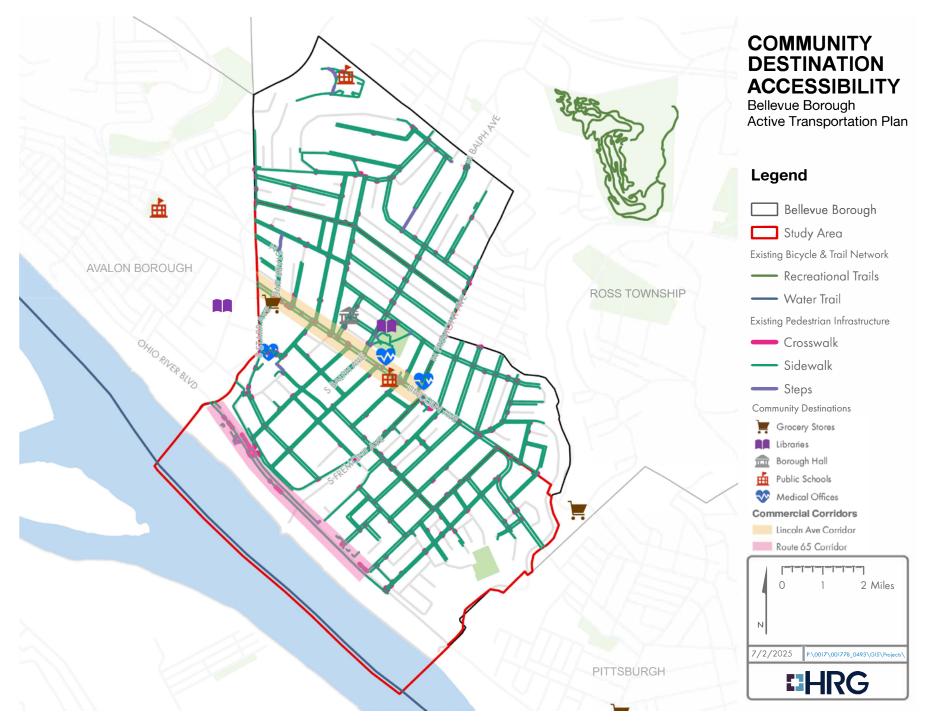
While Bellevue is technically a suburb, as an older community just outside of the City, Bellevue exhibits small lot sizes and overall mid- to high-density development. Small lot sizes and shorter block lengths positively contribute to the walkability of the community. However, single-use zoning does increase the distance between destination types. A map showing community destinations relative to existing walking and biking infrastructure can be found on page 25. Access to community destinations will be discussed more later in the Plan.



Bellevue Borough Zoning Map

Source: Tri Borough Joint Zoning Ordinance (August 2009).





Transportation Network

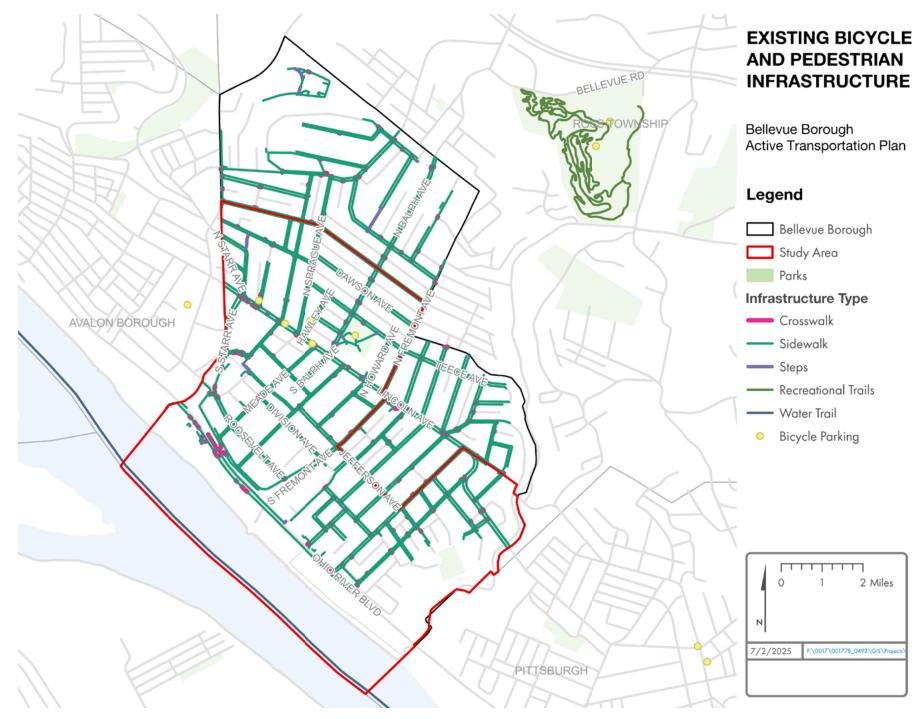
Like the physical character of the community, the existing transportation network impacts the feasibility of walking, biking, and accessing transit. Because transportation works as a network in which all modes must at time interact, it is not only important to understand the existing active transportation infrastructure, but also to understand the nature of the existing roadway network, and how it impacts walking, biking, and transit use.

Existing active transportation facilities can be seen in the map on the following page. While the pedestrian network, comprised of sidewalks, crosswalks, and steps is relatively complete, many areas are in need of maintenance or upgrades to improve accessibility for all users. Conversely, there is almost no dedicated bicycle infrastructure in the community, only bicycle parking, which is still relatively limited. The only trails in the community are recreational trails, primarily within Bellevue Memorial Park, which serve more as a destination for a future connection than as a part of the active transportation network.

Bellevue is currently served by Pittsburgh Regional Transit (PRT) and Beaver County Transit Authority (BCTA). Currently, the Borough is well served by transit routes, although cuts to federal transit funding threaten to reduce service. Bus stops are prevalent in the Borough, however, most of the stops in Bellevue do not have convenient facilities, like bus shelters or benches. In many cases, the bus stops are poorly marked and located with little to no space to stand. In addition, they are often poorly lit and lack bicycle parking. Stops are often situated in a way that requires riders to traverse mud and snow, and steep slopes that are not feasible for riders of all ages and abilities. A map of existing transit routes and stops can be found in the complete Existing Conditions report in Appendix G.



Image showing poor sidewalk pavement condition along the south side of Lincoln Avenue, near CVS. The surface condition of this sidewalk poses a barrier people using wheelchairs or other mobility devices, and may lead to them having to operate in the roadway.



In addition to a lack of dedicated infrastructure for active modes, walking, biking, and accessing transit in a community can be limited by the roadway network, which can create stressful conditions or barriers. While many characteristics can impact how stressful it is for walkers or bicyclists to travel along a roadway, annual average daily traffic (AADT) easily depicts some of the most stressful roadways in the Borough. AADT is the typical daily traffic for a roadway for all days of the week, over a one-year period, and is a standard measure of roadway traffic volume. A map showing AADT throughout the Borough is included on the following page. Lincoln Avenue and Balph Avenue have AADTs reflective of their status as collectors streets. Starr Avenue stands out, having the second highest AADT in the Borough after Route 65, which is not surprising as it serves as a major north/south connection in the community, and a regional connection to Route 65. The roadway with the largest AADT is Route 65, ranging from approximately 10,000 to almost 16,000 depending on the specific roadway segment. Truck traffic, excluding pick-up trucks and panel trucks, is about twice what is experienced along Lincoln Avenue, at approximately 6% of AADT, compared to 3%. Traveling along busy roadways, especially when heavyvehicle traffic is present, creates an unpleasant and often inconvenient experience for any roadway user not in a vehicle. Often times, these high volume roads also experience greater speeding and other aggressive driving behavior, making these roads less safe for walking and biking. The Existing Conditions Report provides a more complete profile of current roadway conditions to better illustrate the impacts on users of active modes.

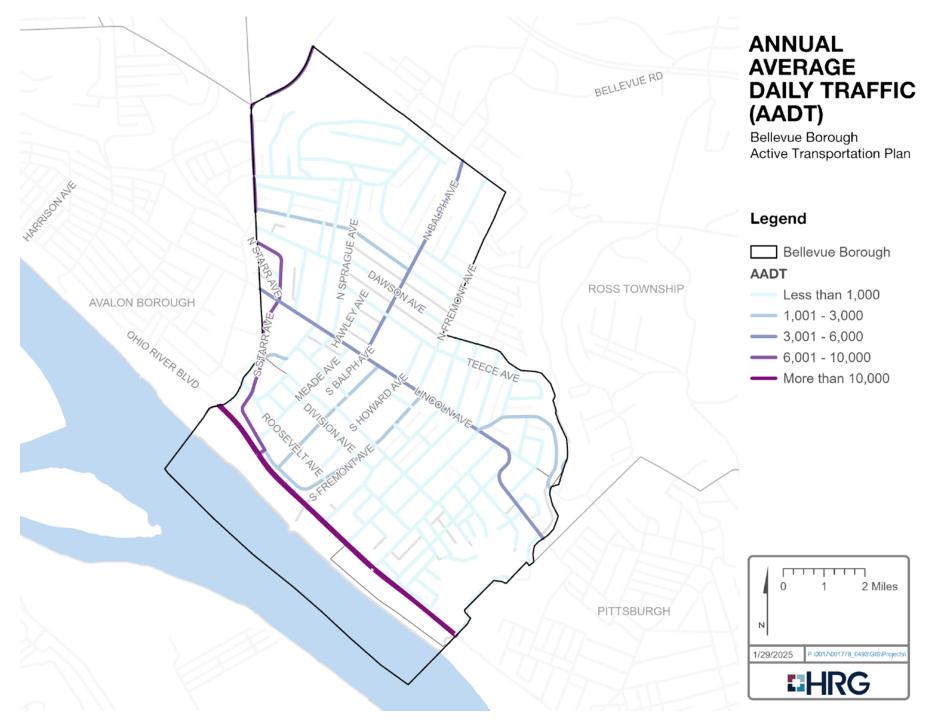
Additional information about the transportation network and current travel behavior, including recent crash data, can be found in the complete Existing Conditions report in Appendix G.



View of Lincoln Avenue near S. Fremont Avenue looking west.



View of Route 65/Ohio River Boulevard near the Riverview Avenue intersection, looking west.



Key Findings

Bellevue Borough's compact layout, mix of land uses, and street network supports and drives demand for active transportation. From its demographic make up to existing land use and transportation facilities, the community's existing character drives the ability to walk, bike, and access transit in the area. The following key findings, and proposed solutions, will be explored in the rest of the Plan.

Demographics: Bellevue has a stable population, that represents a full age range, with varying needs for transportation independence and personal mobility concerns. Current household structures indicate that many single adults live in the area, which may increase the feasibility of walking, biking, and transit use as primary means of transportation. Variable unemployment rates and household incomes across the Study Area may increase the need for these modes more in some areas of the Borough than in others. However, public health concerns related to lack of movement and chronic disease are still prevalent throughout the Study Area.

Physical Character: Like much of Southwestern Pennsylvania, steep slopes must be overcome to complete a successful pedestrian and bicycle network. However, land use patterns favorably contribute to accessibility of different goods and services by helping to reduce distances between origins and destinations. In some cases, however, safe connections to some community destinations are still needed.

Transportation Network: The existing roadway network creates high-stress areas for walkers and bikers, and in some cases stands as a barrier to access for these modes. While the existing sidewalk network is very complete, improving the condition of existing sidewalks or upgrading sidewalks to make them wider, increase separation from the roadway, or even upgrading the facility to a shared use path if possible, is needed to improve access for users of all ages and abilities. Identifying comfortable bike connections is also necessary as well as additional bicycle parking. For the time being, bus connectivity to the region serves the Borough well. However, bus stop facilities could be improved to enhance safety, comfort, and accessibility. Recent crash data does not indicate any pedestrian or bicyclist fatalities within the Borough. However, injuries have occurred and safety concerns have been indicated by residents. Action should be taken to address areas of potential risk before significant incidents arise, helping to maintain zero active transportation fatalities for the community.

<u>VISION</u>

Overview

For any planning effort, it is important to establish an overarching vision for what the final report will help to accomplish. This vision provides an aspirational description of what the community and its stakeholders would like to achieve. Based on input from Borough Staff, Bona Fide Bellevue, the Steering Committee, and members of the public, the following vision statement was developed for this plan.

Vision Statement:

Bellevue is a vibrant, walkable community where people of all ages and abilities can safely and easily get around- whether you bike, walk, take the bus, or drive!

Goals

Based on this vision, the following three goals, each with associated objectives and strategies for implementation, were developed. These goals form the basis for the remainder of the Plan. The recommendations and proposed projects were formulated to help achieve the overall vision for active transportation in Bellevue.

Safety: Improve safety and comfort for all roadway users, including those who walk, use a wheelchair, bike, or use micromobility options (i.e. e-bikes, e-scooters).

Connectivity: Develop and maintain a connected active transportation network consisting of low-stress routes, sidewalks, multi-use paths, trails, and bike facilities to connect people to daily destinations, transit stops, parks, and other key amenities.

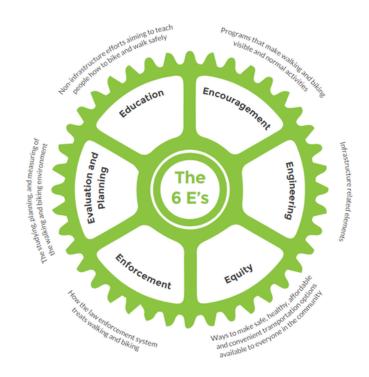
Vibrancy: Create healthy, sustainable, aesthetically pleasing, and economically stimulating community streetscapes and natural landscapes that inspire and facilitate walking, biking, and accessing transit.

The Six Es

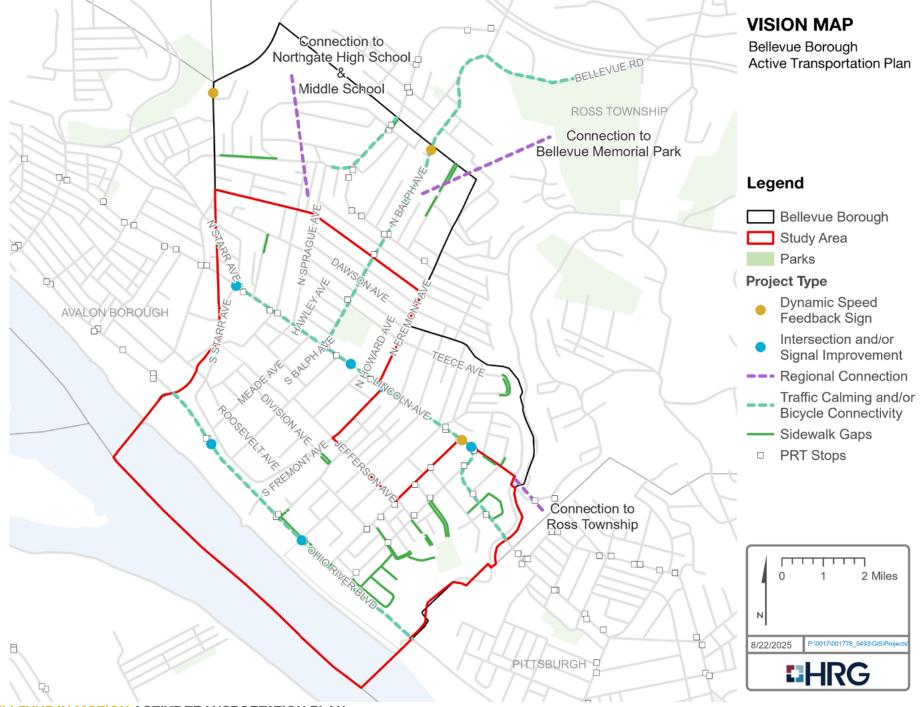
To fulfill the plan's vision, several elements will be needed. When thinking about transportation improvements, most think about the construction of facilities, like sidewalks, bike lanes, or safe crossings. These are important elements, but additional support is needed to create a safe, comfortable, and convenient transportation network. A comprehensive approach to active transportation planning incorporates the six Es:

- Engagement & Encouragement: All active transportation planning or improvement efforts should include opportunities for residents, multi-modal users, and other key stakeholders to share their experiences and opinions. Ongoing engagement efforts should be built into the overall process.
- Equity: All active transportation planning or improvement efforts should ensure fair outcomes for all user demographics, including low-income residents, and people of all races, ethnicities, genders, and abilities.
- **Engineering:** All active transportation planning or improvement efforts should propose physical improvements to make walking and biking safer, more comfortable, and more convenient.
- **Enforcement:** Implementing traffic safety laws and regulations to ensure safe conditions for pedestrians and cyclists.
- Education: All active transportation planning or improvement efforts should provide the community with the skills needed to walk and bike safely by educating them on modal choice, the benefits of walking and biking, and how to walk and bike safely and conveniently.
- **Evaluation:** All active transportation planning or improvement efforts should consider ongoing evaluation of planned efforts to ensure effectiveness of plans, programs, and initiatives.

The recommendations included in this Plan incorporate all of these elements. Evaluation has been included through suggested metrics for each strategy, which can be used to track and measure implementation. Benefits to equity and equitable access to transportation and resources have and should continue to be considered throughout the implementation process. Engineering or infrastructure projects are summarized in the vision map on the following page. Engagement and education efforts can be seen throughout the recommendations and play a critical role in supporting safe roadway use by all users.



Source: https://www.atrc-spc.org/the-six-es.html



SAFETY

Overview

Safety must always be a foundational priority in transportation planning. Active transportation plans should adopt a safety-first approach that reduces potential conflicts among all users- whether they are walking, biking, using mobility devices, accessing transit, or driving. As efforts to promote active modes of travel succeed and more people take to the streets, the importance of designing safe, accessible, and intuitive infrastructure becomes even more critical. By embedding safety into every aspect of transportation planning, communities can create more inclusive, equitable, and livable environments where everyone feels confident and secure navigating public spaces. This plan aims to create a safe and comfortable network for all modes through the objectives and strategies included to the right. This section will elaborate on each of these recommendations.

Safety Goal:

Improve safety and comfort for all roadway users, including those who walk, use a wheelchair, bike or use micromobility options (i.e. e-bikes, e-scooters).

Objective 1.1: Work to eliminate fatal and serious crashes between vehicles and pedestrians or cyclists.

Strategy 1.1.1: Update or develop and adopt municipal policies, ordinances, and codes to align with and advance active transportation goals.

Strategy 1.1.2: Enhance safety by implementing a combination of contextually appropriate traffic calming, roadway, and crossing design treatments at key locations, as indicated by the specific recommendations in this chapter.

Objective 1.2: Participate in active transportation and road safety training sessions to stay up to date on best practices and innovative designs to enhance road safety and implement active transportation solutions.

Strategy 1.2.1: Encourage elected municipal leaders and staff to participate in training sessions sponsored by PennDOT's Local Transportation Assistance Program (LTAP) program, provided at no cost for municipalities.

Objective 1.3: Promote safer speeds through targeted education and outreach campaigns.

Strategy 1.3.1: Sponsor education and outreach campaigns to increase awareness of traffic laws and safe riding and driving habits for biking, e-bikes, and motorists, fostering safer interactions between all road users, at all ages.

Strategy 1.3.2: Install dynamic speed feedback signs to alert drivers of their current speed and encourage compliance with posted speed limits. Consider installation of dynamic speed feedback signs at the locations identified by this Plan.

Municipal Policies, Ordinances, & Standards

Policies, ordinances, and standards are some of the strongest tools that municipalities have for informing and regulating the actions of residents and property owners. The inclusion of specific priorities in these documents also shows dedication to specific initiatives. Therefore adopting dedicated policies and updated ordinances will be a critical part of implementing the goals of this Plan.

Complete Streets

Complete streets refer to roadways designed to accommodate all modes of transportation. The adoption of a Complete Streets Policy may be beneficial in creating a focused guide for implementing improvements throughout the Borough. This type of policy can create a framework for Borough Staff and elected officials as future decisions are made. Adopting this kind of policy can also be advantageous when applying for funding as it demonstrates a dedication to larger non-motorized goals.

According to the National Complete Streets Coalition, a Complete Streets policy should include the following ten (10) elements:

- Commitment and Vision: Documents how and why the Borough wants to complete its streets. This should include a clear statement to create a complete, connected network that considers the needs of all users. This may also document how the Borough will accommodate all users despite the limitations of some roadways.
- 2. Prioritization of Underinvested and Underserved Communities: Define the Borough's most underserved populations and prioritizes them throughout future network improvements. This Plan has already addressed this in many ways by considering financial equity in sidewalk improvements.

- 3. Applicability to All Projects: This clarifies that the new framework would apply to all projects, including maintenance or repairs, and not just the construction of new infrastructure.
- 4. Specification of Accepted Exceptions: Procedures and guidelines for exceptions are defined and outlined, requiring high-level approval and public notice.
- 5. Mandated Coordination: Requires private developers to comply, and inter-agency coordination between government departments and partner agencies.
- 6. Design Guidance: In addition to identifying projects, guidance for ideal and consistent design that considers all users should be prescribed.
- 7. Mandated Proactive Land Use Planning: Projects must consider the existing context of the community, which is less relevant given that the Borough is mostly built out and follows land use patterns conducive to walking and biking.
- 8. Measured Progress: Establishes specific performance measures that match the goals of the broader vision.
- Defined Criteria for Choosing Projects: Project prioritization criteria are defined so that Complete Streets projects are prioritized, which may vary slightly from the currently proposed criteria.
- 10. Implementation Plan: A specific outline of steps that will be taken to implement the projects once they have been selected and defined following the framework. When adopting a Complete Streets Policy, consistency with other ordinances should also be considered. This process should include a review of the Borough's Zoning Ordinance, Subdivision and Land Development Ordinance (SALDO), and any other related municipal regulations. The creation of a Complete Streets Policy, as well as any revisions to related ordinances, should also include the solicitation of feedback from residents and any other relevant stakeholders.

Vision Zero

Like Complete Streets, Vision Zero is a widespread road traffic safety effort that aims to achieve zero fatalities or serious injuries involving road traffic. Coordination with existing national and regional efforts is not only beneficial to the safety of all roadway users, and consistent with the efforts of this Plan, but it may be beneficial to demonstrate a dedication to these efforts when pursuing funding. The adoption of a Vision Zero policy or plan can help to guide roadway safety throughout the Borough. Even though the Borough has a very low rate of non-motorized accidents, adopting a Vision Zero resolution is still beneficial for establishing a decision-making framework interested in maintaining safety. Vision Zero highlights a system-based approach, focusing on creating a safe network based on guided decision making, instead of a dependence on enforcement. This process highlights the following elements:

- Political Commitment: Community leaders should publicly commit to the goals of Vision Zero through the adoption of a local policy.
- Multi-Disciplinary Leadership: Vision Zero should be carried out by a dedicated group, consisting of a mixture of Borough Staff, elected officials, community leaders, emergency responders, health care professionals, transportation experts and advocates, other relevant experts, and residents.
- Equity: Vision Zero should ensure equity throughout the adoption and administrative process, as well as equity within the decisionmaking framework, ensuring safe access for all users.
- Cooperation and Collaboration: A commitment to Vision Zero must also entail a commitment to collaboration with all relevant groups, including but not limited to cooperation with state and regional agencies, neighboring municipalities, and local organizations.
- Data-Driven Decision Making: Decisions should be made based on the review of up-to-date data. This will require a commitment to ongoing data collection and analysis.

- Community Engagement: Like Complete Streets and the planning process for this report, all decisions should incorporate opportunities for public engagement, and the integration of the feedback received.
- Transparency: The Vision Zero process should ensure transparency through regular updates on new policies, decisions made, or progress towards overall active transportation goals.

TRADITIONAL APPROACH Traffic deaths are INEVITABLE PERFECT human behaviour Prevent COLLISIONS INDIVIDUAL responsibility VISION ZERO Traffic deaths are PREVENTABLE Integrate HUMAN FAILING in approach Prevent FATAL AND SEVERE CRASHES SYSTEMS approach

Saving lives is **EXPENSIVE**

Image summarizing the difference between traditional transportation planning or engineering and Vision Zero's method.

Source: https://visionzeronetwork.org/about/what-is-vision-zero/

Saving lives is **NOT EXPENSIVE**

Other Policies & Guidelines

In addition to adopting overarching commitments to safety, supporting documents and policies may help to guide specific implementation of walking, biking, and transit infrastructure. Some of these supporting documents and policies include design standards, traffic calming policies, construction zone policies, and bike parking ordinances.

- Design standards provide a framework for creating functional, aesthetic, and high-quality designs by providing specifications and performance requirements, as well as planning criteria and example design details. The adoption of specific design standards will help to ensure that appropriate treatments are used to effectively improve walking and biking in the community. As part of SPC's 2025 Active Transportation Plan Update, an "Active Transportation Design Toolkit," was developed that should be used as a basis for the creation of design standards. This will not only provide guidance on proper implementation, but will help to ensure regional consistency, which can more positively impact driver behavior.
- Traffic calming policies are a set of strategies implemented to reduce vehicle speeds and improve safety for pedestrians, cyclists, and other road users in specific areas- especially residential neighborhoods, school zones, and urban centers. A traffic calming policy should include:
 - Policy objectives
 - Eligible areas, which may be defined by land use type and/or criteria like traffic volume, speed studies, accident history, or community request.
 - Assessment criteria, including speed thresholds, traffic volume, crash data, walking and biking activity, and community support
 - Potential interventions, which may include, but are not limited to, speed humps, raised crosswalks, chicanes, curb extensions, land reductions, land narrowing, median islands, and pavement markings.

- Construction zone policies should ensure that pedestrians, cyclists, and other vulnerable roadway users are safely accommodated during roadwork or construction activities. This is essential for helping to maintain accessibility for all users at all times. This policy should spell out the correct accommodation standards, in keeping with ADA, and require public notification of construction and planned detours. FHWA also provides guidance on these standards.
- Bike parking ordinances establish a set of requirements for the provision, design, and placement of bicycle parking facilities in new developments, major redevelopments, and/or public spaces. These ordinances are designed to support cycling as a mode of transportation by ensuring that secure, accessible, and convenient bike parking is available. The ordinances should define the types and locations (zoning districts) of businesses and organizations that must comply, the minimum number of spaces that should be provided, design standards, and location to ensure accessibility. Allowing developers to replace a portion of required car parking with bike parking, especially near transit lines, may also be considered.

Existing Ordinance Updates

Chapter 235 of the Borough's Code of Ordinances regulates streets and sidewalks. The construction standards were adopted in 1980 and should be updated to be consistent with current ADA requirements. Minimum widths and regulated cross slopes and running slopes should be updated. Width requirements dictated by the current ordinance are compliant and actually exceed ADA standards. Revisions to the ordinance should also provide for appropriate use of repairs over required replacement, to help reduce costs. The Federal Highway Administration's (FHWA) report, A Guide for Maintaining Pedestrian Facilities for Enhanced Safety can help inform how repairs may be permitted. All other ordinances should be reviewed for consistency, especially associated with the adoption of additional policies and resolutions related to active transportation.

Education & Outreach Efforts

Education and outreach efforts should apply to all parties involved. This means that all roadway users, at all stages of life should be educated on or reminded of the rules of the road. Additionally, the staff members, elected officials, and other stakeholders implementing this Plan must all be educated on up to date technology and infrastructure options.

Educating the Public

All residents should be educated about non-motorized modes of transportation. Non-motorized users should be made aware of resources and how to use them properly. In addition, drivers should be made aware of how to properly operate on a shared roadway. Education about non-motorized transportation can start at any age, and programs and materials can be created to target school age children through senior citizens. The League of American Cyclists offer many resources through their Learning Center. Other resources include PennDOT and BikePGH. Enforcement goes hand in hand with education. Once users have been taught how to properly interact with the infrastructure, enforcement must help to reinforce what is being taught. Education should also go hand and hand with engagement and encouragement efforts, discussed in the Vibrancy Chapter. Some education and enforcement strategies include:

- Working with the school district and/or regional advocacy groups to create programs to teach walking and biking skills to residents of all ages, children through adults.
- Creating and distributing resource materials including safety guides and maps of regional connections.
- Working with law enforcement to refine existing laws and increase enforcement of traffic safety laws.

- Working with advocacy groups and the media to create campaigns and public announcements advocating for non-motorized transportation use and safety.
- Promoting the League of American Cyclists' Bicycle Friendly Driver Training program, which can be completed online, or other similar trainings that teach drivers how to share the road.

In addition to educating residents about safe travel behavior, education should be provided about the responsibility to update sidewalks, the enforcement process, and opportunities to repair sidewalks instead of replacing them. Materials addressing this information should be developed and distributed via existing means of communication like social media or associated with the distribution of other information, like permits or tax documents, as well as at community and engagement events. This information should be consistent and coordinated with the creation of a sidewalk improvement program.

Dynamic Speed Feedback

Part of educating roadway users can include real time information about how they are operating on the roadway. One way to do this is through the use of dynamic speed feedback signs, which measure the speed of the approaching vehicles and then feed this information back to the driver in real time via a dynamic message display. These signs can be used for temporary speed control efforts in targeted locations by being placed on trailers so they can be moved from site to site, or they can be installed permanently at locations with ongoing speeding concerns. Studies indicate long-term efficacy from the use of these signs, especially installed along roadway segments that transition from higher to lower speed. Based on that, a list of suggested locations for the installation of permanent dynamic speed feedback signs has been included below. These signs have a relatively low cost, so additional locations may be considered as necessary.

- Lincoln Avenue near Grant Avenue and/or Lincoln Avenue near Keswick Avenue.
- North Balph Avenue near the Ross Township border.
- North Union Avenue.

Educating Staff & Officials

The PennDOT Local Technical Assistance Program (LTAP) is designed to help Pennsylvania's municipalities make the best use of their roadway maintenance dollars. PennDOT LTAP provides technical training on proved technologies, roadway maintenance, and safety methods. From newsletters and tech sheets to webinars and training courses, LTAP addresses a variety of roadway safety topics, including providing safe and comfortable infrastructure for walking and biking. These resources are available to Pennsylvania municipalities free of charge.



Image of a permanently installed dynamic speed feedback sign.

Source: https://www.radarsign.com/



Image of a temporary dynamic speed feedback sign or speed trailer.

Source: https://flow.alltrafficsolutions.com

Traffic Calming

As previously mentioned, traffic calming is intended to improve safety for pedestrians, cyclists, and other road users, by reducing roadway speeds or volumes, specifically using physical design measures that use self-enforcing physical or perceived means to regulate driver behavior. There are a variety of treatments that can be used, many of which are summarized in the graphic to the right. Specific use should be determined through a dedicated design process considering contextually appropriate solutions for the identified area. This Plan identifies the following areas for consideration, with additional project details included in the Infrastructure Projects Implementation Tables in the Implementation & Funding Chapter.

- Route 65/Ohio River Boulevard
- Lincoln Avenue, from Starr Avenue to Jacks Run Bridge, including the Straw Avenue intersections
- Bellevue Elementary School (BES) School Zone
- Forest Avenue, between the Borough border and Carolyn Avenue
- North Balph Avenue

Property access can also contribute to traffic calming and reducing potential conflict between different modes. This is especially true at properties with uncontrolled access points, like those along Lincoln Avenue near Florence Avenue and at several businesses along Route 65. Access management should be considered, which would ideally include regional coordination to implement consistent methods and guidelines, especially along Route 65. The adoption of an access management ordinance for the Borough would allow for future improvements, as properties turn over for redevelopment. PennDOT published the Access Management: Model Ordinances for Pennsylvania Municipalities Handbook, which may be used as a resource.

TRAFFIC CALMING STRATEGIES

WHAT THEY ARE AND WHEN TO USE THEM

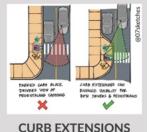


RAISED CROSSWALKS
Use in areas with
frequent pedestrian
crossings to raise driver
awareness and slow

traffic.



SPEED HUMPS Ideal for residential streets with speeding issues.



(BULB-OUTS)

Best in areas with a lot of pedestrian activity to shorten crossings and improve visibility.



CHICANES
Effective to slow traffic along existing long, straight roads.



MINI-ROUNDABOUTS
Helpful at intersections
with limited right-of-way,
but where safety
improvements are
needed to slow traffic,
while allowing it to
continue flowing.



MEDIAN ISLANDS
Useful on wide roads to calm traffic and reduce pedestrian crossing distance by providing a central stopping location.

CONNECTIVITY

Overview

Connectivity is at the core of an effective active transportation network. A well-connected system ensures that people can move easily and safely between destinations—no matter what mode they are using—without encountering gaps, barriers, or unsafe conditions. When sidewalks, bike lanes, trails, and transit stops are linked in a cohesive and intuitive way, active transportation becomes a more practical and appealing option for everyday travel. Strong connectivity improves access to jobs, schools, parks, and services. Ultimately, a connected network allows more people to choose active modes of transportation, contributing to healthier, more sustainable, and more inclusive communities. This Plan aims to create a connected, comfortable active transportation network through the objectives and strategies that follow. This section will elaborate on each of these recommendations.

Connectivity Goal:

Develop and maintain a connected active transportation network consisting of low-stress routes, sidewalks, multi-use paths, trails, and bike facilities to connect people to daily destinations, transit stops, parks, and other key amenities.

Objective 2.1: Create and maintain a safe, connected pedestrian network in the Borough.

Strategy 2.1.1: Perform a complete inventory of the sidewalk network, identifying missing portions of sidewalk and areas of poor condition. This inventory should be updated at least every 3 to 5 years, but the process may consider the use of volunteers to help update data regularly.

Strategy 2.1.2: Develop a plan to fill or replace portions of sidewalk that are missing or in poor condition, and create a complete, comfortable sidewalk network that may be used and enjoyed by pedestrians of all ages and abilities. The network may also consider other appropriate pedestrian infrastructure, as discussed by this Plan.

Strategy 2.1.3: Develop a Sidewalk Maintenance Schedule to help ensure ongoing quality sidewalk connections.

Strategy 2.1.4: Explore opportunities for funding and administering a sidewalk improvement program to assist property owners with installation and repair costs.

Objective 2.2: Create and maintain a safe, comfortable, and connected bicycling network in the Borough.

Strategy 2.2.2: Assess the Borough's street network and identify opportunities for the development of direct and convenient bicycle routes through the use of strategies identified by this Plan. These efforts will require a Circulation Study to be performed, to consider the flow of the overall transportation network.

Objectives and strategies continued on following page.

- Objective 2.3: Improve walking and biking crossings to create a safer walking and biking network.
 - Strategy 2.3.1: Install and maintain high-visibility crosswalk treatments at key marked crosswalks.
 - Strategy 2.3.2: Consider Leading Pedestrian Intervals (LPI) at appropriate intersections, including but not limited to the intersection of Lincoln Ave and Starr Ave, the intersection of Lincoln Ave and Balph Ave, the Bellevue Elementary School Zone, and the intersection of Lincoln Ave and Fremont Ave.
- Objective 2.4: Establish safe and convenient connections to desirable resources beyond the Borough's boundaries.
 - Strategy 2.4.1: Coordinate with Friends of the Riverfront and any other necessary agencies or land owners to pursue a connection to the Three Rivers Heritage Trail.
 - Strategy 2.4.2: Conduct a preliminary trail location study to identify the feasibility of constructing a safe, off-street connection to Bellevue Memorial Park.
 - Strategy 2.4.3: Establish safe walking and biking connections to Northgate Middle School and High School.
 - Strategy 2.4.4: Coordinate with neighboring municipalities to ensure safe walking and biking connections to other regional destinations identified by this Plan.
- Objective 2.5: Enhance transit infrastructure and improve access.
 - Strategy 2.5.1: Work with Pittsburgh Regional Transit (PRT) to improve infrastructure at heavily used stops, including the addition of bike parking and other amenities.

Safe, Comfortable & Connected Network

When thinking about a successful walking and biking network, it is important to think not only about the presence of infrastructure, like a sidewalk or a bike lane, but also about how comfortable it is for someone to use that connection. The comfort of walking and biking infrastructure is generally assessed using a level of traffic stress (LTS) assessment, which uses a variety of variables to measure the perceived comfort, safety, and convenience of walking or biking in that area. As part of the SPC 2025 Active Transportation Plan Update, LTS was assessed for the entire region. Additional information about this assessment can be found in the, "Multimodal Network Analysis Methodology," memo associated with that plan. The results of that assessment for the Bellevue area are included in the map on the following page. In general, these results indicate that most of Bellevue's existing network already scores well for comfort, with some reduced scores along Starr Avenue, Union Avenue, Lincoln Avenue, North Balph Avenue, Riverview Avenue, Forest Avenue, and Route 65/Ohio River Boulevard. The worst scores are seen along Forest Avenue and Route 65, which have already been suggested for traffic calming improvements.

LTS 1 (Maximum Comfort): Users of all ages and abilities are able to move through the area comfortably. There generally is dedicated walking and biking infrastructure.

LTS 2 (Satisfactory Comfort): Generally comfortable for most users. There may be some limitations for seniors and children, especially around busy intersections.

LTS 3 (Average Comfort): Walking and biking may be uncomfortable for many users, but it is still generally possible, with only some barriers to connectivity.

LTS 4 (Minimum Comfort): Walking and biking are uncomfortable for most users. These segments and intersections are barriers to connectivity. If there is dedicated infrastructure, it does not feel safe to use.

Regional Level of Traffic Stress (LTS) Assessment, SPC 2025 Active Transportation Plan Update



Source: https://storymaps.arcgis.com/stories/b82de3f8eb1e4495965f0af1b28a58be

Pedestrian Connections

In general, Bellevue's pedestrian network is nearly complete, with some gaps identified in the Vision Map (page 33). In some cases, areas that do not currently have sidewalks, like parts of Brighton Avenue, Woods Street, or the southern end of Freemont Avenue, were intentionally not included as gap projects because steep slopes and limited rights-of-way will restrict the ability to feasibly add a sidewalk. Off-road alternative connections may need to be identified in these cases. For example, a possible alternative is to build a trail that follows the utility easement at the end of Straw Avenue, creating a connection to the Giant Eagle on Brighton Road in Ross Township. This potential connection is shown in the Vision Map. In other cases, areas identified as gaps may not require the installation of official sidewalks and could instead be served by paved shoulders with striped pedestrian lanes and signage, like the example to the right. This could be implemented along very low volume, low speed roads, like the area around Barr Avenue.

The conditions of sidewalks, curb ramps, signage, and pavements markings vary significantly throughout the Borough. Sidewalks and curb ramps that become too damaged can limit accessibility for some users and therefore connectivity. One of the first steps in improving the condition of the pedestrian network is understanding the current status. It is recommended to a complete inventory of the sidewalk network, establishing a baseline that can be used to prioritize future improvement projects. The inventory should verify the sidewalk gaps identified, audit the current condition of existing infrastructure, and validate the level of comfort assessment performed at the regional level. Once the data is obtained, it should be mapped using GIS, allowing the data to be used for maintenance moving forward, whether in a GIS program or a dedicated asset management program. This inventory



Example of high-stress sidewalk along Route 65/Ohio River Boulevard where there is little to no space between pedestrians and fast moving truck traffic.

Photo Credit: Leann Chaney



Pedestrian Lane 5-8 ft (1.5-2.4 m)

Buffer (Optional) 0-4 ft (0-1.2 m) Example of a pedestrian lane cross-section

Source: FHWA, Small Town and Rural Multimodal Networks

should be updated as sidewalk and curb ramp improvement projects are completed, with a complete update of the audit every three to five years. If funding allows, this process can be completed by professionals with appropriate technology. However, this can be difficult, especially because many grants do not provide for this type of work. If necessary, the use of volunteers to perform and/or update the assessment should be considered. Appendix I includes instructions for a high-level sidewalk assessment, originally created for the Borough of Hummelstown in Dauphin County, Pennsylvania. Once Bellevue's ordinances have been updated to be consistent with ADA standards, the assessment should also be updated to include those considerations. Once the inventory is completed, whether by volunteers or professionals, the results should be used to inform necessary enforcement and the prioritization of future improvement projects. This inventory should be updated at least every 3 to 5 years.

While the Borough already takes action to maintain sidewalks and related infrastructure, an official, routine maintenance program is recommended, which will assist the Borough with planning and budgeting for maintenance and replacement of its infrastructure assets. The following replacement intervals were created based on the National Cooperative Highway Research Program (NCHRP) Report 713- Estimating Life Expectancies of Highway Assets, PennDOT's Specification for Retroreflective Sheeting Materials and Process Inks, and input from HRG transportation engineering staff.

- Pavement Markings 2-3 Years
- Signs 10 Years
- Curbs and Sidewalks 20 Years

The majority of the sidewalks in Bellevue are owned and maintained by the adjacent private property owner. This structure, requires residents to take on the significant cost of sidewalk maintenance and replacement, and limits the potential to improve sidewalk condition and upgrade sidewalks to be ADA compliant. The Borough may assist by identifying sidewalks to improve with the use of external grants or other funding sources, but this still limits the scope of improvements to the network. Instead, the creation of a sidewalk improvement program to assist property owners with installation and repair costs can help to expand potential improvements each year. Through a sidewalk improvement program, property owners who have received a notice that their sidewalk is in violation of the maintenance ordinance would be able to apply for low or no interest loans. In some cases, the Borough may also be able to provide grant funding, generally determined by financial need or hardship. Funding for the creation of a sidewalk maintenance program may come from reallocation within the general budget, specific external funding sources or partnerships, or from the funds gathered by creating a fee capture process related to sidewalk inspection and permitting fees. While many grant programs limit how funds can be used and may not be applicable for a program like this, some grants like PennDOT's Multimodal Transportation Fund may apply and was successfully used by Indiana Borough in Indiana County, Pennsylvania to fund phase two of their Sidewalk Repair Assistance Program. The Commonwealth Financing Authority Multimodal Transportation Fund (CFA MTF) administered by the Pennsylvania Department of Community and Economic Development (DCED) may also apply. In addition to start up funds, the creation and on-going administration of a program like this will also require Borough staff time and resources. Examples of sidewalk maintenance programs or sidewalk repair programs can be found in the City of Lancaster, the City of Pittsburgh, and Indiana Borough.

Bicycle Connections

Currently, the only dedicated bicycle infrastructure in Bellevue is bike parking, which is present, but limited. A more dedicated, holistic review of the Borough's roadway network needs to be performed to best identify a bicycle network. In general, Bellevue's narrow streets will not allow for dedicated bike lanes to be added to the roadway, especially not with enough room for separation or buffering. Additionally, limited rights-ofway will make the addition of shared use paths or separated trails infeasible in most areas. It will be important to consider the use of other infrastructure types, like shared lane markings, also known as "sharrows," and bike route or share the lane signage. In place of formerly standard, "Share the Road," signage, "Bicycles May Use Full Lane," signage is recommended as it more effectively reenforces that bicyclists may use the entire lane. Given the nature of most roadways in the Borough with low traffic volumes and low speeds, signage will be an important part of reminding drivers of the presence of bicyclists on the road. In some busier areas, which have been identified by the higher-stress nature and frequency of crashes, like along Lincoln Avenue, it will be critical to combine signage and pavement markings with additional traffic calming measures. This combination of treatments along low-volume roadways is often referred to as bike boulevards. Additional information about bike boulevards is included on the following page. Key areas for those treatments were identified in the previous chapter, but additional areas should be considered following the identification of the bike network. Identifying the best network will require additional study and review in the form of a Circulation Study, which should consider the flow of the overall transportation network and the potential to implement contraflow bike lanes or signs and pavement markings allowing for contraflow/twoway bike travel on roads that remain one-way for automobiles.

Contraflow bike lanes

Contraflow bike lanes are bike lanes that allow for bicycle travel in the opposite direction from motorized traffic on a one-way street.

In certain situations, a contraflow bike lane may be installed to increase safety, enhance connectivity to the broader bicycle network or provide access to high use destinations.

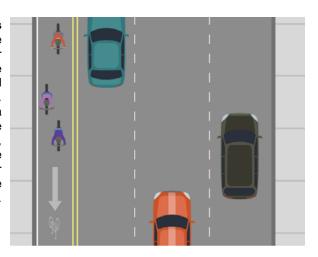


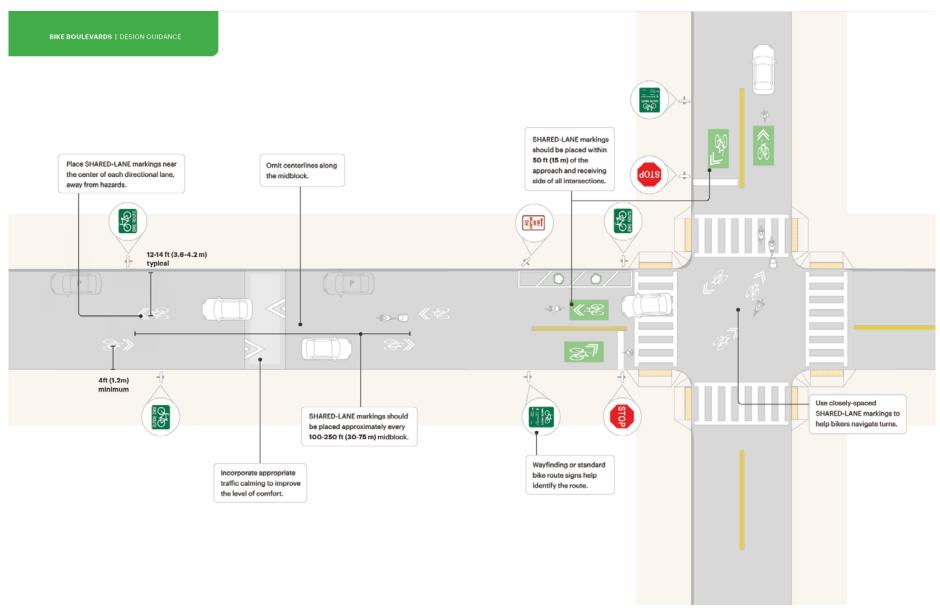
Illustration of a Contraflow Bike Lane

Source: SPC, "A Guide to Understanding Bike Symbols, Signs and Pavement Markings in Southwestern Pennsylvania."



Example of "Sharrows," or Share the Road Markings.

Source: https://www.bmtsonline.com/bikeped/sharrows



Bike Boulevard Design Guidance from NACTO.

Source: https://nacto.org/publication/urban-bikeway-design-guide/designing-bikeways-for-all-ages-and-abilities/bikeways-on-low-speed-low-volume-streets/bike-boulevards/

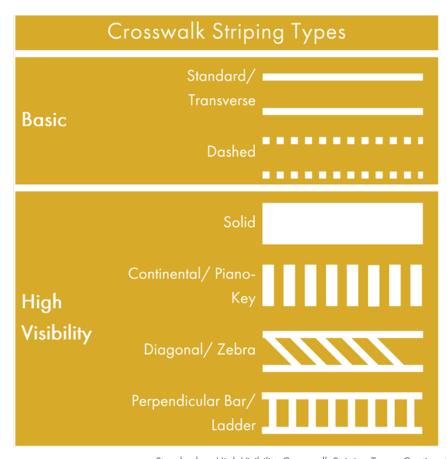
Crossings

Crossings play an important role in connectivity by enabling or preventing movement across a barrier. By enhancing the existing facilities at intersections, safer crossings can be created that will further enable walking and biking. FHWA guidelines recommend three main crossing enhancements to improve non-motorized safety, which have generally been shown to increase the likelihood of drivers yielding to non-motorized users, decreasing the likelihood of accidents, especially severe collisions. These enhancements include:

High Visibility Crosswalks, which use larger patterned striping to make crosswalks more visible to all users from farther away. Currently in the Borough, there is a mixture of standard striping and continental striping, much of which is in need of maintenance to reinforce the visibility. The use of continental striping improves visibility of the crosswalk, even at higher speeds. The difference in these two types of striping can be seen in the graphic to the right. Along parts of Lincoln Avenue, decorative brick treatments have been used in place of continental striping, which is an accepted high-visibility treatment, but may be further improved by widening the side striping.

Improved lighting, which involves the placement of additional luminaires, commonly referred to as streetlights, to illuminate the crosswalk, making it easier for drivers to see non-motorized users, should also be considered at critical intersections, mainly along Route 65. Luminaires must be placed correctly in a forward location to avoid adding shadow that can make it more difficult for drivers to see pedestrians and bicyclists. Existing pedestrian scale lighting along Lincoln Avenue should also be extended from where it currently ends at Meade Avenue to Freemont Avenue.

Enhanced signage and pavement markings, which can help draw the upcoming crossing to drivers' attention, can also be used to help improve non-motorized crossing safety. These applications should be used in accordance with the Manual of Uniform Traffic Control Devices (MUTCD) and should be applied by an engineer, as required by the final roadway design.



Standard vs. High Visibility Crosswalk Striping Types. Continental striping is the most common high visibility striping, regionally.

Additionally, the actual timing of the pedestrian crossing phase at the intersection may be set to enhance crossing. One way that this can be done is through the incorporation of a leading pedestrian interval (LPI). An LPI gives pedestrians the opportunity to enter a crosswalk before the vehicles at the intersection begin moving. This allows pedestrians to be present and more visible in the crosswalk prior to drivers turning. This interval usually is three to seven seconds long, as guided by the MUTCD, and increases the likelihood of drivers yielding to pedestrians. LPIs must be warranted by the overall engineering of the intersection. Therefore, this study can only recommend the consideration of LPIs as part of the implementation process. The Plan recommends that LPIs are considered at the intersections of Lincoln Avenue and Starr Avenue, Lincoln Avenue and Balph Avenue, Lincoln Avenue and Fremont Avenue, and the intersection of Riverview Avenue and Route 65/Ohio River Boulevard, at a minimum.

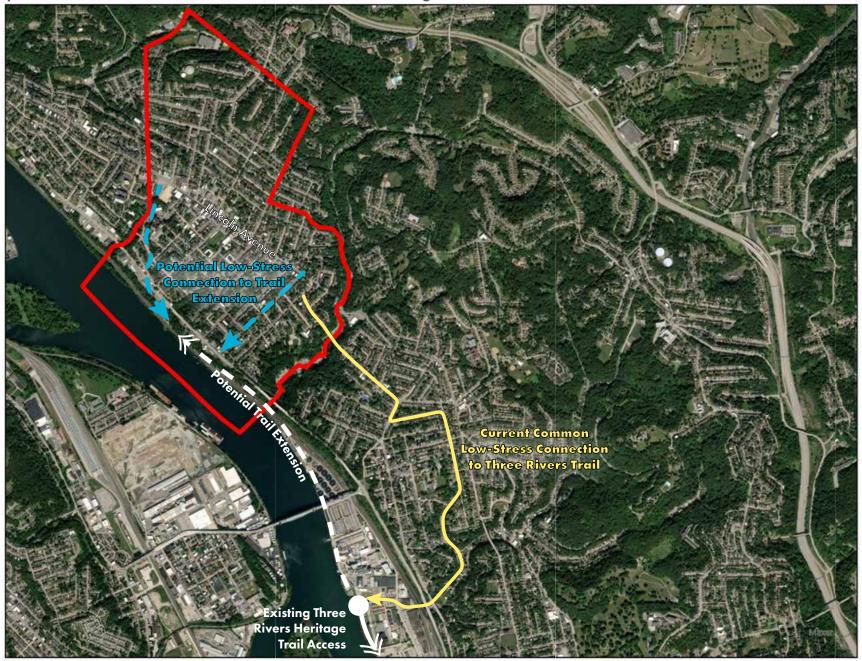
Regional Connections

Transportation functions as a network that does not end at municipal borders. Residents need access to resources beyond the Borough's boundaries. Therefore, it is important to consider additional connections to additional regional resources, and coordination with neighboring municipalities to ensure ongoing regional connectivity. The four following regional connections were identified as the most critical through the engagement process, each of which will require additional studies and design for implementation:

 Pursuing a connection to the Three Rivers Heritage Trail. The Three Rivers Trail represents not only a regional recreational opportunity, but a chance for improved, low-stress connectivity into the City of Pittsburgh. Coordination with the Friends of the Riverfront will be needed to advocate for the extension of the the trail west to Bellevue. Within the Borough, pedestrian improvements and bicycle routes should be identified to guide people to the trail connection. Signage may be used to help indicate desirable paths. Potential connections are identified in the image on the following page. The connection shown is only conceptual and meant to illustrate a potential future opportunity. No funding or design has been committed to this project.

- Conducting a preliminary trail study for a connection to Bellevue Memorial Park. During this planning process, several potential trail alignments were considered, which are summarized in the graphic on page 53. Some of these were informed by previous studies completed by Trail Pittsburgh, which were intended for mountain bike trails. Additional studies, including engineering studies for design and a complete investigation of property ownership will be needed. In coordination, improvements to Balph Avenue/Bellevue Road should also be made to better accommodate safe walking and biking in the area. Suggested improvements are included in greater detail in the Infrastructure Projects Implementation Table. Any of this work would require coordination with Ross Township and Bellevue may be primarily advocating for these connections. The connections shown are only conceptual and meant to illustrate a potential future opportunity. No funding or design has been committed to this project.
- Establishing a safe walking and biking connection to Northgate Middle School and High School. Completing the pedestrian network and identifying bicycle connections should prioritize connections leading to the Middle School and High School.
- Consider the feasibility of a connection to the Giant Eagle along Brighton Road in Ross Township. A potential connection for an off-street trail following the utility easement that extends from the end of Straw Avenue is identified in the Vision Map. While there is established precedence for trails within utility easements, no additional exploration of this trail has been performed, and other alignments will likely need to be considered.

Conceptual Potential Connections to Three Rivers Heritage Trail



Conceptual Potential Connections to Bellevue Memorial Park

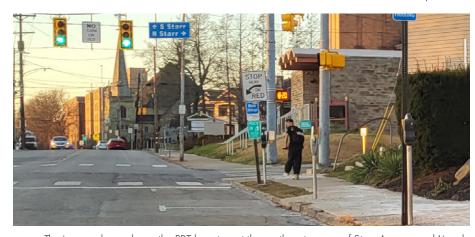


Transit Connections

When considering transit, it is important to think about connections to transit access points or bus stops, which should be provided by complete bicycle and pedestrian networks, as well as the quality of the transit connection. While this Plan does not aim to make changes to existing bus routes, which generally serve the Borough well, bus stops could be improved to enhance the transition from walking and biking to getting on the bus. Existing bus stops were identified as part of the Existing Conditions Report and can be seen in Appendix G. While stops are technically frequent, most of the stops in Bellevue do not have convenient facilities, like bus shelters or benches. In many cases, the bus stops are poorly marked and located with little to no space to stand. They are often poorly lit and lack bicycle parking. Stops are often situated in a way that requires riders to traverse mud and snow and changes in elevation that are not feasible for riders of all ages and abilities. Coordination and collaboration with PRT should be pursued to identify those most heavily used bus stops and upgrade accessibility and the facilities available.



The image above shows a PRT bus stop along Route 65 at the base of stairs that extend from Spring Avenue, which are not accessible to people of all ages and abilities, and are the only access to the stop from the north and from the east. Despite the location along a busy road, there is limited space for riders to wait away from traffic, with a less than 5' wide strip of sidewalk at the base of the stairs. No shelter or bench are provided.



The image above shows the PRT bus stop at the northeast corner of Starr Avenue and Lincoln Avenue. Riders must cross a muddy strip between the sidewalk and the roadway, often referred to as the road verge, to board the bus, and there is no dedicated space to wait for the bus away from traffic and the sidewalk.

<u>VIBRANCY</u>

Overview

In addition to creating a safe and connected network, there are many community benefits to having a robust active transportation network. Active transportation plays a key role in creating vibrant communities by fostering social interaction, economic activity, and a strong sense of place. When people walk, bike, or ride transit, they engage more directly with their surroundings, supporting local businesses, connecting with neighbors, and activating public spaces. This increased street-level activity contributes to a lively, welcoming atmosphere that encourages community pride and participation. Additionally, active transportation reduces traffic congestion, making neighborhoods more pleasant and healthier places to live. Active transportation infrastructure can also incorporate design characteristics that further contribute to community character and health. This Plan aims to engage the community in the active transportation network to harness the many benefits of a safe and connected, multi-modal transportation network. This section will elaborate on the recommendations summarized by the objectives and strategies included.

Vibrancy Goal:

Create healthy, sustainable, aesthetically pleasing, and economically stimulating community streetscapes and natural landscapes that inspire and facilitate walking, biking, and accessing transit.

Objective 3.1: Evaluate the construction or reconstruction of streetscapes, sidewalks, trails, or bikeway projects to identify opportunities for incorporating natural and planted elements.

Strategy 3.1.1: Develop guidelines documenting best management practices for the integration of planted elements in walking and biking infrastructure and other streetscape improvements. Best management practices should include requirements for the use of native species and guidance on invasive species.

Objective 3.2: Promote increased use of active transportation and travel demand management (TDM) strategies to expand modal choice and decrease reliance on single occupancy vehicle travel, creating a more resilient transportation network.

Strategy 3.2.1: Explore options for funding and administering an e-bike voucher program to support increased use of e-bikes.

Strategy 3.2.2: Host Borough or community-led walking and biking events to increase awareness and excitement about walking and biking in the Borough (i.e. Open Streets events, National Bike Month activities, Jane's Walks, etc.).

Strategy 3.2.3: Pursue Walk Friendly Community Designation.

Strategy 3.2.4: Pursue Bicycle Friendly Community Designation.

Strategy 3.2.5: Work with local businesses to pursue Bicycle Friendly Business designations within the community.

Strategy 3.2.6: Develop and implement a Borough-wide Wayfinding Signage Plan that coordinates with local businesses to guide people through the community via any mode of transportation.

Strategy 3.2.7: Develop a Safe Routes to School Program and Walking School Bus Program to promote walking and biking for children.

Objectives and strategies continued on following page.

Objective 3.3: Implement placemaking strategies that create appealing streetscapes and community destinations and contribute to lower stress walking and biking routes.

Strategy 3.3.1: Install contextually appropriate gateway treatments at key locations to signal a transition to a lower-speed environment.

Strategy 3.3.2: Enhance lighting to improve visibility and safety at key locations identified by this Plan.

Section 3.3.3: Explore opportunities for alleyway activation.



Existing streetscape plantings along Lincoln Ave near Sprague Ave. These plantings provide separation between the sidewalk and roadway and create a sense of place. These elements may be utilized in additional locations and expanded on in the guidelines.

Incorporating Natural & Planted Elements

Incorporating natural and planted elements into streetscapes can help to create a sense of place, while providing additional benefits like buffering and stormwater management. The installation of plantings, in the form of street trees, shrubs, or even planters can help to narrow roadways, either physically reducing lane width or by creating the perception of a narrowed area, forcing drivers to slow down, creating a safer space for walkers and bicyclists. The incorporation of native species can help to reflect the surrounding natural environment, contributing to the local identity.

Several resources exist to help guide the inclusion of natural and planted elements in streetscape design. The best method will be for the Borough to develop and adopt design guidelines for streetscapes that consider these elements. The National Association of City Transportation Officials (NACTO) provides guidance on many of these design elements, generally focusing on walking and biking infrastructure and safety, but incorporating stormwater management and planning considerations. Guidelines for street tree plantings, considering most successful species should also be considered. Guidelines should also consider the use of structure soils, which provide a load-bearing substrate for sidewalks, while supporting urban trees. The Borough has also had initial discussions about invasive species mitigation, which should be incorporated into the eventual guidelines.

Finally, maintenance requirements must also be considered as part of the cost of any project, taking into consideration the cost of any specialized equipment that may be needed. Maintenance may be offset in part through resident support. Penn State University Extension offers a Tree Tenders Training program which trains concerned citizens on how to help restore and maintain urban tree canopies.

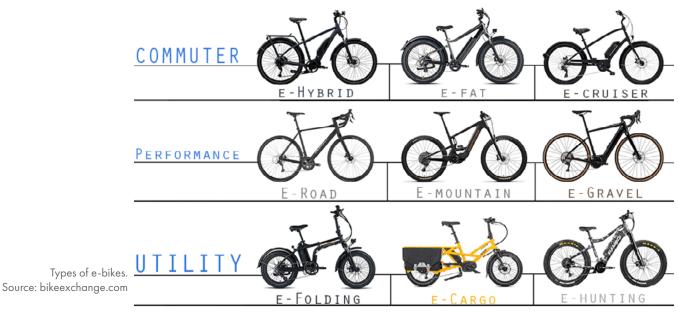
Promoting Increased Use of Active Transportation

Electric Bikes

Electric bikes, more commonly referred to as e-bikes, play a critical role in motivating people to bike more, especially in Southwest Pennsylvania where many people cite steep slopes as one of the factors preventing them from biking more. E-bikes may not only help to overcome slopes but can facilitate longer trip distances and make it easier to transport additional loads or children. The support of electronic assistance may also help more people with limited physical strength or mobility to bike.

While there are many benefits to using e-bikes, this new technology may be concerning for some and financially unreasonable for others. Recognizing that while there are barriers, e-bikes are far more attainable/maintainable than cars, and have many other economic and health benefits, state,

regional, and municipal governments have developed voucher programs to offset the purchase cost. Examples include Washington D.C., Atlanta, Boston, Austin, Boulder, and many others, especially in California. Most programs offer a rebate for the purchase of an e-bike, with varying values based on type of bike (standard versus cargo) and/or based on recipient income (i.e. increased rebate values for qualifying low-income recipients). Recipients generally must be at least 18 years old and are limited to one rebate per year. In some cases, programs are limited to specific retailers, which can help to direct spending back to local businesses. These programs often offer additional information about e-bikes, helping to inform people about the options available. Additional information may help some people overcome concerns about the new technology. This type of program may be most beneficial if administered at the regional level. Coordination with the Southwestern Planning Commission (SPC) and Allegheny County is advised.



Community Events & Designations

Raising awareness of walking, biking, and transituse through encouragement activities can help to increase safe use of these modes. There are many options and opportunities, some include:

- Sidewalk Chalk Campaign Use sidewalk chalk or temporary paint to add inspirational messages, fun facts, or wayfinding markers along popular walking and biking routes.
- Week Without Driving Challenge Pass a Borough proclamation declaring a Week Without Driving in Bellevue Borough and encourage people to participate in the challenge.
- Open Streets Event Host Open Streets events in conjunction with Avalon and Brighton Heights (to meet the recommended route length for Open Streets events).
- Walking/Biking Tours Develop self-guided or guided walking or biking tours highlighting historical sites, public art, community gardens, or cultural landmarks.
- Trail or Road Race- Host a race through Bellevue, allowing people to directly experience walking and running in the community.
- Bike Rodeo Hold an event where kids practice bike handling skills, learn road safety, and get free helmet fittings or bike tune-ups.
- Bike Safety + Skills Classes Offer hands-on classes for riders of all ages and experience levels, covering bike handling, safety, and road-sharing best practices for both people who bike and drivers, including e-bike considerations.
- National Bike Month (May) Organize a community bike ride during National Bike Month.
- Jane Jacobs Walk (May) Host a screening of a Jane Jacobs documentary, followed by a guided walk to explore urban design and community dynamics.

When surveyed during Open House #2, participants were most interested in walking and biking tours, Open Streets Events, and a Jane Jacobs Walk.

In addition to these events, achieving Walk and Bicycle Friendly Community designations and working with businesses to obtain Bicycle Friendly Business designations can also help to bring awareness and increase participation. The Bicycle Friendly Communities and the Bicycle Friendly Business programs are operated by the League of American Bicyclists. As part of the Bicycle Friendly Communities Program, communities must apply and may be accepted with bronze, silver, gold, or platinum status. As part of the application process, communities will receive input about potential improvements. Bicycle Friendly Businesses operates similarly, but allows businesses to gain a ranking based on how they contribute to safe biking in the community. Both of these programs require re-certification every four years. While currently on hiatus, Walk Friendly Communities is operated by the University of North Carolina Safety Research Center. When operational, communities may apply to the program and receive input about potential improvements to their network as part of the response. Walk Friendly's guidlines are available on their website and may be used as guidance even without official involvement. Participation in these programs signals to walkers and bikers that the community is invested in their needs, which can stimulate both active transportation and economic activity in the Borough.



Kids participating in a bike rodeo hosted by the Venango County Sheriff and PennDOT.

Source: YourErie.com

Wayfinding signage helps direct people to safer, more accessible walking and biking routes. These signs may also be used to direct people to other community resources, buildings, or local businesses along the identified routes. While this is a relatively simple concept, wayfinding is best implemented through a boroughwide plan that creates a consistent image and holistic network of signage, coordinated with the network of walking and biking infrastructure. A consistent image helps people to orient themselves and identify signage throughout the community. Establishing a consistent image for boroughwide signage can also help to reinforce the Borough's brand and identity and contribute to a sense of place, which encourages community unity and participation. The image below depicts one example of wayfinding signage designed for Tionesta Borough in Northwestern Pennsylvania, using consistent community branding.

Safe Routes to School Program

Safe Routes to School (SRTS) programs aim to make it safer, easier, and more enjoyable for students to walk and bike to school. These programs bring together schools, families, local governments, and community organizations to improve infrastructure, educate students and drivers, and promote active transportation. SRTS can also identify and prioritize infrastructure improvements needed to improve safe connections to schools and acquire and allocate funding to these projects. This program should include the Borough and Northgate School District and may involve or even be organized by a community organization. As part of a SRTS program or as a standalone project, a walking or biking school bus may be formed. A walking or biking school bus gathers students together to take active modes of transportation to school and may be organized by community and school parent volunteers. As a volunteer program, the cost is minimal, but the organization of committed volunteers may be difficult, and there may be some liability concerns, so the School District should be consulted.



An example of a signage package, including wayfinding signage, developed for Tionesta Borough, PA.

Placemaking

In general, placemaking is a multi-faceted approach to capitalize on a community's assets, with the intention of creating dynamic public spaces that promote public health, happiness, and well-being. Placemaking design strategies can be used to create more appealing streetscapes and community destinations and contribute to lower stress walking and biking routes.

One opportunity for the incorporation of these techniques is the development of gateway treatments at key locations. Gateway treatments are used to signal to drivers that they are transitioning to a local street from a higher speed roadway. These treatments may consist of a variety of engineering and design elements that remind roadway users that bicyclists and pedestrians may be present in the area. The proposed improvements would include visual and physical cues for drivers to reduce their speed, like the physical or perceived narrowing of travel lanes, gateway signage, plantings, and other elements, which may vary based on the specific nature of the street. This plan suggests incorporating these features at the eastern and western entrances to the Borough along Route 65/Ohio River Boulevard, and the entrances to Borough along Lincoln Ave.

The incorporation of additional lighting can also create more comfortable spaces not only to walk and bike, but also to gather as a community. Lighting should be designed and placed to focus on illuminating walking and biking paths, focusing on smaller scale lighting than usual roadway illumination. While extensive lighting is generally not necessary or desirable in residential areas, it may be beneficial along commercial corridors, like Route 65/Ohio River Boulevard, portions of Starr Avenue, and the eastern portion of Lincoln Avenue, east of Harrison Avenue.

Finally, alleyway activation should be considered as a means for creating safe and enjoyable spaces to walk and engage with the community. Alleyway activation refers to the transformation of alleys through aesthetics, accessibility, lighting, ecology, and/or transportation. These treatments signal to the community that these are spaces intended for their use and allows the alley to serve as public space with unique character and added value to the area. Throughout Bellevue, especially in the downtown area around Lincoln Avenue, there are several alleys that should be considered for this type of activation, considering how they may more effectively contribute to the walking and biking network, as safe, comfortable, and enjoyable connections.





An example of an activated alley in Upper Darby, PA Source: AARP Livable Communities Blog, "Meet Us in the Alley!"

IMPLEMENTATION & FUNDING

Overview

The goals, objectives, strategies, and projects included in this Plan will take many years to fulfill. Successful implementation will require ongoing coordination and collaboration with a variety of partners. Funding from external sources, as well as the development of strategic internal funding structures will be needed to enable these efforts. In the end, the implementation of these recommendations will forge the path for making Bellevue a more vibrant, walkable and bikeable community for all its residents and visitors. This section provides valuable details to assist with the implementation of these recommendations.

Funding

Implementation of the proposed recommendations will require significant funding, at least a portion of which will likely need to come from external sources. This section lays out potential external funding sources that are appropriate for active transportation improvements, as well as additional recommendations for potential internal funding structures.

The table on the following page provides a list of external funding opportunities, which should be considered for implementation of the recommendations in this plan. This table provides a variety of funding sources available at the national, state, regional, and local levels. However, this list may not be all encompassing. Federal funding has not been included as many relevant programs have been discontinued. SPC

also offers up to date, detailed information about potential funding sources through the "Resources & Tools," page on SPC's website (https://www.spcregion.org/resources-tools/funding-programs/).

The Commonwealth Financing Authority's (CFA) Multimodal Transportation Fund (MTF) is the go-to program at the State level for funding development, rehabilitation, and enhancement of existing transportation assets. This program funds projects with a total cost of at least \$100,000, with a maximum grant request of \$3 million; partial awards are common. Consideration should be given to the competitive viability of combining smaller improvement projects. The CFA MTF Program typically requires a 30% match; however, there is a municipal match waiver in place through the end of 2025, which has the possibility to be extended. It is important to note that legislative support will be important in securing funding awards through the CFA.

The PennDOT offers their own MTF Program, as well as a Transportation Alternatives Set-Aside (TASA) Program to fund transportation improvements. The PennDOT MTF Program requires a 30% match for grant requests up to \$3 million. While the PennDOT TASA Program will fund 100% of construction costs up to \$1.5 million, the Borough should be prepared to fund pre-construction costs, such as design and permitting. The PennDOT TASA Program is only open every other year and is currently only funded through 2026. The 2025 funding application cycle opens on July 14, 2025 and final applications will be due on October 31, 2025.

Table of Potential Funding Sources

| Agency | Program Name | Grant (% Funded) or Loan | Brief Description | Open Funding Round (Typical) |
|---|--|-----------------------------|---|---|
| Commonwealth Financing Authority (CFA) | Multimodal Transportation Fund (MTF) | Grant (70%) | Development, rehabilitation, and enhancement of transportation assets. | Due in July |
| PA Dept. of Transportation (PennDOT) | Multimodal Transportation Fund (MTF) | Grant (70%) | Transportation and related improvements for transportation assets that enhance communities, pedestrian safety, and transit revitalization. | Due in November |
| PA Dept. of Transportation (PennDOT) | Transportation Alternatives Set- Aside (TASA) Program | Grant (100%) | Funding for projects defined as transportation alternatives, including pedestrian and bicycle facilities, public transportation infrastructure projects, safe routes to school projects, etc. | Varies |
| Allegheny County Economic Development | Active Allegheny Grant Program | Grant (80-100%) | To develop community plans and design transportation projects that will provide bicycle and pedestrian connections to critical local destinations and transportation systems and increase residents' opportunities for physical activity. | Due in November |
| Redevelopment Authority of Allegheny County | Gaming Economic Development Tourism Fund (GEDTF) | Grant | Distributed from gaming funds to support economic development projects in Allegheny County, including transportation. | Varies |
| Commonwealth Financing Authority (CFA) | Local Share Account (LSA) – Statewide | Grant (100%) | Distributed from gaming funds to support economic development projects, community improvement projects, and projects in the public interest, including transportation. | Due in November |
| Southwestern Pennsylvania Commission | Transportation Alternatives Set- Aside (TASA) Program | Grant | Transportation alternatives projects to include on and off road pedestrian and bicycle facilities, infrastructure projects for improving non-driver access to public transportation and enhanced mobility, community improvement activities, recreational trail programs projects, safe routes to school projects, etc. | Varies |
| PA Dept. of Transportation (PennDOT) | Automated Red Light Enforcement (ARLE) Funding Program | Grant (100%) | Improvements to traffic control signals and related intersection traffic control improvements. | Due in June |
| PA Dept. of Transportation (PennDOT) | Green Light Go | Grant (80%) | Financial assistance for existing traffic signal maintenance and operations activities. | Due in February |
| PA WalkWorks | WalkWorks Funding Program | Grant | Development of active transportation plans and related policies – pedestrian, bicycle, and transit transportation systems that increase connectivity (planning projects only). | Varies |
| PA Dept. of Community and Economic Development (DCED) | Municipal Assistance Program (MAP) | Grant (50%) | Community planning efforts, including developing or updating land use ordinances, Transit Revitalization Investment District (TRID) planning studies, planning studies that support community and economic development, and/or multi-modal planning efforts (planning projects only). | Spring Round- Due in March Fall Round- Due in September |
| AARP | Funds quick-action projects that can help communities become more livable for people of all ages, specifically the needs of people 50-plus. Project types include transportation, parks, and community resilience. Capacity building micro-grants and demonstration project grants are also available. | | Varies | |
| T-Mobile | Hometown Grants Program | Grant | Funds projects to build, rebuild, or refresh community spaces that help foster local connections in your town. Projects should be shovel-ready, physical builds or improvements that can be completed within 12 months of receiving Hometown Grants funding. | Due Quarterly |

Table of Potential Funding Sources Continued

| Agency | Program Name | Grant (% Funded) or Loan | Brief Description | Open Funding Round (Typical) |
|--|---|-----------------------------|---|---------------------------------|
| PeopleForBikes | Industry Community Grant Program | Grant | Supports bicycle infrastructure projects and targeted advocacy initiatives that make it easier and safer for people of all ages and abilities to ride. | Varies |
| Appalachian Regional Commission (ARC) | Area Development Program | Grant | Projects that create and retain jobs in the Appalachian Region: this program helps communities recover from declines in coal and manufacturing sectors and transition to new industries. Critical infrastructure investments include transportation networks. | Varies |
| PA Dept. of Transportation (PennDOT) | PA Infrastructure Bank | Loan | Transportation projects (aviation, highway/bridge, rail freight, and transit), including complete streets and intermodal facilities. | Varies |
| Commonwealth Financing Authority (CFA) | Greenways, Trails and Recreation | Grant (85%) | Planning, acquisition, development, rehabilitation, and improvements to public parks, recreation areas, greenways, trails, and rivers conservation. | Due in May |
| PA Depart. of Conservation and Natural Resources (DCNR) | Community Conservation Partnerships Program (C2P2) | Grant (50%) | Planning, acquisition, and development of public parks, recreation areas, trails, river conservation, and access/conservation of open space. | Spring |

It will be important to apply for appropriate funding sources when implementing each recommendation to ensure the competitiveness of each project. In addition to eligible project types, it is important to understand funding amounts. Many funding programs will only qualify for planning projects, and only certain projects will qualify for lower budget construction projects, like the installation of dynamic speed feedback signs. For example, the Active Allegheny Grant Program (AAGP) provides a smaller pool of money and is more appropriate for small projects. The next AAGP application cycle is expected in Fall 2026.

As previously mentioned, the creation of a sidewalk improvement program can help fund sidewalk improvements associated with private properties. While funds and staff time will be needed to support and maintain the program, by assisting property owners with the installation and maintenance of their sidewalks, the overall network will be improved without having to rely on project specific grant funding. The pursuit of external funds also

requires staff time to pursue and administer, while only resulting in a small improvement area. By establishing an internal funding source to assist with adjacent property owners with the maintenance of their sidewalks, applications for external funding can be focused on larger improvement projects to create new connections or redevelop facilities to make them more comfortable and accessible for users of all ages and abilities.

Finally, funding for education and engagement efforts may be the most difficult to obtain. Some funding sources provide for these efforts, like AARP Community Challenge Grants. However, ongoing events and campaigns will require ongoing resources. Educational materials, printed handouts, and giveaways are needed to help spread information about keeping people involved, and the cost adds up. Sponsorships from private organizations and public partnerships may be a viable option for supporting these efforts. Partnerships will also be needed to support the time required to organize and staff these efforts. That will be discussed in the following section.

Implementation

In addition to understanding potential funding sources, implementation of the recommendations in this Plan will require the pursuit of partnerships and an understanding of realistic implementation timelines. An implementation table has been created for each goal, including the objectives and associated strategies. Within these tables, performance metrics, potential partners, a relative opinion of probable cost, a timeframe for implementation, and potential funding strategies have been identified for each strategy.

Project implementation will require coordination with critical partners. In some cases, coordination with state agencies like PennDOT and DCED will be necessary to ensure proper permitting or funding for the project. For other projects, the support of local organizations and volunteers will be needed to facilitate programs and events. Early and ongoing communication with all of these groups will help support successful implementation.

The objectives and strategies have not been prioritized. The timeframe provided instead indicates when it will be most feasible to consider each project based on the required resources, political support required, or funding cycles. The timeframes used are based on the phases below. It will be important to keep all of the projects in mind when considering funding applications and capital planning for the Borough. While a long-term project may not be completed for ten years, considerations for its implementation may need to start much sooner.

- Immediate (1-2 years)
- Short-term (2-5 years)
- Long-term (6-10+ years)

The funding levels corresponding to the opinion of probable cost provided in the table are included below. Given the nature of this Plan, cost ranges have been provided, and more specific price estimates will require more detailed studies for specific projects.

- \$ = \$0 to \$50,000
- \$\$ = \$50,001 to \$250,000
- \$\$\$ = \$250,001 to \$1,000,000
- \$\$\$\$ = \$1,000,001 to \$2,000,000
- \$\$\$\$ = More than \$2,000,000

Moving forward, Borough staff, officials, and their partners can use these implementation tables as a framework to identify projects based on the resources available at that time. The performance metrics provided should be used to track progress, ideally with annual reporting of progress and accomplishments. Overall, the following tables should serve as valuable tools for implementing the overall goals and purpose of this Plan.

Safety Goal Implementation Table

| Objective | Strategy | Performance Measures (Metrics/Indicators) | Potential Partners | Opinion of Probable Cost | Timeframe for Implementation | Potential Funding Strategy |
|---|--|---|---|---|---------------------------------|---|
| Work to eliminate fatal and | Update or develop and adopt municipal policies, ordinances, and codes to align with and advance active transportation goals. | Creation and adoption of Vision Zero Resolution. Creation and adoption of Complete Streets Policy. Creation and adoption of Design Standards. Creation and adoption of Construction Zone Policy. Creation and adoption of Bike Parking Ordinance. In-depth review of local ordinances. Adoption of amendments to Ordinance 235. | Bellevue Borough, Bona Fide Bellevue, SPC, Third Party Consultant | \$ | Immediate/Short-Term* | PA WalkWorks, DCED MAP Grant |
| 1.1 serious crashes between vehicle and pedestrians or cyclists. | Enhance safety by implementing a combination of contextually appropriate traffic calming, roadway and crossing 1.1.2 design treatments at key locations, as indicated by the specific recommendations in the Safety Chapter of this Plan. | See Projects Implementation Table. | Bellevue Borough, SPC, PennDOT, Third Party Consultant | Variable (See Projects Implementation Table) | | · . |
| Participate in active transportation and road safety training sessions to stay up to date on best 1.2 practices and innovative designs to enhance road safety and implement active transportation solutions. | Encourage elected municipal leaders and staff to participate in training sessions sponsored by PennDOT's Local Transportation Assistance Program (LTAP) program -these sessions are provided at no cost for municipalities. | Number of PennDOT LTAP training sessions attended. | Bellevue Borough, SPC, Bona Fide Bellevue | Minimal Cost | Immediate | Borough Staff Time |
| Promote safer speeds through 1.3 targeted education, and outreach | Sponsor education and outreach campaigns to increase awareness of traffic laws and safe riding and driving habits for biking, e-bikes, and motorists, fostering safer interactions between all road users, at all ages. | Number of education events hosted. Number of outreach events hosted. Number of people reached through education campaign.** Number of people reached through outreach campaign.** | Bellevue Borough Police Department, Bona Fide Bellevue, BikePGH, Bellevue Forward, Northgate School District, Andrew Bayne Memorial Library | \$ | Immediate/Ongoing | AARP Community Challenge Grants, PeopleForBikes Industry Community Grant Program |
| targeted education, and outreach campaigns. | Install dynamic speed feedback signs to alert drivers of their current speed and encourage compliance with posted speed limits. Consider installation of dynamic speed feedback signs at the locations identified by this Plan. | Number of speed feedback signs installed. Percent reduction in crashes at the locations of speed feedback signs. | Bellevue Borough, SPC, PennDOT | \$ | Short Term | SPC TASA, PennDOT TASA, DCED MTF, Active Allegheny Grant Program |

^{*} The development and adoption of resolutions and policies may occur more quickly than the amendment of municipal policies and codes.

^{**} This may be measured as a combination of the number of materials distributed and the number of attendees at related events.

Connectivity Goal Implementation Table

| Objective | Strategy | Performance Measures (Metrics/Indicators) | Potential Partners | Opinion of Probable Cost | Timeframe for Implementation | Potential Funding Strategy |
|---|--|--|---|-----------------------------|---------------------------------|---|
| | Perform a complete inventory of the sidewalk network, identifying missing portions of sidewalk and areas of poor 2.1.1 condition. This inventory should be updated at least every 3 to 5 years, but the process may consider the use of volunteers to help update data regularly. | Miles of sidewalk inventoried/assessed, annually. Regular update of sidewalk quality report. | Bellevue Borough, Bona Fide Bellevue, Third Party Consultant | \$/\$\$ | Short-Term/Ongoing | Staff Time/General Fund* |
| Create and maintain a safe, comfortable, and connected pedestrian network in the Borough. | Develop a plan to fill or replace portions of sidewalk that are missing or in poor condition, and create a complete, comfortable sidewalk network that may be used and enjoyed by pedestrians of all ages and abilities. The network may also consider other appropriate pedestrian infrastructure, as discussed by this Plan. | Miles of sidewalk installed, annually. Miles of sidewalk replaced or repaired, annually. Number of curbramps repaired or replaced, annually. Additional pedestrian improvement projects implemented, annually. | Bellevue Borough, Private Property Owners | \$\$\$\$\$ | Short-Term/Ongoing | See Funding Table for Construction Funding, Borough Sidewalk Improvement Program |
| | Develop a Sidewalk Maintenance 2.1.3 Schedule to help ensure ongoing quality sidewalk connections. | Establishment of a Sidewalk Maintenance Schedule. Number of miles of sidewalk maintained annually. | Bellevue Borough | \$ | Short-Term/Ongoing | Staff Time |
| | Explore opportunities for funding and administering a sidewalk improvement program to assist property owners with installation and repair costs. | Implementation of a sidewalk improvement program. Miles of sidewalk improvements funded, annually | Bellevue Borough, Bona Fide Bellevue, Private Property Owners | \$\$ | Short-Term/Ongoing | Staff Time, External Funding Needed for Initial Investment |
| Create and maintain a safe, 2.2 comfortable and connected bicycling network in the Borough. | Assess the borough's street network and identify opportunities for the development of direct and convenient bicycle routes through the use of strategies identified by this plan. These efforts will require a Circulation Study to be performed, to consider the flow of the overall transportation network. | Miles of bicycle infrastructure installed, annually | Bellevue Borough, Bona Fide Bellevue, SPC, PennDOT | \$\$\$\$\$ | Short-Term | See Funding Table for Construction Funding |

^{*} The need for funding will depend on the determined implementation process. The use of a consultant will require more funding than completing the inventory and assessment with the help of volunteers.

Connectivity Goal Implementation Table Continued

| Objective | Strategy | Performance Measures (Metrics/Indicators) | Potential Partners | Opinion of Probable Cost | Timeframe for Implementation | Potential Funding Strategy |
|---|---|--|---|-----------------------------|---------------------------------|--|
| | Install and maintain high-visibility 2.3.1 crosswalk treatments at key marked crosswalks. | Number of high-visibility crosswalks installed, annually. Number of high-visibility crosswalks maintained, annually. | Bellevue Borough, PennDOT | \$/\$\$ | Short-Term | Some upgrading may be funded as part of construction projects. Maintenance of striping will need be be funded by the Borough. |
| Improve walking and biking 2.3 crossings to create a safer walking and biking network. | Consider Leading Pedestrian Intervals (LPI) at appropriate intersections, including but not limited to the intersectior of Lincoln Ave and Starr Ave, the intersection of Lincoln Ave and Balph Ave the Bellevue Elementary School Zone, and the intersection of Lincoln Ave and Fremont Ave. | Number of intersections considered for LPI installation. , Number of intersections with LPI installed. | Bellevue Borough, PennDOT, Third Party Consultant | \$\$ per intersection | Short-Term | PennDOT Green Light Go or ARLE*, May be considered as part of larger construction projects |
| | Coordinate with Friends of the Riverfront and any other necessary agencies or land owners to pursue a connection to the Three Rivers Heritage Trail. | Number of coordination efforts with relevant partners. Fulfillment of initial study identifying preferred connection. | Bellevue Borough, Friends of the Riverfront, Bona Fide Bellevue, BikePGH, Relevant property owners and neighboring municipalities | \$\$\$** | Long-Term | Staff Time |
| Establish safe and convenient connections to desirable resources beyond the Borough's boundaries. | Conduct a preliminary trail location study to identify the feasibility of constructing a safe, off-street connection to Bellevue Memorial Park. | Completion of initial route investigation and study. | Bellevue Borough, Bona Fide Bellevue, Ross Township, Bellevue Memorial Park Trail Group | \$\$*** | Short-Term | See Funding Table for Construction Funding |
| | Establish safe walking and biking 2.4.3 connections to Northgate Middle School and High School. | Completion of initial route investigation and study. Creation of walking and biking connections. | Bellevue Borough, Northgate School District | \$\$*** | Long-Term | See Funding Table for Construction Funding |
| | municipalities to ensure safe walking and municipalities. | Number of additional walking and biking connections | Bellevue Borough, Neighboring Municipalities, Bona Fide Bellevue | Variable | Long-Term | See Funding Table for Construction Funding |
| 2.5 Enhance transit infrastructure and improve access. | Work with Pittsburgh Regional Transit (PRT) to improve infrastructure at heavily used stops, including the addition of bike parking and other amenities. | Number of bus stops improved, annually | Bellevue Borough, PRT | Minimal Cost | Long-Term | Staff Time |

^{*} These funds may require a scope that considers additional signal timing review to be competitive.

^{**} Consideres cost of coordination and defining a connection within Bellevue's boundaries. It does not include any contribution to the extension of the Three Rivers Heritage Trail.

^{***} Consideres cost of preliminary study with initial engineering considerations only. Opinion of probably cost for engineering, design, and construction is \$\$\$\$\$.

^{****} Considers cost of initial study to identify route and coordination with partners. Opinion of probably cost for engineering, design, and construction is \$\$\$\$\$.

Vibrancy Goal Implementation Table

| Objective | Strategy | Performance Measures (Metrics/Indicators) | Potential Partners | Opinion of Probable Cost | Timeframe for Implementation | Potential Funding Strategy |
|--|---|---|---|--------------------------|------------------------------|---|
| Evaluate the construction or reconstruction of streetscapes, sidewalks, trails or bikeway projects to identify opportunities for incorporating natural and planted elements. | Develop guidelines documenting best management practices for the integration of planted elements in walking and biking infrastructure and other streetscape improvements. Best management practices should include requirements for the use of native species and guidance on invasive species. | Development of guidelines. | Bellevue Borough, Bona Fide Bellevue, SPC, Third Party Consultant | \$/\$\$ | Short-Term | Some planning grants may apply, but general funds and staff time will likely be needed. |
| | Explore options for funding and 3.2.1 administering an e-bike voucher program to support increased use of e-bikes. | Number of e-bikes acquired by Bellevue residents after adoption of program. | Bona Flde Bellevue, SPC | - | Short-Term | Will need to explore viable funding sources. |
| Promote increased use of active | Host Borough or community-led walking and biking events to increase awareness and excitement about walking and biking in the Borough (i.e. Open Streets events, National Bike Month activities, Jane's Walks, etc.). | Number of walking and biking events held, annually. | Bona Fide Bellevue, BikePGH, Bellevue Forward, Bellevue Borough Police Department | \$ | Immediate/Ongoing | AARP Community Challenge Grants, PeopleForBikes Industry Community Grant Program, Additional funding and support from sponsors and community groups |
| transportation and travel demand management (TDM) strategies to | 3.2.3 Pursue Walk Friendly Community Designation. | Application submitted. | Bellevue Borough, Bona Fide Bellevue | Minimal Cost | Short-Term | Staff Time |
| 3.2 expand modal choice and decrease reliance on single occupancy vehicle travel, | 3.2.4 Pursue Bicycle Friendly Community Designation. | Application submitted. | Bellevue Borough, Bona Flde Bellevue, BikePGH, SPC | Minimal Cost | Short-Term | Staff Time |
| creating a more resilient transportation network. | Work with local businesses to pursue 3.2.5 Bicycle Friendly Business designations within the community. | Number of businesses that have submitted applications, annually. | Bellevue Borough, Bellevue Forward, Local Business Owners | Minimal Cost | Short-Term | Staff Time |
| | Develop and implement a Borough-wide Wayfinding Signage Plan that 3.2.6 coordinates with local businesses to guide people through the community via any mode of transportation. | Plan developed. | Bellevue Borough, Bona Fide Bellevue, Bellevue Forward, Third Party Consultant | \$\$* | Short-Term | DCED MAP Grant, Active Allegheny Grant Program |
| * Cost may increase with implement | Develop a Safe Routes to School Program 3.2.7 and Walking School Bus Program to promote walking and biking for children. | Plan developed. | Bellevue Borough, Northgate School District, Bona Fide Bellevue, BikePGH | \$/\$\$ | Short-Term | DCED MAP Grant, Active Allegheny Grant Program |

^{*} Cost may increase with implementation, including permitting.

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Vibrancy Goal Implementation Table Continued

| Objective | Strategy | Performance Measures (Metrics/Indicators) | Potential Partners | Opinion of Probable Cost | Timeframe for Implementation | Potential Funding Strategy |
|--|---|--|--|-----------------------------|---------------------------------|---|
| | Install contextually appropriate gateway 3.3.1 treatments at key locations to signal a transition to a lower-speed environment. | Gateway treatments designed and constructed. Percent reduction in crashes at the locations of gateway treatments. | Bellevue Borough, Bona Fide Bellevue, SPC, PennDOT | \$\$\$\$/\$\$\$\$\$* | Long-Term | See Funding Table for Construction Funding |
| Implement placemaking strategies that create appealing streetscapes and community destinations and contribute to lower stress walking and biking routes. | Enhance lighting to improve visibility and 3.3.2 safety at key locations identified by this Plan. | Number of locations with improved lighting, annually. | Bellevue Borough, Bona Fide Bellevue, SPC, PennDOT | \$\$** | Short-Term | May be combined with larger improvement projects to be included with construction costs, otherwise may need to be funded by the Borough. |
| | 3.3.3 Explore opportunities for alleyway activation. | Plan for alleyway activation developed. | Bellevue Borough, Bona Fide Bellevue, Bellevue Forward | Variable | Long-Term | See Funding Table for Construction Funding |

^{*} Cost will vary greatly based on specific treatments proposed, but probable cost shown considers design, engineering, permitting, and construction.

^{**} Cost may increase with implementation, including permitting.

Projects & Project Prioritization

While the implementation tables provide details for the goals, objectives, and strategies, which incorporate larger project related concepts, specific infrastructure projects have their own implementation considerations. This section provides a summary of guidance for specific projects included throughout the Plan. The tables on the following pages provide that summary, including projects broken down by specific elements, their priority level for implementation, potential partners, opinion of probable cost, timeframe for implementation, potential funding strategies, and general project location. Location may be used during implementation to group projects. Creating larger construction projects may be more efficient and more competitive when pursuing some grant sources.

The projects included in these tables were prioritized based on input received from the Steering Committee and members of the public throughout the planning process. While projects may have been given a high priority level for implementation based on their importance to the public and potential for benefit to the overall network, they may still have a long-term timeframe for implementation given the complexity of the project. A good example of this would be improvements to Route 65/ Ohio River Boulevard. While this is proposed to take place in a phased nature where some basic improvements may occur within one to two years, significant improvements will take many years to coordinate the necessary support and approvals, complete design and engineering, and acquire the necessary funding, before construction even begins.

For all the identified projects, more detailed funding plans will be needed. In many cases, depending on the project, an engineer or a third-party consultant may be needed to provide support, including more detailed construction drawings for infrastructure improvements, assistance with rewriting ordinances, etc. These cost estimates should be prepared closer to the time of actual implementation to help ensure accurate estimates based on current costs and specific demands for the project at that time.

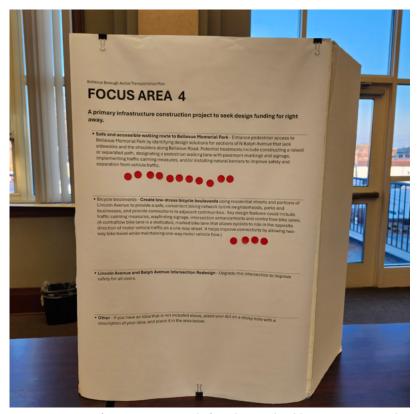


Image of voting exercise results from the March Public Open House #2 that helped to inform project prioritization.

Infrastructure Projects Implementation Table

| Project | Project Element | Priority Level | Potential Partners | Opinion of Probable Cost | Timeframe for Implementation | Potential Funding Strategy | Location |
|--|--|-----------------------|---|-----------------------------|------------------------------|--|--|
| Install high-visibility crosswalks at key | Identify priority locations. Consider high crash or high-stress intersections listed in the Connectivity chapter. | | Bellevue Borough, | ¢ /¢¢ | | Local road maintenance funds, unless included with larger | |
| locations | Perform crosswalk painting to install or maintain ladder or continental style high-visibility painting. | High | PennDOT | \$/\$\$ per crosswalk | Immediate | construction funds application; AARP Community Challenge Demonstration Grants. | Boroughwide |
| Mark crosswalks across access drives | Perform crosswalk painting to install or maintain ladder or continental style high-visibility painting. | Low | Bellevue Borough, PennDOT | \$/\$\$ per crosswalk | Long-Term | Local road maintenance funds, unless included with larger construction funds application; AARP Community Challenge Demonstration Grants. | Boroughwide |
| Upgrade the current treatment of the mid block crossing in the Bellevue Elementary School Zone along Lincoln Ave. | Enhance pedestrian safety and visibility by installing extensions to visually and physically reinforce the space. Temporary installation may be considered using paint and bollards or decorative planters, without engineering, but long-term installations would involve officials plans. | Highest | Bellevue Borough, Northgate School District | \$/\$\$ | Immediate | Local road maintenance funds, unless included with larger construction funds application; AARP Community Challenge Demonstration Grants; PennDOT TASA (construction of permanent features) | Lincoln Ave at Bellevue Elementary School |
| | Explore the installation of a rectangular rapid flashing beacon (RRFB) at the midblock crossing. | | | \$\$ | Immediate/Short-Term | See funding table. | |
| | Identify critical locations based on sidewalk audit. | | | Minimal Cost | | Staff Time | |
| Replace deteriorated curb ramps at key intersections | Create plan to update curbramps in coordination with roadway improvements. | Medium | Bellevue Borough, PennDOT | Minimal Cost | Long-Term | Staff Time | Boroughwide |
| | Improve curb ramps, including engineering and construction cost. | | | \$/\$\$ per curb ramp | | See funding table for construction funding. | |
| Improve transit infrastructure and access | Identify the most heavily used bus stops and work with PRT to install amenities, such as shelters, benches and/or bike parking and improve access. | Low | Bellevue Borough, PRT, Bona Fide Bellevue | Minimal Cost | Long-Term | Staff Time | Boroughwide |

Infrastructure Projects Implementation Table Continued

| Project | Project Element | Priority Level | Potential Partners | Opinion of Probable Cost | Timeframe for Implementation | Potential Funding Strategy | Location |
|---|--|-----------------------|--|-----------------------------|---------------------------------|---|---|
| Install shared lane markings and bike signage along Lincoln Ave. | Identify appropriate locations for signage. Install signage. Installed shared lane markings. | High | Bellevue Borough | \$\$ | Immediate | See funding table for bicycle infrastructure funding. Project likely smaller than most construction grants. | Lincoln Ave |
| Stripe parking lanes along Lincoln Ave from Harrison Ave to Jacks Run Bridge. | Stripe lanes. | Medium | Bellevue Borough, Bona Fide Bellevue | \$/\$\$ | Short-Term | Local road maintenance funds, unless included with larger construction funds application; AARP Community Challenge Demonstration Grants. | Lincoln Ave |
| Create a safe and accessible connection to Bellevue Memorial Park. | Perform a study to identify the perferred connection alignment and create design and construction plans. Identify design solutions for sections of N Balph Ave to incorporate sidewalks and paved shoulders. Consider constructing a raised or separated path or designating a pedestrian walking lane with pavement markings and signage, implementing traffic calming measures, and/or installing natural barriers to improve safety and separation from vehicle traffic. | | Bellevue Borough, Ross Township | \$\$\$\$ | Long-Term | See funding table for construction funds. Specific trail funds may be needed, depending on the final preferred connection. | Bellevue Memorial Park and N Balph Ave |
| Lincoln Ave and Balph Ave Intersection Redesign | Pursue a study to determine the best way to upgrade the intersection and improve safety for all users. Curb ramp upgrades, detectable warning surface upgrades, high-visibility crosswalks, the addition of an audio signal, and removal of hazards from the sidewalk should be considered, at a minimum. | Low | Bellevue Borough, PennDOT, SPC, Third Party Consultant | \$\$\$\$\$ | Long-Term | See funding table for construction funds. A study and engineering costs may not be funded by standard construction funding sources and planning funds may be needed. | Lincoln Ave and Balph Ave |

Infrastructure Projects Implementation Table Continued

| Project | Project Element | Priority Level | Potential Partners | Opinion of Probable Cost | Timeframe for Implementation | Potential Funding Strategy | Location |
|---|--|--|---|--------------------------------|---------------------------------|---|-----------------------------------|
| Redesign of Jacks Run Bridge to include bike lanes and wider sidewalks that connect with proposed bicycle infrastructure along Lincoln Ave. | Jacks Run Bridge is an Allegheny County bridge within Ross Township, but would provide connectivity for Bellevue residents, therefore better connectivity should be advocated for and connected to when implemented. | Medium Priority should be given to motivating and assisting with this project, despite its location outside of the Borough. | Ross Township, Allegheny County, Bellevue Borough, BikePGH, I | \$ | Long-Term | See funding table for construction funds. A study and engineering costs may not be funded by standard construction funding sources and planning funds may be needed. | Jacks Run Bridge |
| Bicycle boulevards - Create low-stress bicycle boulevards using residential streets and portions of Lincoln Avenue to provide a safe, convenient biking network to link neighborhoods, parks and businesses, and provide connections to adjacent communities. | Key design features could include traffic calming measures, wayfinding signage, intersection enhancements and contra flow bike lanes. (A contraflow bike lane is a dedicated, marked bike lane that allows cyclists to ride in the opposite direction of motor vehicle traffic on a one-way street. It helps improve connectivity by allowing two-way bike travel while maintaining one-way motor vehicle flow.) | High | Bellevue Borough, Bona Fide Bellevue, BikePGH, SPC | \$\$ | Short-Term | See funding table for bicycle infrastructure funding. | Boroughwide |
| | Phase 1: Maintain high-visibility crosswalk striping, add pedestrian scale lighting, and review signal timing at Riverview Ave and Route 65 to improve pedestrian crossing. | High | | \$\$ per improved intersection | Short-Term | Local road maintenance funds, unless included with larger construction funds application. | |
| Active transportation improvements to Route 65/Ohio River Boulevard. | Phase 2: Consider the incorportation of streetscape elements or other buffering between sidewalks and the roadway, the addition of a mid-block crossing, improved transit facilities, and other appropriate traffic-calming measures. | | Bellevue Borough, SPC, PennDOT | \$\$\$\$ | Long-Term | See funding table for construction funding. A study | Route 65/ Ohio River Boulevard |
| | Include improvements to sidewalk along Riverview Ave to complete connectivity to Route 65. | | | \$\$\$ | Long-Term | and engineering costs may not be funded by standard construction funding sources and planning funds may be needed. | |
| | Phase 3: Consider a complete redesign of the roadway to create protected bicycle and pedestrian facilities to create a comfortable place for people to walk and bike. | | | \$\$\$\$\$ | Long-Term | | |

THE PATH FORWARD

The recommendations included in this report will not happen overnight. Their implementation will require coordination of partners and stakeholders; additional studies, plans, and designs; and most importantly, the acquisition of funds to make it all happen. This Plan is only the first step in that process, and determining the next steps may seem like a project in and of itself. The Path Forward lays out the first steps that should take place in the path to implementation, providing additional detail on how Borough Staff, elected officials, key stakeholders, and potential partners can carry the goals and recommendations of this Plan forward. Organizational and procedural strategies are recommended to effectively implement the Plan. Implementation elements are roughly listed in consecutive order. However, some may be on-going efforts and others may need to be done in an iterative loop, coordinating with other elements. These elements are also not intended to supersede the efforts that Borough staff have already initiated. These steps are one possible way in which this Plan's recommendations may be implemented in a logical order, but certainly not the only way.

1. Establish an Active Transportation Advisory Group

Forming a group dedicated to a planning effort is the best way to ensure implementation. Municipal staff and elected officials are pulled in many directions. A dedicated group can help advocate for the goals of the Plan. In this case, Bona Fide Bellevue's Active Transportation Committee has already been identified to serve as the Active Transportation Advisory Group. Many of its members were involved throughout the development of this Plan and are dedicated to its implementation. To be most impactful, the group should be recognized by Borough Council and an official process for communication and reporting should be established.

2. Continue Public Engagement and Initiate Education Efforts

The Plan provides many suggestions for potential engagement and education efforts. From Jane Jacobs Walks to bike rodeos, holding these events can be one of the best ways to educate the community about how they can safely walk, bike, and access transit in the community.

3. Adopt a Vision Zero Resolution and Complete Streets Policy

Adopting these documents early in the implementation process is valuable because they serve as guiding documents for carrying out the overall vision and following recommendations. Committing to these approaches also shows that the Borough is dedicated to providing for the safety of all modes, which can assist with gaining support and funds for implementation.

4. Perform a Complete Review of Borough Policies and Ordinances, and Update as Needed

This planning process has already included an initial review and recommendations for these updates. Additional review may be carried out by staff or a third-party consultant to ensure that policies are positively contributing to the goals of this Plan.

5. Create a Safe Routes to School Program

By establishing a Safe Routes to School Program, dedication to facilitating walking and biking to school in the Borough will be formalized. This can assist with funding applications for programmatic and infrastructure based projects to facilitate this goal, including other projects identified by this Plan.

6. Improve Bellevue Elementary School Zone Infrastructure

Listed as part of the Proposed Projects Tables, improvements to the Bellevue Elementary School Zone mid-block crossing were prioritized during community engagement and have the potential to serve not only the school but all residents walking and biking in the area. Curb bump outs and an RRFB require minimal permitting or engineering but will have a significant impact on walking and biking safety in the area, and therefore should be prioritized. These improvements may be combined with additional streetscape improvements for the area surrounding the School, as well as improvements to the crossing at the entrance along South Howard Avenue. The pursuit of funding should be prioritized for the proposed improvements to this area.

7. Complete a Full Network Condition Audit & Prioritize the Necessary Sidewalk Improvements

Whether completed by members of the community or by hiring a consultant, performing a complete audit of sidewalks in the Borough, taking into consideration quality and comfort, is an important early step for implementation as it will inform future projects. Once the audit is complete, all segments should be considered for maintenance or replacement and a prioritized list should be created. This list should then be reviewed to determine if those projects should be addressed through code enforcement or a grant application.

8. Establish a Sidewalk Maintenance Program

While the Borough already considers regular sidewalk care, establishing a formal maintenance program can provide a more systematic approach, help to identify the most needed improvement projects, and assist with decisions for future funding applications.

9. Create a Sidewalk Improvement Program

The creation of a Sidewalk Improvement Program will assist with implementation by providing an additional funding resource the facilitates private property owners to contribute to the improvement of the pedestrian network. Implementing a program early on will make it more effective in contributing to overall sidewalk condition in the Borough.

10. Evaluation

Evaluation is an obvious next step in any planning process but is often overlooked due to a lack of resources or time. This Plan provides performance measures to assist with carrying out evaluation, as well as realistic timeframes because implementing all of these goals will not happen overnight.

Bellevue in Motion is just the first phase in improving walking, biking, and access to transit in the Borough. Achieving the goals of this Plan will require ongoing efforts and coordination between Borough staff, residents, elected officials, surrounding municipalities, and community partners. By following the path outlined here, it will be possible to not only implement the recommendations captured in this Plan, but also continue the work needed to improve and maintain the Borough's active transportation network into the future.