

Stroudsburg Mobility Study

September 2022



Acknowledgments

Thank you to the staff and residents of Stroudsburg Borough devoted to this project. Their work and enthusiasm was integral to the development of this mobility study.

Borough of Stroudsburg:

- ▶ Matt Abell (Council President)
- ▶ Jim Evanisko (Councilmember)
- ▶ Joanne Kockanski (Councilmember)
- ▶ Larry Kopp (Borough Manager)
- ▶ Erica McCabe (Stroudsburg Vice Council)
- ▶ Tara Probst (Mayor)

Stakeholders:

- ▶ Erik Diemer (Business leader)
- ▶ Jim Evinsco (Business leader)
- ▶ Jennifer Lyon (Regional Police)
- ▶ Rich Schlameuss (MCTA)
- ▶ Autumn Hawthorne (Stroud Region Open Space & Rec Commission)
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01

Introduction



Study Purpose & Process

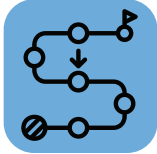
Stroudsburg, though small in size, has firmly cemented its place as a destination for visitors to experience and enjoy the beauty of the Poconos. The residents are likewise drawn to the beauty of the area, as well as the friendly atmosphere. **Main Street is the heart of the community: residents and tourists alike enjoy the beauty and charm of its historic buildings, lively dining and shops, and frequent festivals and events.** Main Street is one of the major economic hubs in Stroudsburg. Yet, the expansion of tourism and the community means that Main Street can sometimes be a stressful and congested street to travel on. The Stroudsburg Mobility Study is a planning study being conducted by the Borough to explore design ideas to enhance Main Street and the greater street and trail network within Stroudsburg Borough. **This document presents both Borough wide recommendations and specific design proposals for Main Street to meet the needs of Stroudsburg residents.**

This study consists of three main phases.



Existing Conditions

Examine the data and gather community and stakeholder feedback to learn what the challenges and opportunities exist in the Borough and Main Street



Main Street Deep Dive

Ground-truth existing conditions findings through site visits, develop concept alternatives for Main Street, and conduct stakeholder and community feedback sessions during a three-day in-person design charrette



Mobility Study

Deliver Borough-wide mobility recommendations and present a preferred design alternative for Main Street to set the Borough up for implementation funding

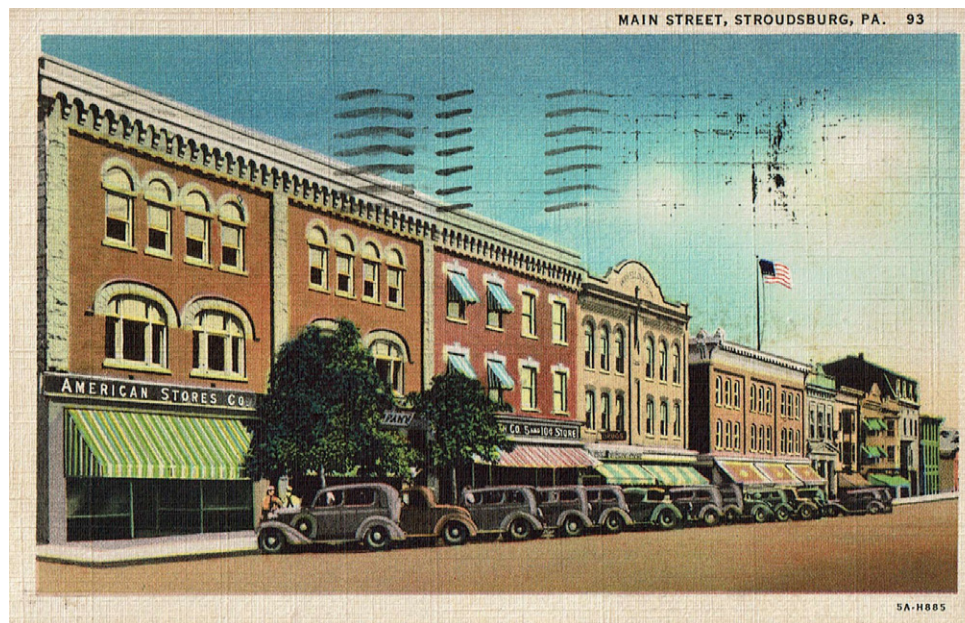


Stroudsburg History & Context

Stroudsburg Borough is located in the heart of the Pocono Mountains, and long been a destination for tourists and a small town center.

Stroudsburg has maintained a small residential population since the 18th century. In the 1960s through the 1980s Stroudsburg's population declined. Businesses began to leave Main Street, and today there are opportunities to grow retail and dining destinations downtown. Stroudsburg is having a resurgence in tourism and population growth following impacts related to the COVID-19 pandemic. Just 90 minutes from New York City, the shift to remote work and promise of lower costs of living and natural beauty has enticed new residents into the Borough.

Main Street and the adjoining Courthouse Square have maintained their position as the economic and cultural center of the Borough. Historic images show that not much has changed about the downtown feel of Main Street.



Historic Pictures of Main Street.

Photographs provided by Jonathan Weber / 728 Main Street LLC

What we Heard: Survey Responses

During the Spring of 2022 an online survey was distributed to Stroudsburg residents, in total **241 responses were received.**

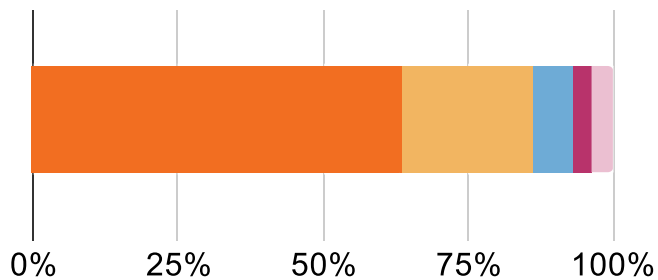
WHAT IMPROVEMENTS WOULD YOU LIKE TO SEE ON MAIN STREET?

- ▶ More pedestrian infrastructure, better crosswalks, designated bicycle lanes
- ▶ Pave and repair the streets
- ▶ Schedule buses more frequently
- ▶ Shorter signals to keep traffic moving

GETTING AROUND STROUDSBURG:

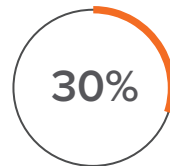
63% of respondents typically drive alone daily. **26%** drive with others or carpool daily, and **10%** of respondents ride a bike weekly.

How often do you drive alone in Stroudsburg?

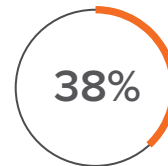


- Daily
- Weekly
- Never
- Rarely
- Monthly

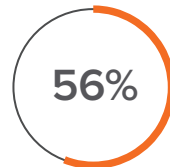
TRAVELING ON MAIN STREET:



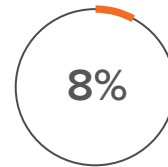
Walk daily



Walk weekly



Drive daily



Bike or roll weekly

PRIMARY USE OF MAIN STREET:



8%

Live



24%

Work



26%

Play



1%

Transit



3%

Learn



17%

Other







(pass through, recreational walking)

WHAT DO YOU LOVE ABOUT MAIN STREET TODAY?

- ▶ Nice variety of restaurants and shopping
- ▶ The small town atmosphere feels vibrant and active
- ▶ The look of historic buildings, murals, holiday decorations

”I love the shops, and the old fashioned downtown feel. I love the attention to detail, like the lights at Christmas and the painted crosswalks. I love the street festivals like Stroudfest, and I love seeing all the little Trick or Treaters trick or treating on Main Street.

TOP-RANKED IDEAS FOR IMPROVING LIVABILITY ON MAIN STREET:

- #1  **Space for Outdoor Dining/Seating**
- #2  **More Trees and Plants**
- #3  **Walkability**
- #4  Bike Lanes and/or Trail Connections
- #5  Incorporate Art
- #6  Speed & Traffic-Calming Strategies

WHAT WOULD YOU CHANGE ABOUT MAIN STREET?

- ▶ Slow down the traffic and find more parking
- ▶ Make it more pedestrian friendly
- ▶ Too many vacancies and run-down storefronts
- ▶ Need safe places to bike

”More areas to sit, eat food, bike ride & walk safely away from cars.

ADDITIONAL THOUGHTS:

- ▶ Placemaking is very important
- ▶ There is too much noise from cars and motorcycles
- ▶ Need more green space and community space



02

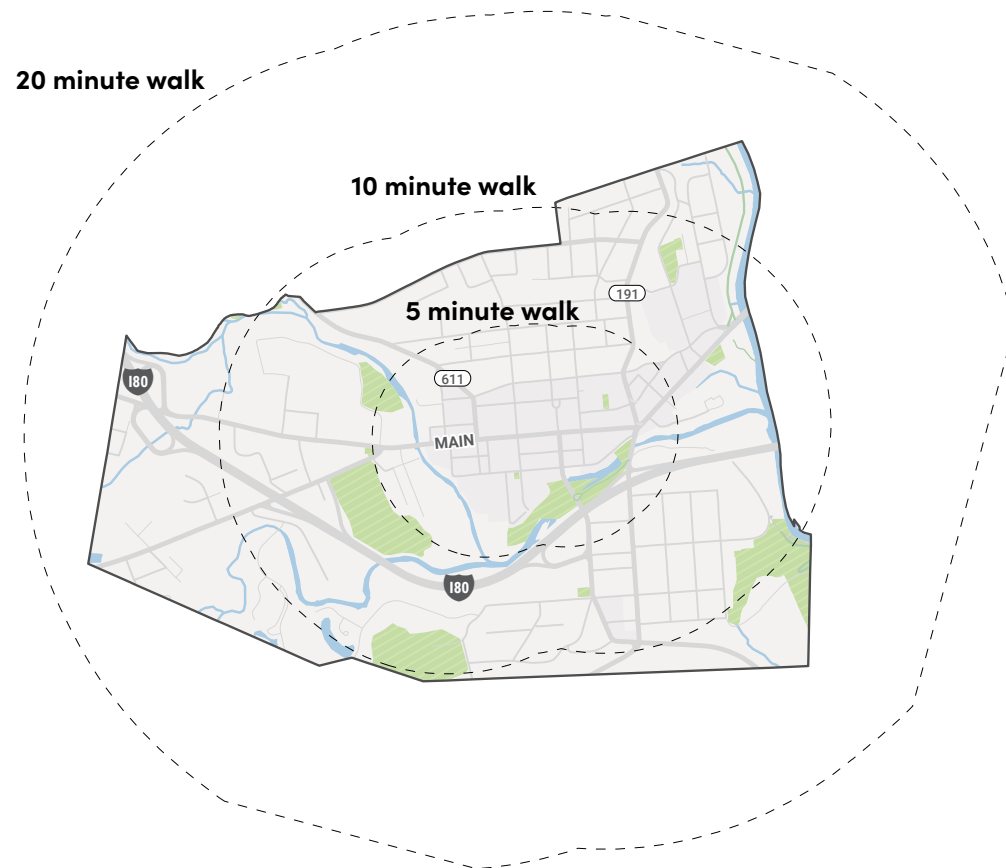
Improving Mobility & Livability in Stroudsburg Borough



Walkable, Bikeable Stroudsburg

Stroudsburg is a small community of approximately 5,500 residents and encompasses 1.7 square miles. Main Street is 2.4 miles long and the commercial center stretches for approximately 0.75 miles. It takes the average person about 5 minutes to bike a mile, and 20 minutes to walk a mile. **As shown in Map 1 most of Stroudsburg is within an easy walk or bike ride to the commercial, retail, educational and recreational destinations in the Borough.** The tight roadway grid and short block lengths means that it is efficient to travel throughout the Borough. Local roads and residential neighborhoods, which have lower traffic volumes and speeds, mean that even less confident bicyclists can feel comfortable riding around the Borough. Nearby locations are also relatively easy to walk or bike to, although as one travels farther away from Stroudsburg, the rural landscapes lend themselves to traveling by car.

Despite the generally walkable community, there are notable barriers to mobility in Stroudsburg, the highway bisecting the borough, and lack of dedicated biking facilities can make some places hard to get to by bike or on foot.



Map 1. Walkable Stroudsburg

Planning Context

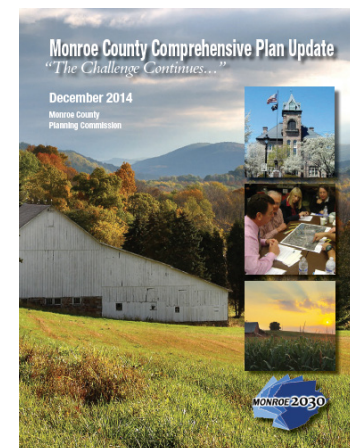
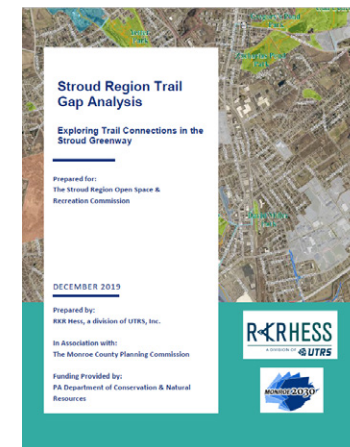
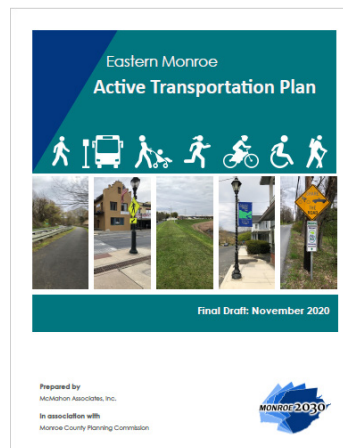
PREVIOUS PLANNING EFFORTS

The recommendations presented in this mobility study build upon the previous planning and design work for Stroudsburg Borough. As part of the existing conditions report, previous plans, programs, and policies were analyzed to help the project team understand how this effort relates to previous planning studies. In total the following six plans were reviewed:

- ▶ Hamilton, Stroud, Pocono, Stroudsburg Regional Comprehensive Plan
- ▶ Monroe 2030: Monroe County Comprehensive Plan Update "The Challenge Continues.."
- ▶ Updated to the Monroe County Open Space, Greenway, and Recreation Plan
- ▶ Stroud Region Trail Gap Analysis
- ▶ East Monroe Active Transportation Plan
- ▶ Stroudsburg Creek Walk Phase 1 Conceptual Trail Plan Report

Overall, these plans shared several common themes and objectives. Prior multimodal planning efforts have stressed the need to accommodate all modes of transportation. There have also been numerous efforts to expand the regional off-road trail network, such as through the Stroud Region Trail Gap Analysis.

Further information on key takeaways can be found in Appendix I, the existing conditions report.



I-80 REALIGNMENT

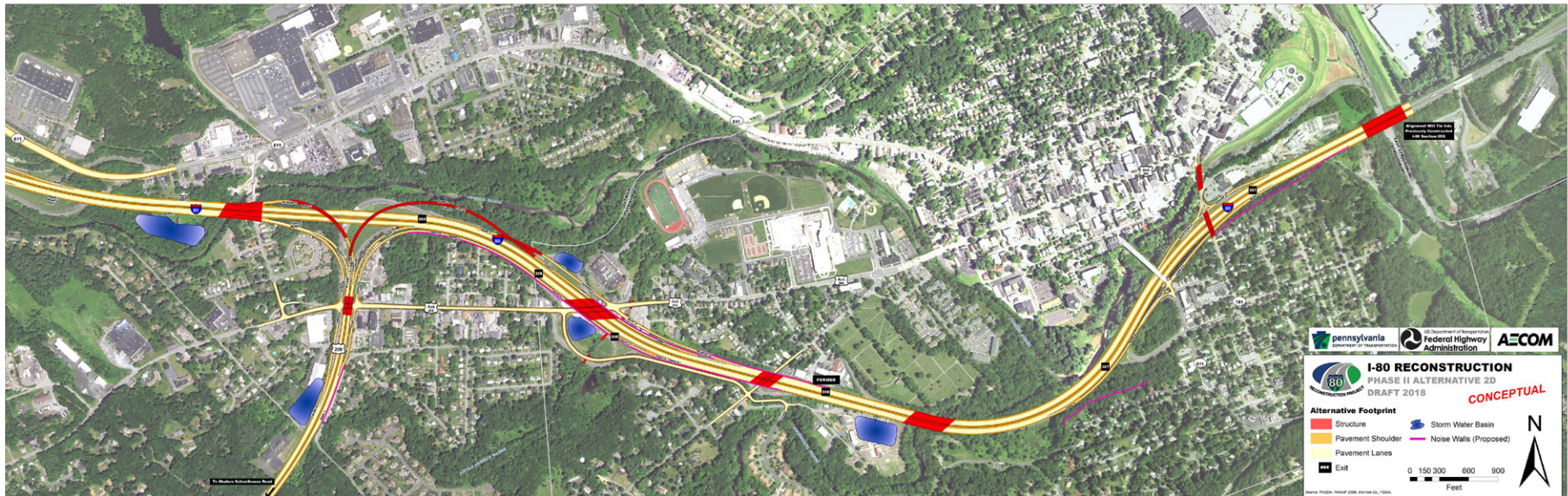
PennDOT is in the process of finalizing some new design work for the I-80 corridor, which includes removing the interchange closest to the western boundary of Stroudsburg. There is an anticipated let date of December 2024, however a final design has not yet been selected as of the publication of this report. For the latest information, visit the project website: <https://www.i80project.com>

This project will have an impact on the traffic flow on Main Street, and the land use around the existing interchange.

A traffic study on Main Street will be needed after construction is complete to better understand the conditions of the corridor and how the changes proposed in this plan will impact traffic flow.

Because these changes to I-80 will have a significant impact on Stroudsburg, opportunities to fund some or all of the improvements to Main Street as part of the I-80 project should be explored.

This graphic shows a proposed concept design for the I-80 corridor developed by PennDOT. The final design will present changes to the traffic flow and patterns on Main Street, particularly on the Western side of town.



Borough Mobility Recommendations

In addition to the Main Street recommendations, the project team considered ways to improve mobility throughout the Borough and improve links to regional destinations. Map 2 displays key recommendations for on-road bikeways and off-road trails. In general, the on-road bikeways serve to create local connections within Stroudsburg, such as to and from downtown, to local schools, and to Glen Park.

The trail network is more regional. Today, there is one off-road trail in Stroudsburg: the Levee Loop trail. This 4.5 mile trail connects Stroudsburg and East

Stroudsburg. The Borough is currently implementing an improved trailhead from Broad Street, south of Main and working to secure an easement and funding to connect the Levee Loop trail near north Second Street. Additional regional trails are planned, including a planning study currently underway that is evaluating the former WB&E rail line as a potential trail connection, which is shown as the light green dashed line on the following page. Stroudsburg also has an existing bike route system: the Stroud Greenway. The intention of this route is to connect users to important historical and natural destinations, including

the Pocono Wildlife Rehabilitation Center, Quiet Valley Historical Farm, and Stroud Mansion. Unlike on-road bike facilities, bike routes typically only feature wayfinding and information on comfortable biking routes, rather than dedicated infrastructure or in-road symbols or markings.



On-road bikeways include bike lanes, bike boulevards, and shared lane markings (also known as 'sharrows'). Bicyclists ride on the roadway when using these facilities. Bike lanes visually separate space for biking from space allocated for driving. By contrast, people bicycling share space with people driving when they ride along bike boulevards or roads with shared lane markings.



Trails provide space for walking and bicycling that is separated from the roadway - either adjacent to a street or located away from a street in natural areas. The 4.5 mile Levee Loop Trail stretches through Stroudsburg Borough and into East Stroudsburg.

EXISTING & PROPOSED ACTIVE TRANSPORT FACILITIES

BOROUGH OF STROUDSBURG MOBILITY STUDY

- Existing Bike Route
- Existing Bike Lane
- Existing Levee Trail
- Existing Trail
- Proposed On-Road Bikeway
- Study Corridor
- park
- water
- Stroudsburg Boundary



Map 2. Borough Mobility Recommendations

Albus.USGS.NGA.NASA.CGIAR.NCEAS.NL.SOS.NINA.Geodatasysteisen.GSASGI and the GIS User Community. Esri Community Maps Contributors.

03

Reimagining Main Street



PNC
WEALTH MANAGEMENT

PNC
WEALTH MANAGEMENT

Introduction

MAIN STREET TODAY

Main Street is the major thoroughfare in Stroudsburg. Main Street exudes downtown charm and is a regional destination for visitors traveling through the Poconos. The commercial center on Main, between 9th Street and 4th Street, fuels the local economy, retail and restaurants along Main employ Borough residents and draw in tourism.

There is a lot to love about Main Street. On a nice day, the street will be bustling with people walking to their destination, relaxing along Main, or dining outside.

The plentiful public art and abundant shade from street trees add to the inviting ambiance for most of the corridor.



Stroudsburg already features walkable alleyways

Generously sized sidewalks (10 feet or greater), curb extensions, and alleyway walkways allow for pedestrians to easily and comfortably access many destinations along Main Street. At night, Stroudsburg features a vibrant nightlife scene with notable bars and restaurants and music at the Sherman Theater. At the Western end, the regional high school and Morey Elementary School serve the community and provide a connection to the popular Stroudsburg Borough Park.

Stroudsburg has clearly cultivated a strong sense of community and a drive to continue to improve the quality of life within the Borough. However, community members and business leaders shared that **more needs to be done to reinvigorate Main Street and build upon the “good bones.”** Throughout the process of researching and evaluating the Borough, several opportunities have been identified to improve mobility along Main Street and within the Borough as a whole.

This includes enhancing placemaking and providing more space for outdoor dining to attract and retain business along Main Street to fill in vacant

lots, addressing conditions that encourage drivers to speed along Main, and providing safe places for people to cross outside of the signalized intersections. We also heard the need to accommodate all modes of travel. This includes creating more comfortable bicycle connections, improving bus stops, and extending sidewalks to rebalance the roadway to prioritize a walkable pedestrian environment. This is particularly important given that the two most recent pedestrian and bicyclist fatalities in Stroudsburg occurred on Main Street.

Residents spoke of the need to create a beautiful and comfortable environment along all segments of Main. Today, the western and eastern ends of Main are not as inviting to walk on, do not have as many community destinations, and overly-wide travel lanes favor vehicular traffic and encourage speeding. There are also opportunities to create gateway points and direct visitors to parking and destinations. More information on opportunities and constraints are available in the existing conditions report, found in Appendix I.

This chapter presents the design process to change and improve the streetscape on Main and two designs are proposed: quick-build improvements and a long-term Vision

Vision and Goals

The sentiments from stakeholders and the general public can be summarized into general themes that represent the vision and goals for Main Street. These principles were incorporated into the development of concept alternatives for Main Street.



Expand Multimodal Access and Connectivity

Enhance walking, biking, transit facilities



Placemaking

Celebrate Stroudsburg's history & creativity



Connect to Nature

Expand access to recreation by strengthening access to trails, parks; explore ways to expand tree and planting areas throughout Stroudsburg's street network



Improve Safety

Prioritize vulnerable road users and reduce conflicts between users



Parking Management:

Accommodate parking in a walkable and bikeable community

Site Visit: Community Charrette

At the end of June 2022, Stroudsburg Borough hosted a design charrette to seek ideas and feedback on design scenarios for the Main Street corridor. The three day charrette was led by a team from Alta Planning + Design, with expertise in transportation planning and landscape architecture. The charrette concluded with the presentation of three design scenarios informed by community feedback and site observations: A short-term quick build concept; and two long-term full build alternatives to consider. In addition to the design scenarios developed for Main Street, the team collected community feedback on opportunities for additional amenities and programming on Main Street (such as wayfinding) and an overall Borough mobility map.

WORKSHOP PROCESS

Day 1: Stakeholder kick-off meeting

Day one introduced the project goals and intentions. The team presented initial findings and collected sentiments on opportunities and constraints along Main street and in Stroudsburg Borough.

Day 2: Focus groups

The second day consisted of three meetings with focused meeting topics: a business community meeting, a parking meeting, and a meeting with PennDOT and local staff who maintain and implement road infrastructure.

Day 3: Design presentation & public open house

The third and final day presented design scenarios and finalized Borough-wide recommendations. The charrette concluded with an open house for the public



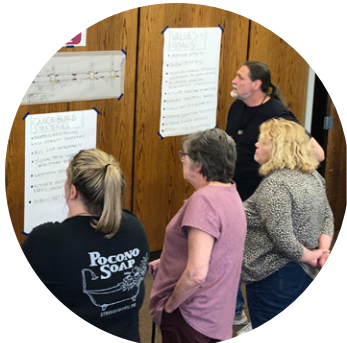
WHAT WE HEARD



There is a need to improve wayfinding, to direct people to downtown destinations and make people aware of the parking garage.

Business leaders are concerned about personal safety. They see it impacting their customer base and are eager for design enhancements that will make the street feel welcoming to visitors.

People walking throughout the downtown will improve economic development, and it is worth pushing for pedestrian-focused designs despite the political challenges and drawbacks (such as losing parking).



The changes coming to I-80 will change the traffic flow on Main, but it is hard to estimate the exact impacts.

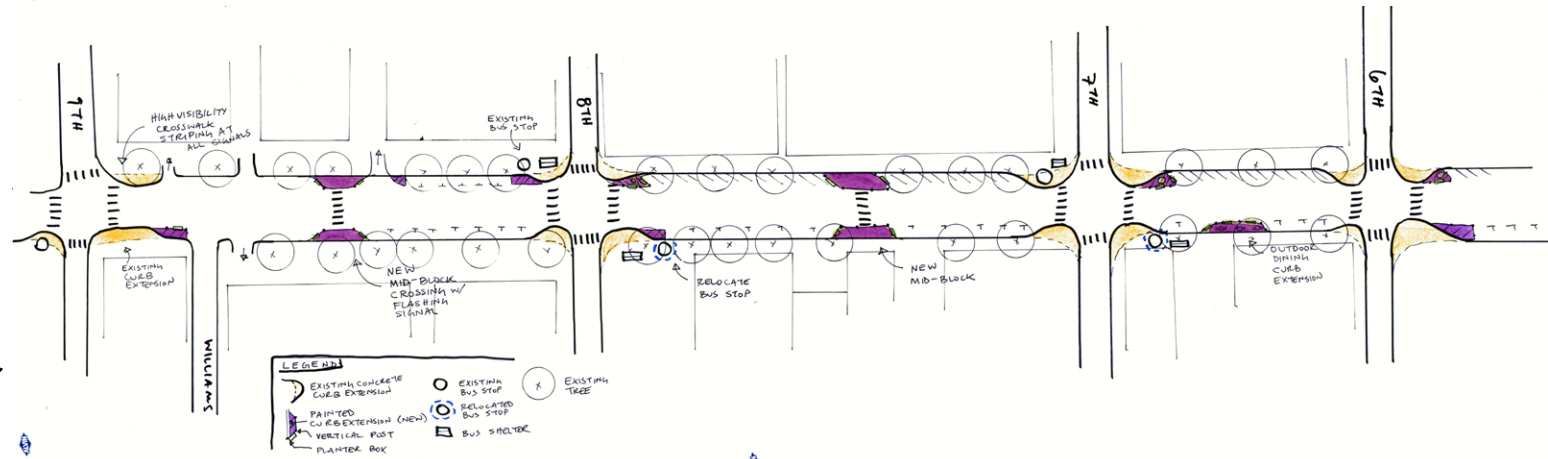
Residents would like to see more outdoor dining, but currently traffic moves too fast to make an outdoor dining environment feel comfortable, and PennDOT will not approve the conversion of parking spaces to outdoor dining areas, as have recently become popular in many communities in response to COVID-19.

Overall, there is a sense of optimism. For many, business has been good, and residents remarked on a re-ignited vibrancy. Now is an opportunity to seize the momentum and implement placemaking and traffic improvements.

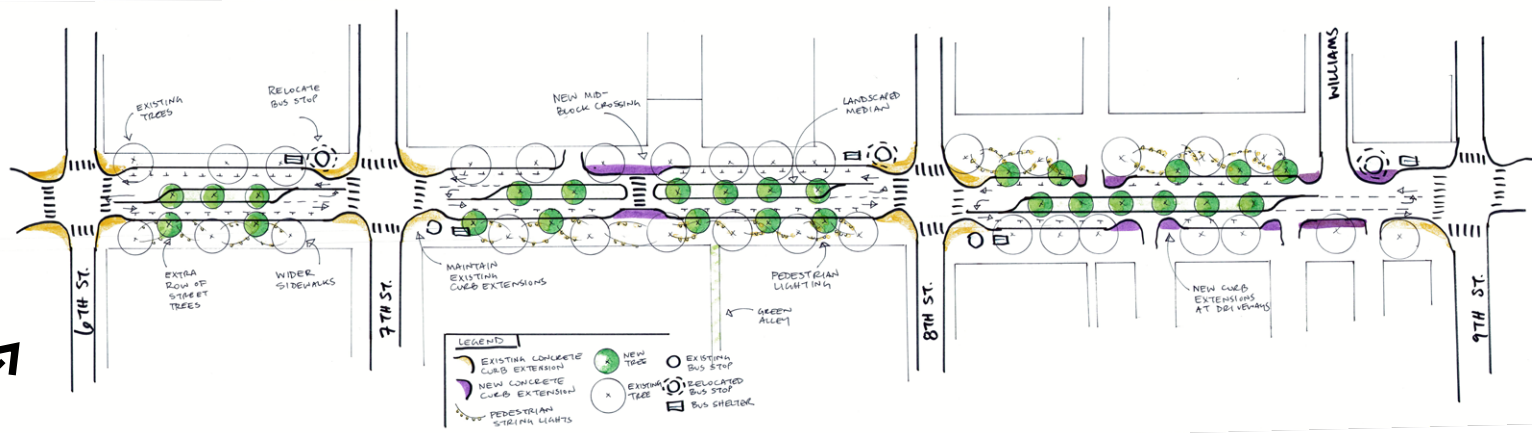
Changes to Main Street will require PennDOT approval, and coming to a shared agreement can be difficult. Many residents would like to take local control of Main.



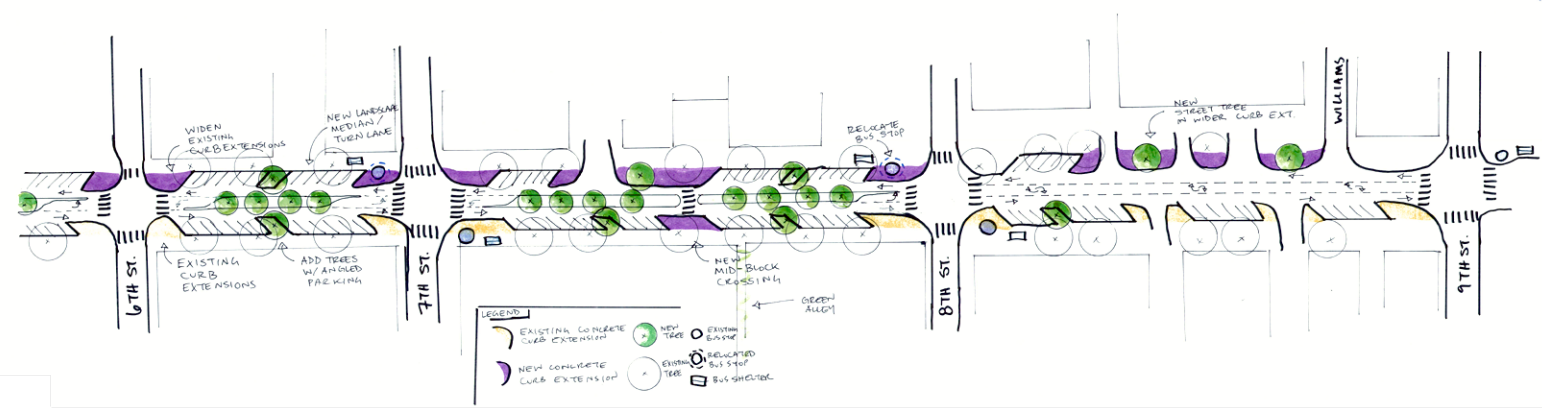
QUICK BUILD: PRIORITIZE PEDESTRIAN SAFETY



LONG-TERM OPTION A: CREATE A GREEN PROMENADE

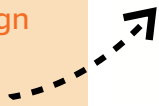
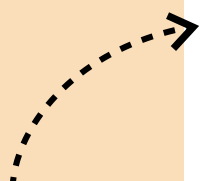


LONG-TERM OPTION B: INCREASE PARKING



The three scenarios shown on the right were developed during the charrette and based on community input. These were the starting point for the final quick build and long-term vision designs.

The green promenade design was selected as the preferred long-term design. The quick build option was selected as a interim step while the design and implementation of the green promenade design advances.

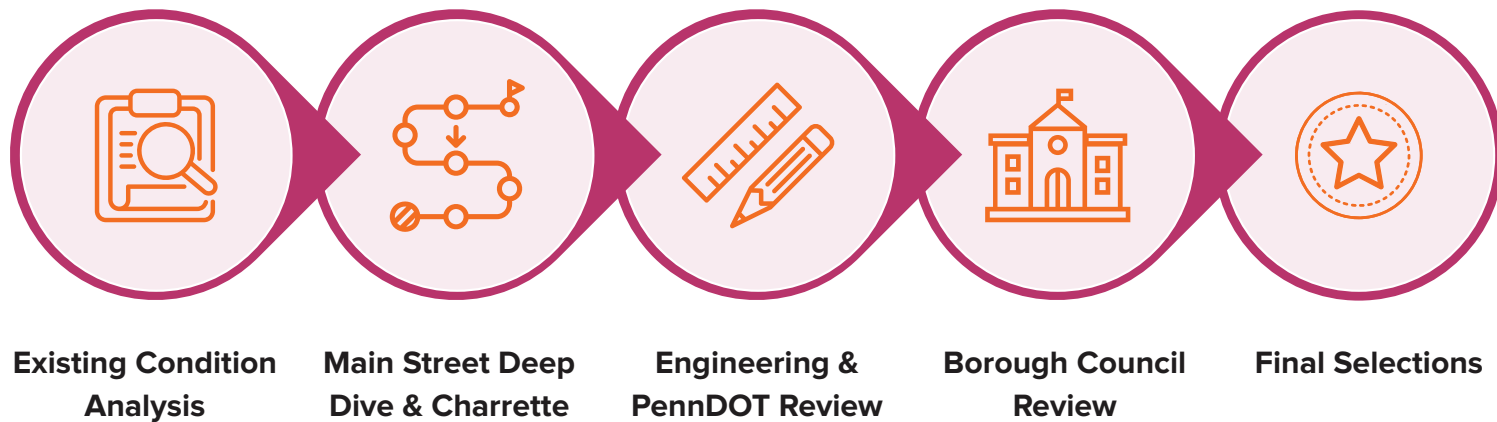


Selecting the Preferred Design Scenarios

The design process involved a review of opportunities and constraints within the borough, and preliminary ideas for design strategies. The initial findings were presented and refined during the site visit and community charrette, which resulted in the final three scenarios. The scenarios were evaluated by experts from PennDOT and an engineering team.

Finally the borough council evaluated the design scenarios. This process resulted in one short-term scenario to immediately work towards, and one long-term scenario, which will progress more slowly. The final preferred design options are the **Quick Build option to improve pedestrian safety and the Long-term option A, to create a green promenade.**

DESIGN PROCESS



Quick Build Strategies

WHY QUICK BUILD?

Quick Build refers to projects that do not require the resources or construction time of a traditional transportation improvement project. Typically Quick Build projects utilize lower cost, though less durable materials.

Quick Build strategies, while swiftly implemented, are distinct from temporary, tactical, or pop-up demonstration projects. These are permanent additions, though they can be an intermediate step to achieve a longer-term solution.

Quick Build projects provide flexibility and cost savings when compared with full build out options. Stroudsburg Borough could also act quickly to implement Quick Build design strategies, with the possibility of realizing the Quick Build design scenario within a year. Additionally, most Quick Build

projects can be constructed within days or weeks, which would minimally impact access to businesses along Main Street.

Furthermore, most of the proposed Quick Build improvements may not require extensive PennDOT review, as they do not affect the road capacity. This is in contrast to the long-term green promenade design presented on pages 25 through 30, where the Borough would need to closely work with PennDOT to approve the proposed design, which could be a lengthy process.

The following pages present Quick Build opportunities identified to improve mobility and safety on Main Street, particularly pedestrian safety. This includes strategies to calm traffic, such as narrowing points in the road using curb extensions and

medians, improvements to the walking experience, such as mid-block crossings and signal timing improvements. Transit stops are also relocated and improved. The Quick Build improvements for Stroudsburg involve enhancing the beauty and sense of place in Stroudsburg, through public art, green alleyways, wayfinding, and outdoor dining.

Many of these strategies, such as wayfinding, would be complementary to the long-term vision, and provide **an immediate first step to achieve the community's preferred long-term design vision**, to create a green promenade along Main Street. Additional information on funding and implementation for is located in Chapter 4.

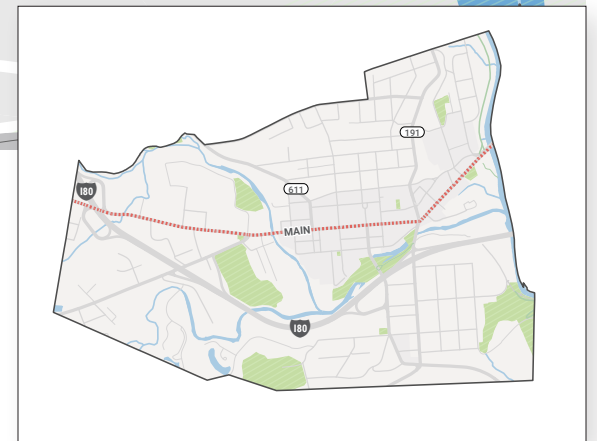
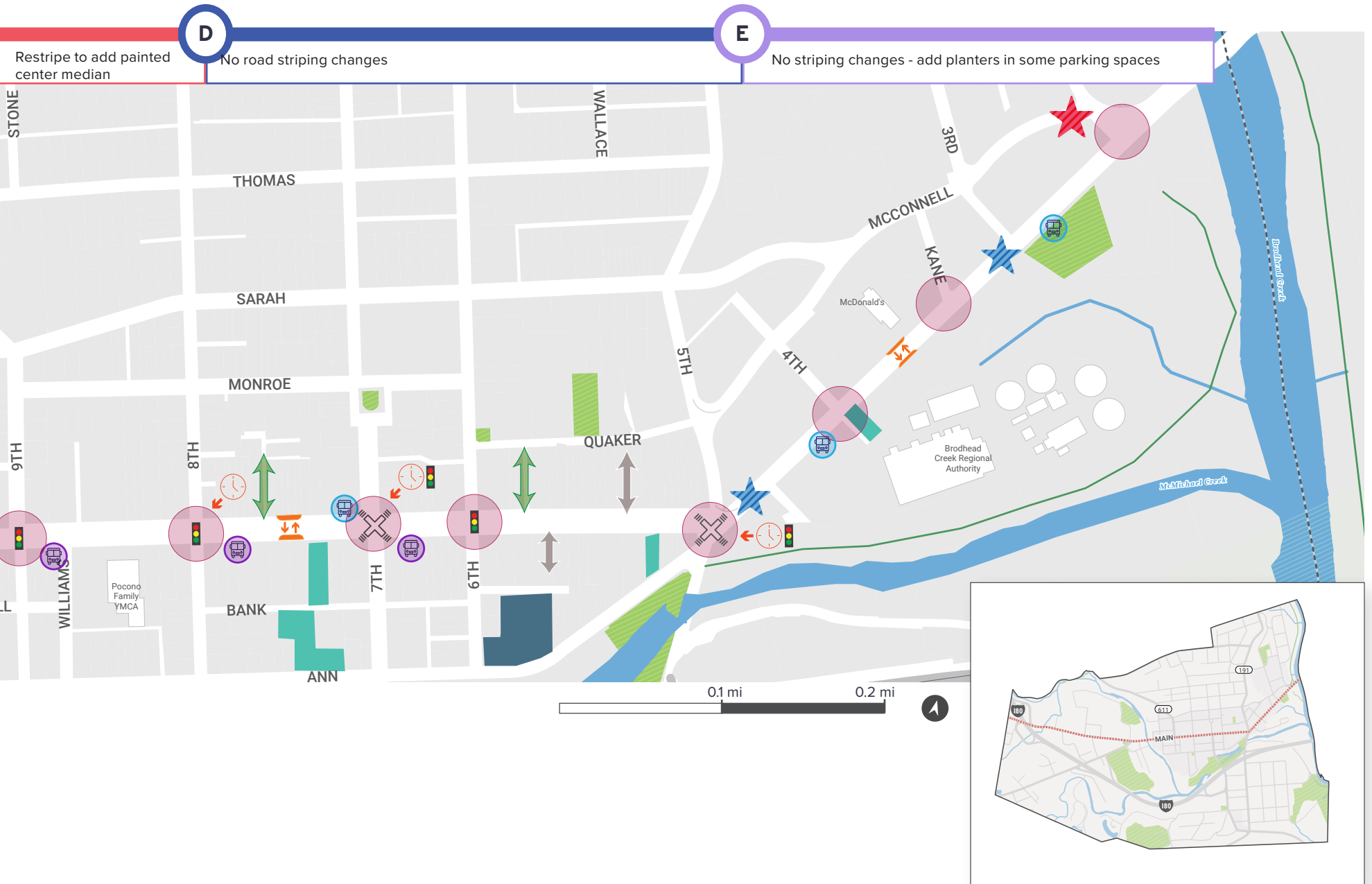
MAINTENANCE AND CONSTRUCTION

One benefit of Quick Build projects is that many of the recommendations on the following pages could be implemented and maintained by Borough staff members, such as placing bollards and painting curb extensions or crosswalks. The Borough already has proven experience implementing painted crosswalks, which are present within Stroudsburg's historic district. Utilizing

federal and state grant opportunities can help fund higher-quality materials such as thermoplastic, which require less maintenance and have a longer life-span.



Stroudsburg Borough public works and community members assisted with the painted sidewalks

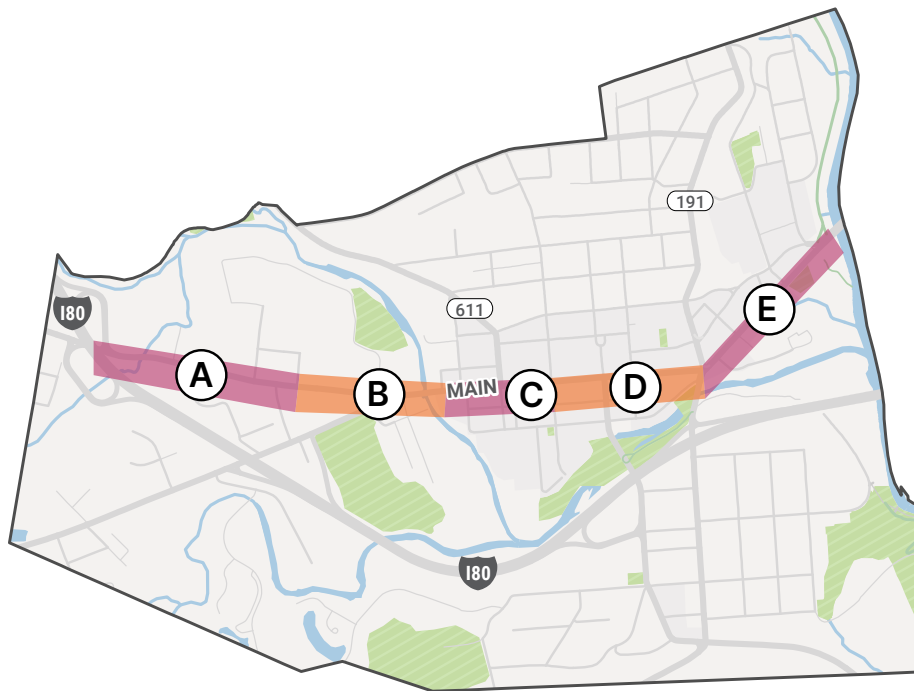


Main Street location within Stroudsburg Borough

Long-term Vision

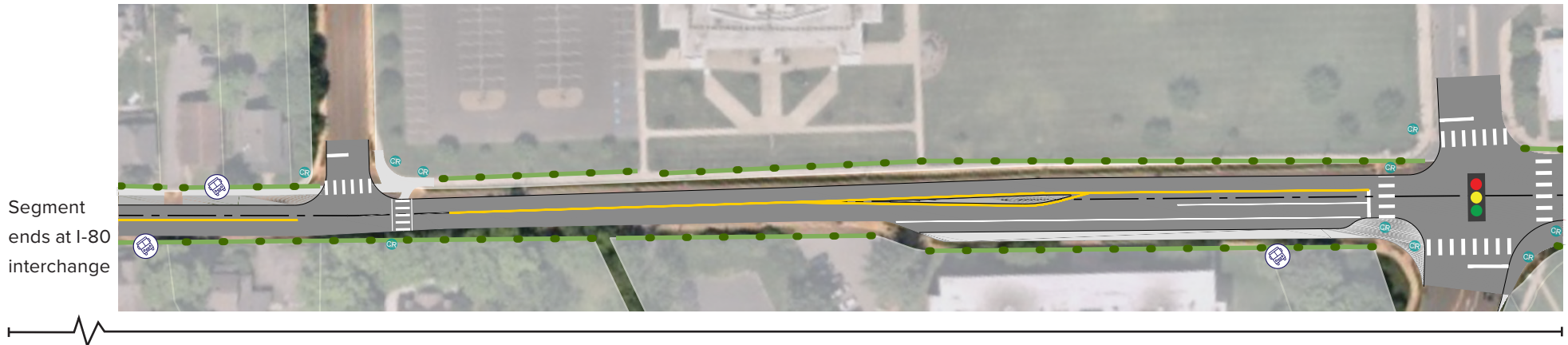
The following pages present the preferred long-term vision for Main Street, to create a green promenade along Main Street. This long-term design advances the quick-build strategies as a future project phase. Implementing this vision will require extensive coordination with PennDOT, who will maintain control of the road. Significant financial commitments are necessary to fully realize the vision for the corridor, which can be accomplished with financial support from external funding sources. Though the vision presented here is not easy to achieve, Stroudsburg residents and stakeholders feel it is a necessary goal to work towards to improve safety, comfort, and vibrancy in the Borough's downtown.

The design concepts are presented in 4 segments, corresponding to the key map shown below

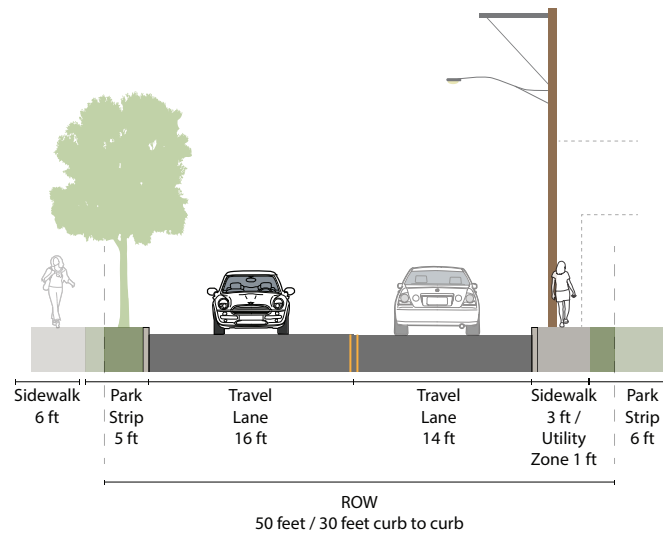


Map 3. Segment Key

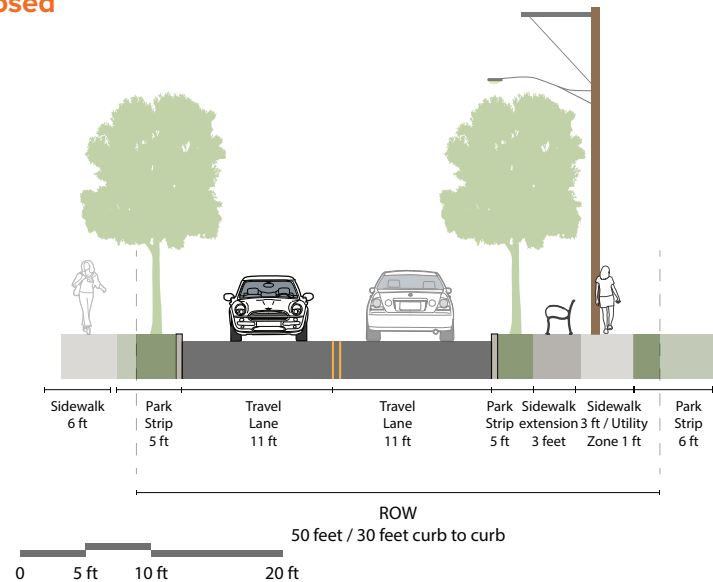
LONG-TERM VISION: SEGMENT A - WESTERN BOROUGH LIMITS TO STROUDSBURG HIGH SCHOOL



Existing



Proposed



Existing Segment A: Two travel lanes, narrow sidewalk on north side of Main Street encourage speeding and create uncomfortable conditions to wait for the bus or to use the sidewalk.

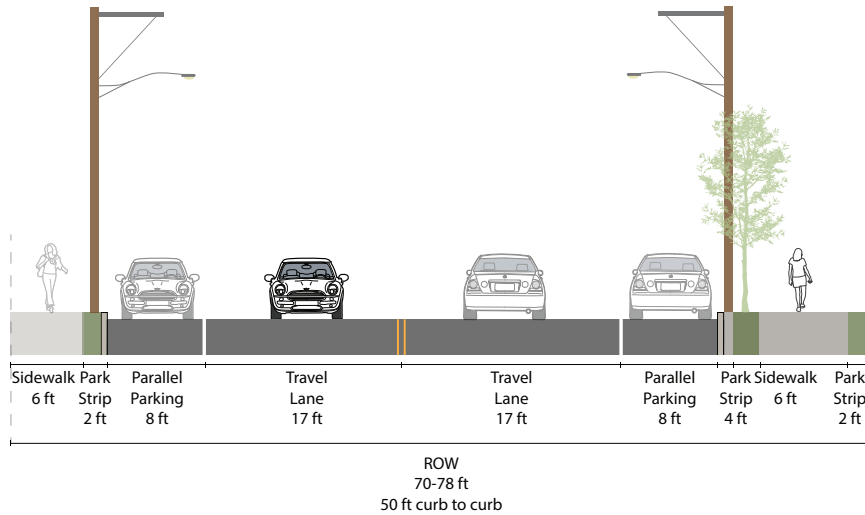
Proposed Segment A: A curb extension on the north side of the street creates space for transit shelters and street trees. Travel lanes are narrowed to 11' which will help calm traffic.

Crossing Improvements: New mid-block crossings south of Garden at the Senior Living Center and Fetherman will be added, including RRFBs.

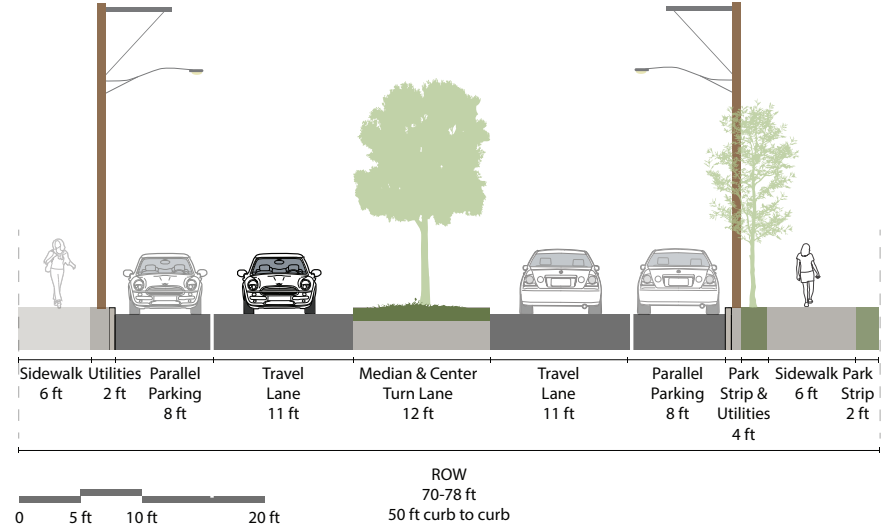
LONG-TERM VISION: SEGMENT B - STROUDSBURG HIGH SCHOOL TO 9TH STREET



Existing



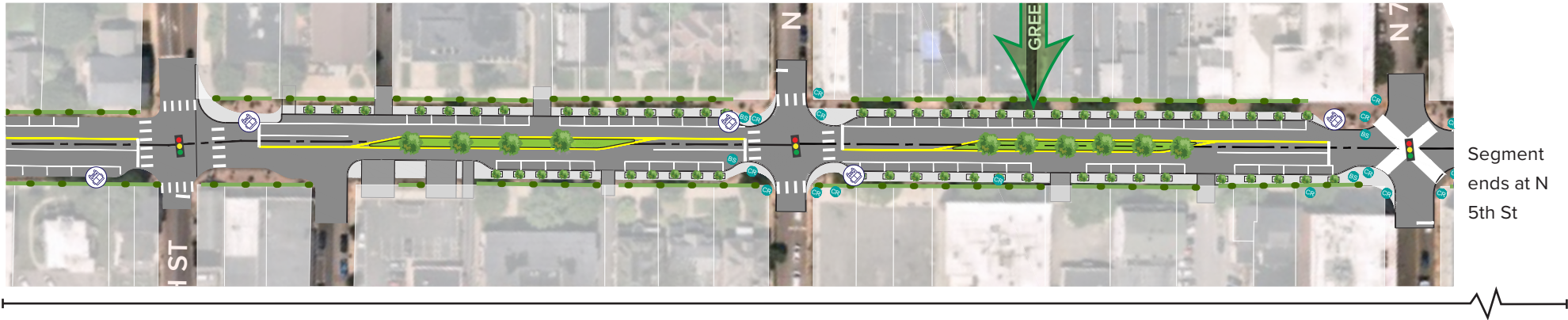
Proposed



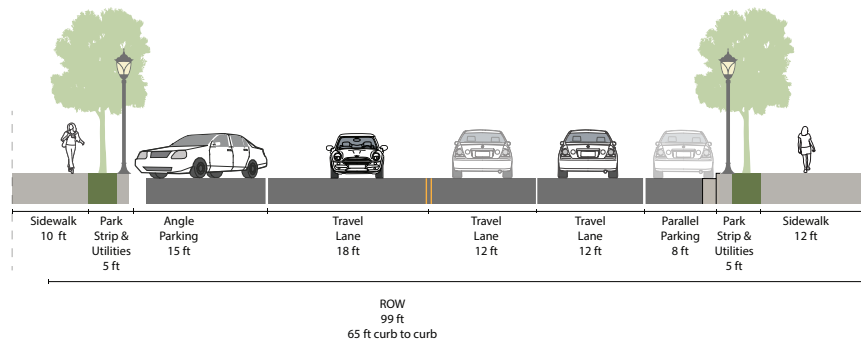
Existing Segment B: Today, the travel lanes are excessively wide through this segment, which can encourage speeding and create challenging crossing conditions for pedestrians.

Proposed Segment B: Right-sizing travel lanes creates space for a planted center median. Crossing Improvements: Curb extensions at Dreher and Main Street will shorten crossing distances for pedestrians, the east-bound curb extension includes a mountable apron to accommodate large trucks and busses when needed. The signal timing at this location will also be adjusted to improve wait times to cross for pedestrians.

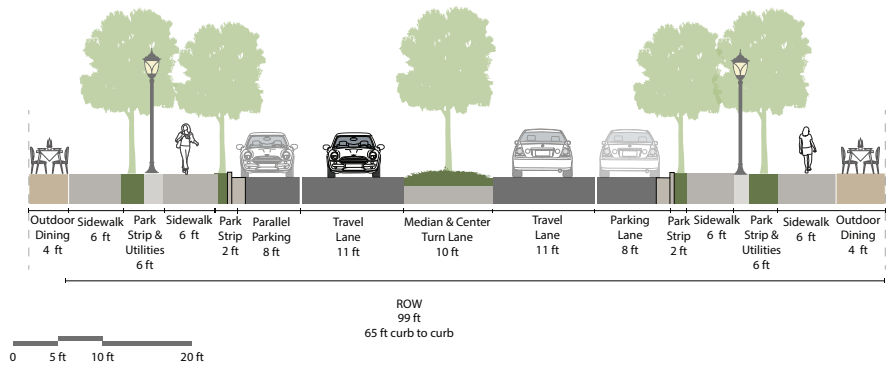
LONG-TERM VISION: STROUDSBURG'S COMMERCIAL CORE - SEGMENT C/D - WAVERLY DRIVE TO 5TH STREET



Existing



Proposed



Existing Segment C/D: Today there are two different cross sections within this segment, one with parallel parking on both sides (from 10th to 8th Streets) and, one with parallel parking on the South side and angled parking on the North side.

Proposed Segment C/D: The proposed reconfiguration of this segment will unify the streetscape and apply one cross section consistently: parallel parking on each side of the street, one travel lane in each direction, and a planted center median that near signalized intersections becomes a left turn lane. By re-dedicating some travel lane and angled parking space to pedestrian uses, wide sidewalks that will accommodate a second row of trees next to the sidewalk.

ADDITIONAL IMPROVEMENTS

Crossing Improvements:

A new mid-block crossing is added between 8th and 7th, as well as improved striping, signage, and signal timing at the two scramble crossings (7th and 5th).

Innovative tree planting & stormwater capture design:

To maximize usable pedestrian space next to this new row of trees, a suspended pavement system will be used. This uses a structural grid of interlocking plastic units, infilled with soil, beneath the sidewalk paving to provide the optimal amount of soil space for these new trees to thrive. This system can also capture stormwater runoff from the road to help manage runoff. Additionally, two green alleys are proposed that will add plantings, inviting string lights, seating, and art.

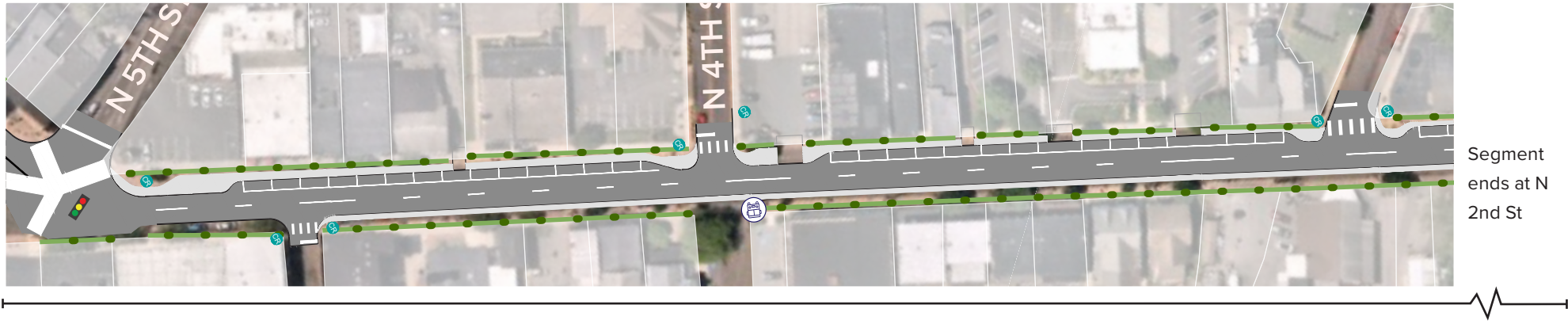


source: <https://eins.ca/2021/05/21/putting-the-woo-in-woonerfs/>

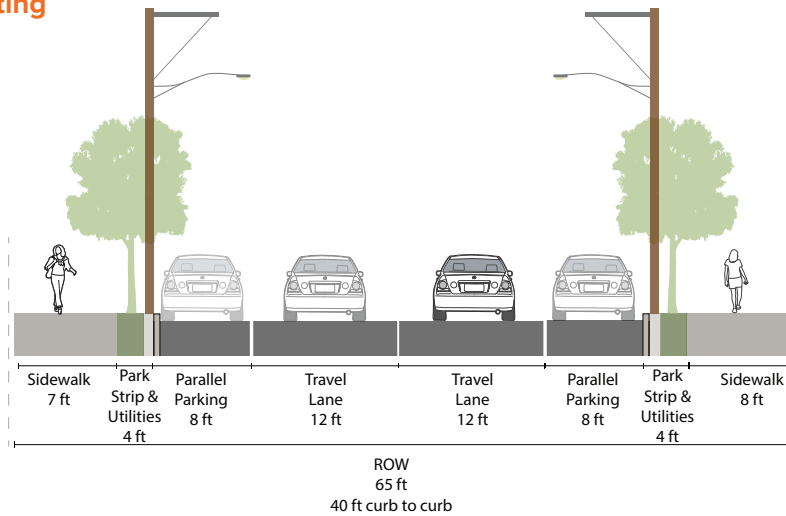


source: <https://www.landscapeperformance.org/blog/2015/06/tracking-silva-cell-tree-performance>)

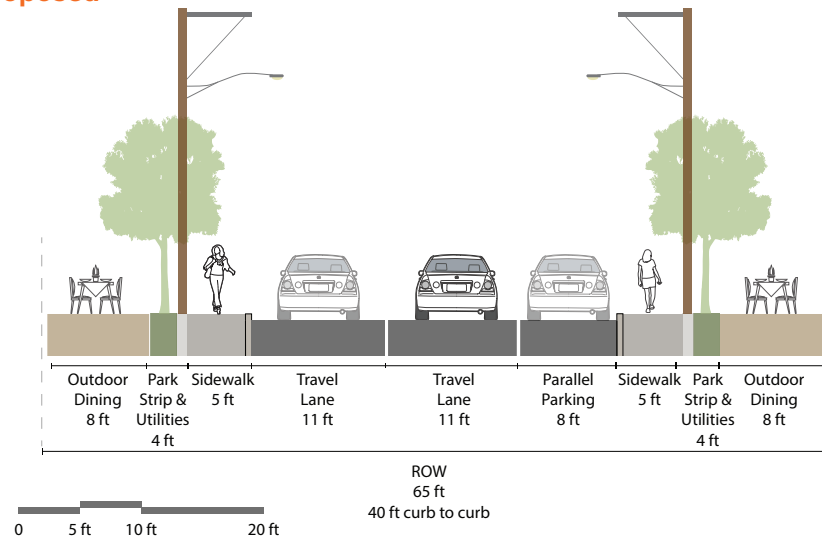
LONG-TERM VISION: SMALL SCALE COMMERCIAL & INDUSTRIAL - SEGMENT E - 5TH STREET TO 2ND STREET



Existing



Proposed



Existing Segment E: This segment of Main Street is one-way and provides two lanes of travel and parking on both sides of the street for the majority of this segment. Today, this segment feels aesthetically disconnected from the rest of Main Street’s commercial core.

Proposed Segment E: By removing parking on one side of the street the curb can be extended equally on both sides of the street to create wider sidewalks that can accommodate outdoor dining. Wayfinding signage to the Borough-owned parking lot at 4th street will be added to encourage parking and strolling along the corridor. Gateway signage will be added near 2nd Street to signal entry into Stroudsburg for people entering via the one-way segment of McConnell heading east from the bridge. Crossing improvements: A new mid-block crossing is added between 4th and Kane, a location where there have been recent pedestrian-involved crashes.

Evaluating Tradeoffs for Long-Term Vision

A major function of the design charrette was to build community consensus around a preferred scenario. The public right of way is constrained, and all available options feature trade-offs. The trade-offs for the preferred long-term vision to create a green promenade along Main Street are shown in Figure 1. For the preferred long-term design, the major trade-off was eliminating some parking spots along Main Street. By switching from pull-in angled parking to parallel parking, 8 feet become available for other uses – in this case, this space was allocated to sidewalk extensions and a landscaped center median. The decision was made for the following reasons:

- ▶ It is difficult to back-up from the angled spaces, due to the limited visibility from the topography (small hill blocks view).
- ▶ The future conditions will encourage people to park on both sides of the street, while currently most people park on the north side of the street.

- ▶ Additional wayfinding will be used to promote the currently underutilized parking garage
- ▶ Sharing parking with surrounding businesses and institutions (for example, the courthouse garage) can be explored

Figure 1. Trade-offs associated with the long-term vision

	DECREASE	STAYS THE SAME	INCREASE
STREET TREES / PLANTINGS	-	=	+
OUTDOOR DINING	-	=	+
WALKING EXPERIENCE	-	=	+
BIKING EXPERIENCE	-	=	+
TRAFFIC CALMING	-	=	+
PARKING AVAILABILITY	-	=	+
ESTIMATED COST	\$	\$\$	\$\$\$

*Conditions will improve for experienced cyclists, and remain similar for less experienced cyclists.

PARKING EVALUATION: STRATEGIES TO RECOUP LOST REVENUE & INCREASE PARKING OPTIONS

A preliminary evaluation of parking supply along Main Street was conducted to quantify supply and demand of street parking and Borough-owned lots using guidance established by the Institute of Transportation Engineers (ITE) Trip and Parking Generation handbook and the Borough's established parking minimums. The assessment found that the current parking supply for Main Street is more than adequate. In fact, there are more than 150 parking spots than are required per best practice and Borough recommendations.

So while the long-term vision for the corridor would result in a loss of parking, the supply will still be sufficient.

The long term vision would result in a loss of parking. As shown in the table on the following page, there would be a net loss of approximately 32 spaces. Of these, 14 spaces will be lost on Lower Main, where meters are currently being removed. So the potential loss of metered parking on Main is 18.

Maximize Surface Parking Lot Utilization

There are places on Main that can absorb this parking impact, as shown in Map 3. Additional wayfinding could promote use of the municipal garage and surface

lots, which are underutilized. Agreements with local businesses such as the Penn Stroud Hotel, The County Courthouse, and nearby banks could open up shared parking – where the spaces are available to the general public after business hours. While most people who would park downtown will be able to park near Main street in one of these alternative locations, removing parking may dissuade some people from driving and parking. Though this has numerous safety, environmental, and congestion benefits, there may be a decrease in parking revenue.

Shared Mobility

There is an opportunity to explore shared mobility options that can be located on Borough owned lots and garages. This may include bike share, scootershare, or carsharing services that increase mode choice and lessen parking demand.

Adjust Parking Rates

Currently parking rates in Stroudsburg are 50 cents per hour. Stroudsburg could raise the hourly rate, which is in line with neighboring jurisdictions, as shown below. Additionally, residents expressed that the \$10 meter fine is not high enough to discourage business owners and residents from overstaying the meter.

Peer city hourly rates:

- ▶ Hazeton - \$1 hr
- ▶ Allentown - \$1 hr
- ▶ Bethlehem - \$1.50 hr
- ▶ Easton - \$1 hr



Map 4. Existing Available Parking Options

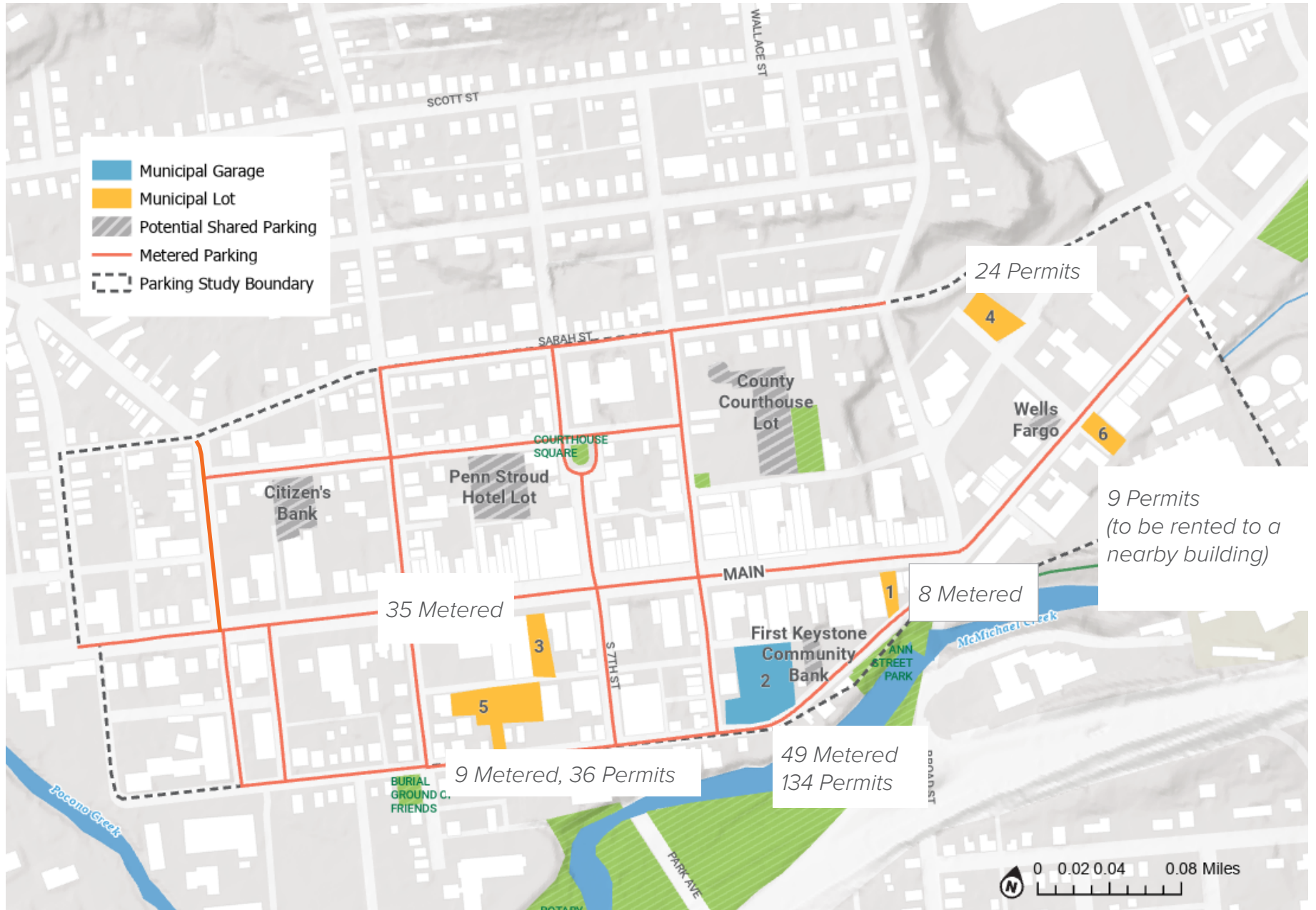


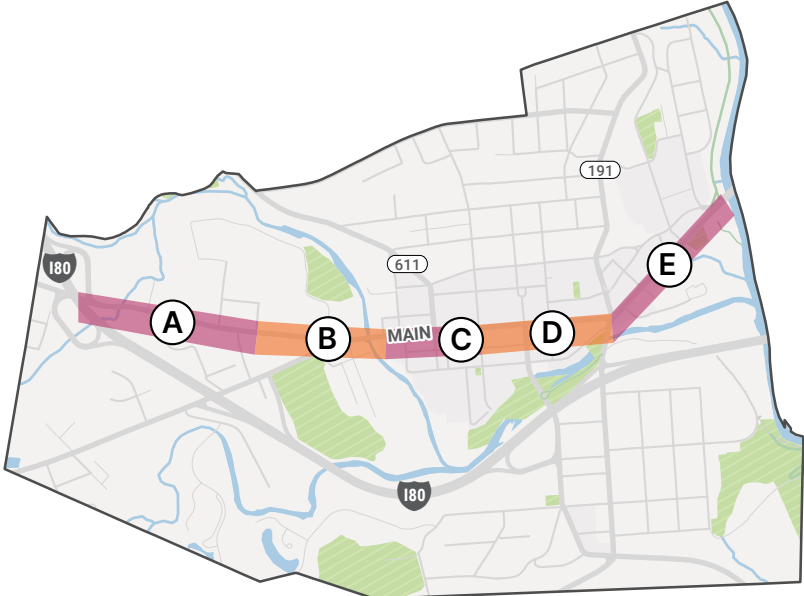
Table 1. Approximate Parking Change

Segment	Main Street Block	Current Parking Total	Proposed Parking Total	Differential
Segment A	1200 block	0	0	0
Segment A	1100 block	0	0	0
Segment B	1000 block	12	26	14
Segment C	900 block	23	23	0
Segment C	800 block	19	19	0
Segment D	700 block	48 (34 on north side, 14 on south side)	29	-19
Segment D	600 block	23 (17 on north side 6 on south side)	16	-7
Segment D	500 block	52 (35 on north side, 17 on south side)	46	-6
Segment E	400 block	28	14	-14
Segment E	300 block	11	11	0
-	parking garage	49 metered (134 permits)	49	0
-	municipal lots	52 metered (69 permits)	52	0
Total		216	184	-32

Note: Parking totals are based on planning-level estimations and actual parking loss may vary.

Parking Configurations

- ▶ **Segment A:** no change to parking (no parking except for a few non-metered spots near the housing complex—perceived as guest parking for this building)
- ▶ **Segment B:** gain parking by adding spaces
- ▶ **Segment C:** no change to parking
- ▶ **Segment D:** lose parking. Change head-in parking to parallel on both sides + add mid-block crossings.
- ▶ **Segment E:** remove parking on south side and add midblock crossing



Map 5. Parking Conditions

04

Implementation



Introduction

This plan includes Borough-wide bike and pedestrian network recommendations, as well more detailed recommendations for Main Street that will lead to a more joyful, connected, and safer Stroudsburg for people using all modes: walking, biking, taking transit and driving. This chapter provides guidance and action steps for implementing those recommendations.

To fully realize the recommendations within this Plan will require leadership and dedication on the part of a variety of groups and agencies. Collaboration with regional and state agencies, including PennDOT, the Monroe County Transportation Authority (MCTA), the Stroud Region Open Space & Recreation Commission, the private sector, including the Pocono Mountain Economic Development Corporation, and non-profit organizations should be considered to implement the vision laid out in this Plan. The implementation of the projects and strategies in this document will need to be phased over time and will depend on available resources. Even small amounts of local funding could be very useful and beneficial when matched with outside sources.



Implementation Recommendations

RECOMMENDATION	TIMELINE	KEY STAKEHOLDERS
Apply for 2022 DCED Grant for Quick Build improvements to Main Street	Complete	Stroudsburg Borough Staff, elected officials
Work with PennDOT to identify funding opportunities for Main Street supported by the I-80 project	Short-term (6months - 1 year)	Stroudsburg Borough Staff, PennDOT, elected officials
Prepare for Federal Funding Opportunities, including developing a 30% concept design, preparing a benefit-cost analysis for the proposed long-term vision, and conduct a traffic study.	Short-term (6 months -1 year)	Stroudsburg Borough Staff, PennDOT, elected officials
Develop conceptual design and sign placement plans for a Borough-wide wayfinding sign program that will reinforce connections to bike routes and trails, and provide pedestrian wayfinding to businesses and parking garages. Develop concepts for “Welcome to Stroudsburg” gateway signs, as well as shopping district signs.	Short-term (6 months -1 year)	Stroudsburg Borough Staff, elected officials, business owners along Main Street, the Pocono Chamber of Commerce, Stroudsburg historical society
Apply for RAISE grant in the 2023 Funding Cycle (applications will likely be due in the spring) for long-term improvements to Main Street	Short-term (6 months -1 year)	Stroudsburg Borough Staff, PennDOT, elected officials
Increase parking costs in line with neighboring jurisdiction (\$1-\$1.50 an hour) and parking violation ticket rates.	Mid-term (1-3 years)	Stroudsburg Borough Staff, elected officials, business owners along Main Street, the Pocono Chamber of Commerce, local police, the general public
Explore additional funding opportunities, including state/ local grants to include the following : <ul style="list-style-type: none"> • Transportation Alternatives Set-Aside (TASA) • PennDOT Local Safety Grants • Green Light-Go • Automated Red Light Enforcement • PennDOT Multi-Modal Grants • Department of Community and Economic Development (DCED) Multi-Modal Grants 	Short-term (6 months - 1 year)	Stroudsburg Borough Staff, elected officials

Cost Estimate Approach

Cost estimation relies on a variety of factors that are related to design constraints, property ownership, and local, regional, and state requirements. The following pages present two cost estimates: one for the quick build strategy to improve pedestrian safety and one for the long-term design to create a green promenade along Main Street.

Soft Costs: Design & Engineering

Design and Engineering costs cover a variety of professional services, including:

- ▶ Public participation
- ▶ Preliminary, semi-final, and final design
- ▶ Site surveyance
- ▶ Preparation of construction documents
- ▶ Permitting (local, state, and Federal, if required)
- ▶ Bid assistance
- ▶ Construction observation and contract administration

Based upon similar project experience and proposed concept design features, design

and engineering costs are expected to be approximately 15% of the total construction cost. However, the actual cost of these services will vary widely depending on project phasing. To a large extent, the cost of permitting, preparing bid documents, and managing the construction for a single phase are the same as completing these activities for an entire project. Survey and design are also more cost-effective if done at one time.

Hard Costs: Construction

This document presents preliminary estimates of construction costs based upon the conceptual designs described in this Plan. It does not include the construction costs of any of the potential expanded scope items outlined in the previous section. Important assumptions used to arrive at these estimates include:

- ▶ Proposed plans are conceptual and require additional detailed design
- ▶ This feasibility-level cost estimate is derived from previous studies, contractor coordination, and recent indexed construction costs
- ▶ Costs do not include property

acquisition

- ▶ Peripheral roadway intersection improvements are not included
- ▶ Standard construction methods and materials are used
- ▶ In developing these estimates, similar projects were used to select the construction materials with the best life-cycle cost and performance characteristics.

Inflation and Escalation

Cost estimates for this plan were developed in Summer 2022. When using these estimates, unit costs should be adjusted to account for inflation rates relative to the projected year of construction.



QUICK BUILD COST ESTIMATES

Planning-level cost estimates were developed for the proposed quick build concept. The table provides a summary of the planning-level costs, with costs prioritized into two tiers. Development of a preliminary design layout, survey, and utility coordination is recommended to refine potential cost ranges.

Table 2. Cost estimates for quick build improvements

DESCRIPTION	QTY	UNIT	UNIT PRICE	TIER 1 - AMOUNT	TIER 2 - AMOUNT
CIVIL IMPROVEMENTS					
Clearing & Grubbing, Demolition, and Site Preparation	1	EA	\$75,000.00	\$75,000	\$20,000
Pavement- Ultra-Thin Bonded Wearing Course	24000	SY	\$12.00	\$0	\$288,000
Planter Box- 54" L X 26" W X 21" H	52	EA	\$600.00	\$31,200	\$0
Green Alley Improvements	2	EA	\$15,500.00	\$0	\$31,000
MID-BLOCK IMPROVEMENTS					
Enhanced Mid-Block Crossing	5	EA	\$42,850.00	\$214,250	\$0
BUS STOP IMPROVEMENTS					
Bus Shelter	3	EA	\$7,500.00	\$22,500	\$0
Bus Stop Lighting	8	EA	\$3,000.00	\$24,000	\$0
Bus Stop Pad- Concrete	5	EA	\$4,500.00	\$0	\$22,500
Bus Stop Relocation	3	EA	\$12,000.00	\$0	\$36,000
PAVEMENT MARKING AND SIGNAGE					
Pavement Markings Symbols	32	EA	\$350.00	\$11,200	\$0
Pavement Markings- Stop Lines and Crosswalks	831	LF	\$15.00	\$12,465	\$0
Hi-Visibility Crosswalk	41	EA	\$2,000.00	\$82,000	\$0
Pavement Markings Lane Lines- Thermoplastic	20996	LF	\$3.50	\$73,486	\$0
Pavement Markings- Gore Markings- Thermoplastic	995	LF	\$7.50	\$7,463	\$0
Curb Extension- Colored Thermoplastic	8000	SF	\$27.50	\$220,000	\$0
Scramble Center Pattern Marking- Colored Thermoplastic	3850	SF	\$30.00	\$0	\$115,500
Flexible Delineator- K71	320	EA	\$180.00	\$57,600	\$0
Turn Wedge/Centerline Hardening Device- Treetop Speed Hump (10-ft)	68	EA	\$400.00	\$27,200	\$0
Traffic Signs & Posts	1	EA	\$350.00	\$350	\$0
Gateway Signage	2	EA	\$10,000.00	\$20,000	\$0
Wayfinding Signage	18	EA	\$450.00	\$8,100	\$0
Pedestrian Scramble Signage	8	EA	\$350.00	\$2,800	\$0

Table 3. Cost estimates for quick build improvements (continued)

TRAFFIC SIGNALS					
Operational Signal Changes	4	EA	\$7,500.00	\$30,000	\$0
LUMP SUM ITEMS					
Erosion and Sediment Control (2%)	1	LS	-	\$0	\$10,260
Minor Items (4%)	1	LS	-	\$36,785	\$20,930
Maintenance of Traffic (6%)	1	LS	-	\$50,677	\$29,580
Construction Surveying (2%)	1	LS	-	\$16,892	\$10,065
Mobilization (10%)	1	LS	-	\$84,461	\$49,300
			<i>SUBTOTAL</i> =	\$1,108,428	\$633,136
CONTINGENCIES					
			10% DESIGN & CONSTRUCTION ENGINEERING =	\$110,843	\$63,314
			5% CONTINGENCY =	\$55,421	\$31,657
			<i>TOTAL</i> =	\$1,274,693	\$728,106
			GRAND TOTAL COST =	\$2,002,799	

Disclaimer:

These planning-level opinion of probable construction costs were developed by identifying pay items and establishing quantities based on the current typical sections. Additional pay items have been assigned approximate lump sum prices based on a percentage of the anticipated construction cost. Bus stop lighting is assumed to be solar-powered and not connected into electrical system. Preliminary cost opinions include a 5% contingency to cover items that are undefined or are typically unknown prior to final design. Unit costs are based on 2022 dollars and were assigned based on historical cost data from PennDOT and local bid tabulations. This cost opinion does not include; permitting, inspection, or construction management; escalation; or the cost for ongoing maintenance. This cost opinion is provided for the Client's information, and is based on the design professional's recent experience, adjusted for factors known at the time of preparation. Alta Planning + Design has no control over the cost of labor and material, competitive bidding, or market conditions; and makes no warranties, expressed or implied, concerning the accuracy of the opinion as compared to actual bids or cost to the Client.

LONG-TERM VISION COST ESTIMATES

The costs associated with the long-term design recommendations.

Table 4. Cost estimates for long-term improvements

DESCRIPTION	QTY	UNIT	UNIT PRICE	Tier 1: Traditional Street	Tier 2: Additional Costs for Flush Street Commercial Core (9th to 5th)
CIVIL IMPROVEMENTS					
Clearing & Grubbing, Demolition, and Site Preparation	1	LS	\$216,818.18	\$216,818	\$25,000
Pavement- Full Depth	3033	SY	\$90.00	\$273,000	\$1,085,050
Pavement- Mill & Overlay	17067	SY	\$50.00	\$853,333	-
Pavement- Ultra-Thin Bonded Wearing Course	19244	SY	\$12.00	\$230,933	-
Concrete Sidewalk	4947	SY	\$145.00	\$717,267	\$145,000
Concrete Driveway	808	SY	\$150.00	\$121,250	-
Concrete Curb (6")	13650	FT	\$35.00	\$477,750	-
Curb Ramp	68	EA	\$3,000.00	\$204,000	\$39,000
Truck Apron	300	SF	\$20.00	\$6,000	-
Landscape- Sod or mulch	2094	SY	\$15.00	\$31,417	-
Landscape- Street Tree	200	EA	\$1,500.00	\$300,000	-
Tree trench- Tree, tree well, grate	94	EA	\$15,000.00	\$1,410,000	-
Green Alley Improvements	2	EA	\$15,500.00	\$31,000	-

MID-BLOCK IMPROVEMENTS					
Enhanced Mid-Block Crossing (Full Build)	5	EA	\$24,200.00	\$121,000	-
BUS STOP IMPROVEMENTS					
Bus Shelter	14	EA	\$7,500.00	\$105,000	-
Bus Stop Lighting	14	EA	\$3,000.00	\$42,000	-
Bus Stop Pad- Concrete	14	EA	\$4,500.00	\$63,000	-
PAVEMENT MARKING AND SIGNAGE					
Pavement Markings Symbols	42	EA	\$350.00	\$14,700	-
Pavement Markings- Stop Lines	675	LF	\$15.00	\$10,125	-
Hi-Visibility Crosswalk	44	EA	\$2,000.00	\$88,000	-
Pavement Markings Lane Lines- Thermoplastic	22850	LF	\$3.50	\$79,975	-
Pavement Markings- Gore Markings- Thermoplastic	350	LF	\$7.50	\$2,625	-
Scramble Center Pattern Marking- Colored Thermoplastic	3850	SF	\$30.00	\$115,500	-
Gateway Signage	2	EA	\$5,000.00	\$10,000	-
Wayfinding Signage	18	EA	\$450.00	\$8,100	-
Pedestrian Scramble Signage	8	EA	\$350.00	\$2,800	-
TRAFFIC SIGNALS					
Traffic Signal Modifications	6	EA	\$25,000.00	\$150,000	-
Operational Signal Changes	4	EA	\$7,500.00	\$30,000	-
DRAINAGE AND UTILITIES					
Drainage Modifications/Adjustments	1	LS	\$1,548,820.00	\$1,548,820	\$128,000
Street Light Modifications/Adjustments	1	LS	\$51,500.00	\$51,500	-
Utility Modifications/Adjustments	1	LS	\$61,800.00	\$61,800	-

LUMP SUM ITEMS					
Erosion and Sediment Control (2%)	1	LS	-	\$147,554	\$28,441
Minor Items (6%)	1	LS	-	\$451,516	\$87,029
Maintenance of Traffic (6%)	1	LS	-	\$429,654	\$83,823
Construction Surveying (2%)	1	LS	-	\$146,169	\$28,510
Mobilization (10%)	1	LS	-	\$716,090	\$139,705
<i>SUBTOTAL =</i>				\$9,268,696	\$1,789,558
CONTINGENCIES					
<i>15% DESIGN & CONSTRUCTION ENGINEERING =</i>				\$1,390,304	\$268,434
<i>30% CONTINGENCY =</i>				\$2,780,609	\$536,867
<i>TOTAL =</i>				\$4,170,913	\$805,301
GRAND TOTAL COST =				\$13,439,609	\$2,594,860
GRAND TOTAL COST WITH FLUSH STREET=				\$16,034,468	

Disclaimer:

These planning-level opinion of probable construction costs were developed by identifying pay items and establishing quantities based on the current typical sections. Additional pay items have been assigned approximate lump sum prices based on a percentage of the anticipated construction cost. Bus stop lighting is assumed to be solar-powered and not connected into electrical system. Preliminary cost opinions include a 5% contingency to cover items that are undefined or are typically unknown prior to final design. Unit costs are based on 2022 dollars and were assigned based on historical cost data from PennDOT and local bid tabulations. This cost opinion does not include; permitting, inspection, or construction management; escalation; or the cost for ongoing maintenance. This cost opinion is provided for the Client's information, and is based on the design professional's recent experience, adjusted for factors known at the time of preparation. Alta Planning + Design has no control over the cost of labor and material, competitive bidding, or market conditions; and makes no warranties, expressed or implied, concerning the accuracy of the opinion as compared to actual bids or cost to the Client.