



PLANNING BOARD MEETING - MAY 13, 2026 AGENDA

Wednesday, May 13, 2026 at 7:30 PM

Online via Zoom

Members of the public who wish to review hard copies of any documents which are available for online inspection in the packet, should contact the Land Use Administrator, Robin Tillou via e-mail at planning@penningtonboro.org or telephone at (609) 737-0276 x3.

OPENING STATEMENT: Adequate Notice of this meeting has been given to the Hopewell Valley News and Trenton Times and was posted on the bulletin board at Borough Hall at 30 North Main Street and on the Borough website according to the regulations of the Open Public Meetings Act.

ROLL CALL: Blackwell; Caminiti; Davy; Jackson; Kassler-Taub; O'Neill; Reilly; Tracy; Rex; Calabi; Jacobs

PUBLIC COMMENT FOR NON-AGENDA ITEMS ONLY

RESOLUTIONS OF MEMORIALIZATION

[*Resolution](#) - Appointment of Planning Board Engineer

MASTER PLAN PUBLIC HEARING

[*Master](#) Plan Adoption

OLD BUSINESS

MINUTES FOR APPROVAL

[*April](#) 8, 2026 Minutes

Adjournment_____

*Indicates Action May Be Taken

BOROUGH OF PENNINGTON PLANNING BOARD

RESOLUTION APPOINTING BOARD ENGINEER

WHEREAS, the Mayor and Council of the Borough of Pennington adopted Resolution 2026 – 4.17 on April 6, 2026, appointing a Municipal Engineer; and

WHEREAS, N.J.S.A. 40:55-D-24 authorizes the Pennington Borough Planning Board to appoint a consulting engineer to assist the Board with its duties; and

WHEREAS, the Pennington Board Planning Board wishes to utilize the services of the Municipal Engineer as the Board Engineer; and

WHEREAS, the award of this professional services contract is based on a competitive proposal process and is otherwise compliant with the New Jersey Local Public Contracts Law, N.J.S.A. 40A:11-1, et seq. concerning the appointment of a professional engineer whose practice is regulated by law.

NOW THEREFORE, BE IT RESOLVED, that the Pennington Borough Planning Board hereby appoints Colliers Engineering & Design, Inc. as the Board Consulting Engineer for the calendar year 2026.

CERTIFICATION

I, Robin Tillou, Administrative Secretary to the Pennington Borough Planning Board does hereby certify that the foregoing is a true copy of a Resolution adopted by the Pennington Board Planning Board at its meeting on May 13, 2026.

Robin Tillou
Pennington Borough Planning Board
Land Use Administrator
HPC Secretary

MASTER PLAN
BOROUGH OF PENNINGTON
NEW JERSEY

8. Conservation of Natural Resources Plan Element

Approved by the Environmental Commission for release to the Planning Board on May 20, 2024. Conditionally adopted by the Planning Board on June 12, 2024. This element will be available for comments until April 22, 2026, prior to final adoption at a public meeting of the Planning Board on May 13, 2026.

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- 1. Introduction**
- 2. Summary of Environmental Resources and Conditions**
- 3. Conservation of Natural Resources Goals**
- 4. Impacts of Other Elements of the Master Plan**

Environmental Commission

Kieran John, Chair
Joann Held
Dan Rubinstein
Brian Friedlich
Jim Fuger
Nancy Fishman
Andrew Jackson
Yasmine Zein, Alternate #1
Nell Haughton, Alternate #2
John Valenza, Council Representative

1. Introduction

The Municipal Land Use Law (N.J.S.A. 40:55D-28(8)) defines the Conservation of Natural Resources Plan element as follows:

“A conservation plan element providing for the preservation, conservation, and utilization of natural resources, including, to the extent appropriate, energy, open space, water supply, forests, soil, marshes, wetlands, harbors, rivers and other waters, fisheries, endangered or threatened species wildlife and other resources, and which systemically analyzes the impact of each other component and element of the master plan on the present and future preservation, conservation and utilization of those resources”

The conservation of Pennington Borough’s natural resources can positively contribute to the health, quality of life, welfare, and safety of residents. The Conservation of Natural Resources Plan element assists in the conservation of the Borough’s natural resources by identifying and characterizing its environmentally significant features and by putting forth key goals for the Borough’s conservation efforts.

The Conservation of Natural Resources Plan element incorporates the 2024 Environmental Resources Inventory (ERI) of Pennington Borough, developed and approved by the Environmental Commission. The ERI can be found on the Borough website. It describes the Borough’s natural resource characteristics and environmentally significant features, including manmade features such as historic sites and contaminated sites. It provides baseline documentation for evaluating resource protection and is a dynamic document that should be periodically revised and re-adopted to capture changes in conditions. Together the ERI and the Conservation of Natural Resources Plan element provide documentation and form a basis for land use and other policy decisions, plans, and municipal functions.

The Borough’s 2025 Master Plan also contains an Open Space and Recreation Plan element and a Green Building and Environmental Sustainability Plan element (GBESE), whose contents may overlap at times with those of the Conservation of Natural Resources Plan element. This element focuses on the conservation of Pennington’s natural resources and leaves the preservation of open space and the conservation of energy to the other elements.

2. Summary of Environmental Resources and Conditions

Pennington Borough is located in northwest Mercer County, New Jersey, and occupies 0.96 square miles, over 90% of which is already developed. The Borough has a population of 2,802 people (2020, U.S. Census). The Environmental Resources Inventory (ERI) is the definitive document that describes the Borough’s environmental resources and conditions. The following is a summary of the categories covered:

1. **Geology.** Pennington is located at the southern edge of the Piedmont Plateau. The topography of the majority of the Borough is relatively mild, with gentle slopes, flat areas, and occasional steep slopes.
2. **Soils and Slopes.** A region’s soil defines what vegetation is possible and impacts land uses. Pennington lies at the edge of the Piedmont Province and the Coastal Plain and

contains a wide variety of soil types, with 60% of its soils classified as prime farmland. The majority of the Borough is relatively flat, but there are some areas of steep slopes along the banks of the Stony Brook and various tributaries, as well as along the embankments of the existing railroad lines.

3. **Land Use.** NJDEP Land Use/Land Cover mapping identifies approximately 63.5% of the Borough as urban, with residential areas comprising the majority. Less than 1% is classed as vacant land. Main roads are New Jersey State Highway Route 31 and Mercer County roads, 624/E. Delaware Ave., 640/N. Main St. and 631/Ingleside Ave. CSX railroad tracks traverse the Borough in a north-south direction.
4. **Open Space.** There are two parks in the Borough, Kunkel Park and Sked Street Park. Recently, the Borough began the development of a public arboretum in the woodland behind Toll Gate Grammar School. The Borough works actively with Hopewell Township, Mercer County and regional not-for-profit organizations to create, expand and maintain a permanently protected “green belt” of open space around or near Pennington, with access from the Borough where possible.
5. **Water Resources.** There are a total of 2.12 miles of stream flowing across Pennington Borough, including Lewis Brook, Stony Brook, Woolsey Brook, and several tributaries to these streams. There are also three features defined as waterbodies, lakes, or ponds by NJDEP and 0.25 acres is wetland. Three larger lakes in Hopewell Township surround the Borough; Rosedale Lake, Curlis Lake, and Baldwin Lake. The Borough is located on the Delaware and Raritan watershed line with Woolsey Brook flowing to the Delaware and Lewis Brook and Stony Brook flowing to the Raritan. Drinking water comes from four wells around the Borough that collect water via fractures in the bedrock of the Passaic formation. The Borough delivers about 80 million gallons of water per year to its users.
6. **Wastewater and Solid Waste Management.** Pennington Borough is responsible for the operation and maintenance of the wastewater collection system within the Borough. Treatment of this wastewater occurs at the Pennington Wastewater Treatment Plant (WWTP), which is owned by the Stony Brook Regional Sewerage Authority (SBRSA). Sludge from the plant is trucked to the WWTP receiving facility in Princeton for treatment and disposal. The Borough’s Department of Public Works provides curbside trash collection to all residents once a week, and the trash is taken to a Mercer County transfer facility in Ewing Township. Recycling service every other Tuesday is provided through the Mercer County Improvement Authority. The Borough also collects leaves, brush and other yard waste.
7. **Climate and Air Quality.** Pennington Borough lies within the Central New Jersey climate zone, a temperate, continental climate influenced by airstreams that vary from hot and humid to dry and cold. Severe storm events, including thunderstorms, tropical storms, hurricanes, blizzards, ice storms, hailstorms, and tornadoes, all occur in Mercer County. Storms often result in flooding. Most recently, tropical storm Ida hit New Jersey in September 2021 when 7.44 inches of rain fell within a 6-hour period in the Hopewell Valley area, resulting in severe flooding in Pennington Borough. Air quality in the

Borough is generally good as there are no major sources of air pollution located in or near Pennington.

8. **Light and Noise Pollution.** The sources of light pollution impacting Pennington Borough are mostly not within the Borough itself. Local sources of light and noise pollution include the traffic on Route 31, as well as the lighting of parking lots, businesses, and athletic fields. Noise pollution comes from cars, motorcycles, trucks and trains and from lawn maintenance and leaf blowing. All noise pollution is regulated under chapter 133 in Pennington Borough Code.
9. **Vegetation and Wildlife.** Pennington's natural areas face ongoing and emerging threats to natural ecological balance. Non-native, invasive species pose a significant threat by crowding out native species and reducing biodiversity. Climate change impacts growing conditions. The white-tailed deer population has grown, negatively impacting the ecosystem and adversely affecting public safety with auto collisions and exposure to Lyme disease. On the positive side, Pennington has been recognized as a Tree City for over 30 years and the Borough has a Community Forestry Management Plan as well as ordinances on street trees and on tree management on private property.
10. **Contaminated Sites.** In Pennington Borough there are two active contaminated sites on the NJDEP Known Contaminated Sites (KCS) list: the site of an underground heating oil tank in the commercial area of North Main Street (remedial action report submitted in May 2021) and the former Pennington Borough Sanitary Landfill (early stages of remediation initiated in September 2019). A third site, known as the Tiger Mart site at the corner of Route 31 and West Delaware Avenue, is shown in the NJ GEOWEB as an active site with a remedial action plan in place.

In summary, the Environmental Resource Inventory catalogues the Borough's natural resources and characteristics and should be utilized by residents and officials in decision-making. It is useful to residents who wish to identify potential resource issues on their property and in their neighborhood as well as to officials reviewing development applications. While the Borough's natural resources are not as extensive as surrounding communities, they are nonetheless worthy of consideration in ongoing and future planning.

3. Conservation of Natural Resources Plan Element Goals

The goals of the Conservation of Natural Resources Plan element are as follows:

1. Coordinate development to preserve and enhance natural resources.
2. Guide growth away from natural resources into areas with existing infrastructure.
3. Limit disturbance of environmentally sensitive lands such as steep slopes, floodplains, wetlands, critical habitat, and unique environmental features
4. Protect water quality for drinking, recreation, irrigation, and natural habitat.

5. Encourage the removal and replacement of non-native plantings and protect and restore natural vegetation.
6. Manage nuisance and invasive species to protect native ecosystems and biodiversity.
7. Preserve contiguous natural lands to minimize habitat fragmentation and maximize the benefits of preservation.
8. Preserve and enhance existing visual resources such as scenic corridors, tree-lined streets, and woodlands.
9. Foster stewardship and management of already preserved lands and natural resources.

4. Impacts of Other Elements of the Master Plan

Pennington Borough addresses natural resource conservation in the other elements of the Master Plan where relevant. The impacts of other elements on the conservation of natural resources include:

Land Use Plan Element. The Land Use Plan element relates to the Borough's zoning and potential redevelopment areas. Future development should aim to conserve the Borough's natural resources through the preservation of open space and by observing the principles of sustainable development. The Land Use Plan element includes a Climate Change Vulnerability Assessment of the risk to the Borough of climate change-related natural hazards, which will impact natural resources as well as residents and borough businesses.

Public Works Services Plan Element. This element primarily concerns the Borough's energy, drinking water, waste management and recycling, wastewater and sewage, and stormwater management systems. The maintenance and improvement of these systems is consistent with several goals of this Conservation of Natural Resources Plan element. In particular, the improvement of the Borough's stormwater management system can reduce the quantity of pollutants that flow into the Borough's waterbodies as stormwater runoff.

Open Space and Recreation Plan Element. Both the Open Space and Recreation Plan element and the Conservation of Natural Resources Plan element encourage the preservation of the Borough's natural spaces. Open space preservation protects wildlife habitats, natural vegetation, trees, and can contribute to stormwater management and pollutant reduction.

Green Buildings and Environmental Sustainability Plan Element. Buildings that incorporate energy efficiency, water conservation and reuse, and other green building practices can greatly contribute to the conservation of Pennington Borough's natural resources. The strategies discussed in the Green Buildings and Environmental Sustainability Plan element will be key in achieving the goals of the Conservation of Natural Resources Plan element, and in reducing the Borough's carbon footprint.

MASTER PLAN

BOROUGH OF PENNINGTON NEW JERSEY

1. Framing Plan: Introduction, Vision, Assumptions and Guiding Principles

The Framing Plan element draft released by the Master Plan Committee was conditionally adopted by the Planning Board on April 8, 2026, and posted on the Borough website for public comment. This element will be available for comments until April 22, 2026, prior to final adoption at a public meeting of the Planning Board on May 13, 2026.

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Suzanne Elliott	Michelle Needham	Tom Timperman
Nell Haughton	Gretchen Overhiser	Kristen Tunkel
Jason Meyer	Ryan Schwab	Rich Tunkel
Merideth Moore	Natalie Shivers	Yasmine Zein

A. Introduction

The municipal Master Plan, adopted by the Planning Board, sets the Borough's land use policies and is the principal document that addresses the way development, redevelopment, conservation, preservation and restoration should occur within the municipality. It is intended to guide the decisions made by public officials and those of private interests involving the use of land. Further, the Master Plan, and more specifically its goals and objectives, are critical to the Planning Board when deciding upon development applications where variance relief is requested. Through its various elements, the Master Plan provides a vision for the community in the next 10 to 25 years.

The Master Plan provides the legal foundation for the zoning ordinance and zoning map. New Jersey, among a handful of other states, specifically ties the planning of a community as embodied in the Master Plan to the zoning ordinance and zoning map, which are adopted by the Borough Council and constitute the primary law governing the use of land at the local level. Under New Jersey's Municipal Land Use Law N.J.S.A. 40:55D-1 et seq., (hereinafter "MLUL") a zoning ordinance must be substantially consistent with the Land Use Plan.

It should be noted that this Master Plan is for the Borough of Pennington, not for the larger area covered by the Pennington 08534 Zip Code. As of 2025, Pennington Borough has about 1100 housing units and a population of 2800 whereas Pennington Zip Code 08534, which includes Pennington Borough, has about 5000 units and a population of 13,000. The area of Pennington Borough is about one square mile and is included in the 08534 Zip Code which covers about 20 square miles (<https://www.unitedstateszipcodes.org/08534/>). Pennington Borough is surrounded by Hopewell Township, a separate municipality, and that is where the 3900 additional housing units of Zip Code 08534 are located. If asked, most of the residents of Zip Code 08534 will say they live in Pennington, and this can lead to confusion in terms of planning and governance.

a. Definition of the Master Plan

Municipal planning is a process. One of the primary objectives of that process is adoption of the Master Plan. The Master Plan itself is generally defined as a comprehensive guide for the future development of a community in terms of its physical, environmental, resilience, social, public health, economic and aesthetic needs. The key aspect in defining a Master Plan is its comprehensive approach. The Master Plan considers all factors having an impact on community life and their potential for change. Each of the many aspects to be examined are considered with respect to the whole, and in forming final proposals, all planning considerations are adjusted to each other.

The Municipal Land Use Law, Chapter 219 of the Laws of New Jersey in (40:55D-5) defines a Master Plan as "a composite of one or more written or graphic proposals for the development of the municipality as set forth in and adopted pursuant to Section 19 (40:55D-28) of this act." That section contains a listing of the mandatory and optional elements of a Master Plan.

b. Purposes of a Master Plan

According to the Municipal Land Use Law, the purpose of a Master Plan is to “guide the use of lands within the municipality in a manner which protects public health and safety and promotes the general welfare.” (40:55D-28). The purpose of the Master Plan is to present for all to see and comment on:

1. Fundamental statements of policy in the form of principles and objectives regarding future development of the community
2. Plan text and maps relating the policy statements to a physical design; and
3. General considerations of the ways and means by which Plan proposals can be achieved.

c. The Use of a Master Plan

The uses of the Master Plan are as follows:

1. It provides the basis for zoning. Under the Municipal Land Use Law, a community wishing to control land use by means of a zoning ordinance must first adopt the Land Use Plan element of its Master Plan.
2. It provides the local governing body, agencies, and residents and businesses - both existing and prospective - with the information needed to make intelligent decisions relating to land use and community development, particularly for applications where variances are requested.
3. It is often required for a community to be eligible for certain State (e.g., Green Acres) and Federal funding programs.
4. It serves as a check against any arbitrary action of elected officials. Action by such officials involving the expenditure of public funds for a capital project must be referred to the Planning Board for project review and recommendation in conjunction with the adopted Master Plan.
5. It often provides a wealth of general information about the community for interested parties and, with imaginative proposals, can stimulate public interest in, and support for, community improvement.

B. Legal Requirements for Planning

a. Plan Preparation and Adoption

The responsibility for the preparation of a Master Plan rests with the Planning Board. The Master Plan is adopted (or amended) only by the Planning Board and only after a public hearing. In accordance with the Municipal Land Use Law, the Master Plan must be reexamined at least once every ten years and amended if necessary. The local development ordinances as presented in the Borough Code must be consistent with the Land Use element and the Housing Plan element of the Plan.

b. Plan Content

The Master Plan must include a statement of objectives upon which the Plan is based, a Land Use Plan and additional Plan elements as deemed appropriate for the municipality, and a specific policy statement indicating the relationship of Plan proposals to the Plans of neighboring communities, the County, and other appropriate jurisdictions.

c. Plan Impact on Future Development

The Master Plan, after adoption by the Planning Board, gives the community the legal basis for control over future development. The major means of control are as follows:

1. The official map of the community, adopted by local ordinance, must be consistent with the appropriate provisions of the Master Plan.
2. The official map is deemed conclusive with respect to the location and width of streets and public drainage ways and the location and extent of flood control basins and public areas. (40:55D-32)
3. The location and design of new streets created through the process of land subdivision or site plan approval may be required to conform to the provisions of the Mobility Plan element of the Master Plan. (40:55D-38b(2))
4. Where the Master Plan provides for the reservation of designated streets, public drainage ways, storm water detention basins, or public areas, the Planning Board may require that such facilities be shown and reserved in subdivisions and site plans in locations and sizes suitable for their intended use. The reservation powers are effective for a period of one year after approval of a final plan. The municipality must compensate the owner for such an action. (40:55D-44)
5. Whenever the governing body or other public agency proposes to spend public funds, incidental to the location, character or extent of a capital project, such proposal must be referred to the Planning Board for review and recommendation. No action shall be taken without such recommendation or until 45 days have elapsed after such reference. (40:55D-31).
6. All the provisions of a zoning ordinance, or any amendment or revision thereto shall either be substantially consistent with the Land Use element and the Housing Plan element of the Master Plan or designed to effectuate such Plan elements. (40:55D-62)

C. Public Participation in Developing the Plan

Public participation has been the foundation of the development of the Master Plan. Although Pennington is a wealthy town, its budget is constrained by the lack of any major industries. With property taxes at the upper end of the New Jersey spectrum, there was limited appetite in the Borough for funding Master Plan activities. With a looming deadline of September 2023 for the state-mandated Master Plan reexamination, a Master Plan Committee (MPC) was formed in 2021 within the Planning Board, consisting of four volunteer members, assisted by the Borough Planner. The MPC completed a comprehensive Reexamination Report of the 1998 Master Plan

and its subsequent reexaminations, which was adopted by the Planning Board in a public meeting on May 10, 2023.

A major recommendation of the Reexamination Report was that the Borough should create a new Master Plan to replace the obsolete 1998 Plan. The following steps have been taken to ensure that Pennington residents are informed and involved during the development of the Master Plan and its elements:

1. In all, more than 75 borough residents have been involved in the preparation and writing of the Master Plan elements, which speaks well to direct community involvement.
2. After an appeal for volunteers to assist the Planning Board with the Master Plan, 15 residents stepped forward and were appointed by the Mayor to a Citizens Advisory Committee (CAC) in October 2023. CAC members have served as community contacts, obtaining feedback as the Master Plan and its elements were developed. Several have been involved in the teams writing element drafts.
3. In the fall of 2023, the MPC and CAC determined that the new Master Plan would consist of 12 elements and worked together to develop the vision and goals for each element for the updated Master Plan. Their report was reviewed, modified and endorsed by the Planning Board in a public meeting on January 10, 2024.
4. The endorsed vision and goals were presented to the public at an Open House at Borough Hall on April 10, 2024. Revisions were made based on feedback from Borough residents. The resulting list of draft goals was distributed to the teams developing the Master Plan elements as a guide for their discussions.
5. In preparing the various Plan elements, the MPC benchmarked the master plans of nearby communities: Hopewell Township, Hopewell Borough, Princeton, Bordentown, Lambertville, Stockton, Rocky Hill, and Hightstown. The MPC also reviewed the elements in the 1998 Pennington Borough Master Plan and the 2005, 2013 and 2023 Reexamination reports and considered the findings and recommendations in the 2002 Route 31 Design Study and the 2013 Route 31 Redevelopment Study.
6. The MPC assigned responsibility for developing initial drafts of 5 of the elements to related Committees and Commissions. These were Economic Development, Historic Preservation, Open Space and Recreation, and the Environmental Commission took on the GBESE (Green Buildings and Environmental Sustainability), Conservation of Natural Resources (including the Environmental Resources Inventory) and the Climate Change-Related Hazard Vulnerability Assessment (CCRHVA) for the Land Use Plan.
7. Specialized teams were formed for Mobility, Utility Services, and Community Facilities and Services. The MPC took responsibility for the introductory Framing document and the Relation to Other Plans element. The MPC worked with the Borough Planner on the Land Use Plan and the Housing Plan.
8. At various stages of the preparation of the elements, drafts were posted on the Master Plan page on the Borough website and Borough emails were sent to notify residents. Comments received were considered by the writing teams and changes were made to the elements where appropriate.
9. When elements were released from the writing teams, they were presented for conditional adoption by the Planning Board at their regular public meetings. After nine of the elements were conditionally adopted, the Master Plan Committee compared the goals in

the elements to find conflicts and duplications. Six Plan elements were revised and were presented to the Planning Board on October 8, 2025. The changes were endorsed, and near-final versions of the nine elements were posted on the website to allow additional comments before final adoption.

10. In August 2025, the MPC conducted a web-based survey to seek the input of residents on Housing and Land Use. The survey yielded 550 responses. Interestingly 241 of these came from residents of Hopewell Township which speaks to the Greater Pennington concept described in the Introduction above. The results of the survey are posted on the Borough website and were presented to the Planning Board at a public meeting on January 14, 2026. The results have been used to guide the development of the Housing and Land Use Plan elements.
11. The Amended 2025 Fourth Round Housing Plan was presented at a public meeting of the Planning Board on January 14, 2026 and was adopted. It was endorsed by Council on February 3, 2026. At its public meeting on March 2, 2026, Council adopted the HMU and MU ordinances along with AH 1-5 and adopted a revised Zoning Map.
12. The Planning Board held a public meeting on April 8, 2026 and conditionally adopted the Framing Plan and the Land Use Plan prior to final adoption of the Master Plan at a public Planning Board meeting on May 13, 2006

D. The Master Plan

The Borough of Pennington has many assets, including its location, charming downtown, established neighborhoods, and historic character. It has also benefited from previous planning efforts, which have shaped the Borough and maintained a high quality of life for the community. With little land available for development, the Borough population has remained stable since the last Master Plan of 1998, with 2655 residents in 2000 and 2784 in 2022. The last large area of undeveloped land in the Borough, the 16 acres previously owned by Capital Health, was rezoned for mixed residences and is now an 80-home development known as the Heritage at Pennington. Few sites remain for development.

However, there are new challenges facing the Borough, including the adverse effects of climate change, housing affordability, diversity, protection of natural resources, and traffic congestion. The Pennington Borough Master Plan Reexamination Report, adopted at a public meeting of the Planning Board on May 10, 2023, recommended that the Borough's 1998 Master Plan needed to be updated. There were three general areas where it was deemed to be deficient:

1. The Plan made no mention of several important current issues, including conservation, renewable energy, greenhouse gas emissions reduction, climate change hazard vulnerability and mitigation, green buildings, environmental sustainability, or the current variety of modes of mobility. Nor does it include an Economic Development Plan.
2. Updates are needed to the data and assumptions in the seven elements that were in the 1998 Master Plan: land use, housing, circulation, utilities, historic preservation, community facilities, and regional planning.
3. The 1998 Master Plan and its 2005 and 2013 reexaminations, and 2014 amendment exist only as PDFs on the Borough website. Thus, it is difficult to get a coherent picture of the current Master Plan as revised by recommendations in the reexamination reports. The

reevaluation reports were generally aimed at specific zoning issues relevant at the time and did not represent a comprehensive review of the Borough's planning policies and objectives.

To address the first and second issues, the Planning Board recommended that the Borough embark on an update of the Master Plan, creating a process that will allow existing elements to be fully updated and new elements to be written. To address the third issue, the Master Plan will be a living document on the Borough website. Each element will have its own webpage, links to which will be placed on the Master Plan landing page on the Borough website. Some elements may need to be revised more frequently and when an element is revised and publicly adopted by the Planning Board, it will replace the outdated version on the website. In this way, anyone accessing the Master Plan will be directed to the current version of all elements.

The Municipal Land Use Law (MLUL) mandates two elements in a Master Plan, an overview of the vision, assumptions, and guidelines upon which the proposals for the physical, economic, and social development of the municipality are based, which we have called the Framework element, and a Land Use Plan element. It also requires in 40:55D-28(4)d that the Master Plan shall include a policy statement on its relationship to the master plans of contiguous municipalities, the County master plan, the State Development and Redevelopment and the District Solid Waste Management Plan. Since these plans may be amended or updated from time to time, this topic has been designated as a plan element entitled Relation to Other Plans.

In addition, the MLUL suggests fifteen optional elements. Of these, nine have been deemed to be meaningful for inclusion in the Pennington Borough Master Plan along with the Framework, Land Use Plan and the Relation to Other Plans elements described above. Elements not considered relevant included farmland preservation, shore access, educational facilities, and development transfer. Recreation was included with Open Space and recycling was included in Utility Services.

The twelve elements in the Pennington Borough Master Plan are:

1. Framing Plan: Vision, Assumptions and Guiding Principles
2. Land Use Plan
3. Housing Plan
4. Mobility Plan
5. Utility Services Plan
6. Community Facilities and Services Plan
7. Open Space and Recreation Plan
8. Conservation of Natural Resources Plan
9. Economic Development Plan
10. Historic Preservation Plan
11. Green Buildings and Environmental Sustainability Plan
12. Relation to Other Plans

Links to the current version of these elements can be found under the Master Plan tab in the Planning and Zoning section of the Pennington Borough website.

E. Vision Statement

Pennington is viewed as a welcoming, healthy, safe and resilient community with friendly, supportive neighborhoods, a diverse downtown that is inviting to residents and visitors of all ages and interests. Historic preservation remains key to the Borough's character and pride. There will be open spaces and parks that offer both passive and interactive recreational resources for all. The Borough of Pennington responsibly supports affordable housing, while balancing development and preservation opportunities that enhance the quality of life for those of all ages who live, work, and play in the community. Pennington strives to be a sustainable, climate-resilient community.

F. Forward-Looking Assumptions

The following assumptions have guided the development of the Master Plan:

1. Given a lack of vacant land, much of the Borough's future growth will be in the form of redevelopment.
2. Traffic volumes in the Borough will continue to increase as new development is constructed in surrounding Hopewell Township.
3. At the global, national, state, and local level, there will be a growing focus on mitigation and adaptation to the effects of climate change.
4. The Borough will need to comply with federal, state and county mandates regarding climate change, environmental sustainability, and green building.
5. The Borough will continue its efforts to reduce the emission of greenhouse gases (GHG) in its operations to zero by 2035 and will encourage borough residents and businesses to seek ways to reduce their GHG emissions.
6. Local installation of renewable energy generation facilities and the ability to choose from a variety of emissions-free electricity suppliers will be necessary to help meet emissions reduction goals.
7. Reducing transportation GHG emissions will require zero-emissions electric, or hydrogen powered vehicles, which in turn will require charging and fueling infrastructure.
8. Funding will be needed for infrastructure improvements (including natural infrastructure e.g., restoration, tree planting and stormwater green infrastructure) to reduce flooding from heavy rain, minimize damage from strong winds, and cope with temperature extremes.
9. The Borough will need to continue to provide its fair share of the region's housing that is affordable to low-income and moderate-income households.
10. The trend to expand the safe use of rights-of-way to pedestrians, bicyclists and other personal vehicles will continue, with support at the state and county level.
11. Wireless communication technology will continue to improve, and the Borough will need to monitor the installation of new infrastructure.
12. Borough support for the preservation of its historic and iconic buildings will continue.
13. Support for the purchase of open space and its use for recreation will remain a focus.
14. The Borough is proud of being a Tree City and will continue to maintain its shade trees.

G. Guiding Principles

Guiding principles reflect the values of community and stakeholders expressed through the Master Plan outreach process, and by analysis of existing conditions, trends and best practices. They provide clarity for achieving the vision, and the community should look to these guiding principles when making planning and land use decisions.

Pennington recognizes the importance of:

1. Being a welcoming, inclusive, and accessible community for people who are diverse in age, race and ethnicity, gender identity, religion, abilities, and socioeconomic status.
2. Equitable access to housing, transportation, civic participation, parks, services, and other amenities.
3. Being a close-knit neighborhood that is also engaged in our wider communities of greater Pennington (08534 Zip code), Hopewell Township and Mercer County.
4. Maintaining attractive and caring residential neighborhoods while recognizing the need for more housing at lower price points.
5. Providing first class public services, and safe water and sanitary systems.
6. Supporting physical and mental wellness for its residents by recognizing the important health and equity implications of land use policy and planning decisions.
7. Pursuing age-friendly policies and programs so that residents can age in place and retain social connections, health, and well-being.
8. Having both a thriving town center that brings together residents, small businesses and Borough government operations, and a vibrant commercial sector along Route 31.
9. Becoming more sustainable and resilient to climate change-induced hazards and a model for energy efficiency and energy choices with a goal of becoming carbon neutral.
10. Observing best practices for designing parks, streets, public spaces, and open spaces to provide opportunities for social connection and a sense of community.
11. Having roads and sidewalks that safely accommodate walking, bicycling, and personal micromobility vehicles, while accommodating cars and commercial vehicles.
12. Preserving, honoring, and understanding its history, while embracing possibilities for new ways of living, working, communicating, and enjoying life.
13. Creating meaningful opportunities for social interactions, culture, learning, and leisure, by engagement with public and commercial facilities in the community.

H. Elements of the Master Plan

The Master Plan is more than a planning document – it is the community's collective vision for the future. It acknowledges the challenges to be faced (climate change, regional development pressures, aging infrastructure, changing transportation needs, affordable housing obligations) while celebrating the assets that make Pennington special (historic character, engaged residents, natural beauty, and strong partnerships). The Master Plan does not prescribe every detail but establishes principles and priorities to guide decisions over the next 10 to 25 years. It balances preservation with progress, local character with regional collaboration, and current needs with future sustainability. The following are brief summaries of what can be found in the other eleven plan elements that follow this Framing Plan, which is element 1.

Links to the current version of these elements can be found under the Master Plan tab in the Planning and Zoning section of the Pennington Borough website.

2. Land Use Plan

The Land Use Plan brings together the various land needs or uses suggested in the goals of the other elements of the Master Plan and develops recommendations for the modification of zoning ordinances or boundaries to accommodate them. The Land Use Plan summarizes the vision and goals of each Master Plan element and presents the land use issues identified. The Land Use Plan includes the existing and proposed land use and zoning maps, and descriptions of the proposed changes recommended.

Significant zoning changes were requested by the Housing Element and Fair Share Plan to accommodate the affordable housing obligations mandated by the state. These were largely accomplished by combining multiple business-only zones in both the Route 31 corridor and along North and South Main Street into two zones and allowing mixed business and residential uses in both. The new zones are Highway-Mixed Use (H-MU) for the Route 31 corridor and Mixed-Use (M-U) for other areas in the Borough. These new designations are supported by the Economic Development Plan, which also recommended elimination of the little-used Town Center Buffer (TCB) zone.

To meet the goal of the Mobility Plan to improve safety, reduce congestion and eliminate flooding at the intersection of Route 31 and West Delaware Avenue, a new Crossroads-Business (C-B) zoned is recommended to prioritize the use of land to create solutions to the problems at the intersection. The Mobility Plan also suggests that creative thinking on land use is needed to provide safe routes for bicycle and other personal mobility vehicle users, and for pedestrian walkways.

The Historic Preservation Plan recommends the creation of a Historic District Overlay to cover both the contiguous Historic District in the Town Center and other lots outside the Historic District that are deemed historic and should be preserved. It also recommends that Toll Gate Grammar School and the HVRSD Administration Building be zoned as E-3 Educational to allow preservation of the two 100-year-old structures.

The Land Use Plan concludes with the Climate Change-Related Hazard Vulnerability Assessment (CCRHVA) required by Municipal Land Use Law. This gives an analysis of current and future threats and vulnerabilities associated with climate change, a build-out analysis of future development, and an assessment of threats and vulnerabilities. It identifies critical facilities, utilities, roadways, and other public infrastructure necessary for evacuation and sustaining quality of life during a disaster and associated emergency response and management plans, and post-disaster recovery plans.

3. Housing and Fair Share Plan

This Plan addresses the Borough's fourth-round affordable housing obligation, which consists of a present need (rehabilitation) of 4 units and a prospective need (new construction) of 58 units. It

also addresses the third-round obligation unmet need of 125 units. According to the Plan, the Borough will meet all its fourth-round obligation, plus 37 of its third-round unmet need, which is higher than the realistic development potential based on an analysis of vacant land in the Borough.

Because there is little vacant land available, the Borough has focused on areas that can potentially be redeveloped. Eleven properties have been identified and are described in the Plan. Each currently has structures on them, with a variety of uses, but there is opportunity to develop them more efficiently, and with multifamily housing. As of 2026, two of the properties are in various stages of the redevelopment process as areas in need of redevelopment. As described under the Land Use section above, new draft zoning ordinances (H-MU and M-U) are presented in the Housing Plan along with five other draft ordinances, AH1 to AH5, that address the particulars of individual sites.

It is determined that the Plan is consistent with the 2025 State Development and Redevelopment Plan. All proposed sites to meet the fair share obligation are within existing sewer service area and have access to public water. All promote the goal of providing housing with access to transit, jobs, education, services and amenities as they are located close to NJ Transit bus stops and have ready access to a multitude of commercial services and amenities.

4. Mobility Plan

Pennington Borough's visions for mobility are to have transportation policies that reduce automobile use in the Borough and to provide safe sidewalks for pedestrians of all ages and abilities, and safe routes for bicycles and other low speed personal vehicles. The Borough also strives to improve highway access and crossing management for Route 31 with a strong emphasis on safety, and to eliminate flooding on all roads in the Borough. It aims to minimize the impacts of transportation on the environment, including greenhouse gas emissions, and air and noise pollution, and to implement Complete & Green Streets, and Vision Zero policies. It will work to provide adequate parking for customers of businesses in the town center while meeting the parking needs of employees and residents. It will also promote public and other transit alternatives to reduce traffic congestion and provide services to young and senior residents and to people with disabilities.

Nine goals and associated strategies can be found in the Plan, and a comprehensive review of the background to the goals is given in five additional sections covering Route 31 and its issues, Complete & Green Streets and Vision Zero policies, Borough parking needs, zero-GHG-emission vehicles, and public transit options. It recommends that the Borough should arrange for regular traffic and parking studies in and around Pennington and monitor changes to gauge the effectiveness of actions taken in response to the Mobility Plan. The Plan also discusses the Borough's dependence on the Delaware Valley Regional Planning Commission (DVRPC) and the New Jersey Department of Transportation (NJDOT) for improvements to State Route 31 and on Mercer County for the various County roads in the Borough.

5. Utility Services Plan

Pennington Borough's vision for utility services is to provide first-class, cost-effective services in Borough public areas and rights-of-way such as stormwater management, tree management, infrastructure maintenance and upgrades, snowplowing, and road repairs. It will also maintain and improve water and wastewater systems to ensure uninterrupted service, maximize system capacity, and reduce the long-term cost of municipal ownership. It will work to protect water quality for drinking, recreation, irrigation, and natural habitat, to maintain Municipal Separate Storm Sewer System (MS4) permit compliance, and to reduce the impact of severe storms on flooding in the Borough.

The Plan gives six goals and associated strategies for services provided by the Department of Public Works as described above and four goals and associated strategies for working with other entities that provide critical services to the Borough. These are recycling through the Mercer County Improvement authority and other entities, reliable and adequate electricity supply by Public Service Electric and Gas, delivery of natural gas by Elizabethtown Gas, and world-class telecommunication services provided by a variety of providers.

A comprehensive review of the background to the goals and strategies can be found in the Plan.

6. Community Facilities and Services Plan

Pennington Borough works to ensure equitable access to community facilities and services, and to provide these for people of all ages, races and ethnicities, gender identities, religions, abilities, and socioeconomic status. The Borough's vision is to enhance the physical and mental wellness of its residents by creating meaningful opportunities for social connections, culture, learning, and leisure, and by supporting the availability of public and private facilities and services in the community.

This Plan catalogs the public and private facilities and services provided for the residents of Pennington Borough. Borough-owned facilities include the Municipal Building, the Public Works Department, the Senior Center and four parks. Services provided by the Borough in addition to those covered in the Utility Services Plan above include police, emergency management, health and recreation. Services provided by others include fire and rescue, first aid, the library and the Post Office. There are five churches and two active cemeteries, a public grammar school and two private schools.

The total area of open space available for recreation, including parks, school grounds and other facilities is 53 acres. The National Recreation Association recommends that 10 acres of space is needed for every 1000 people in a community. With a population of 2,800, the Borough should have 28 acres and so is well served by these 53 acres. In addition, the Borough is surrounded by large tracts of open space including Baldwin Lake Wildlife Management Area, the Watersheds Institute, and the Mercer County Park – Rosedale, Mercer Meadows and Curlis Woods. Many of these areas are connected via trails such as the Lawrence Hopewell Trail, which also connects to

additional open spaces throughout the County. Nine goals for community facilities and services are given in the Plan.

7. Open Space and Recreation Plan

The Open Space and Recreation Plan was developed through the collaboration of two advisory bodies, the Open Space Committee and the Parks and Recreation Commission. The open space preservation mission is to retain the “village” identity of Pennington and the semi-rural character of nearby surrounding areas. The recreation vision is to maximize participation in outdoor and indoor activities, and to collaborate with other Borough committees to create synergies between recreation, education, and economic development.

The Borough works in collaboration with Hopewell Township, Mercer County and the State of New Jersey, and with non-profit land preservation organizations D&R Greenway Land Trust, Friends of Hopewell Valley Open Space and the New Jersey Conservation Foundation, to permanently protect open space in and near Pennington. The Plan reviews existing open space and recreational resources and assesses potential preservation opportunities near the Borough. Prioritized corridors extend west to Washington Crossing State Park, east to Mercer Meadows, and north to Baldwin Lake. Specific improvements proposed include the Stony Brook - Presidential Hills Connector, bike lanes connecting to the Great Western Bikeway, and safer bike paths around town.

The Plan presents four goals for open space preservation and four objectives for recreational enhancements. It also presents an extensive action plan for open space acquisition, woodland preservation, safe biking routes, pedestrian trails, parks, and potential synergies with economic development in the Borough.

8. Conservation of Natural Resources Plan

This Plan was developed by the Pennington Environmental Commission. It incorporates the comprehensive 2024 Environmental Resources Inventory (ERI) developed by the Commission. The ERI describes the Borough’s natural resource characteristics and environmentally significant features, including manmade features such as historic sites and contaminated sites. It provides baseline documentation for evaluating resource protection and is a dynamic document that will be periodically revised to capture changes in conditions. Together the ERI and the Conservation of Natural Resources Plan element form a basis for land use and other policy decisions, plans, and municipal functions.

While much of Pennington is developed, its natural resources remain critical to health, wellbeing, and resilience. This element presents ten goals for protecting water quality, managing invasive species and promoting native vegetation, preserving contiguous natural lands, enhancing riparian zones, building climate resilience, protecting sensitive lands, and preserving scenic corridors.

9. Economic Development Plan Element

Commercial development is an indispensable part of Pennington. It is a source of goods and services for the residents of the Borough and the nearby area and is also part of Pennington's brand promise for potential residents and visitors and identifies what the businesses should reinforce. The vision is that Pennington is, and will continue to be, a welcoming, walkable, authentic, safe and prosperous hometown for a diversity of households and for small businesses that seek to join and support an optimistic and entrepreneurial community.

The Plan provides a strategic framework for supporting Pennington's businesses across two distinct locations, the Route 31 corridor and the historic Town Center at Main Street and Delaware Avenue. Six comprehensive recommendations address business-centered issues, density, mobility and parking, signage and promotion, and new development opportunities. The Plan recommends simplification of the zoning in the Route 31 corridor and extending it to mixed uses. It also aims to encourage foot traffic by reducing on-site parking requirements for businesses, to improve wayfinding signage in the Borough, and to support entrepreneurship through home-based business development.

10. Historic Preservation Plan

This Plan was prepared by the Historic Preservation Commission. It presents a comprehensive framework for preserving Pennington's remarkable collection of 19th and early 20th century structures through the Crossroads Historic District, which contains approximately 160 buildings at the borough's historic core. The Commission, established in 2011, has successfully saved at least 10 historic houses from demolition and many now serve as affordable rental and owner-occupied housing. The vision is to safeguard Pennington's varied architectural heritage through regulatory protection that discourages demolition, encourages appropriate alterations and adaptive reuse, promotes energy-efficient retrofits for historic structures, and integrates preservation efforts with smart growth, housing choice, sustainability, and economic development goals. The Plan pursues Certified Local Government status, recommends the establishment of a Historic District Overlay Zone, and emphasizes public education about historic resources.

The Plan presents eight goals and eight specific recommendations to ensure Pennington's historic assets remain a living, evolving part of the community while maintaining the unique character that defines the borough. It promotes the preservation of threatened historic resources, such as the Railroad Station and the HVRSD Administration Building, including identification and documentation where needed.

11. Green Buildings and Environmental Sustainability Plan Element (GBESE)

The GBESE was developed by the Environmental Commission with an overarching aspiration for Pennington to be a community that thrives socially and economically, while minimizing any detrimental impact on the environment. The Plan envisions a sustainable, healthy, and resilient Borough where the quality of life of both current and future residents is preserved and enhanced through the protection of our natural resources, dedication to sustainable development practices,

reduction of our impact on the local and global environments, and restoration of previously damaged resources, sites, and waterways.

The Plan presents 14 goals and associated strategies. It strongly encourages LEED certification (or comparable standards) for new construction and renovations, with goals for energy efficiency, electrification of buildings and transportation, renewable energy installation (solar, geothermal), water conservation, green infrastructure, and smart growth principles. Specific strategies include installing solar panels on municipal buildings, facilitating EV charging, updating building codes for sustainability, expediting green permits, regulating lawn equipment to reduce emissions/noise, harvesting rainwater, and treating redevelopment as opportunity to restore sites.

12. Relation to Other Plans

Four regional plans have a direct impact on Pennington Borough: the Hopewell Township Master Plan, the Mercer County Master Plan, the New Jersey State Development and Redevelopment Plan (SDRP) and the District Solid Waste Management administered by the Mercer County Improvement Authority (MCIA). The Plan details each of these external plans, focusing on those components that have an impact on the Borough. It establishes a proactive framework for monitoring and responding to current and future versions of these plans. The Planning Board will actively track developments in the plans and provide timely recommendations to Borough Council to protect the Borough's interests and capitalize on opportunities for beneficial collaboration.

The wide range of topics addressed by the external plans can influence any of the elements of the Pennington Borough Master Plan. The monitoring process may trigger amendments to Master Plan elements and the Borough Code to meet mandated sections of County, State or MCIA plans. In some cases, this may trigger an update and re-adoption of an element. The monitoring process will allow a proactive response by the Council and Planning Board, rather than a reactive one. The Plan also suggests that Pennington should have a strong voice during proceedings regarding updates to these plans.

I. Implementation of the Master Plan

Within the individual Master Plan elements, goals range from near-term, inexpensive quick fixes to longer range ones that may require substantial funding from internal or external sources. Some goals may involve the development of new ordinances, or revisions to existing ones. Although the Planning Board creates the Master Plan in consultation with the community, implementation is the responsibility of Borough Council

Borough Council's Implementation Authority -- Borough Council has primary responsibility for developing a Master Plan implementation plan. Council may delegate implementation plan development tasks to the Planning Board. Final authority for implementation plan adoption rests with Borough Council.

Collaborative Implementation Planning Process --When Council delegates implementation planning tasks to the Board: joint development between Borough Council and Planning Board is required, robust public participation must be incorporated throughout the process; regular Council review of implementation plan development progress; public hearings and comment periods at key implementation planning milestones; and community input sessions to ensure resident voices are heard in implementation priorities.

Implementation Plan Integration with External Monitoring --The implementation planning process shall coordinate implementation priorities with external plan monitoring findings, adjust implementation strategies based on identified external threats or opportunities, align implementation timing with regional planning cycles when beneficial to Borough interests, and incorporate defensive measures into the implementation plan to protect against adverse external impacts. The Relation to Other Plans element gives details on the monitoring process.

Conditionally Adopted

MASTER PLAN
BOROUGH OF PENNINGTON
NEW JERSEY

11. Green Buildings and Environmental Sustainability Plan Element

The Green Buildings and Environmental Sustainability Plan element draft released by the writing team was conditionally adopted by the Planning Board on November 13, 2024, and posted on the Borough website for public comment. Revisions made to address comments received and to ensure consistency with other Plan elements were endorsed by the Planning Board on October 8, 2025. Final changes were approved by the Planning Board on April 8, 2026. This element will be available for comments until April 22, 2026, prior to final adoption at a public meeting of the Planning Board on May 13, 2026.

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B. Renewable Energy and Energy Conservation

C. Green Building and Design

D. On-Site Water Management

E. Land Use, Mobility and Waste Management

Impact on Other Elements of the Master Plan

GBESE Team:

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Introduction

In 2008, the Municipal Land Use Law (MLUL) was amended to include the Green Building and Environmental Sustainability Plan Element as a permitted Master Plan Element in N.J.S.A. 40:55D-28 (16). The definition of this element was revised in 2024 and is as follows:

“A green buildings and environmental sustainability plan element which shall provide for, encourage, and promote the efficient use of natural resources and the installation and usage of renewable energy systems; consider, encourage and promote the development of public electric vehicle charging infrastructure in locations appropriate for their development, including but not limited to, commercial districts, areas proximate to public transportation and transit facilities and transportation corridors, and public rest stops; consider the impact of buildings on the local, regional and global environment; allow ecosystems to function naturally; conserve and reuse water; treat storm water on-site; and optimize climatic conditions through site orientation and design.”

Development decisions, which are guided by the Master Plan, have the potential to impact a community’s local environment, resilience to natural hazards, and contribution to climate change. Incorporating sustainability into the Master Plan is a vital step in the Borough’s efforts to preserve our natural resources and operate in a truly sustainable manner, ensuring a healthy and thriving environment for future generations.

This Green Building and Environmental Sustainability Plan Element (GBESE) is intended to ensure that future planning and development in Pennington Borough enhances the environmental sustainability and resilience of the community and minimizes negative effects resulting from its environmental footprint. It also encourages the reversing of negative effects from previous development. Specifically, its purpose is to guide and serve as a basis for Borough land use decisions, ordinances, and policies that are related to buildings and sustainability.

Sustainability as a concept can be interpreted in different ways. The United Nations Commission on Environment and Development defines sustainable development as development that “meets the needs of the present without compromising the ability of future generations to meet their own needs.” Following green building practices, reducing carbon emissions, and otherwise pursuing sustainability as addressed in this and other elements in the Master Plan will benefit current and future generations of Borough residents, and will contribute to regional, national, and global reductions in greenhouse gas emissions.

There is overlap of some topics in the MLUL description for the GBESE and in the descriptions of other elements in the Master Plan. To avoid future confusion when elements may need to be updated, the goals for a particular topic will appear on only one element in the Master Plan. Reference to these topics will be included in this element and in the text of the secondary elements, where appropriate.

Vision

The GBESE envisions a sustainable, healthy, and resilient Pennington Borough where the quality of life of both current and future residents is preserved and enhanced through:

- The protection of our natural resources.
- Dedication to sustainable development practices.
- Reduction or elimination of our impact on the local and global environments.
- The restoration of previously damaged resources, sites, and waterways.

The GBESE team of the Environmental Commission has developed this element with an overarching aspiration to be a community that thrives socially and economically, while minimizing any detrimental impact on the environment, and recognizing that human health and safety depends on improvements to the health of the environment.

Core Topics

This GBESE addresses sustainability in five main areas:

- A. Climate Change and Greenhouse Gas Emissions
- B. Renewable Energy and Energy Conservation
- C. Green Building and Design
- D. On-Site Water Management
- E. Land Use, Mobility and Waste Management

After an introduction to each topic, goals are presented. Sustainability considerations should be incorporated into all of the Borough's planning and zoning decision-making.

A. Climate Change and Greenhouse Gas Emissions

According to NJDEP's 2020 Scientific Report on Climate Change, New Jersey will experience significant direct and indirect changes in its environment due to climate change, which is caused largely by human activities in the form of greenhouse gas emissions. The impacts that New Jersey has experienced and will continue to experience include more severe storm events, higher temperatures and heatwaves, more frequent precipitation and flooding, and others. To minimize the effects of climate change on our ecological systems, natural resources, human health, and economy, we must pursue strategies that will improve our resilience to, and reduce our contribution to, climate change.

Goals aimed at increasing the resilience of individual buildings and sites against the effect of hazards due to climate change will be in this GBESE. Assessing the hazards to the whole

community will be in the Land Use Plan element in a new section mandated by the MLUL, the Climate Change-Related Hazard Vulnerability Assessment (CCRHVA).

In 2021, the Borough resolved that municipal operations would become carbon neutral by 2035 (Resolution 2021-3.4). This resolution also states that the Environmental Commission will report to the Council on an annual basis the amount of CO₂e released and offset by the Borough and assist the Borough in developing strategies to migrate away from carbon energy sources. Finally, the resolution asks the Environmental Commission to educate and encourage residents to become carbon neutral. The goals associated with advancing this resolution are in this Plan element.

Climate Change and Greenhouse Gas Emissions Goals

Goal 1: Achieve zero CO₂e emissions in municipal operations by 2035.

- a) The Environmental Commission will conduct an annual analysis of municipal CO₂e emissions.
- b) Develop a plan to reduce CO₂e emissions in municipal operations, which may include strategies related to buildings, vehicle fleets, lighting, and water use.
- c) CO₂e offset opportunities should be explored since CO₂e emissions from grid electricity generation are beyond the Borough's control.

Goal 2: Stimulate a reduction in CO₂e emissions by borough residences and businesses.

- a) Encourage Borough residents and businesses to reduce their emissions through energy choices, energy conservation measures, and green design practices.
- b) Support the purchase and production of renewable energy.
- c) Adopt ordinances that facilitate the production of renewable energy within the municipality.
- d) Increase housing density, support the establishment of downtown businesses, and encourage residents to shop locally to reduce the need for vehicle travel. Make visiting the town center more inviting for pedestrians, bicyclists and personal mobility vehicle riders with better sidewalks and road markings, and other incentives.
- e) Support the use of electric vehicles and residential battery energy storage.
- f) Continue to coordinate sustainability efforts with neighboring municipalities.
- g) Pursue regulation and electrification of yard maintenance equipment such as lawn mowers, trimmers, leaf blowers and chain saws, to eliminate GHG and other air polluting emissions and to reduce noise.

Goal 3: Improve resilience and response of sites and building to the impacts of climate change.

- a) Use best practices when adapting buildings to withstand the hazardous impacts of climate change, such as wind, hail, ice storms and heavy rain.
- b) Improve stormwater management on individual sites to reduce the contribution towards municipal flooding related to extreme storm events.
- c) Manage stormwater using green infrastructure best management practices and by educating residents about their role in stormwater management.

- d) Update building and infrastructure design standards to account for projected increase in flooding due to climate change.

B. Renewable Energy and Energy Conservation

Transitioning to renewable energy sources and conserving energy are two ways that the Borough can reduce carbon emissions and become more sustainable. In addition, pursuing renewable energy and energy conservation has the potential to improve resilience over traditional energy systems, such as centralized electricity generation and fossil fuels.

The Borough can support the sustainability of the energy system by promoting strategies such as the use of renewable energy sources with domestic battery energy storage, local energy production, energy conservation practices, and electric vehicles. This core topic is closely linked to the Climate Change and Greenhouse Gas Emissions and the Green Building and Design core topics. Strategies for installing Level 1 and 2 charging in buildings and small developments will be in this GBESE. Commercial Level 2 and 3 charging installations at strategic locations in the Borough will be covered in the Mobility Plan element.

Renewable Energy and Energy Conservation Goals

Goal 1: Improve the overall energy efficiency of the Borough.

- a) The Environmental Commission will develop and maintain a Community Energy Plan for the Borough.
- b) Continuously improve the energy efficiency of Borough operations.
- c) Improve the efficiency of municipal buildings through green building practices and energy conservation measures.
- d) Employ residential and commercial building and site design practices that reduce total energy usage.
- e) All appliance replacements or new installations should meet Energy Star standards. See: <https://www.energystar.gov>
- f) Encourage and support the efforts of residents and businesses to conserve energy by being a resource for information on new technology and products and on government and private financial incentives.
- g) Support the use of smart grid technologies such as smart meters with the opportunity for interactive supply and pricing decisions.

Goal 2: Electrify buildings and the transportation sector.

- a) Support the electrification of residential and commercial buildings (e.g., installation of electric appliances and heat pumps) through education and outreach regarding technology and rebates.
- b) Move towards using electricity as the sole energy source for public facilities and operations and continue to improve energy efficiency.

- c) Facilitate the installation of Level 2 (220V) or Level 3 (440V) electric vehicle charging stations at central locations for residents without a suitable private location, such as a garage or driveway, for charging.
- d) Encourage all new development to install Level 2 (220V) electric vehicle charging.
- e) Support the installation of Level 2 (220V) electric vehicle charging in existing homes.
- f) When Borough Public Works vehicles, Police vehicles and other mobile utility equipment need replacing, prioritize the purchase of electric or hybrid alternatives.

Goal 3: Encourage the use of renewable energy sources.

- a) Install solar photovoltaic panels on municipal buildings and parking lots and seek opportunities to leverage any agreements to benefit community-wide solar installations.
- b) Encourage residents to enroll in community solar programs.
- c) Support the use of solar panels on private structures and land through solar friendly zoning, permitting and exclusion from value addition for real estate taxes.
- d) Explore the potential to use geothermal energy for heating and cooling.
- e) Apply for incentive grants through New Jersey's Clean Energy Program.
- f) The Environmental Commission should act as an information resource for other grants and incentives that can accelerate the transition to renewable energy sources in the public and private sector.

C. Green Building and Design

Improving the sustainability of our buildings will be essential to achieving overall sustainability. In the US, buildings account for 41% of total energy consumption, 72% of electricity consumption, 39% of carbon dioxide emissions, and 14% of potable water usage (US Green Building Council, Benefits of Green Building). In terms of total energy consumption, buildings out-consume the industrial and transportation sectors. Green design not only makes buildings more efficient but also reduces the impact of buildings on the surrounding environment.

Requiring the use of green building practices for the construction and renovation of municipal buildings would improve the Borough's sustainability across all the core topics. Green building and design should also be encouraged for private development. The US Green Building Council's Leadership in Energy and Environmental Design (LEED) certification program is the industry standard for green buildings (<https://www.usgbc.org/leed>). Building to meet LEED certification standards is an effective way to ensure that buildings are green and sustainable and should be strongly encouraged in the Borough. Other green building certifications and frameworks should also be considered and encouraged. It is recognized that these programs may be modified, or new ones developed, during the life of this element. It is understood that the most current versions would be recommended.

The US Green Building Council provides extensive libraries of green building strategies. For example, to make its buildings sustainable, the Borough and its residents can: design building

envelopes to reduce heating, cooling, lighting, and ventilation loads; set performance targets for energy, water, and waste; use passive and active renewable energy to meet energy loads; select water-efficient plumbing fixtures and appliances; design infrastructure to support non-fossil fuel transportation; eliminate the use of potable water for irrigation; reduce and recycle demolition and construction waste, and other strategies.

Pennington Borough's current Building and Construction Requirements consist of NJ State Uniform Construction Code <https://www.nj.gov/dca/codes/codreg/ucc.shtml> and its adopted model codes:

1. 2021 International Building Code New Jersey Edition (effective 3/1/23)
<https://codes.iccsafe.org/content/NJBC2021P1>
2. 2021 International Energy Conservation Code (IECC)
<https://codes.iccsafe.org/content/IECC2021P2>
3. 2021 International Residential Code New Jersey Edition
<https://codes.iccsafe.org/content/NJRC2021P1>

These codes do not include Green Building requirements that align with USGBC, or similar, Green Building standards. Additionally, LEED and/or other similar certification programs are not currently a requirement for construction in Pennington Borough. However, ordinances can be written and approved, and codes can be adopted, to provide Green Building requirements for building and construction to conform with the recommendations in the Master Plan.

According to the U.S. Green Building Council, "*LEED-certified homes are designed to provide clean indoor air and ample natural light and to use safe building materials to ensure our comfort and good health. They help us reduce our energy and water consumption, thereby lowering utility bills each month, among other financial benefits. Using the strategies outlined in LEED, homeowners are having a net-positive impact on their communities. LEED homes are also designed, constructed and operated to be resilient in adverse conditions and are developed with proactive design planning for potential impacts of catastrophic weather.*"

<https://www.usgbc.org/leed/rating-systems/residential>

This is clearly aligned with the MLUL definition for the GBESE.

The U.S. Green Building Council uses six rating methods for LEED certification:

1. Building Design and Construction (BD+C)
2. Interior Design and Construction (ID+C)
3. Building Operations and Maintenance (O+M)
4. Neighborhood Development (ND)
5. Residential
6. Cities

Certification comes in four categories, Platinum, Gold, Silver and Certified, which allows the certification process to be introduced in a graduated manner. <https://www.usgbc.org/leed>

Many of the goals set forth in other elements in the Master Plan align to LEED standards. LEED isn't necessarily restricted to buildings - it extends to site, resource allocation, infrastructure, etc.

Zoning that takes a sustainable approach will inherently end-up creating beneficial conditions for LEED buildings, sometimes making it more economically feasible to achieve LEED or other certification. The rating system is in part designed to incentivize sustainability through mutually beneficial development.

Green Building and Design Goals

Goal 1: Implement and incentivize green building and sustainable site design practices and conduct energy modeling to evaluate and optimize building design for energy efficiency.

- a) Strongly encourage the use of certification programs such as LEED, or a comparable rating from another program, for new construction, renovations, additions, development and redevelopment projects, and for landscaping.
- b) Encourage municipal building renovations, and new municipal buildings, to meet LEED Certified and/or comparable standards.
- c) Improve local ordinances and zoning regulations to reflect and support sustainable building practices.
- d) Incentivize green building practices in the permitting process by expediting permits and green-relevant variances, and other strategies.
- e) Encourage sustainable innovation in new construction and in existing buildings.
- f) Encourage new construction design to include building thermal performance, on-site renewables, commissioning of building systems and energy efficiency strategies.
- g) Encourage collaboration between new construction and renovation design teams and the Environmental Commission early in the design process.

Goal 2: Reduce environmental impacts during new construction and renovation.

- a) Create construction site management policies to encourage low noise and low emission equipment, manage stormwater and reduce water use.
- b) Reduce dependency on fossil fuels during construction and renovation.
- c) Encourage the development and use of a construction waste management plan that incentivizes recycling and reduces construction waste.

Goal 3: Reduce the environmental impact of existing buildings.

- a) Encourage sustainability audits of existing municipal buildings and, when feasible, identify opportunities for improvement.
- b) Explore opportunities to educate and engage property owners on strategies for resiliency in climate change, e.g. rainwater management, heat island reduction.
- c) Encourage a reduction in dependency on fossil fuels for building construction and operation.
- d) Encourage the collection and reuse of stormwater, and the use of grey water systems.
- e) Enhance lighting ordinances to satisfy concerns of sky shine at night.

Goal 4: Encourage adaptive reuse, historic preservation, energy retrofits, and upgrades to existing buildings instead of demolition and replacement.

- a) Encourage the calculation of the energy embodied in new construction and new material manufacturing, to demonstrate the energy, greenhouse gas and natural resources savings possible from adaptive reuse and retrofits.
- b) Identify and abate lead hazards and risks in buildings and infrastructure built before 1978, as recommended by the EPA.

D. On-Site Water Management

Sustainability measures that protect the Borough’s water quality and quantity can help ensure that residents have reliable access to clean water. The Borough should actively work to protect its bodies of water and related infrastructure, including the four active wells that supply all the Borough’s water. The health of the watershed and the natural water cycle is essential to the quality of a water utility (including recharge, natural filtration and aquifer protection).

The water supply can be stressed during droughts, which are predicted to occur more frequently due to climate change. In addition, intense rainfall and storm events, which will also increase in frequency, can cause flooding that may negatively impact water quality. Water quality is a known issue in New Jersey, where most streams, lakes, and rivers are classified as impaired (NJ DEP, 2022 Integrated Water Quality Assessment Report). Total Maximum Daily Load (TMDL) studies have also been published to set goals for pollutant load reductions for Pennington Borough’s watersheds.

To protect our water resources, the Borough should pursue strategies that reduce water usage, protect water quality and quantity, manage stormwater, and reduce flooding. Strategies for managing stormwater on site will be in this GBESE. Goals for managing stormwater at the municipal level will be found in the Utility Services Plan element.

On-Site Water Management Goals

Goal 1: Encourage the conservation of water by Borough residents and businesses.

- a) Conserve water in municipal buildings and encourage water conservation practices among residents and businesses.
- b) Install water-efficient appliances and fixtures.
- c) Harvest rainwater and reuse grey water for landscape watering and irrigation.
- d) Use native plants that require little to no irrigation for landscaping.

Goal 2: Minimize site-specific impacts on storm water pollution throughout the Borough.

- a) Determine if existing buildings have inflow or infiltration into the wastewater exit pipe.
- b) Direct development away from riparian areas, wetlands, wetland buffers, and flood hazard areas.
- c) Conduct education and outreach programs to encourage behavior that reduces water pollution.

Goal 3: Reduce flooding and pollution through improved on-site stormwater management.

- a) Reduce or eliminate disturbance to natural stormwater systems on site and use green infrastructure.
- b) Require site designs to limit impervious surfaces and set infiltration rates.
- c) Update design standards to account for a projected increase in flooding and precipitation.
- d) Support the full or partial replacement of lawns with meadows to support biodiversity, absorb stormwater and reduce emissions and noise from lawn mowing and leaf blowing.

Goal 4. Take every opportunity to restore developed sites and address the impact of past development on current storm water problems and other environmental issues.

- a) Establish guidelines for redevelopment that encourage restorative design, aiming to enhance the resilience of previously developed sites.
- b) Treat the redevelopment and investment in previously developed land as an opportunity to repair/restore the sites through enhanced stormwater ordinances.
- c) Retrofit municipal facilities with green infrastructure to retain stormwater on site and encourage the same for private development; potential green infrastructure tools include rain gardens, bioswales, green streets, green and blue roofs, and vegetated islands.

E. Land Use, Mobility and Waste Management

The Land Use Plan element of the Master Plan should follow the 10 “Smart Growth” principles developed by the Smart Growth Network with the support of the Environmental Protection Agency (EPA). See: <https://www.epa.gov/smartgrowth/about-smart-growth>. The principles aim to improve community resilience, health, diversity, and sustainability and are listed here:

1. Mix land uses such that residential, commercial, and recreational are in close proximity.
2. Take advantage of compact building design.
3. Create a range of housing opportunities and choices.
4. Create walkable neighborhoods.
5. Foster distinctive, attractive communities with a distinct sense of place.
6. Preserve open space, farmland, natural beauty, and critical environmental areas.
7. Strengthen and direct development to existing communities.
8. Support the provision of a variety of public transportation choices.
9. Make development decisions predictable, fair, and cost-effective.
10. Encourage community and stakeholder collaboration in development decisions.

Land use is often a key determinant of whether alternative transportation options and electric vehicles are feasible for residents. Increasing town density, mixing land uses, offering a variety of transportation choices, providing the appropriate infrastructure for walking, biking, and electric vehicle charging, and other strategies consistent with the smart growth principles encourage more sustainable travel within and through the Borough.

Vehicles powered by gasoline, diesel and natural gas are major emitters of greenhouse gases. Reductions in emissions can be achieved by encouraging alternative modes of transportation, such as shared or public transportation, walking, and biking, with the goal of reducing the total vehicles miles traveled (VMT) by Borough residents.

Electric vehicles are a promising alternative to fossil fuel-powered cars. Rather than filling up on fuel at a gas station, electric vehicles need to be plugged into a power source to charge. Therefore, building electric vehicle charging stations at central locations and supporting the installation of charging stations in homes can help encourage electric vehicle uptake by making charging more convenient.

The conflict between the need for residential and commercial parking and the desire for dedicated bike and micro-mobility lanes will have to be resolved equitably.

The goals for the above topics can be found in the Land Use and Mobility Plan elements.

Reducing waste and increasing recycling are key components of environmental sustainability. It reduces consumption of new raw materials, energy use (from production of new materials), air pollution (from solid waste incineration) and water pollution (from landfills). Although waste management and recycling are of importance to residents, it is not included in the MLUL description of the GBESE. These topics are covered in detail in the Utility Services Plan element. Section C, Green Building and Design, of this GBESE includes a goal related to the disposal of construction waste created during the development of a site.

Impact on Other Elements of the Master Plan

Master Plan elements Green Buildings and Environmental Sustainability, Conservation of Natural Resources, Open Space and Recreation, and Historic Preservation set the tone for sustainability and environmental sensitivity in Pennington Borough. Each impacts the health and wellbeing of residents and the health of the environment. Other elements should follow the lead of these four elements in shaping the town through land use, housing, utilities, mobility, economic development and community facilities. Specific impacts of the GBESE on other Master Plan elements are as follows.

Land Use Plan Element.

The Land Use Plan Element relates to the Borough's zoning and potential redevelopment areas. It will be impacted by several topics in the GBESE.

- Section A, "Climate Change and Greenhouse Gas Emissions" and its goals and strategies will have direct application to the "Climate Change-Related Hazard Vulnerability Assessment" (CCRHVA) which will be included in the Land Use Plan element.

- The Land Use Plan element should be cognizant of the 10 “Smart Growth” principles developed by the Smart Growth Network, as listed in Section E.

Housing Plan Element

Much of the new Housing Plan element will focus on the development of affordable housing to meet the Borough’s court-determined obligation.

- Section C, “Green Building and Design,” should be considered in the new Housing Plan element, particularly regarding the construction of affordable housing through accessory dwelling units, individual homes or small communities.
- Goals 2 and 3 of Section B, “Renewable Energy and Energy Conservation,” should be observed for the selection of energy sources and energy-efficient appliances.
- Goal 2 and 3 from Section A, “Climate Change and Greenhouse Gas Emissions,” is important to consider when selecting sites for housing, as are many of the water management goals and strategies in Section D.

Mobility Plan Element

The Mobility Plan element covers the safe and efficient movement of people and goods in the Borough. It will recommend ways to reduce greenhouse gas and other pollutant emissions from transportation. It will also change the focus from cars to the accommodation of pedestrians, bicycles and users of personal micromobility vehicles, including electric. Each of these will complement the sustainability goals in the GBESE.

Utility Services Plan Element.

The Utility Services Plan element covers water supply and distribution, drainage and storm water management, sewerage, solid waste disposal, and the maintenance of borough roads and facilities. Successful implementation of many of the goals in the Utility Services Plan element have a direct impact on sustainability. GBESE goals on reducing greenhouse gas emissions and energy efficiency will impact Public Works Department operations. Green building and renewable energy goals will apply to municipal facilities.

Open Space and Recreation Plan (OSRP)

The goals of the OSRP are complementary to the sustainability aspect of the GBESE. Successful implementation of these goals will have a beneficial effect on the health and wellbeing of residents through opportunities for recreation and supported activities.

Conservation of Natural Resources and the Borough Environmental Resource Inventory (ERI)

The conservation of natural resources is a critical aspect of sustainability and is addressed in the Conservation of Natural Resources Plan element. The Environmental Resources Inventory

provides a host of valuable information about the Borough and its natural resources and is a valuable source of data of potential use in the implementation of the GBESE goals.

Economic Development Plan

Many of the goals in the GBESE apply directly to the facilities used for businesses and commercial organizations. The goals should steer the design and building of new facilities and retrofits for business use. The energy goals in the GBESE are also applicable to businesses.

Historic Preservation Plan

The preservation of historic buildings in the Borough is aligned with sustainability. The energy and green building goals in the GBESE are directly applicable to the restoration of historic buildings.

Conditionally Adopted

MASTER PLAN
BOROUGH OF PENNINGTON
NEW JERSEY

6. Community Facilities and Services Plan Element

The Community Facilities and Services Plan element draft released by the writing team was conditionally adopted by the Planning Board on April 9, 2025, and posted on the Borough website for public comment. Revisions made to address comments received and to ensure consistency with other Plan elements were endorsed by the Planning Board on October 8, 2025. Final changes were approved by the Planning Board on April 8, 2026. This element will be available for comments until April 22, 2026, prior to final adoption at a public meeting of the Planning Board on May 13, 2026.

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Thanks go to the following people who helped create the Community Facilities and Services Plan element: Chair Ryan Schwab, Suzanne Elliott, Allison Neary, Kate O'Neill, Rob Ingram, Roger Demareski, and Andy Jackson. Thanks also to Kati Angerone for her thorough and insightful editing.

1. Introduction

The Municipal Land Use Law (MLUL) includes a Community Facilities Plan as a permitted Master Plan element. N.J.S.A. 40:55D-28(4) describes the element as follows:

“A community facilities plan element showing the existing and proposed location and type of educational or cultural facilities, historic sites, libraries, hospitals, firehouses, police stations and other related facilities, including their relation to the surrounding areas.”

This element, which is entitled Community Facilities and Services Plan, shall serve as a catalog of not only facilities but also services available to Borough residents and businesses, and presents goals for improvement. The Plan is based on a review and evaluation of the Community Facilities Plan of the 1998 Pennington Borough Master Plan and of the 2005, 2013 and 2023 Master Plan Reexamination reports. The writing team also reviewed Community Facilities Plan elements from nearby communities.

The initial Master Plan vision and element goals developed by the Master Plan Committee (MPC) and the Citizens Advisory Committee (CAC) were endorsed by the Planning Board in a public meeting on January 10, 2024. The element goals in that report were the starting point for the Community Facilities and Services Plan element writing team.

2. Community Facilities and Services Plan Vision and Goals

This Plan includes data on municipal facilities, other non-municipal facilities that may be available for public use, parks and recreation, schools, and churches, and services they provide.

Pennington Borough has an extensive range of community facilities to serve its population. The Borough Administrator undertakes an annual review of Borough needs with respect to community facilities and services in collaboration with the Hopewell Valley Office of Emergency Management and Borough Council to ensure facilities and services are properly functioning and have the capacity for the forecasted annual usage. Many facilities have been upgraded over the course of the last decade to reflect Americans with Disabilities Act requirements and other needs.

According to the 2020 Census, Pennington Borough had a population of 2,800 people. With limited vacant land and little opportunity for new development, no major additions to, or expansion of the existing community facilities are anticipated. However, it may be necessary to consider renting some nearby space or repurposing other borough buildings if needs arise.

Pennington Borough works to ensure equitable access to community facilities and services, and to provide these for people of all ages, races and ethnicities, gender identities, religions, abilities, and socioeconomic status. The Borough will enhance the physical and mental wellness of its residents by creating meaningful opportunities for social connections, culture, learning, and leisure, and by supporting the availability of public and private facilities and services in the community.

Goals for community facilities and services:

1. With the renovation of Borough Hall and the modern Public Works facility, the community is well positioned to provide municipal services. However, Borough Hall space is limited and may not be adequate for the proper functioning of some departments. The Borough should continue to evaluate facilities and services annually for function and future capacity to support all services. It may be necessary to consider renting some nearby space or repurposing other borough buildings.
2. The Borough should communicate with the community on the availability of the services it provides. This communication should be kept current and occur via multiple modes. It is especially important that community members understand the roles of various departments in the Borough and Hopewell Valley in the event of an emergency.
3. Emergency services, including fire, ambulance and medical services, evacuation plans, local shelters and emergency communications should be reviewed annually to ensure that the needs of Pennington and the region are met now and in the future. Emergencies to be prepared for include rainstorms and flooding, snowstorms and ice storms, strong winds, tornados, wildfires, extreme heat, extreme cold, train derailments, and pandemics. A long-term and sustainable replacement for the Emergency Medical Services should be prioritized.
4. Pennington Borough should consider becoming a National Weather Service StormReady municipality and work the Hopewell Valley Office of Emergency Management to offer a comprehensive StormReady environment in Hopewell Valley. Consideration should be made to implement Outdoor Warning Sirens to ensure multiple layers of alerts.
5. The Senior Center on Reading Avenue may become redundant when the regional Community Center on Reed Road is opened. Alternate uses will need to be found, as outlined in the Land Use Plan and Housing Plan elements.
6. Pennington should have a place that provides opportunities for learning, social connections, culture, and leisure for all. It should be rich in arts, community activities, and entertainment. Although the proposed new community center on Reed Road may provide opportunities, the Borough should provide them in town by fostering partnerships and developments that can serve all segments of the community, especially those who cannot drive.
7. To support community activities, the Borough should keep an updated list of public and private indoor and outdoor facilities that are willing to host activities, such as community events, youth and adult sports, meetings of volunteers, book clubs, art shows, etc. Helping residents find facilities that meet their needs will bring the community together in shared activities.
8. Church attendance is in decline and some of the churches in the Borough may close or consolidate. These buildings are often historic and to preserve the Borough's history, while

providing community facilities, the Borough should encourage repurpose rather than demolition of these buildings.

9. The Borough should encourage the development or revitalization of daycare services to help families to be able to live in Pennington.

3. Borough Facilities and Services

3.1. Borough Facilities

3.1.1. Pennington Municipal Building (Borough Hall)

(<https://www.penningtonboro.org>)

Borough Hall is located at 31 North Main Street. It houses a conference room that can be used for in-person meetings of the Council and of the various Boards, Commissions and Committees of Pennington Borough. The conference room also serves as the Municipal Court, a local court whose procedures are governed by New Jersey Court rules. Borough Hall also contains offices for the Mayor, the Borough Administrator and the Borough Clerk, and a work area for employees of the various municipal departments including the Tax Collector, Tax Assessor, Land Use Administrator, Zoning Officer, Building and Construction officials, Public Works, Board of Health, and the Office of Emergency Management. Borough Hall also houses the Police Station and the independent Public Library. It is equipped with auxiliary power.

3.1.2. Public Works Building

(<https://www.penningtonboro.org/departments-public-works>)

The Department of Public Works (DPW) is located on North Main Street on a lot in Hopewell Township owned by Pennington Borough. The lot also includes a PSE&G solar farm with a battery backup system, which provides electric power to the grid and provides power to the Public Works building. The building and parking lots store all equipment for garbage and other waste collection, and for the maintenance of Borough-controlled roads, water system (including fire hydrants), sewer collection system, stormwater infrastructure, Borough-owned buildings and grounds, parks, streams and catch basins, and shade trees within the Borough right-of-way. The maintenance of DPW vehicles and equipment is conducted at the Public Works building, whenever feasible. Further information on Public Works services and facilities, including the sites of water wells and sewer pumps can be found in the Utility Services Plan element of the Master Plan.

3.1.3. Senior Center

The Hopewell Valley Senior Center on Reading Street is supported by Hopewell Valley Senior Services (HVSS), which serves seniors from Pennington Borough, Hopewell Borough and Hopewell Township. Activities are organized by HVSS and those at the Reading Street facility include Artists' Choice and Collage, Social Bridge, Games, Knitting Club, and Mahjong. Other activities open to Pennington seniors take place at the Hopewell Township Building, the Mercer

County Library and the Hopewell Borough Library. Additionally, the Mercer County Nutrition Program for Older Adults provides ready-to-eat meals at the Reading Street facility.

Hopewell Township is in the design stage of a multipurpose building off Reed Road to serve primarily as a senior and community center, with integrated fitness and wellness facilities for residents of the Hopewell Valley (i.e., Hopewell Township, Hopewell Borough and Pennington Borough). The new center will also have office space for non-profit organizations. Outdoor amenities envisioned include an outdoor pool, passive and active recreation areas, a walking nature trail, and a community garden. No date has been set for completion, but when it is opened, the current Senior Center may become obsolete, and the facilities and lot will be re-envisioned.

3.1.4. Pennington Parks

Pennington has four public parks for active and passive recreational use, covering 11.8 acres of Borough land (see Table 2 in Section 3c, which also includes details of additional open space in the Borough). The largest at 7.5 acres is Kunkel Park, bordered by Lewis Brook, Stony Brook and King George Road. It has a meeting and events shelter, playgrounds and a sand pit. The D&R Greenway Pennington Loop Nature Trail through the Baldwin State Wildlife Management Area can be accessed from the north side of the park. The Eileen M. Heinzl Arboretum sits on 3.0 acres of woodlands east of Toll Gate Grammar School. It was purchased from HVRSD in 2022 and work to create the arboretum is being conducted by volunteers guided by the Pennington Environmental Commission. There is a 1.1-acre children's park with playground equipment on Sked Street. There is also a 0.5-acre space with a gazebo at the corner of Knowles Street and Broemel Place which is known as Veterans Memorial Park. The parks are maintained by Public Works and improvements may be funded by grants or from the Borough's Open Space Fund.

3.1.5. The Closed Landfill

A closed municipal landfill sits on 7.8 acres to the west side of the CSX railroad tracks, bounded by West Delaware Avenue to the south and Broemel Place to the north. It was operated from 1954 to 1980. In 1972, the Borough reported the following refuse streams by volume: household (75%), commercial (8.3%), landscape (12.5%), construction (2.1%) and bulky items (2.1%). According to the records, liquids, sewage sludge, septic tank waste, chemicals, agricultural waste and oils were excluded from the landfill. The volume of waste is estimated to be 65,000 cubic yards, or about 15,000 tons. The landfill has been the subject of several environmental studies. The site is managed by Public Works and contains a disused garage and a storage area for construction and other materials. It also is the site of Borough water well #6.

Adjacent to the southwest corner of the landfill is a 0.2-acre lot with an old water tank and a building that used to be the Public Works Director's office. At the northwest corner is a 0.6-acre lot that used to belong to Nassau Oil Company. The three lots have been declared an Area in Need of Redevelopment by the Borough Council. A stone road runs north-south across the property. According to a 1950 Fire Map, a tributary of Lewis Brook ran diagonally across the landfill lot but in the early days of the landfill it was diverted to a ditch along the west side of the lot, to a culvert under the stone road, and then east to the tunnel under the railroad tracks.

In view of the recent increases in land value in Pennington, the Borough should consider the potential of the landfill and investigate strategies such as returning the property to greenfield status by transferring the contents of the landfill to a modern, lined landfill, along with other strategies.

3.2. Borough Services

Details on Services provided within the Borough by the Department of Public Works can be found in the Utility Services Plan element of the Master Plan. These include:

1. Operation, management and maintenance of the Pennington Water Department, a public water system, including water supply infrastructure, such as water supply wells, water treatment and water distribution system (i.e., water mains, valves, towers, hydrants, etc.) for the provision of safe and adequate water supply and fire protection for residents, businesses and municipal buildings.
2. Operation, management and maintenance of the wastewater collection system and delivery to the Stony Brook Regional Sewerage Authority (SBRSA) Pennington Wastewater Treatment Plant.
3. Operation, management and maintenance of Borough-owned or controlled stormwater infrastructure (i.e., pipes, inlets, basins, etc.) and provision of stormwater management consistent with applicable federal and state laws.
4. Borough road repairs and maintenance.
5. Snow removal from Borough Streets and Borough owned or controlled properties.
6. Maintenance of Borough Trees, as defined in the Borough's Community Forestry Management Plan developed by the Shade Tree Committee.
7. Garbage collection, including additional fee-based services for bulk waste.
8. Leaves, branches, and lawn and yard waste collection.

The Utility Services Plan also presents details of services provided to the Borough by others:

1. Recycling by the Mercer County Improvement Authority
2. County road maintenance, including leaf and snow removal, by the Roads Section of the Mercer County Department of Transportation & Infrastructure
3. Electricity from Public Service Electric and Gas (PSE&G).
4. Natural Gas from Elizabethtown Gas
5. Telecommunications by several suppliers.

Services provided to Borough residents and businesses by entities other than the Department of Public Works are described below.

3.2.1. Police Services

(<https://www.penningtonboro.org/police>)

The Pennington Police Department is responsible for enforcing local and state laws with respect to motor vehicles and enforcing the New Jersey criminal code. Police headquarters are located within the Municipal Building on North Main Street. This space houses offices, a holding cell, an evidence room and break rooms.

Police equipment in 2025 included the following:

- 4 Marked police vehicles
- 1 Unmarked police vehicle

Pennington Borough has shared service agreements with Hopewell Township and Mercer County for Emergency 911 and Dispatch. The Department's authorized complement of officers and dispatchers is supplemented by civilians and crossing guards.

3.2.2. Emergency Management

(<https://www.hopewellpolicenj.gov/divisions/oem>)

Hopewell Valley has a regional Office of Emergency Management (OEM) including Hopewell Township, Hopewell Borough and Pennington Borough. Each municipality has an emergency Management Coordinator. The OEM is responsible for planning for, responding to, and coordinating efforts during major emergency events in Hopewell Valley. The OEM has developed a comprehensive emergency operations plan. Periodically the OEM conducts drills involving the police departments, fire departments, emergency medical units, communications centers, health departments and other government agencies such as the public works departments. Emergencies to be prepared for include rainstorms and flooding, snowstorms and ice storms, strong winds, tornados, wildfires, extreme heat, extreme cold, train derailments, and pandemics.

The OEM uses an emergency operations center located in the Hopewell Township Police headquarters. This center is activated several times a year for incidents such as floods, major snowstorms, and other large-scale events. The Hopewell Valley OEM works closely with the Mercer County and New Jersey Offices of Emergency Management.

3.2.3. Board of Health

(<https://www.penningtonboro.org/board-health>)
(<https://www.hopewelltpw.org/190/Board-of-Health>)

The Board of Health provides health services to Borough residents and businesses through a shared services agreement with the Hopewell Township Health Department. The mission of the Township Board of Health is to protect, improve, and promote the health, productivity, and well-being of all Hopewell Valley residents. The Borough also has shared service agreements with the Township for animal control and senior services.

3.2.4. Recreation

The Pennington Parks & Recreation Commission sponsors recreational programs from youth to senior levels. Included are summer concerts, Art in The Park, Hopewell Valley Night Out and the 4th of July Races. Theme events include the Memorial Day Parade, the Easter Egg Hunt and the Holiday Walk.

The annual Pennington Day in May is organized by the non-profit organization Pennington Day Inc. Pennington Day's stated mission is; to further the Borough's spirit and identity as a community, and enhance its quality of life, while providing community groups, civic organizations and businesses of Hopewell Valley an opportunity to inform the community of their mission; to allow community organizations to raise funds through their sponsorship of Pennington Day events and/or the booths, and; to make grants to non-profits, civic organizations, schools and municipalities for specific projects that serve Pennington Borough and Hopewell Valley.

4. Other Facilities and Services

This section describes community facilities owned and operated by other entities within the Borough, and the services they provide.

4.1. Pennington Fire Company

Pennington Fire Company (PFC) operates from its own building on Broemel Place. Pennington Borough Fire District No. 1 is an autonomous entity responsible for providing fire protection and extinguishing fires within the geographic boundaries of Pennington Borough and, pursuant to an agreement with the Hopewell Township Board of Fire Commissioners, for providing primary fire protection and extinguishing fires to the central and southern portions of Hopewell Township. The Fire District is governed by a five-member Board of Fire Commissioners. It is funded through a fire tax - in 2025 this was set at 5.0 cents per \$100 of property valuation for real estate tax purposes. Its mission is to protect life, property and the environment from damage due to fire and environmental emergencies in the district, and to assist neighboring communities in their mission to do the same. The Fire District's administrative office is in the PFC building on Broemel Place.

Pennington Fire Company is a 100% volunteer organization that has provided volunteer fire services and emergency services to Pennington Borough, Hopewell Borough, and Township, as well as the surrounding areas, since 1891. It is one of only four 100% volunteer fire companies left in Mercer County. (<https://penningtonfire.org>).

4.2. Pennington First Aid

The Pennington First Aid Squad (PFAS) stopped responding to emergency calls on February 28, 2022, after 68 years of continuous 911-response to the community. The squad has gone out of business due to steadily declining numbers of volunteer EMTs. Squad leadership pursued several avenues to help ease staffing difficulties, including ramping up recruitment and retention efforts, and trying to expand the use of paid EMTs to supplement the volunteers. These were not enough to overcome the challenges, and the squad was left with no other option than to disband. In its February 7, 2022, regular meeting, the Borough Council authorized the Mayor to enter into a Shared Services Agreement with Mercer County for the provision of EMS dispatch services (Resolution 2022-2.13). Ambulance services are currently being provided by Capital Health in Hopewell Township.

4.3. Pennington Public Library

(<https://www.penningtonlibrary.org>)

Pennington Public Library is an independent community institution that was founded in 1876. The library is a tenant of the Borough subject to a MOU. The mission of the library is to celebrate reading in all formats and provide a warm, welcoming place where community members of all ages can interact, engage in public discourse, and pursue lifelong learning for personal growth and entertainment. The library offers a variety of quality programming, knowledgeable staff, dedicated volunteers who staff the circulation desk, a comfortable physical environment and coffee and tea station courtesy of the Friends of the Library. The library's current collection of books, e-books, DVDs, newspapers and magazines exceeds 34,000 titles. The circulation is over 44,000 titles checked out annually. The library also provides access to the world through free Wi-Fi, offers frequent programs for education and entertainment, and builds a strong community by sharing information from local organizations.

To ensure fiscal parity among municipalities that support a local or joint library and those that support a county library, on March 21, 2011, Governor Chris Christie signed P.L. 2011, c. 38 into law. This law provides a dedicated line item on the property tax bill for the minimum funding to municipal and joint free public libraries. In 2025, the Pennington Municipal Library tax was 4.6 cents per \$100 of property valuation for real estate tax purposes. The Borough collects these taxes and passes these funds through to the library. The library budget is supplemented by donations from the community to the Friends of Pennington Library. Library cards can be obtained at no charge for people who live in the Hopewell Valley Regional School District. The library trustees have completed a strategic plan and a building program plan, which will be used to determine future library needs.

4.4. Post Office

The United States Post Office occupies a building on a 0.5-acre site on Broemel Place across from the Pennington Fire Company. Post Office employees provide window, P.O. Box and passport services. All mail carriers and vehicles for the delivery of mail in the Pennington 08534 Zip Code operate out of the building. The 08534 Zip Code includes about 13,000 residents in 5000 homes on just over 20 square miles that include Pennington Borough and an area of Hopewell Township surrounding Pennington. Of these, 2,800 residents and 1,100 homes are in Pennington Borough. <https://newjersey.hometownlocator.com/zip-codes/data.zipcode,08534.cfm>

4.5. Churches

There are five churches, and two active cemeteries located in Pennington. These are identified in Table 1 below. Partnership with these churches to have their buildings be shelters as part of the emergency management plan is recommended. If the churches were to offer public parking outside church hours, it could increase the number of parking spaces in the Borough and help town center businesses. They could also add fee-based electric charging infrastructure to their community services. These would help generate revenue.

Table 1. Churches and Active Cemeteries

Use/Facility	Location	Size (Acres+/-)
Pennington United Methodist Church	South Main Street	1.0
First Baptist Church of Pennington	Academy Street	0.3
St. Matthew's Episcopal Church	South Main Street	1.2
St. James Roman Catholic Church	Eglantine Avenue	5.0
Pennington Presbyterian Church and Cemetery	South Main Street	1.9
Pennington Cemetery Association	South Main Street	<u>4.8</u>
	Total Area	14.2

The Pennington Historic Preservation Commission recognizes the importance of preserving historic structures while repurposing them to meet evolving community needs. Many buildings, including churches, within the Historic District offer unique opportunities to serve as community facilities. The adaptive use and reuse of these structures can provide venues for cultural, educational, and recreational activities while maintaining their historical integrity.

Given the potential for church closures or consolidations due to declining attendance, the Commission advocates for proactive measures to repurpose them. These spaces could accommodate a range of services, such as daycare centers, meeting halls, or cultural hubs, ensuring their continued contribution to the community fabric. Integrating these facilities into the Borough's service offerings allows Pennington to honor its architectural heritage while meeting modern needs, fostering a sense of continuity and shared purpose.

4.6. Howe Commons

Named for a very influential member of the community who developed many of Pennington's neighborhoods and served twice as Mayor, the William P. Howe Commons at 65 South Main Street is made up of five buildings that fit with the Colonial feeling of the town. The oldest building, Abey House, started life as a farmhouse in the early 1800's and after a few ups and downs, was restored to its current state by Dr. William Abey as his residence in 1942. Building E, the last of the five, was completed in 2009. The grounds of the Commons add to the aesthetic appeal of the Borough streetscape. With cooperation from the owner, hosting various public events in the Borough has been a long-standing tradition of Howe Commons. These include concerts for the Parks & Recreation Committee, use by the Pennington Business & Professional Associations for The Holiday Walk and to host the Borough Christmas Tree and Menorah, and as a gathering place for dignitaries for the Memorial Day Parade.

4.7. Trenton Cyrus #5 Freemasons Lodge

The Freemason Trenton Cyrus #5 Lodge has a Temple at 131 Burd Street in Pennington. The Temple was dedicated and opened for business on September 23, 1961. It hosts several events that are open to the public, including Oktoberfest, a Santa Claus visit before Christmas, and various events to celebrate local citizens, who do not need to be freemasons.

4.8. Public Schools

(<https://www.hvrsd.org>)

The Hopewell Valley Regional School District (HVRSD) has been in operation since 1965 when voters of Hopewell Township, Hopewell Borough and Pennington Borough approved a plan to consolidate their schools. A history of schools in Hopewell Valley can be found on the HVRSD website. HVRSD operates six schools, Central High School (grades 9-12), Timberlane Middle School (grades 6-8) and four elementary schools (pre-K to grade 5). Pennington resident children may attend Toll Gate Grammar School, Timberlane Middle School and Central High School.

Toll Gate Grammar school is located at 275 South Main Street in Pennington Borough and has a student population of around 300. It was built in the 1920's along with the original Central High School at 425 South Main Street, which now houses the HVRSD administration offices. These two buildings are well-preserved landmarks in the historic landscape of Pennington and if either were to be vacated by HVRSD, the Historic Preservation Commission would like to see adaptive reuse to preserve the historic architecture.

4.9. Private Schools

4.9.1. The Pennington School

The Pennington School was founded in 1838. It is a private, coeducational school with day and boarding programs for students in grades 6 through 12. Boarding is offered for grades 8-12. The Pennington School has an enrollment of about 535 students and about half of them live on campus. School grounds are located on both sides of West Delaware Avenue. Approximately 33 acres are located on the south side of West Delaware and 17 acres on the north side, including staff housing. As shown in Table 2, about 12 acres on either side of Green Street are open space.

4.9.2. Cambridge School

Cambridge School is an independent grade 1-12 day school that specializes in helping students with language-based learning differences. The school is located at 100 Straube Center Boulevard in Pennington Borough and serves around 130 students with a teacher-to-student ratio of about 4.

5. Open Space in Pennington for Recreation

As shown in Table 2, there are several other areas of open space available for residents to use in addition to the four Borough-owned parks described in section 3.1.4.

Pennington's four parks cover 12.1 acres of Borough land. Educational facilities in the Borough contribute an additional 34.3 acres of land that is available for public use. These include Toll Gate School rear field and playground, the Board of Education's Administration Building rear field, the Pennington School sports fields and lake on Burd Street and its fields and woodlands on both sides of Green Street. In addition, the Pennington African Cemetery contributes 1.3 acres and there are 5.4 acres of open space north of the Senior Center on Reading Street. The total area of open space available to the public in Pennington is approximately 53 acres.

Table 2. Parks and Other Open Space in Pennington

Use/Facility	Location	Size (Acres+/-)
Parks and Recreation		
Kunkel Park	King George Rd.	7.5
Mini-park	Sked St.	1.1
Veterans Memorial Park, with gazebo	Broemel / Knowles	0.5
Eileen M. Heinzl Arboretum	East Curlis	<u>3.0</u>
		12.1
Educational Facilities		
Toll Gate rear field and playground	South Main	3.3
HVRSD Admin rear field	South Main	2.9
Pennington School sports fields and lake	Burd Street	15.9
Pennington School woods walk and field	Green Street, east side	5.7
Pennington School field and tennis courts	Green Street, west side	<u>6.5</u>
		34.3
Other spaces open to the public		
Pennington African Cemetery and south	South Main	1.3
Hopewell Valley Senior Center	Reading Street	<u>5.4</u>
		6.7
	Total area	53.1

The National Recreation Association has determined that approximately 10 acres of parkland is needed for every 1000 people in a community. According to this recommended ratio, Pennington Borough, with a population of about 2,800, should have 28 acres of recreational open space. Pennington is adequately served by the 53 acres of combined open space shown in Table 2. In addition, the Borough is surrounded by large tracts of open space including Baldwin Lake Wildlife Management Area, the Watersheds Institute, and the Mercer County Park – Rosedale, Mercer Meadows and Curlis Woods. Many of these areas are connected via trails such as the Lawrence Hopewell Trail, which also connects to additional open spaces throughout the County.

6. Relationship with Regional Community Facilities Plans

6.1. Hopewell Township Master Plan

<https://www.hopewelltp.org/DocumentCenter/View/8614/Community-Facilities-Plan-Element--Adopted-April-12-2007>

Hopewell Township adopted a Community Facilities Plan element in 2007. It covered

1. Hopewell Township Municipal Complex
2. Fire Protection and Emergency Services
3. Police Protection

4. Hopewell Valley Regional School District
5. Library
6. Senior Citizens
7. Youth Activities

Facilities and services recommendations were made in five areas in the 2007 element:

1. Municipal Operations

The addition of more bays at the public works building was recommended, because the bays are undersized for some of the existing equipment and some equipment is stored outside. Given the size of the tract and its location, the public works site also presents further opportunities for expansion.

2. Township Fire District

The Fire District is developing a plan for the construction of a building in the Municipal Services Complex to house Fire District administrative offices, equipment storage, rescue vehicles and emergency response. As residential and non-residential development proceeds towards build-out, the Fire District may also need to re-evaluate its operations and the need for additional facilities.

3. School District

After a population growth analysis, it appeared that future school enrollments, combined with programmatic requirements established by the N. J. Department of Education (DOE), will create a need for a new school site or substantial reconfiguration of existing school sites. In the HVRSD planning process an early childhood center also is being considered.

4. Hopewell Valley Senior Advisory Board

A proposal by the Hopewell Valley Senior Center Planning Committee (later constituted as the Senior Advisory Board) recommended the construction of a Hopewell Valley Senior Center with a full-time director.

5. Youth Activities and Youth Advisory Committee

It was recommended that the Youth Advisory Committee meet with interested parents, community leaders, government officials, health professionals and youth to determine the feasibility of a teen/youth center in Hopewell Valley.

No significant changes were recommended for the 2007 Community Facility Plan element in the 2021 Master Plan Reexamination report.

6.2. Mercer County Master Plan

<https://www.mercercounty.org/home/showpublisheddocument/1242/636058423221200000>

The Mercer County Master Plan framework document of 2010, and amended in 2016, discusses County assets, strengths and challenges in Section III. Regional Vision: Goals, Policies, and Strategies (page 25). The assets are discussed at a very high level, rather than at the facilities or services level.

A 2024-25 \$450k grant program called Mercer County at Play for All enables non-profits and municipalities to provide programming and facility improvements that benefit vulnerable populations. Funding is available in three eligibility categories:

1. Equipment purchases and programming for municipal senior physical recreation programs.
2. Inclusive playground improvement grants to municipalities
3. Programming support grants for non-profits that provide after school mentoring and sports programming to underserved youth

This and similar future programs could be tapped for resources to improve certain Borough recreational facilities and services.

<https://www.mercercounty.org/departments/planning/mercer-at-play-3-test>

7. Relationship with Other Plan Elements in the Master Plan

The Community Facilities and Services Plan Element impacts and is impacted by other Master Plan elements as follows:

Land Use Plan Element. The capacity to support community facilities and services is impacted by the development and redevelopment that the Borough permits through zoning. Consequently, the potential to redevelop and/or re-imagine facilities within the Borough to support the community's needs and the goals and objectives set forth in this and other elements should be reflected in the Borough's Land Use Plan Element and the zoning that implements it.

Housing Plan Element. The Borough has identified areas in need of redevelopment which may hold the opportunity for high density housing, including affordable units. The impact of these developments on the need for additional community facilities should be considered. As the Borough investigates the redevelopment opportunities, possible new community facilities should be included.

Mobility Plan Element. The Mobility Plan includes goals to provide safe access to the town center and to recreational facilities for pedestrians, bicyclists and those not in cars. This will enhance the opportunities for residents to access community facilities.

Utility Services Plan Element. The Utility Services Plan gives details of the services provided to residents by the Borough using the facilities described in this Community Facilities and Services Plan.

Economic Development Plan Element. This Plan considers all aspects of commerce and economic development in the Borough. Some of the commercial facilities in the Borough may be willing to offer space for community activities and furthermore, local businesses rely upon, and benefit from, services offered within the Borough, as well as facilities that draw visitors to the center of town.

Open Space and Recreation Plan Element. Open space and recreation were combined with community facilities in the 1998 Master Plan. Since they are now separate plans, it will be necessary in the future to review both plans to ensure their goals remain consistent.

Historic Preservation

Historic preservation aims to maintain the Borough's historic character. Some of the preserved buildings may be of interest for a variety of community activities, both historical and recreational.

Conditionally adopted

MASTER PLAN
BOROUGH OF PENNINGTON
NEW JERSEY

10. Historic Preservation Plan Element

The Historic Preservation Plan element draft released by the writing team was conditionally adopted by the Planning Board on February 12, 2024, and posted on the Borough website for public comment. This element will be available for comments until April 22, 2026, prior to final adoption at a public meeting of the Planning Board on May 13, 2026.

Contents:

- 1. Introduction**
- 2. General Goals and Objectives**
- 3. Specific Recommendations**
- 4. Description of District**
- 5. District Significance**
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 - a. Brief History of Pennington**
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 - e. Link to Historic Preservation page on Borough Website, including District Survey**

Members of the Historic Preservation Commission

Eric Holtermann, Mary Baum, Robert Chandler, David Coats, Jack Davis, George Ford, Katrina Homel, Natalie Shivers and Craig Wallace.

Master Plan Committee liaison Amy Kassler-Taub.

1. Introduction

This Historic Preservation Plan Element of the Pennington Borough Master Plan is prepared pursuant to the Municipal Land Use Law (NJSA 40:55D-1et. Seq). This enables the Planning Board to adopt a Historic Preservation Plan Element as part of the 2025 Municipal Master Plan Update. According to NJSA 40:55D-28b (10), the purpose of the element shall be to: “(a) indicate the location and significance of historic sites and historic districts; (b) identify the standards used to assess worthiness for historic site or district identification; and (c) analyze the impact of each component and element of the Master Plan on the preservation of historic sites and districts.” Historic sites may include buildings, structures, sites and objects. In Pennington Borough, districts may include residential, commercial, industrial or other historically significant areas.

The Borough of Pennington is fortunate to retain a remarkable collection of early 19th C. through early 20th C. structures, generally well-maintained and in good condition. The result is an intact historic district at the core of the borough with a consistent historic character. In 2011, Pennington enacted a Historic Preservation Ordinance and created the Historic Preservation Commission and Crossroads Historic District. Prior to 2011, Pennington’s surviving historic structures had no protection from demolition or inappropriate renovation.

Since 2011, demolition of contributing historic structures within the historic district has been practically eliminated. Appropriate renovations have become more common, guided by the Historic Preservation Commission. A critical component of the ordinance is that it is a regulatory ordinance, rather than an advisory ordinance. A regulatory ordinance strongly discourages demolition and compels owners, especially developers, to make improvements in a historically appropriate manner. Revisions to the ordinance recently approved by the Borough Council have strengthened and clarified the language to minimize ambiguity in the original text.

Looking forward, several goals have been established by the Historic Preservation Commission:

- Pursue state-level designation of the Historic Preservation Commission as a Certified Local Government (CLG) enabling access to state grants and technical assistance
- Coordinate with the Planning/Zoning Board on zoning changes impacting the historic district and historic character of the Borough, including identification of the Crossroads Historic District as an “Overlay Zone” on the borough zoning map.
- Recognize the need for affordable housing, encouraging increased “infill” density and contextually appropriate development within the borough.
- Recognize additional impacts of climate change and the need for energy efficient, sustainable strategies for historic structures

Change to the Borough’s historic built environment is inevitable and can be positive. The recommendations of the Historic Preservation Element, combined with actions recommended in other Master Plan Element sections, can promote the Borough’s historic resources as a valuable asset for the improvement of the Borough.

2. General Goals and Objectives

- a. Safeguard Pennington’s historic and varied architectural heritage by preserving building sites, structures and objects which reflect its history.
- b. Identify, designate and provide appropriate advice regarding historic landmarks and historic districts in order to preserve their historic character.
- c. Discourage demolition of historic resources.
- d. Encourage continued use of historic sites and districts and facilitate their appropriate use or reuse, including adaptive re-use to accommodate growth and changing needs. Manage change of historic sites and districts by encouraging appropriate alteration and/or new construction.
- e. Balance historic preservation efforts with the public interest in smart growth, greater housing choice, sustainability, equity, and economic development.
- f. Prepare and promote user-friendly information for public awareness and stewardship of historic resources, policies, and design guidelines. Continue to facilitate awareness through multi-platform outreach to promote historic resources.
- g. Promote resiliency of historic structures vulnerable to climate change-related natural hazards.
- h. Consider other future designations of building sites, structures and objects.
- i. Promote appreciation of Pennington’s architecture and history for the education, pleasure and welfare of its inhabitants.

3. Specific Recommendations

- a. Pursue Certified Local Government (CLG) status with NJ Historic Preservation Office (NJHPO) enabling eligibility for State-level grants and technical assistance. Explore other options available to municipalities under the New Jersey’s Municipal Land Use Law.
- b. Promote the NJ Rehabilitation Building Subcode Subchapter 6, Historic Buildings Section (5:23-6.33) encouraging retaining historic fabric within the district and promoting historically appropriate rehabilitation.
- c. Coordinate with Planning/Zoning Board for zoning update to identify “Historic District Overlay” in zoning code and map.
- d. Provide Historic Preservation Commission position and advice on other zoning updates including setbacks, ADU’s, density, new development.
- e. Provide Historic Preservation Commission position and advice on Planning/Zoning “Areas in Need of Development.”
- f. Promote historically appropriate energy/sustainability strategies for property owners.
- g. Promote preservation of threatened historic resources, including identification and documentation where needed. Monitor status of potentially threatened structures such as the Railroad Station and the HVRSD Administration Building.
- h. Promote public awareness and education of historic district requirements and benefits.
- i. Continue to provide technical assistance to owners of historic properties.

4. Description of District

a. Description and limits of the district

Pennington's Crossroads Historic District is centered on the Borough's historic crossroads, North and South Main Street, and East and West Delaware Avenue. Specifically, the structures on these streets comprise the core of Pennington's early and mid-nineteenth century development. Approximately 160 structures are contained in the district, including all of the historic downtown area, most of the significant 19th C houses as well as several significant early 20th C houses, and the five historic church buildings. In addition, the district includes the Pennington African Cemetery, a non-contiguous plot added to the district in 2018. Within the district the majority of structures are identified as "contributing," 12 significant structures are identified as "key contributing," and most mid to late 20th C structures are identified as "non-contributing." There are no properties listed independently in the Borough Ordinance, although there are 2 properties listed on the State and National Historic Registers.

b. Survey history, status and availability

The Historic Preservation Commission has prepared a survey of all properties within the district. The survey is based on survey descriptions prepared in 1984 by Bill Schmidt and others, and has been updated with recent photos on current NJ Historic Preservation Office forms. Key contributing, contributing and non-contributing status is identified for each building. The survey is in digital format and is publicly available on the Borough Website.

c. State and National listed properties

The Pennington Crossroads District is established locally by Borough Ordinance, but is not listed on the State or National Registers of Historic Places. The NJ Historic Preservation Office issued a Certificate of Eligibility (COE) in 2018 indicating that the district would meet the standards for listing.

Two properties in the Borough are listed on the State and National Registers. The Railroad Station on Railroad Place is listed, as is the Presbyterian Church at the intersection of East Delaware and South Main. The Presbyterian Church is within the district, the Railroad Station is outside of the district.

5. District Significance

a. Periods of significance

The District includes many 19th C and early 20th C houses, as well as town center commercial structures from the same periods. Accordingly, the period of significance for the District runs from the 18th C pre-revolutionary era for some of the earliest structures, through the early 20th Century when the district was essentially built out.

b. 50-year threshold for review

The ordinance previously specified the year 1945 as the end of the period of significance, noting that properties constructed after that date are not subject to review. As part of the

recently approved revisions to the ordinance, the 1945 date has been eliminated. In its place, review of any structures more than 50 years old from the date of review is included, consistent with State and National historic preservation standards.

6. Integrity & Existing Conditions Issues

a. General conditions statement

The Crossroads Historic District is remarkably intact with most street-facing facades retaining their historic character. In addition, most properties are well-maintained, with very few neglected or deteriorated conditions. Fortunately, the historic character of buildings in the district has not suffered widely from poor-quality siding and window replacements or other inappropriate changes. Changes to siding, windows and exterior trim are important character-defining features that are carefully reviewed by the Historic Preservation Commission.

b. Public response

Since the enactment of the Historic Preservation Ordinance and formation of the Historic Preservation Commission in 2011, the Commission has been generally well-received within the community. On one hand, regulations are not considered onerous by most homeowners, and, more importantly, at least 10 houses in the district have been spared demolition because of the Preservation Ordinance and Historic Preservation Commission review. Also, the ordinance is intentionally written to focus on the preservation of primary historic structures, without review of outbuildings, accessory structures, landscape elements, signage, etc., which are often already regulated by zoning. Where there has been some pushback it has been from some developers and house-flippers, intending to purchase some of the more neglected properties in the district to either demolish or renovate them. In each case, the Historic Preservation Commission has worked with the developer to maintain certain quality standards. In most cases, this has meant retaining the most historic street-facing portion of the structure, preserving its character-defining features, and allowing replacement or dramatic renovation of additions toward the rear of the lot.

c. Ordinance text issues and proposed amendments

Revisions to the Preservation Ordinance have been approved by the Borough Council. The revisions focus on clarifying vague language and being more specific about replacement material – specifically “in-kind” replacement, which has been interpreted too broadly by some applicants. Revisions expand the “Minor Work Application” section to insure the appropriateness of replacement materials. “Minor Work” applications do not require attendance or review at a Historic Preservation Commission meeting, and can be approved by the Commission chair or designated Commission member.

Other ordinance revisions include clarifications recommended by the NJ Historic Preservation Office to verify compliance with the MLUL – for instance, deletion of a “Type D” member, not permitted by MLUL.

d. Threats

The Historic Preservation Commission’s regulatory (as opposed to advisory) status has provided essential protection against the most common threat of demolition. However, other threats exist, mostly associated with historically inappropriate repairs, replacement and renovations. In particular, repair and replacement of siding, windows and trim are considered “maintenance” in the Building Code and therefore do not require a building permit. Property owners can undertake these repairs without being aware that the materials are subject to Historic Preservation Commission review. Fortunately, Borough occupants are vigilant and the Borough office or the Historic Preservation Commission is usually notified when work is being undertaken. When identified, the Borough Zoning officer can issue stop work orders for unauthorized work. Ideally, a program to improve property owner’s awareness could help address this issue.

e. Successes

The Historic Preservation Commission has seen many significant successes starting with the preservation of the Alumni Center (former Headmaster’s House) at the Pennington School, and followed by the subsequent rehabilitation of several other houses in the district – all spared from demolition. Coincidentally, protection of existing houses in the district helps the Borough retain some of its lowest cost rental and owner-occupied housing. Other successes include the following:

- As property owners have become more familiar with the Historic Preservation Commission, they have sought the advice of the Commission for renovations and upgrades. Many properties have been appropriately upgraded with advice from the Commission.
- The Pennington African Cemetery is an important addition to the district, offering it historic protection and the ability to apply for grants.
- Revised and approved ordinance text has replaced vague text with clear language specifically noting non-approval of certain materials and process for “Minor Work” approvals.
- The Historic Preservation Commission page of the Borough website has been updated to include:
 - digitized district survey posted on the webpage for easy public access
 - added links to design guidelines, applications, ordinance, maps
 - added meeting agendas and meeting minutes.

7. Interface with other Master Plan Elements

a. Land Use

(Note: The Land Use Element had not been prepared when this section was written. Accordingly, this section may be edited in coordination with the Land Use Element when available)

The Pennington Historic Preservation Commission reaffirms its commitment to preserving the integrity of the Historic District while accommodating thoughtful, compatible development. Revising zoning maps and ordinances to designate the Historic

District as an "overlay zone" will provide a valuable tool to ensure its unique character is safeguarded. Zoning adjustments, including setbacks and lot coverage, must respect the aesthetic and historical significance of the area.

New buildings within the Historic District should comply with-Section 119-10(f) of the Historic Preservation ordinance, noting consistency with "visual compatibility" factors listed in the ordinance. New buildings adjacent to or outside the Historic District should respect the scale, density and character of the surrounding architectural context. While preserving the existing-density and character of the district is a priority, the Historic Preservation Commission supports innovative proposals - provided their design seamlessly integrates with the historic fabric.

Additionally, the Historic Preservation Commission emphasizes climate resilience and sustainability for historic properties, advocating for energy-efficient retrofits and strategies to mitigate climate-related impacts while preserving historical features

b. Housing

(Note: The Housing Element had not been prepared when this section was written. Accordingly, this section may be edited in coordination with the Housing Element when available)

The Pennington Historic Preservation Commission prioritizes preservation of the Historic District while also acknowledging that sensitive new housing development can be compatible with its character. Density and extent of multi-family housing must be appropriate, maintaining architectural harmony with existing structures, and ensuring they complement the area's historical and aesthetic value.

The Historic Preservation Commission supports proposals that adaptively reuse existing buildings, provided the additions are architecturally appropriate. Historically, (before modern zoning ordinances) mixed use and multi-family buildings were common within the district.

The Hopewell Valley Regional School District Administration Building at 425 South Main Street presents a significant opportunity to develop affordable housing while preserving its historical integrity. Additionally, the Historic Preservation Commission champions the preservation and rehabilitation of-lower-cost historic homes ensuring they remain a vital resource for diverse residents.

This balanced approach underscores the Historic District's role as a living, evolving community while maintaining its historical identity.

c. Mobility

The Pennington Historic Preservation Commission underscores the need to integrate mobility enhancements with the preservation of the Borough's historical character. Improvements in pedestrian and bicycle infrastructure within and around the Historic

District should align with Complete Streets policies, ensuring that new facilities respect the district's aesthetic while improving safety and connectivity. Enhanced lighting and walkability will support both residents and visitors, encouraging appreciation of the district's historical assets.

Parking solutions within the district should prioritize compatibility with its historical setting. Measures such as strategically placed EV charging stations must balance modern mobility needs with the preservation of historical integrity.

Additionally, careful planning is required to address the potential impacts of increased traffic from regional developments, ensuring the district remains accessible without compromising its charm or safety.

By considering these factors, the Historic Preservation Commission aims to enhance mobility while safeguarding Pennington's unique heritage.

d. Community Services and Facilities

The Pennington Historic Commission recognizes the importance of preserving historic structures while repurposing them to meet evolving community needs. Many buildings within the Historic District, including its five churches, offer unique opportunities to serve as community facilities. The adaptive use and reuse of these structures can provide venues for cultural, educational, and recreational activities while maintaining their historical integrity.

Given the potential for church closures or consolidations due to declining attendance, the Historic Preservation Commission advocates for proactive measures to repurpose these historic buildings. These spaces could accommodate a range of services, such as daycare centers, meeting halls, or cultural hubs, ensuring their continued contribution to the community fabric.

Integrating these historic facilities into the Borough's service offerings allows Pennington to honor its architectural heritage while meeting modern needs, fostering a sense of continuity and shared purpose.

e. Economic Development

The Pennington Historic Preservation Commission emphasizes the proven economic value of historic preservation as a driver of sustainable growth. Preserving and promoting Pennington's Historic District enhances its appeal as a destination for heritage tourism, a growing sector supported by New Jersey's State Heritage Tourism initiatives. By drawing visitors to experience the Borough's unique architectural and cultural history, historic preservation generates revenue for local businesses and strengthens the community's economic vitality.

The Historic District, serving as a “Crossroads” in the heart of Pennington, is pivotal to fostering desirable economic activity. This historic downtown area provides an inviting backdrop for retail, dining, and cultural events, attracting both residents and visitors. Integrating historic preservation into economic development strategies ensures the Borough maintains its character while leveraging its heritage as a foundation for future prosperity.

f. Green Buildings and Environmental Sustainability

The Pennington Historic Preservation Commission advocates for the integration of environmental sustainability into the preservation and adaptive reuse of historic structures. Historic buildings in Pennington offer inherent sustainability advantages through their adaptability for modern uses, reducing the need for new construction and preserving embedded energy. Enhancing these structures with appropriate green building improvements ensures they contribute to the Borough’s environmental goals without compromising their historical integrity.

Upgrades such as envelope insulation, energy-efficient windows, and renewable energy sources like solar panels can be seamlessly incorporated into historic buildings. The Historic Preservation Commission supports measures to minimize fossil fuel use by adopting sustainable energy solutions while maintaining the character of these structures. By prioritizing thoughtful retrofitting, Pennington can achieve a balance between historic preservation and environmental stewardship, fostering a more sustainable and resilient community.

8. Appendices

- a. A Brief History of Pennington
- b. Map: Pennington Crossroads Historic District
- c. Sites currently listed on NJ and National Register of Historic Places
- d. Other potentially significant historic sites
- e. Link to Historic Preservation Commission page on Borough Website, including District Survey
<https://www.penningtonboro.org/historic-preservation-commission>

Appendix a. Brief History of Pennington Borough

Pennington first appears in the historical record in 1725-1726, as a place called Pennytown. At the annual Hopewell Township meeting of that year, the citizens agreed to hold future town meetings at the “new meeting House by John Smith’s Alias Pennytown.” Thus Pennington began as the seat of government for Hopewell Township. Due to its position on a north-south road connecting the market called Trent’s town with the developing northwest portion of New Jersey, it enjoyed the advantages of traffic on the road. John Smith owned a tract of land in the southeast corner of the intersection of the two forest trails that are now Main Street and Delaware Avenue, and Jonathan Furman owned the facing tract in the southwest corner. It was on these two tracts that the town began. Smith may have owned a store or tavern prior to the construction of the Meeting House (Presbyterian Church), hence the earlier place name “John Smith’s.”

Enoch Armitage arrived from England in 1719. He provided the impetus for the church and hence the town by becoming ruling elder of the area Presbyterians and providing the timber and iron work for the 1726 building at Pennytown. By 1737, Furman operated the Red Lyon tavern opposite the present Presbyterian cemetery, and by the 1750’s, a half dozen houses were added, bringing in a blacksmith and a wheelwright. By 1740, a new name was sought for the town. Smithfield and Queenstown were tried, but Pennington became the final form in the 1750’s.

By the time of the Revolution, there was a third tavern, at the site of the former Bank, and just a few houses more. On December 10 of 1776, a large detachment of the British army came through Pennington at night and returned the next day to quarter in the taverns and on neighborhood farms. A few days later a contingent of 500 cavalry arrived, no doubt the source of the tradition that the cavalry men exercised their horses over the cemetery wall. The second most famous American general, Charles Lee, was brought to Pennington on the 13th after his capture at Basking Ridge.

The town we see today, along Main Street north of Curlis Avenue, and along the first blocks of East and West Delaware Avenue, is the result of a rapid 19th century expansion. It began with the construction of a new public school at 135 South Main about 1815. Four nearby houses were added in the 1820’s along south Main Street, bringing the Moore farmhouse and blacksmith shop within the village. A fourth tavern was added on the west side of North Main. The Methodists built a church on South Main in 1826, and other new lots were laid out on South Main in the 1830’s. The Female Seminary and the Pennington Male Methodist Seminary were built in 1836 and 1839, and this triggered a faster expansion of the town. Dry goods and grocery vendors, shoemakers and tailors came to town to serve the student population. Isaac Bergen began his carriage-making business on West Delaware.

Meanwhile the traffic on the road increased, and blacksmiths and wheelwrights were added. Houses were added outward along all four directions from the crossroads intersection in the 1830’s, 40’s, and 50’s. The Methodists erected a new church closer to the center of town in 1846. Just before 1850, frontage on Joshua Bunn’s farm on both sides of Main Street south of the Female Seminary, was acquired by black families. The African Methodist church was erected in 1850. By 1850 Pennington’s population was about 500.

Writing in 1876, Rev. George Hale, Presbyterian minister in Pennington from 1838 to 1863 said,

“During those twenty-five years there has been a perceptible advancement . . . In this village, where there are now standing about one hundred dwellings, at least sixty (more than half) have been put up within this time, and many of the others have been improved and enlarged.”

In 1875 the railroad came through town, opening up another set of business possibilities, and allowing residents to commute for work and travel for recreation. A lumber yard, coal yard, and stockyards for importing dairy cows, and farm and carriage horses were built in the north end of town, and T. P. and C. A. Reed built the grain silo on North Main, near the new railroad Station.

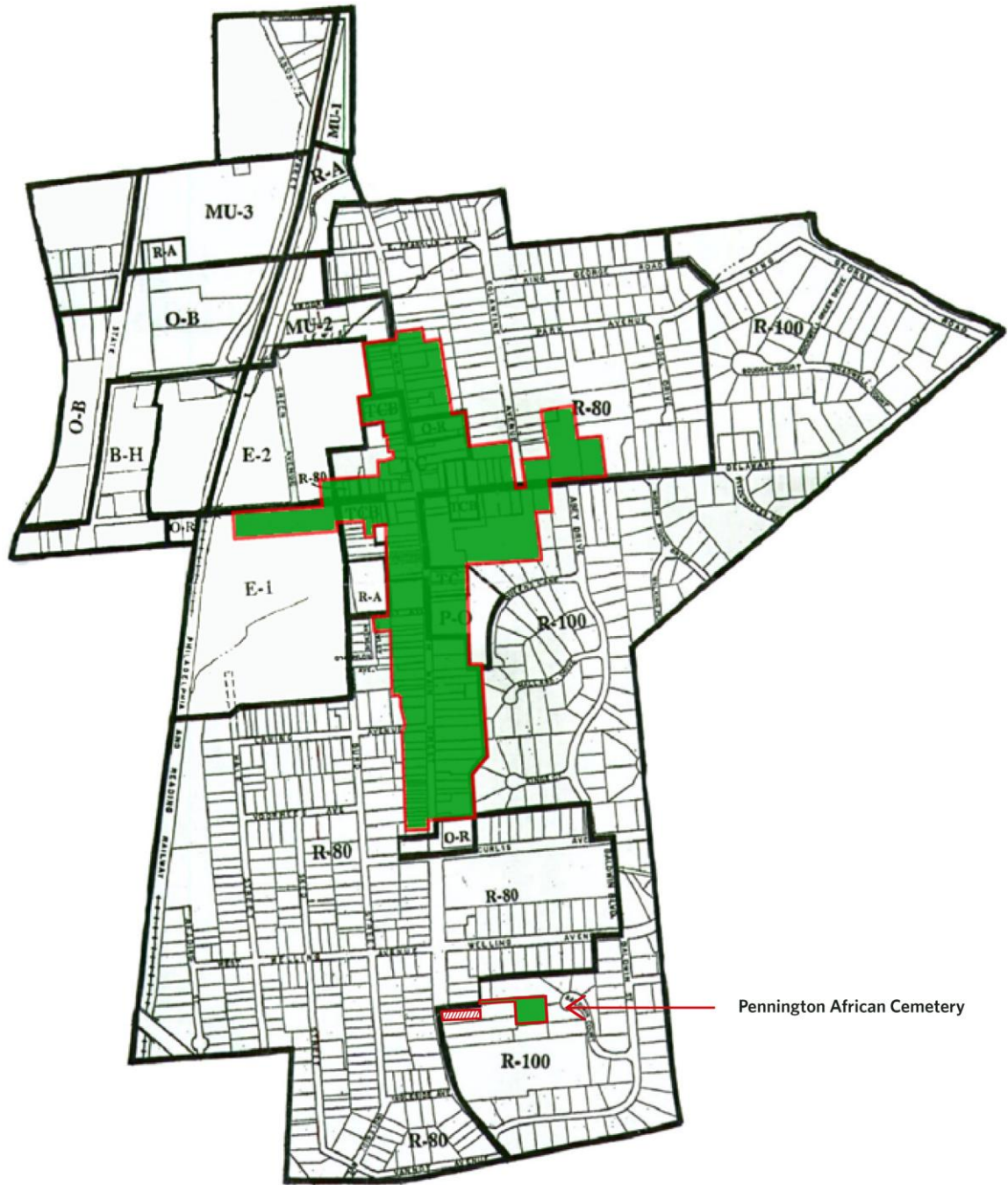
In 1890, under this new business climate, the town incorporated to separate its interests from the Township. Immediately the Pennington Fire Company was formed, and the new equipment was soon housed in the Odd Fellows’ new three story brick building. Sidewalks and street lights were introduced. At this moment of improvements, Col. John A. Kunkle came to town. He purchased the Ketcham farm that lay on the north side of East Delaware Avenue. He then built Stony Brook Lodge and developed Eglantine Avenue. In 1897, telephones were introduced into Pennington, and a newspaper was inaugurated the following year. Electricity was also brought to Pennington at this time.

In 1898, the first Catholic church was built in Pennington, and the new brick school, now Academy Court, was built. As the new century came in, The First National Bank was founded at the northeast corner of Main and Delaware in the Irving house, the old colonial tavern where the town had been incorporated ten years earlier. In 1902, trolley service was extended to Pennington and the African Baptist congregation acquired the use of the relocated 1850’s public school, which still stands at Academy Street and Crawley Avenue.



In 1910, William Howe, Sr. arrived in Pennington and continued the role of developer begun by Col. Kunkle. He first acquired a small farm at the site of the Pennington Professional Center and began his famous nursery business there. Selling that small farm, he purchased the Sked farm opposite the Tollgate House, and expanded his nursery operation there. He soon sold that property and bought the land adjacent on the north, next creating Burd Street and building a new house, at the corner of Laning Avenue. Over the next several decades, Howe laid out streets and lined them with Norway maples. In 1919, he purchased the Curlis farm, lying from the Tollgate house to the north side of Curlis Avenue and extending far to the east. A new network of streets was added, and houses were built through the 1960’s. His nursery operations were interwoven with the house lots. He donated the location for the Tollgate school, and his office at the northwest corner of South Main and Curlis Avenue still serves a commercial purpose.

After the arrival of the railroad and the trolley, the invention of the automobile finished the work of turning Pennington into a quiet suburban town, where new families and long-term residents enjoy their lives in a beautiful historic setting. Walking or driving the course of Main Street and Delaware Avenue, we still see much of the town that Reverend Hale knew in 1876. Few towns are as fortunate in the preservation of their history as Pennington. History on display is the source of property value and our town’s unique identity. Let it always be so.

Appendix b. Map of the Pennington Crossroads Historic District



June 15, 2021

-  Pennington Crossroads Historic District
-  Property Subject to HPC Review

Appendix c. Sites currently listed on New Jersey and National Register of Historic Places

Delaware & Bound Brook Railroad Station
#2 Railroad Place
NR: 12/31/1974, SR:11/4/1974

First Presbyterian Church of Pennington
13 South Main Street
NR: 8/24/2011, SR: 6/2/2011

Appendix d. Other Potential Historic Sites and/or Districts

1. Delaware & Bound Brook Railroad Station
2 Railroad Place
2. "Tollgate" House (subject to HPC review per Variance approval)
417 South Main Street
3. Sked Farmhouse – Rose Garden Inn
410 South Main Street
4. William Howe Sr. House
304 Burd Street
5. Clarkson / Woolsey & Cadwallader Lumber Yard Barn
Brookside Avenue at Green Street
6. Clarkson / Woolsey & Cadwallader Lumber Yard Manager's House
20 Brookside Ave
7. Pennington Canning Company
Brookside Avenue
94 ½ North Main Street
8. Clarkson / Woolsey & Cadwallader Lumber Yard Office
16 West Franklin Ave
9. Daniel A. Clarkson House
230 West Delaware Avenue
10. Mercer & Somerset RR Depot and House.
240 and 238 West Delaware
11. Farmhouse
302 North Main Street

12. Freight Depot & Siding
Green Street

Appendix e. Link to Historic Preservation page on Borough Website, including District Survey

<https://www.penningtonboro.org/historic-preservation-commission>

Conditionally Adopted

MASTER PLAN
BOROUGH OF PENNINGTON
NEW JERSEY

5. Utility Services Plan Element

The Utility Services Plan element draft released by the writing team was conditionally adopted by the Planning Board on March 12, 2025, and posted on the Borough website for public comment. Revisions made to address comments received and to ensure consistency with other Plan elements were endorsed by the Planning Board on October 8, 2025. Final changes were approved by the Planning Board on April 8, 2026. This element will be available for comments until April 22, 2026, prior to final adoption at a public meeting of the Planning Board on May 13, 2026.

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- 1. Introduction**
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 - b. Water Supply, Treatment and Distribution Systems**
 - c. Sanitary Sewer System and Sewerage Treatment**
 - d. Stormwater Management**
 - e. Recycling**
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 - g. Electricity and Natural Gas**
 - h. Telecommunications**
- 4. Relationship with Regional Utility Plans**
- 5. Relationship with Other Plan Elements in the Master Plan**

Appendix A. Tables.

Utility Services Plan Element Writing Team

Thanks go to the following people who helped create the Utility Services Plan element: GP Caminiti, Brian Friedlich, Joann Held, Meredith Moore, Natalie Shivers, Nadine Stern, Mary Ternoey and Rick Smith, with Andy Jackson as chair. Thanks also go to Kati Angerone for her thorough review and many suggestions for improvement of the element.

1. Introduction

The Municipal Land Use Law (MLUL) includes a Utility Services Plan as a permitted Master Plan element. N.J.S.A. 40:55D-28(4) describes the element as follows:

“A utility services plan element analyzing the need for and showing the future general location of water supply and distribution facilities, drainage and flood control facilities, sewerage and waste treatment, solid waste disposal and provision for other related Utility Services and including any stormwater management plan required pursuant to the provisions of PL.1981, c.32 (C.40:55D-93 et al).”

Pennington Borough provides many services to its residents and businesses beyond those listed in the MLUL description above. All utility services should be part of the planning process. This element includes services provided by the Department of Public Works and outside entities, including commercial services.

Services provided within the Borough by the Department of Public Works:

1. Operation, management and maintenance of the Pennington Water Department, a public water system, including water supply infrastructure, such as water supply wells, water treatment and water distribution system (i.e., water mains, valves, towers, hydrants, etc.) for the provision of safe and adequate water supply and fire protection for residents, businesses and municipal buildings.
2. Operation, management and maintenance of the wastewater collection system and delivery to the Stony Brook Regional Sewerage Authority (SBRSA) Pennington Wastewater Treatment Plant.
3. Operation, management and maintenance of Borough-owned or controlled stormwater infrastructure (i.e., pipes, inlets, basins, etc.) and provision of stormwater management consistent with applicable federal and state laws.
4. Borough road repairs and maintenance.
5. Snow removal from Borough Streets and Borough owned or controlled properties.
6. Maintenance of Borough Trees, as defined in the Borough’s Community Forestry Management Plan developed by the Shade Tree Committee.
7. Garbage collection, including additional fee-based services for bulk waste.
8. Leaves, branches, and lawn and yard waste collection.

Services provided to the Borough by Others:

1. Recycling by the Mercer County Improvement Authority.
2. County road maintenance, including leaf and snow removal by the Roads Section of the Mercer County Department of Transportation & Infrastructure.
3. Electricity from Public Service Electric and Gas (PSEG).
4. Natural Gas from Elizabethtown Gas.
5. Telecommunications by several suppliers.

In preparing this Utility Services Plan element, the writing committee benchmarked the Utility Services Plans in the Master Plans of nearby communities. The Utility Services Plan of the 1998

Pennington Borough Master Plan and the utility services sections in the 2005, 2013 and 2023 Master Plan Reexamination reports were also reviewed, see: <https://www.penningtonboro.org/1261/1998-Master-Plan-Updates>

The 2023 Master Plan Reexamination report recommended that the water and sewerage data in the 1998 Utility Services element should be revised to reflect current capacities. The updated element should also analyze the need for and show the future general location of water supply and distribution facilities, drainage and flood control facilities, sewerage and sewerage treatment, solid waste disposal and provision for other related utility services and stormwater management facilities. This element will be helpful to the Borough as it considers likely future development and to what extent it will be served by water, sewerage, flood, solid waste, and stormwater infrastructure and what, if any, upgrades are necessary to ensure adequate service. It should also include electricity and natural gas supply and the installation of communication tools – cable, cell towers and wi-fi. The preparation of this element required coordination with the Director of Public Works.

The vision and goals for the Utility Services Plan element are a subset of the overall Master Plan vision and goals developed by the Master Plan Committee (MPC) and the Citizens Advisory Committee (CAC). The CAC is composed of 15 resident volunteers appointed by the Mayor on October 4, 2023. The role of the CAC is to assist the Planning Board in any area assigned to it, as detailed in NJ MLUL 40:55D-27a. In this case, the CAC is assigned to help the Planning Board develop the Master Plan. Their role is to work with the MPC and with the Committees and Commissions developing draft elements for the Master Plan. CAC members serve as community contacts, obtaining feedback and buy-in as the Plan elements develop.

In the fall of 2023, the MPC and CAC worked together to develop the vision and goals for the updated Master Plan. Their report was reviewed, modified and endorsed by the Planning Board in a public meeting on January 10, 2024. The modified vision and goals were presented to the public at an Open House at Borough Hall on April 10, 2024. Minor revisions were made based on feedback from Borough residents. The resulting list of draft goals was distributed to the teams developing the Master Plan elements as a guide for their discussions. The Utility Services goals in that report were the starting point for the Utility Services Plan element writing team.

2. Utility Services Plan Vision, Goals and Strategies

Pennington Borough’s vision for Utility Services is to provide first-class, cost-effective services and safe and reliable water and sanitary systems, in compliance with applicable federal and state laws.

Goals for services provided by the Department of Public Works and Others are:

1. Continue to provide high-quality, cost effective and environmentally conscious utility services for all Pennington residents and businesses.

- a. Manage utility assets through maintenance of an up-to-date asset inventory, appropriate assessment of vulnerability and condition, understanding of asset lifecycle, charging adequate fees and rates and capital planning.
 - b. Ensure that the SBRSA sewerage plant serving Pennington is protected from flooding along Stony Brook.
 - c. Consider exploring shared services in coordination with Hopewell Township to offer some services for a fee to Township residents whose homes can only be accessed via Borough roads. For example, they may be interested in paying for town water to avoid individual costs for water treatment or well repairs and for garbage collection.
2. Continue to provide services in Borough public areas and rights-of-way such as stormwater management, tree management, infrastructure maintenance and upgrades, snowplowing, and road repairs.
 - a. Coordinate with Mercer County Department of Transportation & Infrastructure on road maintenance and leaf and snow removal on County Roads in the Borough.
 - b. Maintain an up-to-date Community Forestry Management Plan.
 3. Continue to maintain and improve water and wastewater systems to ensure uninterrupted service, maximize system capacity, and reduce the long-term cost of municipal ownership.
 - a. Improve climate resilience through vulnerability assessment informed infrastructure improvements and redundancy to maintain service during extreme climate change-related events.
 - b. Ensure there is sufficient water and sewer capacity to serve new developments, including those associated with the Borough's affordable housing obligation.
 - c. Continue the leak detection and water main rehabilitation programs, including lead service line replacements.
 - d. Explore connecting to an outside supplier to supplement water supply in emergencies as an alternative to installing a second water tower.
 - e. Continue to reduce surface water inflow into the wastewater collection system to ensure efficient use of wastewater treatment facilities.
 - f. Improve the understanding of inflow and infiltration of surface water into the ground to maintain groundwater and aquifer quality.
 4. Protect water quality for drinking, recreation, irrigation, and natural habitat, maintain Municipal Separate Storm Sewer System (MS4) permit compliance, and meet or exceed current stormwater requirements of N.J.A.C. 7:8.
 - a. Maintain an up-to-date stormwater asset inventory, Stormwater Management Plan and Stormwater Pollution Prevention Plan.
 - b. Seek all available Federal, State, and County financial assistance to improve stormwater infrastructure to prevent flooding and explore new opportunities to fund provision of stormwater services, such as through a Stormwater Utility.
 - c. Reduce stormwater runoff by encouraging a reduction in impervious coverage and consider ordinances that limit impervious surface and lower stormwater management thresholds, especially in areas that are flood prone.
 - d. Educate property owners and encourage landscaping for improved water absorption and managing stormwater close to where it falls.

- e. Develop and maintain an up-to-date Watershed Improvement Plan, consistent with MS4 requirements, to address water quality and flooding within the Borough's watersheds.
 - f. Enforce riparian buffers ordinances and encourage enhancement of these areas with native and appropriate vegetation to reduce nonpoint source pollution and reduce flooding.
 - g. Preserve and enhance riparian zones to minimize flooding, maximize water quality and protect aquatic habitats.
 - h. Continue to reduce surface water inflow into the wastewater system.
5. Reduce the impact of severe storms on fluvial and stormwater flooding in the Borough.
- a. Develop hydrologic and hydraulic analyses of surface waters and stormwater infrastructure in the Borough that are susceptible to frequent flooding, including Lewis Brook and its tributaries.
 - b. Identify opportunities for flood mitigation and restoration of the natural floodplain and stormwater infrastructure improvements within the Borough.
 - c. Determine best management practices and amendments to ordinances, including stormwater basins, floodplain restoration, removal and reduction of impervious surfaces and green infrastructure, that can be used to slow stormwater, reduce runoff and thereby reduce flooding.
 - d. Ensure that Borough ordinances are written to reduce or eliminate disturbance to natural stormwater systems and to use green infrastructure.
 - e. Coordinate flooding analyses and identify opportunities for flood mitigation and restoration of the natural floodplain and stormwater infrastructure improvements with local and upstream partners including:
 - i) Mercer County Department of Transportation regarding bridges, culverts and stormwater infrastructure within the Borough, particularly along or draining to Lewis Brook. Note that as of 2025, Mercer County is in the planning stages of improving and/or replacing bridge and culvert crossings along Lewis Brook.
 - ii) New Jersey Department of Transportation regarding stormwater infrastructure associated with Route 31 and draining to nearby waterways or connecting to Pennington storm systems.
 - iii) The Hopewell Valley Regional School District regarding drainage of Central High School facilities into the Lewis Brook watershed.
 - iv) Mercer County Park, particularly as it relates to flooding on Stony Brook, which backs up into Lewis Brook. Work with them on beaver management to prevent the exacerbation of localized flooding from beaver dams that can impair the water infrastructure that Pennington relies upon such as the sewer collection system and the Stony Brook Wastewater Treatment Plant.
 - f. Identify, characterize, document the history of and map the piped streams or stormwater ditches that could be 'daylighted' to improve aesthetics and the natural functioning of the watershed, reduce flooding and increase green space, all of which have notable health and safety benefits.
 - g. Develop a maintenance plan, consistent with or in exceedance of requirements of the MS4 permit, to ensure that stormwater infrastructure such as inlets, pipes and catch basins remain free of debris and that stormwater operation is optimized.

6. Conduct a flood vulnerability assessment on existing and future development that incorporates future floodplains using the New Jersey Department of Environmental Protection's Inland Climate Adjusted Flood Hazard Area.
 - a. Chapter 163, Part IV 163-20 of the Borough Code needs to be consistent with State minimum floodplain standards (i.e., New Jersey Flood Hazard Area Control Act rules, N.J.A.C. 7:13 and the Uniform Construction Code N.J.A.C 5:23) and therefore must be updated to reflect amendments to these standards.
 - b. Residents need to be made aware of any flood risks to their homes based on updated flood hazard area delineations and as of July 2023 residents and landlords are required by state law to disclose certain flood risks to tenants or prospective buyers.

7. Promote recycling and increase the range of materials that can be recycled.
 - a. Continue to promote the County's current recycling program through residential education regarding proper recycling and by making the recycling schedule readily available.
 - b. Lobby the Mercer County Improvement Authority to accept more materials for recycling, such as other plastics and polystyrene packaging and work with the Hopewell Valley Green Team to make interim arrangements to recycle materials that are not currently accepted.
 - c. Explore and continue alliances with other local/regional organizations (i.e., Hopewell Valley Green Team, Hopewell Valley Regional School District) to establish new or expanded programs to address materials not currently included in existing programs (e.g. metals, plastics other than 1,2 or 5, Styrofoam, construction/demolition debris, window glass, etc.) and host freecycle and repair clinic events that reduce landfill waste. Create a Borough collection site for other items that can be recycled when delivered to recyclers of specific items.
 - d. Request that the County collect electronic goods, batteries, and hazardous materials more frequently than every six months.
 - e. Investigate whether the Borough can generate income by recycling metals and expanded polystyrene and save money by reducing the volume of waste going to a landfill.
 - f. Encourage composting of food waste and other organic material by residents, businesses, and institutions through education on the benefits and best practices. Facilitate participation by establishing compost bins at municipal facilities and schools and make them available to residents.
 - g. Ensure the Borough's municipal operations utilize optimal waste management practices. Set a date by which the Borough is 100% paperless, while recognizing that some residents are not comfortable with computers, or don't have access, provide paper options as requested.
 - h. Provide recycling bins at all municipal locations including playing fields and parks and wherever trash receptacles are located.

8. Electricity – Public Service Electric and Gas
 - a. Work with PSEG to ensure that Pennington is provided with an acceptable level of service and that the distribution system can supply sufficient power as electricity demand

- in Pennington increases due to electrification of Borough operations, residences and businesses, and transportation.
- b. Ensure that PSEG makes renewable electricity from all eligible suppliers available to Borough users.
 - c. Support the PSEG program to improve supply resilience. Take every opportunity to convert overhead utility lines to underground when making infrastructure improvements.
9. Natural Gas – Elizabethtown Gas
- a. As Pennington moves to electrification, ensure that natural gas supplies will continue to meet needs in the Borough.
10. Telecommunications.
- a. Ensure that Pennington continues to have Borough-wide access to the internet and streaming TV at speeds that are best-in-class.
 - b. In recognition that dead zones are a threat to public safety, ensure that comprehensive coverage of cell phone service is available.
 - c. Embrace and facilitate the delivery of new technology and services as they become available, while ensuring that the size, location, and appearance of cables and facilities are not visually intrusive.
 - d. Borough electronic communications, including virtual meetings and programs, website, social media and email, with residents and businesses should be first class.

3. Background to Services and Service Providers

a. Pennington Department of Public Works

(<https://www.penningtonboro.org/1230/Department-of-Public-Works>)

The Department of Public Works (DPW) is responsible for maintaining the roads, parks, municipal buildings, and Borough-owned shade trees. The DPW collects municipal waste, as well as leaves, branches and yard waste and clears Borough roads of snow. The public water supply system, the Pennington Water Department (PWD), includes treatment and distribution, is owned and operated by the Borough under the direction of the Superintendent of Public Works as New Jersey licensed water system operator, consistent with federal and state laws. Apart from the main campus of the Pennington School and a few Borough homes, PWD delivers water to all properties in the Borough, as well as several properties in Hopewell Township that straddle the municipal boundary. In 2025, there were 1087 customers made up as follows: 875 single-family homes, 89 multi-family residences, 94 commercial, 15 churches and 14 schools. The system is also responsible for delivering water for fire protection by maintaining the Borough fire hydrants and adequate water pressure, consistent with state law.

DPW staff maintains and operates the Borough's wastewater collection system, consistent with federal and state law, with delivery to the SBRSA treatment plant located on Rocky Hill Road.

b. Water Supply, Treatment and Distribution Systems

The water system consists of approximately 80,000 feet of water main, 367 water main valves, 111 hydrants, four deep wells equipped with turbine and submersible pumps, two packed column treatment units, one packed tray aeration system and a 600,000-gallon standpipe storage tank next to Borough Hall. It supplies 1,087 customers, as described above.

Pennington Borough's water source is the Brunswick Aquifer. Water withdrawals are regulated and permitted by the New Jersey Department of Environmental Protection (NJDEP). This permit, known as a Water Allocation Permit, is renewed every ten years, or sooner if modifications to the permit are proposed. The current Water Allocation Permit #5276 is effective until April 30, 2034. During the permit renewal process, the NJDEP reviews the prior reporting and issues a staff report concerning the allocation and the availability of water from the aquifer being used. The report contains recommendations for modifications and conditions which are incorporated into the renewed permit.

The allocation permit includes a variety of initial, monthly, biennial and general conditions. These conditions require the monitoring of water levels at a multitude of locations, adoption and implementation of water conservation and drought management plans, investigation of valid complaints by users of wells within the zone of influence of the municipal wells and maintaining the unaccounted-for water below 15% of total water use per NJDEP guidance. Unaccounted-for water is the difference between water delivered by the wells and the amount that is recorded by customer meters. Unaccounted-for water may be due to leakage or to inaccurate meters.

The current allocation permit provides for a maximum of 145 million gallons per year, a rate designed to maintain the sustainability of the aquifer in the long term. The monthly allocation maximum is 12.6 million gallons, slightly higher than 1/12th of the annual maximum allocation, allowing some seasonal variation. The maximum instantaneous withdrawal is 777 gallons per minute. This allows the wells to keep up with short-term demand. Night withdrawals are far smaller than those during the day. The withdrawal in 2024 was 90.3 million gallons and the average monthly withdrawal was 7.5 million gallons, about 60% of the maximum. This leaves room for growth in the residential and commercial areas.

The allocation permit also regulates the maximum pump capacity for each well to prevent the local water level falling below a safe level. Details on the wells are in Table 1. The total capacity of the wells is just above the maximum 777 gallons per minute allocation, so the wells are adequate to meet demand.

There is a significant concern regarding demand for firefighting, both in short-term supply volume and water pressure maintenance. When the Heritage at Pennington development was built a booster station was installed to maintain pressure for the sprinkler system and the fire hydrants. Strategies to address this concern and increase emergency supply might include, but are not limited to, construction of an additional water tower, possibly on the Public Works site because of its high elevation, or connecting to a nearby NJ American Water supply line running along Pennington Rocky Hill road. This option would require coordination with Mercer County

as it will involve infrastructure change to carry the pipe over the Stony Brook bridge that is slated for design and replacement.

Table 1. Pennington Borough water wells.

Well	Capacity (gallons/minute)
6	202
7	190
8	152
9	250
Total	794

A comprehensive analysis of field test results, historical operations data and the permitted quantities outlined in the Borough's NJDEP Water Allocation Permit was presented in the Well Capacity Testing Technical Report dated April 2004, which is on file with Public Works. In 2019, Van-Note Harvey Associates prepared an Asset Management Plan (AMP) for PWD, as required by the NJ Water Quality Accountability Act. The AMP has the following purposes:

1. To demonstrate responsible management of the drinking water assets.
2. To communicate and justify funding requirements indicated by the plan.
3. To provide a management roadmap for the utility.
4. To serve as a link between the Pennington Water Department and its customers.

The Asset Management Plan contains an overview of the utility, mission statement, level of service agreement, critical asset list, operation and maintenance strategy, capital investment program, and financial strategies. It also laid out a plan for upgrading all the water lines. Although DPW had planned to conduct this work when roads were being resurfaced, an influx of federal financial support for road repairs from the Inflation Reduction Act led to the roads being resurfaced before the water line replacements could be planned.

The PWD upgrades its treatment infrastructure to ensure that the water quality remains in compliance with the state and federal health and safety regulations, as overseen by the NJDEP. An Annual Drinking Water Quality Report is sent to water customers.

The following is a list of proposals and possibilities that may increase demand for water:

- Landfill property redevelopment
- Blackwell property redevelopment
- Wells Fargo site redevelopment
- 12 North Main Street redevelopment
- Senior Center redevelopment or new use
- Single-family infill/minor subdivisions
- Accessory dwelling units
- School Administration Building (re-use net increase)
- Other subdivision redevelopments or expansions

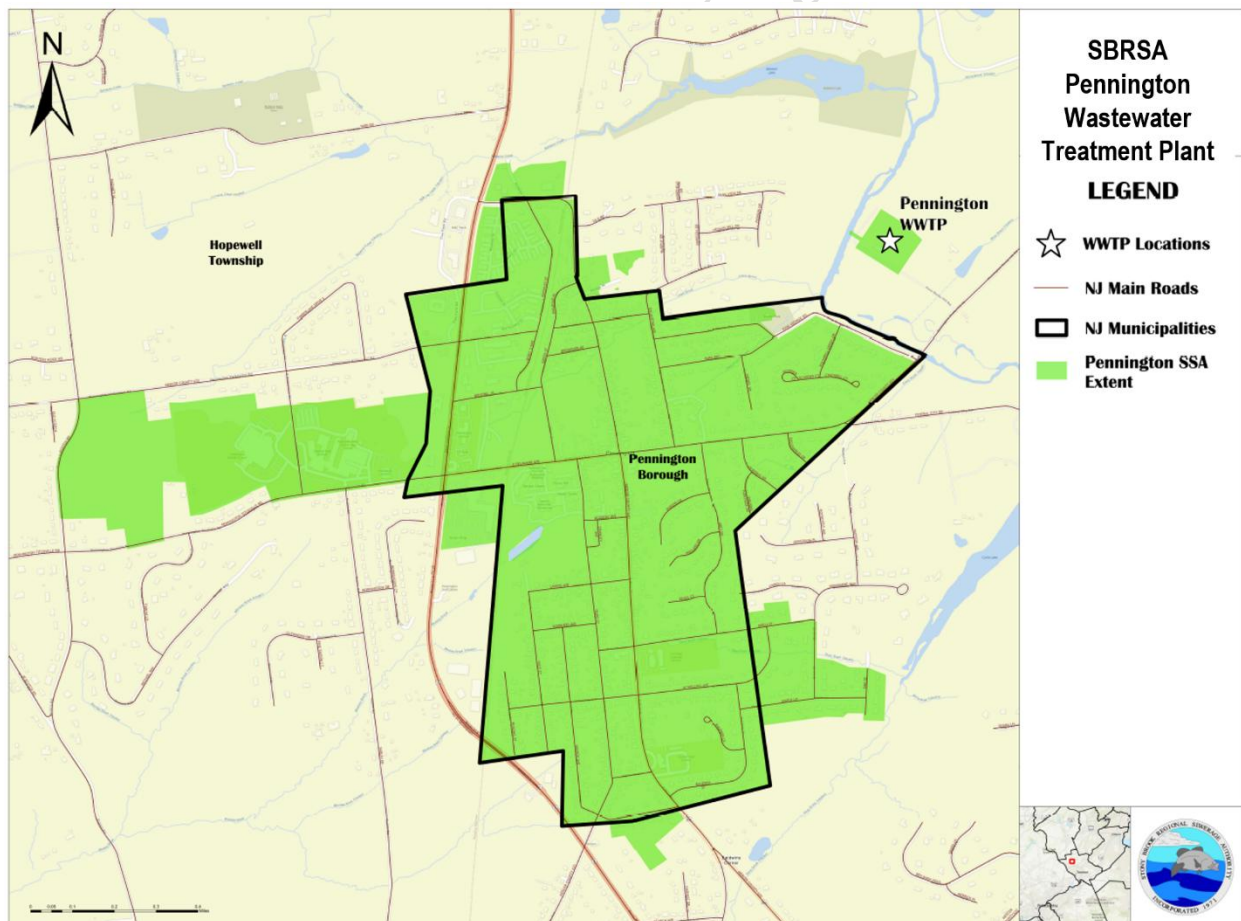
The required water and sewerage treatment capacity should be factored into the Housing Plan and Land Use Plan elements, as well as plans for redevelopment.

c. Sanitary Sewer System and Wastewater Treatment

The sanitary sewer collection system is owned and operated by the Borough under the direction of the Superintendent of Public Works as New Jersey licensed wastewater operator. The system provides sewerage connections to all properties in the Borough, and several properties in Hopewell Township. The system consists of 70,000 feet of sewer main, 315 manholes, five pump stations and an inverted siphon. The NJDEP has set no limit on the capacity of the Borough's collection system. The collector sewers have adequate capacity for their existing and currently planned future use. The sewer main system has a capacity of 1.7 million gallons per day (MGD).

The SBRSA-WWTP became operational in 1984. As of March 2025, the plant has a permitted design capacity of 0.445 MGD. The current 12-month daily average flow is 0.238 MGD. In 2024 the highest single day flow rate was 1.159 million gallons. The additional capacity currently available is 0.183 MGD, which allows for future development within the approved sewer service area (SSA). SBRSA accepts new applications to hook into their system (i.e., Treatment Works Approval applications) on a first-come, first-serve basis, provided the applicant is located within the SSA. Figure 1 shows the Pennington WWTP SSA.

Figure 1. SBRSA Pennington Wastewater Treatment Plant Sewer Service Area Map.



The SSA includes the entirety of Pennington Borough as well as Hopewell Valley Central High School and Timberlane Middle School property as far as Scotch Road, Pennington Market, the Hopewell Township part of Pennington Pointe, the Pennington Public Works complex, and the three streets, Birch, Maple and Oak off East Curlis Avenue in the Township. SBRSA is not typically involved in the municipal and county planning process. NJDEP regulations govern the establishment of the SSA, plant capacity, and Treatment Works Approvals.

The amount of sewage capacity required for a variety of residential, commercial and other buildings and facilities can be found in Table A1 in Appendix A. The table is based on the Projected Flow Criteria as set forth in Subchapter 23 of the New Jersey Pollutant Discharge Elimination System (NJPDES) Rules at N.J.A.C. 7:14A-23, found on the NJDEP Division of Water Quality Treatment website <https://dep.nj.gov/dwq/all-division-rules-and-regulations/njpdess/>. The table shows wastewater flow criteria for various development types such as single-family homes, duplexes, townhouses, condominiums and apartments with 1-3 bedrooms, restaurants, and various commercial facilities. This is useful for calculating wastewater flow requirements as the Borough strives to meet its affordable housing obligation. The values in the table can be used to determine the sewerage volume requirements for any residential or commercial developments in the Borough when making an application for a TWA pursuant to N.J.A.C. 7:14A-22. Should Pennington Borough require more wastewater treatment capacity than is available at Pennington WWTP, additional capacity must be formally requested from the SBRSA Board of Directors, who will determine if a plant expansion is warranted.

Note that the average daily flow in 1996 was 0.315 MGD. This flow included the actual wastewater flow plus surface water inflow, which is the flow of stormwater and elevated groundwater into the wastewater system. In the third quarter of 1996, the average daily flow at the plant exceeded the permitted plant capacity, and the SBRSA notified the Borough of the excursion. The Borough was aware of the magnitude of the surface water inflow since the mid-1990's and was already part way through a seven-step surface water inflow reduction program. In 1997, the average daily flow was reduced to 0.274 MGD because of the surface water inflow program, including the mainline grouting and the sump pump program, and to a reduction in rainfall over the region. The surface water inflow program continued and included mainline repairs and continued enforcement of the rule against sump pumps being connected to the wastewater system. The current average daily flow of 0.238 MGD speaks to the success of the Public Works surface water inflow program. However, the increasing age of the sewer system coupled with an increase in extreme rainfall events means that the Borough must continue to address surface water inflow.

d. Stormwater Management

The regulation of stormwater by the New Jersey Department of Environmental Protection (NJDEP) falls into three general categories:

1. Management of a municipal separate storm sewer system (MS4) to minimize and slow the flow of stormwater into the storm sewer system, to minimize pollution carried by stormwater and to ensure the storm sewer system is adequately designed and maintained. This is regulated in subchapters 24 and 25 of NJAC 7:14A, New Jersey Pollutant Discharge Elimination System (NJPDES) rules.

<https://dep.nj.gov/dwq/all-division-rules-and-regulations/njpdes/>

2. Management of stormwater runoff from new development and redevelopment in the municipality must meet standards for the management of water quantity, groundwater recharge, water quality and green infrastructure requirements, in consideration of the increasing severity of rainfall events due to climate change. This is regulated by N.J.A.C. 7:8 Stormwater Management.

<https://dep.nj.gov/wp-content/uploads/stormwater/n.j.a.c.-7-8.pdf>

3. Regulation of stormwater also impacts flooding. Development and disturbance within the regulatory Flood Hazard Area and associated riparian zones is addressed in the Flood Hazard Area Control Act rules at NJAC 7:13.

https://dep.nj.gov/wp-content/uploads/rules/rules/njac7_13.pdf

1. Municipal Separate Storm Sewer System MS4 (Tier A Permit)

The Clean Water Act (CWA) was developed in 1972 to expand on the Water Pollution Control Act of 1948. The CWA introduced the National Pollutant Discharge Elimination System (NPDES), an EPA permit program to reduce water pollution by regulating point sources of pollutants discharged into US waters. The EPA authorizes the program to state governments for permitting, administration, and enforcement.

The NJDEP manages the New Jersey Pollutant Discharge Elimination System (NJPDDES) permitting program. It is designed to protect New Jersey's ground and surface water by assuring the proper treatment and discharge of wastewater and stormwater from various types of facilities and activities and reducing the amounts of pollutants which may be discharged. In 1990, Phase I addressed stormwater discharges from medium and large municipal separate storm sewer systems (communities of more than 100,000) and discharges associated with industrial activities. In 1999, Phase II came into effect to control pollution discharges from smaller municipal storm sewer systems, highway systems, and other sources. On January 5, 2004, the NJDEP adopted two (2) sets of stormwater rules to help reduce pollution levels caused by stormwater runoff and to help replenish groundwater supplies. From 2004, Municipal Separate Storm Sewer System (MS4) permits were required for most municipalities in the State, including Pennington.

The 1998 Borough Master Plan had recommended the development of a Stormwater Management Plan but the 2004 MS4 permit required the creation of a Municipal Storm Water Management Plan (MSWMP) developed based on the Stormwater Management rules. Pennington's MSWMP was adopted in May 2005. The Plan recommended updates of ordinances. As required by the NJDEP, the Borough of Pennington adopted its Municipal Stormwater Management Plan (MSWMP) in April/May 2005. The Plan addressed groundwater recharge, stormwater quantity, and stormwater quality impacts of large projects to minimize the adverse impact of stormwater runoff and the loss of groundwater recharge. Recommended changes to Chapter 163, Part IV 163-20 of the Borough Code were adopted by ordinance in July 2006. Municipalities are required to reexamine their plan at each subsequent reexamination of the master plan. The MSWMP was reviewed by the Borough Engineer for the 2013 Master Plan reexamination, and it was concluded that there were no required changes at that time. It was again reviewed in the 2023 Master Plan reexamination and updates were recommended.

The MS4 Tier A Permit requires a municipality to develop and maintain a stormwater pollution prevention plan (SPPP) to minimize stormwater-related pollution in the MS4 system. The preparation of an SPPP helps to identify potential sources of pollution and to establish best management practices (BMP) to eliminate such exposure. Pennington created its SPPP in 2020 and it can be found on the Borough website. It includes a map of storm sewer outfalls and a map of the storm sewer system. In 2025, Pennington Borough joined Princeton, Hopewell Township, and Lawrence Township in a collaborative effort to address stormwater management requirements for the Stony Brook Watershed. The Borough Council approved a resolution authorizing participation in this regional initiative to develop a comprehensive Watershed Improvement Plan (WIP). This will help Pennington's to maintain its MS4 Tier A permit.

Following a review of the Tier A permitting program in 2018, changes were made to align the program with updated federal guidelines. Tier B permits were eliminated, and all municipalities were required to meet Tier A requirements after a certain time. The Tier A permit was revised and expanded and came into effect in January 2023. The revised Tier A permit includes the new requirement for a WIP, which has three major deliverables: Watershed Inventory Report due by the end of December 2025, the Watershed Assessment Report due by the end of December 2026 and the Final Watershed Improvement Plan due by the end of November 2027.

2. Stormwater Management

Stormwater regulations have undergone significant changes in the last few years in response to major recent rainstorm events, and in anticipation of similar or more severe events in the future because of climate change. In our area, tropical storm Ida (September 1, 2021) deluged Hopewell Valley with more than 7.44 inches of rain in a 6-hour period, a 500-year storm. According to NJDEP rainfall studies, extreme rainfall events are expected to increase in frequency as the climate warms.

In March 2021, all municipalities in the State were required to adopt new comprehensive stormwater management ordinances consistent with NJDEP stormwater management rules. The new rules implemented more stringent requirements for stormwater control and promoted the use of nonstructural stormwater management techniques. The Borough adopted its new Stormwater Control Ordinance 2021-2 in April 2021. It adopted the best management practices for the use of stormwater management measures, including green infrastructure and nonstructural stormwater management strategies, and resulted in significant changes to Borough Code Chapter 163, Part IV, Tables 5 and 6 in 163-20.5.

The Borough's 2005 Stormwater Management Plan and the associated Borough Code were reviewed in the 2023 Master Plan reexamination, and it was noted that significant changes were likely to be needed soon as the NJDEP were holding discussions at the time of the report on changes to the stormwater management and flood hazard area control act rules. In July 2023, the Inland Flood Protection rules were adopted. These rules incorporated climate change science into the rules by requiring the use of future rainfall amounts when designing for stormwater management. "Calculation of stormwater runoff and groundwater recharge" gives current and future multipliers to be used in New Jersey with NOAA rainfall predictions shown in Figure A2 in the Appendix.

As mentioned above, in 2025, Pennington Borough joined with Princeton, Hopewell Township, and Lawrence Township in a collaborative effort to address stormwater management requirements for the Stony Brook Watershed. The Borough Council approved a resolution authorizing participation in this regional initiative to develop a comprehensive Watershed Improvement Plan (WIP). The partnership will allow the four municipalities to share resources and expertise while working with a respected watershed management firm to collect essential technical data needed to meet state stormwater discharge requirements. Work on the project is expected to be completed by fall 2026, in advance of state deadlines for required reports. The resulting data and recommendations will help Pennington develop effective strategies to improve water quality, address pollutants, and mitigate flooding issues within the Stony Brook Watershed, benefiting both residents and the environment for years to come.

N.J.A.C. 7:8-4.3 (a) states that a municipality shall adopt a municipal stormwater management plan as an integral part of its master plan. Pennington's MSWMP has so far been a separate document from the Master Plan and has been included by reference. N.J.A.C. 7:8-4.3 (e) states that within one year of the adoption of a regional stormwater management plan, each municipality within the planning area shall amend their MSWMP and stormwater control ordinances to implement the regional plan.

For Pennington Borough, a critical element of any stormwater management plan is to eliminate the flooding that occurred along the course of Lewis Brook during the recent extreme storms Ida (2021) and Debby (2024) and is likely to occur in future extreme rainfall events. Floods occurred at several intersections, Route 31 and West Delaware Avenue, Green Street and Broemel Place, North Main Street and Brookside Avenue, and Eglantine Avenue and East Franklin Avenue. Flooding also occurred on the Blackwell property and in the back yards of houses on East Franklin Avenue and on Lewis Brook Road in Hopewell Township. The most likely cause of the flooding is that previously installed stormwater management assets are inadequate to handle higher rainfall amounts and the various bridges, tunnels, culverts and pipes through which Lewis Brook and its tributaries flow are too small for the higher levels of rainfall seen recently. All infrastructure improvements by the Borough, NJDOT or Mercer County to correct these should take into account how the resulting modified flow impacts infrastructure further downstream by using a hydrologic and hydraulic model for the entire reach of Lewis Brook as such consideration is required by state regulations.

Ida was an extreme storm event that caused significant flooding in Pennington Borough. An excellent report "Ida Remnants Strike New Jersey" by David A. Robinson, the NJ State Climatologist, dated Oct. 26, 2021, provided rainfall data in Hopewell Township for different periods during Ida, as shown in Table 2. Hopewell Township had some of the highest rain amounts in the state.

A major goal of the Watershed Institute led initiative is to reduce flooding and improve water quality along the course of Stony Brook and its tributaries. Addressing the issues on Lewis Brook should be included in the initiative for Pennington Borough. Strategies to improve water quality and reduce flooding might include, but are not limited to, retention and delaying the flow of stormwater runoff using stormwater best management practices (BMPs) such as stormwater

detention basins and green infrastructure - possible locations for large detention basins are on the landfill property and the Blackwell property, along with part of the Pennington School wooded area on Green Street adjacent to Lewis Brook.

Table 2. Tropical Storm Ida Remnants Rainfall, Sept 1-2, 2021

<https://climate.rutgers.edu/stateclim/?target=Ida>

Peak volumes recorded on September 1, with average recurrence intervals (ARI, see Table A2)

Peak 6-hour period: 7.44 inches ending 10:35 pm.	ARI 500 years
Peak 3-hour period: 5.90 inches ending 8:55 pm.	ARI 1000 years
Peak 2-hour period: 5.16 inches ending 8:40 pm.	ARI 1000 years
Peak 1-hour period: 3.29 inches ending 7:55 pm.	ARI 200 years
Hopewell Township total 9.13 inches	

Note that the time periods overlap. The peak 1-hour is included in the 2-, 3- and 6-hour.

It remains to be seen whether the new collaborative effort to address stormwater management for Stony Brook Watershed influences the decision on whether we should create a stormwater utility to pay for improvements and maintenance of the Borough's storm sewer system.

3. Flood Hazard Area Control

Three components of a flood hazard area are:

1. "Riparian zone" means the land and vegetation adjacent to a regulated water. Depending on the classification of the water, the extent of the zone from the stream bed can be 50, 150 or 300 feet.
2. "Floodway" means land which is mathematically determined to be needed for the channel and adjacent land to convey water resulting from a 100-year flood.
3. "Flood hazard area" means land which lies below the peak water surface elevation that will occur in a design flood. For a delineated water, this is 2 feet above the State delineation. For other streams it is 125% of the 100-year flood based on NOAA with future multipliers.

The adopted Flood Hazard Area Control Rules can be found in NJAC 7:13:

https://dep.nj.gov/wp-content/uploads/rules/rules/njac7_13.pdf

NJAC 7:13 Subchapter 3 gives six methods for determining the extent of the floodway and flood hazard area for rivers and streams in New Jersey. Method 1 applies to NJDEP delineated waters, while Method 2 applies to FEMA delineated waters. For waters that are both NJDEP delineated, and FEMA delineated, the flood hazard area is the higher of the elevations determined by Methods 1 and 2. Methods 5 or 6 would apply to Lewis Brook since it is not NJDEP or FEMA delineated. Method 6 is more accurate than the approximate Method 5 but requires a detailed study.

Method 1 for NJDEP delineated waters, which includes Stony Brook:

1. The flood hazard area design flood elevation shall be equal to two feet above the design flood elevation shown on the flood profile adopted as part of the Department delineation,

unless subsequent to July 17, 2023, the Department revises a flood profile in accordance with N.J.A.C. 7:13-3.8 to account for changes in flood elevations due to increased precipitation, in which case the flood hazard area design flood elevation is that which is shown on the revised flood profile;

2. The floodway limit is that which is shown on the flood maps adopted as part of the Department delineation.

As of May 2025, there have been no changes to Method 1.

In method 6 for a regulated water in a fluvial flood hazard area (such as Lewis Brook), the flood hazard area design flood elevation is determined as summarized here:

1. A hydrologic analysis shall be performed to determine the peak flow rate for the anticipated future 100-year flood for the regulated water using the “future” adjustment factors listed in Table 3.6B of NJAC 7:13 (the same as Table 5.6 in NJAC 7.8). It is 1.36 for Mercer County.
2. A hydraulic analysis, such as a standard step backwater analysis, shall be performed to determine the flood hazard area design flood elevation using 125 percent of the anticipated future 100-year peak flow rate determined pursuant in 1 above.

e. Recycling

In 1967 the Mercer County Improvement Authority (MCIA, www.mcianj.org) was created under the County Improvement Authorities Law to undertake certain projects for the benefit of the residents of Mercer County. The mission of the MCIA is to serve the needs of Mercer County and to improve the quality of life for the residents by providing programs and services for the County, Municipalities, school and fire districts, and not-for-profits in the areas of financing, project management, redevelopment, solid waste and recycling.

The MCIA oversees the proper disposal of Mercer County's solid waste and manages a curbside recycling program to ensure a cleaner and safer environment. The rules for recycling can be found on the MCIA recycling website (<http://mcianj.org/recycling>). The program collects clean and dry:

- Paper
 - Mixed Paper, Office Paper & Window Envelopes
 - Corrugated Cardboard (flatten boxes and/or cut into manageable bundles)
 - Telephone Books & “Soft” Cover Books
 - Hard Cover Books (Hard cover must be removed)
- Glass
 - Glass Food & Beverage Jars/Bottles (all colors)
- Aluminum and Metal
 - Aluminum & Metal Beverage Containers
 - Metal Cans
- Plastics with #1, #2, #5 Symbols
 - Milk Jugs & Plastic Beverage Bottles and beverage caps
 - Detergent & Shampoo Containers
 - Juice Boxes & Juice/Beverage Cartons
 - Yogurt, condiment and to-go containers
 - Amber colored medicine bottles.

The MCIA also organizes a Household Hazardous Waste and Electronic collection periodically at the Dempster Fire School, 350 Lawrence Station Road in Lawrenceville, and a Document Shredding event twice a year at 651 South Broad Street Parking lot 4 in Trenton.

Hopewell Township has an Electronics Collection and Paper Shredding event and a Metals collection event periodically, both at the Hopewell Township Public Works facility. Pennington Borough Residents may participate in this collection.

The Hopewell Valley Green Team organizes collections of a variety of items not on the MCIA list (May through October) in conjunction with the Pennington Farmers Market. The Green Team has also assembled a list of ways to recycle or dispose of many items that are not collected by MCIA, see: <https://hopewellvalleygreenteam.org/recycling/recycling-tips/> for tips and a schedule of collection dates. A link to their annual Reuse & Recycle in Hopewell Valley schedule can be found on this website. It contains web links to many organizations that will receive items for recycling or reuse.

The Pennington Borough Environmental Commission is currently looking for a program that will collect and compost food waste.

There are private companies that will assist municipalities with the management of waste that is not currently recycled such as scrap metal, various plastics, food waste and compost. Pennington will continue to explore ways to meet their goal of increasing the range of materials that can be recycled. This has the combined benefit of reducing the impact of waste on the environment while reducing the cost to the Borough of landfill tipping fees.

f. County Road and Bridge Maintenance – Mercer County Department of Public Works, Highway Division

The Superintendent of Public Works of Mercer County manages the operation of the Highway Division under the supervision of the County Administrator to enhance the quality of life for Mercer County residents by ensuring a safe, efficient and reliable transportation system.

The Division is responsible for 180 miles of County routes, handling ice control, snow removal, leaf pickup, deer carcass removal, pothole repairs, milling and resurfacing, asset condition management, and utility and contractor road work permit oversight. County roads in or feeding Pennington are CR 640 – Pennington Road, South and North Main Street, CR 546 – South Main Street to Lawrenceville-Pennington Road, CR 631 – Inglestone Avenue, CR 624 – Pennington-Titusville Road, West and East Delaware Avenue, and CR 623 – Pennington-Harbourton Road.

g. Electricity and Natural Gas

Background

In New Jersey, there are five electricity utility companies and four gas utility companies. To avoid overlap, the NJ Board of Public Utility Services (NJBPUS) has defined the electricity and

gas territories where the Utility Services can operate. Maps of the territories can be found on the NJDEP GIS website: [Electric Utility Services Territory Map of New Jersey | NJDEP Open Data](#) and [Gas Utility Services Territory Map of New Jersey | NJDEP Open Data](#). Electricity is supplied to Pennington Borough by Public Service Electric and Gas (PSEG) and gas is supplied by Elizabethtown Gas (ETG).

New Jersey deregulated the energy utility industry in 1999, dividing energy services into supply and distribution. Customers can choose both electricity and gas providers and utility companies deliver them for a fee. Bills are split into two parts, energy and distribution. For each utility, there are many energy suppliers that a customer can select to provide electricity or gas. The website <https://nj.gov/njpowerswitch/suppliers/> is provided by the NJBPU to let residents and businesses know which third party suppliers (TPS) are licensed to sell electricity or gas in a utility's territory and inform them about the rules if a TPS is selected. If no TPS is selected, the utility becomes the supplier by default but will still list energy and distribution separately on their bills. Note that the Utility Services buy their electricity and gas from a variety of suppliers. As of May 2025, there were 80 choices of suppliers for electricity in the PSEG territory and 38 for gas in ETG territory.

Balancing the generation of electricity with customer demand is a complex process. Near constant voltage must be maintained to avoid damaging equipment (voltage too high or too low) or brownouts (too low) and the phase of the alternating current needs to be the same across all connected suppliers. The lower 48 states of the USA are divided into three interconnections;

- The Eastern Interconnection, covering the area east of the Rocky Mountains and a portion of the Texas panhandle.
- The Western Interconnection, covering the area from the Rocky Mountains to the west.
- The Electric Reliability Council of Texas (ERCOT), covering most of Texas.

These operate largely independently from each other with limited transfers of electricity between them. The Eastern and Western Interconnections in the United States are also linked with Canada's power grid. The interconnections help maintain the reliability of the grid by providing multiple routes for power to flow and allowing generators to supply electricity to many load centers. This redundancy helps prevent transmission line or power plant failures from causing interruptions in service to retail customers.

New Jersey is in the Eastern Interconnection and its real-time electricity supply is managed by PJM, a regional transmission organization <https://www.pjm.com>. PJM coordinates the movement of wholesale electricity across 13 states. It has over 1100 members, both suppliers and distributors, and manages the interconnectivity requests for new suppliers. Except for very high demand periods, there is more generation capacity available than is needed to meet demand. However, this is beginning to change as data centers and AI are starting to consume a large amount of electricity. At any point in time, suppliers are chosen through a time-based bidding process. Constantly available power such as nuclear and combined-cycle natural gas form the base of the supply, with intermittent (e.g., solar and wind) and higher cost peaking power coming lower down the order. Power can also come from storage such as pumped hydro (e.g. Yards Creek in NJ) and an increasing number of battery installations. Adding batteries to solar and wind plants moves them towards the constantly available power category and takes them up the order. The price charged for electricity by a utility is similar throughout the year as the peaks and

troughs due to changes in short term demand are balanced out. This may not be the case with smaller suppliers who may choose to pass on higher costs at peak periods to customers, The fine print in agreements should be read.

Gas supply is easier to manage than electricity as pressure (gas equivalent of voltage) can be managed by valves and pressure regulators. The gas is delivered by pipeline from wells in gas-producing locations after processing in gas plants to control delivered gas heat capacity and to remove toxins. Because of the extensive use of gas for heating, the demand for gas is much higher in the winter than in the summer. Across the country, winter demand is 33% higher than in summer. To keep the production of gas wells similar throughout the year, demand and supply are balanced by storing a portion of the gas produced in the summer and recovering it from storage for sale in the winter. About 85% is stored via wells in depleted natural gas or oil fields, 10% in aquifers and 5% in salt caverns. New Jersey has few natural gas reserves, does not produce natural gas, and does not have any large-scale gas storage. All the gas we use comes via pipelines from the Gulf States or from Appalachian shale gas producers.

The above paragraphs are to give background for policies and goals for electricity and gas in Pennington Borough. The US Energy Information Administration is an excellent resource, and information about all forms of energy can be found at <https://www.eia.gov/energyexplained/>.

Policies and Goals for Electricity and Natural Gas

As a result of passing Resolution 2021-3.4 in March 2021, it is the policy of the Borough of Pennington to become carbon neutral in all its operations by 2035. The 4th component of the 2021 resolution committed the Environmental Commission to use the Borough's efforts to become carbon neutral to educate and encourage Borough residents and businesses to become carbon neutral. In 2025, the Borough received a grant from NJBPU to help the Environmental Commission develop a Community Energy Plan. The plan will create an inventory of energy use by type across the Borough, and the resulting carbon emissions. The plan will then make recommendations on how residents can move their energy usage from fossil fuels to zero-CO₂ sources. In most cases this means changing from natural gas to electricity for domestic heating and cooking and moving transportation to electric vehicles. Goals for this topic will be found in the Green Buildings and Environmental Sustainability Plan element.

The success of the program will depend in part on the success of New Jersey's policy to have its electricity generation be carbon neutral by 2035. Electricity is defined as secondary energy, because its CO₂ production depends on the primary energy sources used in its generation. Electricity generation in New Jersey results in about 0.5 lbs of CO₂ per kWh due to the input energy mix. This is more than the 0.4 lbs of CO₂ per kWh of heat from a modern high efficiency condensing gas furnace so converting before the NJ electricity generation drops below 0.4 lbs of CO₂ per kWh would be a step in the wrong direction. Pennington is committed to meeting goals that are science-based regardless of direction changes at the Federal level. Residents should be encouraged to keep the pressure on the state to move to carbon neutrality.

There are several ways to move Pennington's electricity use towards carbon neutrality regardless of the progress the state is making.

1. Encourage residents, businesses and churches to select “green-energy-only” suppliers from the list in the PSEG territory in the NJ Power Switch website above.
2. Encourage residents to sign up for Community Solar suppliers.
3. Reduce barriers to the installation of solar panels on all Pennington Borough lots.
4. Borough administration should reconsider a Government Energy Aggregation (GEA) program for Pennington (see <https://nj.gov/njpowerswitch/gea/>). A GEA program allows municipalities to aggregate the energy requirements of residential, commercial and municipal customers so they can purchase electricity (or gas) from a third-party supplier at reduced prices. The supplier should be chosen for its high renewable energy content.

h. Telecommunications

Internet, TV and Telephone

Internet and TV services can be provided in six ways. Three use direct connections to buildings; Fiber-optic uses light pulses through fine strands of glass and offers the fastest and widest bandwidth; Coaxial TV cable with a central copper wire uses electricity to deliver the signal and is generally not as fast and has a smaller bandwidth than fiber-optic; Older telephone wires can be used for DSL (Direct Subscriber Line) services, which are slower and limited in bandwidth but may have a lower installation cost and lower monthly fees. All three with direct connections can provide services to landline telephones. The three non-connected alternatives are direct wireless, satellite and via cell towers to handheld devices. Direct wireless uses a base station to transmit the internet over radio waves directly to a receiver located on the building. The receiver needs a good line of sight to the base station and the signal may be affected by the weather and distance from the station. Satellite services are often used in rural areas which are out of reach of fiber and cable services. It too can be affected by the weather. Finally, many people are “cutting the cable” altogether and opting for services from cell towers to mobile phones. Internet downloads can be slow unless the handheld device can connect to Wi-Fi. With 5G, speeds are improving.

Cable services are delivered to Pennington residents via the utility poles, which are owned by PSEG. The larger cables at the top of the poles deliver electricity. Lower down the poles are fiber-optic, coaxial cables and telephone wires. Service providers pay fees to the utility to use the poles. Pennington is served by eight TV and internet providers, four of which have 100 % coverage and four have partial coverage.

There are several cell phone service providers in Pennington. Service is generally reliable but there are pockets where one provider has a better signal than another.

Regulation of Wireless Telecommunication Facilities

There have been two recent changes to the regulation of wireless telecommunication facilities. The first, a federal law, prohibits municipalities from denying a request by an “eligible facility” to modify an existing wireless tower or base station if such a change does not “substantially change” the physical dimensions of the tower or base station. The term “substantial change” is

not defined by the law. Until regulation or case law is issued on this topic, the Borough will need to carefully interpret this on a case-by-case basis.

The second regulatory change is an amendment to the Municipal Land Use Law, N.J.S.A. 40:55D- 46.2. This new section states that applications for collocated equipment on a wireless communications support structure shall not be subject to site plan review provided three requirements are met: 1) the structure must have been previously approved; 2) the collocation shall not increase the overall height of the support structure by more than 10 percent, will not increase the width of the support structure, and shall not increase the existing equipment compound to more than 2,500 square feet; and 3) the collocation shall comply with all of the terms and conditions of the original approval and must not trigger the need for variance relief. Borough ordinances should be revised to reflect federal law.

It is anticipated that providers of fifth-generation wireless technology (“5G”) will seek to install wireless facilities, typically on utility poles and lampposts, throughout the region. 5G offers subscribers much faster data speeds and, with that, new and enhanced technological capabilities. The Borough should take appropriate steps to control and regulate the implementation of 5G technology by adopting ordinances which implement processes and regulate, among other things, the size, location, and appearance of 5G wireless facilities.

4. Relationship with Regional Utility Plans

a. Hopewell Township Master Plan

Hopewell Township approved its current Utility Services Plan element on November 19, 2009. (<https://www.hopewelltp.org/DocumentCenter/View/8622/Utility-Services-Plan-Element---Adopted-November-19-2009->)

The plan covered the lack of interest in developing public sewers throughout the Township due to the concern that it would bring uncontrolled growth. Sewers for larger individual developments are connected to Ewing Lawrence Sewerage Authority (ELSA) and Stony Brook Regional Sewerage Authority (SBRSA). Similarly, there was no interest in a township wide water supply. The plan acknowledged that there were a few residences on the borders of Hopewell and Pennington Boroughs that were connected to the borough systems. Larger developments are served by the NJ American Water Company.

There was no mention of Utility Services in the 2021 Master Plan Reexamination report. There was also no mention of other services besides sewer and water in the Township Master Plan.

b. Mercer County Master Plan

Mercer County adopted a Wastewater Management Plan (WMP) in October 2013. (<https://www.mercercounty.org/home/showpublisheddocument/1154/636058398453800000>) The plan reports that Pennington Borough adopted its own WMP on October 8, 2009, and incorporated it by reference. According to the County WMP, the Pennington Borough WMP

expired on October 8, 2015. The Mercer County Planning Department submitted an update to the Mercer County WMP, as required by the NJDEP, six years from the date of adoption of the current plan, i.e., October 9, 2019. As part of that process, the three municipalities (including Pennington) which had previously been working from their own adopted municipal WMPs joined the county-wide WMP. The county-wide WMP update is currently under review by NJDEP. Until the update is adopted, the 2013 Mercer County WMP and associated Sewer Service Area (SSA) mapping remain in full force and effect. See: (<https://www.mercercounty.org/departments/planning/wastewater-management-planning>)

Mercer County is in the process of developing a Stormwater Management Plan, but its website only contains a link to the NJ Plan, see below. Mercer County is not involved in the purveyance of potable water and does not have a potable water plan.

c. New Jersey Department of Environmental Protection Water Quality Management Planning (<https://www.nj.gov/dep/wqmp/index.html>)

The role of the program is to advance Water Quality Management through the coordination of planning and permitting activities. This will be achieved through the following efforts:

- Technical Support: Working with counties and private property owners on Sewer Service Area amendments, Wastewater Management Plans, consistency assessments and other related water quality management planning issues;
- Planning and Implementation: Managing water quality planning grants; overall statewide water quality planning through the Continuing Planning Process;
- Coordination: Coordinating activities among The Division of Water Quality, The Division of Water Supply and Geosciences, Land Use Management, other DEP programs, the regulated community and planning agencies across the state.

The Water Quality Management Rule, N.J.A.C. 7:15, is effective as of November 7, 2016.

5. Relationship with Other Plan Elements in the Master Plan

The Utility Services Plan impacts and is impacted by other Master Plan elements as follows:

Land Use Plan Element. This plan relates to the Borough's zoning and potential redevelopment areas. Utility needs will be impacted by the Borough's development and redevelopment plans and the ability to redevelop or develop is also contingent on the capacity of various utilities. Stormwater hazards are addressed in the Climate Change-Related Hazard Vulnerability Assessment (CCRHVA), which is part of the Land Use Plan.

Housing Plan Element. The Borough has identified areas of redevelopment which have the opportunity for high density housing, including housing that is designated affordable. The ability of utility services to serve this development/redevelopment must be evaluated as well as the impact of these developments on existing utility services.

Economic Development Plan Element. This Plan considers all aspects of commerce and economic development in the Borough, some of which may impact Utility Services.

Conservation Plan Element. The Conservation Plan incorporates the Borough's Community Forestry Management Plan by reference and impacts the Department of Public Works.

Green Buildings and Environmental Sustainability Plan Element (GBESE). Several goals and strategies in the GBESE are aimed at reducing the Borough's contributions to climate change. The GBESE includes the Community Energy Plan, which is under development, and a significant part of that plan is focused on transportation energy use and greenhouse gas emissions via electrification. This will increase the demand for electricity, which will need to be matched by a growth in PSEG supply.

Conditionally Adopted

Appendix A

Figure A1. NJ DEP table of water treatment capacity requirements for various sewerage sources. From Subchapter 23 of the N.J.A.C. 7:14A New Jersey Pollutant Discharge Elimination System (NJPDES) Rules.

<https://dep.nj.gov/dwq/all-division-rules-and-regulations/njpdess/>.

Type of Establishment	Measurement Unit	Gallons Per Day
<i>Residential Dwellings</i> (single family home, duplex units, townhouses, condominiums, apartments)		
1 bedroom unit	Per Dwelling	150
2 bedroom unit	Per Dwelling	225
3 bedroom unit or larger	Per Dwelling	300
1 bedroom unit (age restricted)	Per Dwelling	110
2 bedroom unit (age restricted)	Per Dwelling	170
3 bedroom unit (age restricted)	Per Dwelling	225
<i>Transit dwelling units</i>		
Hotels	Bedroom	75
Lodging houses and tourist homes	Bedroom	60
Motels and tourist cabins	Bedroom	60
Boarding houses (max. permitted occupancy)	Boarder	50
<i>Camps</i>		

Figure A1 (continued)

Campground/mobile rec. vehicle/tent	Site	100
Parked mobile trailer site	Site	200
Children's camps	Bed	50
Labor camps	Bed.	40
Day camps--no meals	Person	15
<i>Restaurants (including washrooms and turnover)</i>		
Average restaurant	Seat	35
Bar/cocktail lounges	Seat	20
Fast food restaurant	Seat	15
24 hour service restaurant	Seat	50
Curb service/drive-in restaurant	car space	50
<i>Clubs</i>		
Residential	Member	75
Nonresidential	Member	35
Racquet club	(per court per hour)	80
Bathhouse with shower	Person	25
Bathhouse without shower	Person	10
<i>Institutions (includes staff)</i>		
Hospitals	Bed	175
Assisted living facility	Bed	100
Skilled nursing facility	Bed	75
Other institutions	Bed	125
<i>Schools (includes staff)</i>		

Figure A1 (continued)

No shower or cafeteria	Student	10
With cafeteria	Student	15
With cafeteria and showers	Student	20
With cafeteria, showers and laboratories	Student	25
Boarding	Student	75
<i>Automobile service stations</i>		
	per filling position	125
Service bays	per bay	50
Mini-market	Sq. Ft.	0.100
<i>Miscellaneous</i>		
Office buildings (gross area)	Sq. Ft.	0.100
Stores and shopping centers (gross area)	Sq. Ft.	0.100
Factories/warehouses (add process wastewater)	Employee	25
with showers, (add process wastewater)	Employee	40
Laundromats	Per machine	580
Bowling alleys	Alley	200
Picnic Parks (restrooms only)	Person	10
Picnic Parks with showers	Person	15
Fairgrounds (based upon average attendance)	Person	5
Assembly halls	Seat	3
Airports (based on passenger use)	Passenger	3

Figure A1 (continued)

Churches (worship area only)	Seat	3
Theater (indoor)	Seat	3
Dinner theater	Seat	20
Catering/Banquet Hall	Person	20
Sports stadium	Seat	3
Visitor Center	Visitor	5
Multi-member swimming pool	Person	15

Conditionally Adequate

Figure A2. Precipitation frequency (PF) estimates for Pennington from NOAA’s National Weather Service Hydrometeorological Design Studies Center with average recurrence intervals (ARI). https://hdsc.nws.noaa.gov/pfds/pfds_map_cont.html?bkmrk=nj
 PF estimates are based on frequency analysis of partial duration series (PDS). Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval.

PDS-based precipitation frequency estimates with 90% confidence intervals (in inches) ¹										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.340 (0.309-0.376)	0.406 (0.369-0.448)	0.482 (0.436-0.532)	0.538 (0.486-0.593)	0.606 (0.544-0.668)	0.656 (0.586-0.724)	0.706 (0.628-0.780)	0.752 (0.665-0.833)	0.809 (0.709-0.901)	0.853 (0.741-0.956)
10-min	0.543 (0.493-0.600)	0.649 (0.589-0.716)	0.772 (0.698-0.852)	0.860 (0.777-0.948)	0.966 (0.867-1.06)	1.04 (0.934-1.15)	1.12 (0.997-1.24)	1.19 (1.05-1.32)	1.28 (1.12-1.43)	1.34 (1.17-1.50)
15-min	0.679 (0.617-0.750)	0.816 (0.741-0.901)	0.977 (0.883-1.08)	1.09 (0.983-1.20)	1.22 (1.10-1.35)	1.32 (1.18-1.46)	1.42 (1.26-1.57)	1.50 (1.33-1.67)	1.61 (1.41-1.79)	1.69 (1.46-1.89)
30-min	0.931 (0.845-1.03)	1.13 (1.02-1.24)	1.39 (1.26-1.53)	1.58 (1.42-1.74)	1.81 (1.63-2.00)	1.99 (1.78-2.20)	2.17 (1.93-2.40)	2.34 (2.07-2.59)	2.56 (2.25-2.86)	2.73 (2.37-3.06)
60-min	1.16 (1.05-1.28)	1.41 (1.28-1.56)	1.78 (1.61-1.96)	2.05 (1.85-2.26)	2.42 (2.17-2.66)	2.70 (2.41-2.98)	2.99 (2.66-3.30)	3.28 (2.90-3.64)	3.68 (3.22-4.10)	3.99 (3.46-4.47)
2-hr	1.41 (1.27-1.56)	1.72 (1.55-1.90)	2.17 (1.96-2.40)	2.52 (2.27-2.78)	3.00 (2.69-3.31)	3.39 (3.02-3.74)	3.79 (3.35-4.19)	4.20 (3.69-4.65)	4.78 (4.15-5.32)	5.23 (4.50-5.86)
3-hr	1.55 (1.40-1.72)	1.88 (1.70-2.10)	2.39 (2.15-2.66)	2.78 (2.50-3.09)	3.33 (2.97-3.70)	3.77 (3.35-4.19)	4.24 (3.73-4.72)	4.72 (4.12-5.27)	5.40 (4.64-6.05)	5.94 (5.05-6.69)
6-hr	1.96 (1.77-2.19)	2.38 (2.14-2.65)	3.00 (2.70-3.35)	3.51 (3.14-3.90)	4.25 (3.77-4.72)	4.86 (4.28-5.40)	5.52 (4.82-6.14)	6.23 (5.38-6.94)	7.26 (6.15-8.13)	8.11 (6.78-9.14)
12-hr	2.37 (2.15-2.66)	2.88 (2.60-3.22)	3.66 (3.29-4.09)	4.32 (3.87-4.82)	5.31 (4.70-5.91)	6.16 (5.41-6.87)	7.10 (6.16-7.91)	8.14 (6.95-9.10)	9.69 (8.11-10.9)	11.0 (9.06-12.5)
24-hr	2.74 (2.52-2.99)	3.31 (3.05-3.62)	4.21 (3.87-4.60)	4.97 (4.55-5.42)	6.10 (5.55-6.65)	7.08 (6.38-7.70)	8.15 (7.28-8.87)	9.33 (8.25-10.2)	11.1 (9.65-12.1)	12.6 (10.8-13.8)
2-day	3.17 (2.92-3.47)	3.84 (3.53-4.21)	4.88 (4.48-5.35)	5.75 (5.26-6.29)	7.02 (6.37-7.65)	8.09 (7.29-8.81)	9.25 (8.27-10.1)	10.5 (9.31-11.5)	12.4 (10.8-13.6)	13.9 (12.0-15.3)
3-day	3.36 (3.10-3.67)	4.06 (3.74-4.44)	5.14 (4.73-5.61)	6.03 (5.52-6.57)	7.31 (6.66-7.95)	8.39 (7.60-9.11)	9.54 (8.58-10.4)	10.8 (9.62-11.8)	12.6 (11.1-13.8)	14.1 (12.3-15.5)
4-day	3.55 (3.28-3.86)	4.29 (3.96-4.67)	5.40 (4.98-5.87)	6.30 (5.80-6.85)	7.61 (6.95-8.25)	8.68 (7.90-9.41)	9.84 (8.89-10.7)	11.1 (9.93-12.0)	12.8 (11.4-14.0)	14.3 (12.6-15.6)
7-day	4.16 (3.85-4.52)	5.00 (4.62-5.43)	6.20 (5.72-6.74)	7.19 (6.62-7.81)	8.61 (7.89-9.33)	9.79 (8.93-10.6)	11.0 (10.0-12.0)	12.4 (11.2-13.4)	14.3 (12.7-15.6)	15.9 (14.0-17.3)
10-day	4.74 (4.42-5.12)	5.67 (5.27-6.12)	6.93 (6.44-7.48)	7.95 (7.37-8.58)	9.39 (8.67-10.1)	10.6 (9.71-11.4)	11.8 (10.8-12.7)	13.0 (11.9-14.1)	14.8 (13.4-16.1)	16.3 (14.6-17.7)
20-day	6.41 (6.02-6.83)	7.60 (7.14-8.10)	9.08 (8.52-9.68)	10.2 (9.60-10.9)	11.8 (11.1-12.6)	13.1 (12.2-13.9)	14.3 (13.3-15.2)	15.6 (14.4-16.6)	17.3 (15.8-18.5)	18.6 (16.9-19.9)
30-day	7.98 (7.55-8.43)	9.42 (8.91-9.95)	11.0 (10.4-11.6)	12.2 (11.6-12.9)	13.9 (13.0-14.6)	15.1 (14.2-15.9)	16.3 (15.3-17.2)	17.5 (16.3-18.5)	19.0 (17.7-20.2)	20.2 (18.7-21.5)
45-day	10.2 (9.66-10.7)	12.0 (11.4-12.6)	13.8 (13.1-14.5)	15.2 (14.4-15.9)	16.9 (16.0-17.8)	18.2 (17.2-19.2)	19.5 (18.3-20.5)	20.6 (19.4-21.8)	22.1 (20.7-23.4)	23.2 (21.7-24.5)
60-day	12.2 (11.6-12.8)	14.3 (13.6-15.0)	16.3 (15.5-17.1)	17.8 (17.0-18.7)	19.7 (18.7-20.7)	21.1 (20.0-22.2)	22.4 (21.2-23.5)	23.6 (22.3-24.8)	25.1 (23.6-26.4)	26.1 (24.5-27.5)

MASTER PLAN
BOROUGH OF PENNINGTON
NEW JERSEY

7. Open Space and Recreation Plan Element

The Open Space and Recreation Plan element draft released by the writing team was conditionally adopted by the Planning Board on June 12, 2024, and posted on the Borough website for public comment. Revisions made to address comments received and to ensure consistency with other Plan elements were endorsed by the Planning Board on October 8, 2025. Final changes were approved by the Planning Board on April 8, 2026. This final draft will be available for comment until April 22, 2026, prior to final adoption at a public meeting of the Planning Board on May 13, 2026.

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Acknowledgements:

Many thanks to members of the Open Space Committee for their participation in drafting and reviewing this plan as it was refined. Thanks also to the Parks and Recreation Committee for their input. Special thanks also to Kate O’Neill and Kati Angerone for their careful review and editing.

1. Mission And Vision

This element of the Master Plan results from the consultation and collaboration of two advisory committees, on Open Space and on Parks and Recreation. Their respective missions or vision statements are presented below. Some aspects of these committees' visions intersect with the work and aims of other Borough advisory committees, and where relevant such intersections are noted in the text.

Open Space Preservation Mission:

To retain the “village” identity of Pennington and the semi-rural character of nearby surrounding areas, the Borough of Pennington works in collaboration with Hopewell Township, non-profit land preservation organizations, Mercer County, and the State of New Jersey to permanently protect open space in, adjacent to, and near the Borough as well as open space along roads, waterways and other undeveloped greenway corridors leading to and from the Borough.

Parks and Recreation Vision Statement:

Pennington Borough is a close-knit village surrounded by open space and accessible by numerous greenway corridors and trail systems. The Pennington Parks & Recreation Commission exists to provide recreational space, facilities, and programming for all Borough residents. Our vision is to maximize participation in outdoor and indoor recreation, and to collaborate with other Borough committees to maximize synergies between recreation, education, and economic development efforts inside and outside the Borough.

2. Goals and Policies

The Open Space and Recreation Plan (OSRP) is consistent with the goals and objectives of the Borough's 2023 Master Plan Reexamination Report related to open space preservation. The Master Plan establishes as one of its goals the maintenance of Pennington as a primarily residential community, and elaborates that open space and recreational areas, both public and private, should be preserved and enhanced, with linkages to nearby preserved areas. Undeveloped lands forming natural breaks in development around the Borough are a major factor in Pennington's distinctive historic village character. The Master Plan statement of goals emphasizes that the Borough should work with “public and private agencies” such as non-profit organizations to preserve these open space areas. Such partnerships also dramatically increase the effectiveness of the Borough's Open Space Tax, since partner contributions can often cover 90% or even more of acquisition costs.

The OSRP elaborates on these Master Plan goals as a vehicle for soliciting public input on how those goals should be realized. By voting to adopt an open space tax in 1998 by a margin of more than 3-1, Borough taxpayers supported the idea that open space preservation and the recreation it offers are important. In 1999, following that vote, the Borough Council created by ordinance the Open Space Committee and an Open Space Trust Fund. In 2000, the Council

approved Pennington’s participation in the three-municipality Hopewell Township Open Space Advisory Committee. Citizen input on the OSRP will help guide how those and other resources can be best used to preserve open space and enhance recreational opportunities.

Open Space Preservation:

The goals of the Borough’s OSRP are to advance the broader Master Plan by acting in concert with Hopewell Township, Mercer County, the State of New Jersey, and local non-profit land preservation organizations to:

1. Create, expand, and maintain a permanently protected greenbelt of open space adjacent to and near the Borough, and foster and protect greenway corridors leading into and out of the Borough.
2. Preserve the historic village character of Pennington, which depends on the maintenance of a rural landscape on the Borough’s boundaries and on the fringes of developed land surrounding the Borough, and along corridors leading to and from the Borough.
3. Increase the range of passive recreational opportunities on permanently protected tracts of open space in and near the Borough.
4. Address environmental issues that affect the health, welfare, and safety of Borough residents and neighboring populations through actions related to open space preservation and protection. These may include issues such as storm water management, water quality and quantity, climate change, and threats to natural landscapes from wildfires, pests, disease, and non-native invasive species.

Open Space and Recreational Enhancements:

The specific objectives of the Borough’s OSRP related to open space and recreational activity are:

1. Create and enhance linkages that allow pedestrian access to open space and recreational opportunities from multiple points within the Borough. Work toward the goal of making open space and recreation facilities reasonably accessible to all, regardless of age or disability.
2. Create and enhance linkages that allow bicycle access to open space and bicycle routes outside the Borough. Provide bicycle racks at Borough parks and in commercial areas.
3. Enhance recreational facilities in Kunkel and Sked Street parks, with attention to the needs of both children and adults of all abilities.
4. Where the Borough owns land that is in a natural state, formalize its preservation by rezoning as Open Space

3. Existing Open Space and Recreational Resources

Properties on the Borough's Recreation and Open Space Inventory (ROSI)

Within the Borough of Pennington there are four parcels of permanently protected open space listed on the Recreation and Open Space inventory, totaling 13.12 acres:

- Kunkel Park (7.59 acres) lies in the northeast corner of the Borough and offers playground equipment, a sand box and a pavilion for picnics and other functions, as well as a link to open space outside the Borough via the Pennington Loop Trail. The park also features a fine stand of mature hardwoods.
- The Sked Street mini park (1.06 acres) offers a quiet spot for families and small children to play safely outdoors.
- The Arboretum being developed by the Borough (3.0 acres).
- Two lots adjacent to the Pennington African Cemetery, totaling 1.07 acres.

These properties are valuable spots of green and quiet in the Borough, but they offer limited open space. They cannot provide the extensive open space needed for long country walks, nor can they provide a wide range of recreational facilities.

By virtue of the Borough's location near existing open space lands, however, there are opportunities to expand the open space and recreation opportunities available from within the Borough. Going north, for example, Kunkel Park can be linked along the Stony Brook to the protected lands of The Watershed Institute (formerly Stony Brook-Millstone Watershed Association), and thus connected by already existing footpaths to Hopewell Borough. The Pennington Loop Trail already provides access from Kunkel Park to the State's Fish and Wildlife Preserve at Baldwin Lake, which is linked to the trail easements and County-owned land along the Stony Brook referred to above.

Similar linkages are possible to the south and east as well. Preserved lands just outside the southern border of the Borough now allow access from South Main Street to Mercer County Park lands, with footpath access to Curlis Lake, the Equestrian Center, and Rosedale Park sections of Mercer Meadows. The Pennington Connector to the Lawrence Hopewell Trail (LHT) provides a pedestrian/bicycle connection from King George Road to the Watershed Institute Reserve and to Mercer Meadows.

School Properties

Local school properties include open space and recreational facilities. To the rear of Toll Gate Grammar School, the cleared area of 2.6 acres includes a playground, baseball/soccer fields, bordering on 3.0 acres of Borough property being improved as an arboretum. Over half of the 27 acres of The Pennington School property south of W. Delaware Avenue is open space, including athletic fields and a pond, as well as a large lawn area in front of Old Main on West Delaware Avenue, which features some of the Borough's largest trees. On the north side of West Delaware Avenue is another 5 acres of Pennington School land where tennis courts and

soccer fields are located. Pennington School permits the public to make use of its campus and athletic fields, with some occasional restrictions.

On South Main Street, to the rear of the Hopewell Valley Regional School District administrative offices, there are approximately 2 acres of mowed grass, which in the past were used by the YMCA, with permits, for baseball and soccer games.

Wooded Areas

There are three existing woodland sites within the Borough and two Borough-owned sites just outside the Borough:

1. 3.0 acres at the rear of the Toll Gate School site on East Curlis Avenue, owned by the Borough. A portion of this tract is currently being developed as an arboretum, as described above. The area includes a small stream and a trail from Curlis Avenue to Welling Avenue used mostly by school children. A portion of the trail is on a Borough right-of-way extending from Baldwin Street.
2. 3.2 acres with trails on the east side of Green Street, connecting to North Main Street, owned by The Pennington School and designated as the Lewis Brook Nature Trail. This site borders the south side of Lewis Brook. Additional markings could help walkers identify the access point for this trail on North Main Street.
3. Approximately 0.75 acres at the northern end of Reading Street, owned by the Borough. This area is the northern part of the Senior Citizen Center site and is bounded on the west by the railroad tracks, on the east by the backyards of homes on Hale Street, and on the north by property of the Pennington School.
4. Just north of the Borough in Hopewell Township, there is an approximately 14-acre wooded area to the rear (north) of the Borough's Public Works garage. Crossing the site from Route 31 to the railroad tracks is Baldwin Brook, which feeds Baldwin Lake. The stream is considered to have a high natural resource value by the NJ Department of Environmental Protection (C-1) which requires a 300-foot-wide buffer on either side.
5. Also in Hopewell Township, the Borough owns a 4-acre former dam site on Stony Brook just west of Old Mill Road. The WPA-built dam from the 1930s has been mostly destroyed by flood waters through the years, going back to the 1973 flood. The breach in the approximately 5-foot-high deteriorated stone dam is more than 100 feet wide.

Landfill Site

The closed municipal landfill sits on 7.8 acres to the west side of the CSX railroad tracks, bounded by West Delaware Avenue to the south and Broemel Place to the north. It was operated from 1954 to 1980. The landfill and two adjacent lots have been declared an area in need of redevelopment by the Borough. Development may include open space or recreational uses.

Howe Commons

The privately owned courtyard area in the center of the Howe Commons office complex on South Main Street is a highly valued oasis of open space in the Borough. In addition to its aesthetic quality, this open space is used for special public events. Under a license agreement signed by the owner and the Borough in January 2005, the courtyard area can be used without charge for “community events” such as “Pennington Day, holiday events and summer band concerts,” and has been so used for at least 25 years.

Trails and Bike Routes

The Borough is fortunate to have direct pedestrian access to hiking trails from its borders to two large open space preserves: the County’s Curlis Lake Woods section of Mercer Meadows, and land north of the Borough extending to Baldwin Lake via the Pennington Loop Trail. This land includes property owned and maintained by the NJ Department of Environmental Protection - Fish and Wildlife, and D&R Greenway Land Trust.

The Borough also enjoys direct access to the multi-use Lawrence Hopewell Trail (LHT) via the Pennington Connector, completed in 2014. The LHT is a 20-mile loop trail suitable for biking which extends through sections of Hopewell Township and Lawrence Township. Of particular benefit to Pennington is the trail’s connection to the County’s Rosedale Park and other sections of Mercer Meadows. See Appendix B for a map showing entrance points to the LHT and hiking trails.

Just south of the Borough, Pennington-Lawrenceville Road (County Route 546) has been widened by Mercer County to provide bike lanes. This improves safety for bicyclists riding from Pennington to the Twin Pines recreational fields and residential areas along County Route 546, including Brandon Farms. Bicyclists can extend their ride from the Twin Pines fields to Mercer Meadows on the east side of Federal City Road and further east to Village Park and the Johnson Trolley Line in Lawrenceville.

This improvement of Route 546 is part of the implementation of Mercer County’s plans for the “Great Western Bikeway.” The Great Western Bikeway, mostly on CR 546, will extend from Washington Crossing State Park to Lawrenceville and the D&R Canal. The route includes Washington Crossing-Pennington Road to the west of Pennington and Pennington-Lawrenceville Road to the east of Pennington, with Pennington being at the mid-point of the 8-mile bikeway (see map in Appendix C). The plan calls for the bike route to detour around the Pennington Circle via Ingleside Avenue and South Main Street with a pedestrian activated light at the Route 31-Ingleside Avenue intersection. At its western end, this bike route will provide access to roads within Washington Crossing State Park and to the Delaware & Raritan Canal State Park towpath, a 30-mile bikeway extending along the feeder canal from Trenton to Frenchtown. At the eastern end, the route will connect to the main leg of the D&R Canal and its towpath, and the Lawrence Hopewell Trail in Lawrence Township.

4. Recreational Needs Analysis

The Borough's existing open space within its boundaries clearly cannot alone provide for expansion of open space recreation. The only feasible strategy is for the Borough to work with other agencies and non-profit groups to expand permanently protected and preserved open space outside the Borough for recreational use. Within the Borough, however, there are ways to enhance some recreational opportunities.

5. Open Space Resource Assessment

A broad band of undeveloped land, some already preserved and much of it not preserved, extends around Pennington Borough and offers substantial opportunities for progress towards the OSRP goals. Specific parcels of land will be identified as potential preservation opportunities through communication with interested landowners.

Analysis of tax maps suggests possible preservation opportunities that would expand preserved open space to the east and west. To the east, there is substantial vacant land opposite Mercer Meadows along Federal City Road. To the west, open space corridors are being created by Hopewell Township and other entities toward the Delaware River along Pennington-Titusville Road and Washington_Crossing-Pennington Road. Expansion of open space preservation in each of these areas would advance the OSRP goals.

Criteria for preserving land outside the Borough should be based on several factors including (in no order of priority):

1. Proximity to the Borough
2. Whether adjacent to preserved land
3. Natural resource value, including woodlands and stream corridors
4. Potential for environmental restoration and protection, including flood mitigation.
5. Potential for passive recreational use
6. Potential for active recreational use
7. Viewshed from adjacent roads
8. Potential for linkages to other preserved land
9. Risk of potential development

The Borough's Open Space Tax (one cent on every \$100 of assessed valuation) is an important source of revenue for open space acquisition in and around the Borough, and for enhancing recreational facilities within the Borough. The tax revenue allows the Borough to tap into other revenue sources that can dramatically increase the purchasing power of modest expenditures from its own funds. For open space acquisition, the Borough has taken advantage of NJ Green Acres grants and Mercer County Municipal Assistance grants; when both are obtained for a project, they cover all but a 10% required local match for an open space purchase. This practice has allowed the Borough to build up its open space fund. The Borough should consider this fund as a strategic asset that can be used to leverage State and County funds and funds available from non-profit partners. The Borough should actively pursue grant opportunities for restoration and enhancement of acquired land.

6. Action Plan

Open Space Acquisition

The Borough's strategy is and should continue to be to work in concert with Hopewell Valley partners. These partners are already actively identifying emerging land preservation opportunities. The Borough can work with interested landowners to negotiate terms and financial arrangements that can satisfy the public's interest in land preservation and landowners' legitimate interest in realizing a fair return for their land. The Borough should cooperate with Hopewell Township, the Friends of Hopewell Valley Open space, D&R Greenway Land Trust, Mercer County, the New Jersey Conservation Foundation, and the State of New Jersey. The Borough should remain open to participating in transactions that might entail purchase of land in fee simple from owners, as well as transactions in which land is preserved through the conveyance of conservation easements. With such cooperation, the Borough can expect that land preservation transactions will typically involve a combination of resources contributed by the Borough and these partners.

Rather than identify specific parcels that would be targets of preservation, the Borough prefers to follow up on opportunities that are consistent with the overall goals of the OSRP. Identifying specific parcels would be unrealistic, since the voluntary interest of landowners in the area must first be engaged. Moreover, identifying specific parcels in the absence of landowner's expressions of interest could be perceived as coercive or alternatively might weaken the bargaining position of the partners who are negotiating preservation deals.

The plan of action for open space acquisition will be guided by the accompanying Open Space Map (Appendix A) showing the proposed Greenbelt and nearby greenway corridor roads. Other "gateway" corridors that offer potential non-auto access to the Borough can be identified based on emerging land preservation opportunities. This map provides a broad guideline for determining whether land preservation opportunities will contribute to the overall OSRP goals. The Borough will also consider the Hopewell Township Open Space Plan, which defines a Greenbelt around the Borough. The watershed improvement initiative led by the Watershed Institute for Princeton, Lawrence Township, Hopewell Township and Pennington may identify other opportunities for open space acquisition for flood mitigation.

The proposed Greenbelt as shown on the Open Space Map is important to preserving the identity of Pennington as a separate and distinct small town. The Greenbelt includes a substantial amount of undeveloped land, especially to the west and east of the Borough. The eastern boundary extends to Mercer Meadows along Federal City Road, while the western boundary extends to Scotch Road. The northern boundary extends to Yard Road, and the southern boundary extends to Pennington Circle and Blackwell Road. It should be noted, however, that further residential development around Pennington could make it appropriate to reconsider and expand this Greenbelt definition to maintain a focus on preserving green areas that surround Pennington and its adjacent developed areas in what might be called "greater Pennington."

The other major element in preserving open space as shown on the Open Space Map consists of nearby “greenway corridors” emanating from the Borough or the nearby Pennington Circle. In earlier OSRPs, these corridors were defined solely along roads that link Pennington to state, county, and municipal parks; preserving the scenic quality of these roads can thus contribute to the goal of maintaining Pennington’s character. Each of these roads is bordered by a substantial amount of open space, much already preserved.

The identified “greenway corridor roads” are as follows: 1) to the west of Pennington, Washington Crossing-Pennington Road and Pennington-Titusville Road, both of which extend to Hopewell Township’s Woolsey Park and Washington Crossing State Park; 2) to the east, Federal City Road, which leads to Rosedale Park and the County’s Mercer Meadows; 3) to the northeast, Pennington-Rocky Hill Road, which includes the former Bristol-Myers Squibb site with its 200 acres of farmland; and 4) South Main Street and its extensions to the Pennington Circle and along Pennington-Lawrenceville Road. Priority for preservation should be given to sites on these roads within two miles of the Borough.

There is an increasing appetite among the public for ways to move around our area without getting in a car. For that reason, the OSRP envisions the creation, where possible, of off-road corridors in and out of the Borough. Such corridors may provide Borough residents with access to recreational opportunities outside the Borough, and for non-Borough residents to come into the Borough to visit local businesses or friends. Such corridors could include footpaths or even bicycle paths where feasible.

Preservation of Wooded Areas in Pennington and of Other Sites Owned by the Borough

The Borough has designated the 3.0 acres of woodland behind Toll Gate Elementary School as the Eileen M. Heinzl Arboretum and has included it in its ROSI. The Borough should continue to work with the Environmental Commission, the Shade Tree Committee, local volunteers and the Public Works Department to transform selected areas of that wooded parcel into an arboretum - a protected area for installation of native trees, shrubs, and perennials, with access trails, that can serve the enjoyment and education of students, residents and visitors.

The Borough Public Works garage is on a site in Hopewell Township just north of the Borough Boundary, which is partly wooded. The entire wooded area to the rear (north) of the garage should be retained and kept natural by the Borough. The area immediately behind the facility is already devoted to a solar array. Given stream buffer requirements, difficulty of access from Route 31, and Township zoning (industrial commercial), it is unlikely that the wooded area north of Baldwin Creek is threatened by development interests. Since that area is also isolated from residential areas in the Borough, it is not an attractive site for development of recreational trails.

No action is needed to preserve the Borough’s dam site as open space due to wetland and stream corridor restrictions imposed by NJ DEP. Future recreational use of the site is doubtful given extensive wetlands on the site, limited access from Old Mill Road, and the unlikely reconstruction of the dam given DEP permitting issues and cost.

Recreational Enhancements

Bicycling:

The Proposed Bicycle Route map in Appendix D was first presented in the 2015 Open Space and Recreation Plan. In the last ten years improvements to the roads highlighted on this map have in some cases increased safety and for pedestrians, bicyclists and micromobility vehicles, although ideal Safe Streets standards cannot be said to have been fully satisfied.

Counter-clockwise from the south:

- A full traffic light has been installed at the intersection of Ingleside Avenue and Route 31 to make crossing Route 31 safer and to give access to the Great Western Bikeway and points south and west.
- A mini roundabout has been installed at the intersection of Ingleside Avenue and Burd Street with clear crossing markings and signs.
- Sharrow signs have been added to the Ingleside Avenue roadbed.
- Burd Street has parking on one side only, which helps bicyclists avoid car doors opening. It also has some speed bumps and bright yellow pedestrian crossing signs.
- The pedestrian crossing of West Delaware Avenue at Green Street now has pedestrian activated yellow flashing signs.
- A sidewalk has been constructed from Knowles Street to the pagoda in Veterans Memorial Park (near Broemel Place) that provides shelter and a resting place.
- A full traffic light has been installed at the intersection of North Main Street and Route 31 to allow safe crossing of Route 31 and to give access to the shops and services on Tree Farm Road, the Brandywine retirement community, and onwards to Pennington-Harbourton Road, the schools, and points west.
- King George Road and Park Avenue now have traffic-calming speed bumps.
- Eglantine Avenue is wide and was recently resurfaced, which improves the bicycling experience.
- A white-striped pedestrian crossing of East Delaware Avenue has been installed at Abey Drive.
- Abey Drive and Curlis Avenue are easy to negotiate on bicycles.
- The pedestrian crossing of South Main Street at Curlis Avenue now has pedestrian activated yellow flashing signs.
- South Main Street is fairly wide south of Curlis Avenue, but care needs to be taken by bicyclists during weekday morning and evening rush hours due to heavy traffic.
- There is a clearly marked crossing of South Main Street to Ingleside Avenue

Some sections of the route still need safety improvement:

- The most hazardous is the North Main Street bridge over the CSX railroad tracks. This bridge was constructed as a highway-only bridge. It has no sidewalks and poor sightlines to pedestrians and bicycles due to the sharp curve. It is listed on the Federal Highway Administration (FHWA) National Bridge Inventory (NBI) and the most recent inspection in October 2023 described the deck geometry as the minimum tolerable. It noted the lack of sidewalks on either side and described the approach alignment as being intolerable and in need of corrective action with high priority. The report recommended that the bridge

should be widened. Responsibility for the work rests with NJDOT. It is reasonable to request that NJDOT upgrade the bridge to highway-pedestrian status and include protected walkway/bikeway lanes on both sides of the roadway. Until this improvement is made, the bridge should not be recommended as a route for bicycles.

- There is no marked crossing from the north side of North Main Street to Knowles Street.
- Although there is a sidewalk between the Heritage development and Woolsey Court, there is no sidewalk on the west side of Knowles Street between North Main Street and the Heritage development. A lined lane for bicycles would help.
- The bridge over the small stream just south of the Penn Brook Swim Club has a narrow, curved, raised sidewalk which is difficult to negotiate even for experienced bicyclists. This sidewalk is frequently used by children riding to the swim club and should be made safer.
- The Pennington-Rocky Hill Road bridge over Stony Brook is also in the FHWA NBI and the most recent inspection in October 2023 described its condition as poor and the deck condition as intolerable and in need of corrective action with high priority. The bridge railings, guardrails and transitions do not meet currently acceptable standards. The report recommended that the bridge should be rehabilitated due to general deterioration. Responsibility for the work would lie with Mercer County and improvements are in the design stage. The existing bridge provides little protection from motor vehicles for pedestrians and bicyclists crossing the bridge on the raised sidewalk to or from the end of the LHT Pennington Connector. The new bridge design should include a wider walkway/bikeway, preferably with a protective guardrail and no raised curb. LHT has proposed a South Pennington Connector that will start by running from the bridge to Federal City Road along County land on the southeast side of Pennington-Rocky Hill Road (see below). This will require a road crossing for pedestrians and bicycles close to the bridge. The location and design of the crossing should be part of the bridge project. It would also enhance the safety of pedestrians and bicyclists if the 25-mph zone was extended some distance north of the bridge into Hopewell Township. Currently the speed limit is 45 mph on the bridge.
- The pedestrian crossing of East Delaware Avenue at Abey Drive would be much safer for pedestrians and bicyclists if equipped with pedestrian-activated yellow flashing signs.

The safety of bicyclists within the Borough would be served by the installation of bike route signs on the proposed streets on the map in Appendix D as those being best suited for bicycles and for connections to bicycle routes outside the Borough. Whenever the Borough is resurfacing roadways on the map, appropriate road markings for bicycle safety should be added. Wayfinding signs to the center of town from the LHT and the Great Western Bikeway could be installed to bring business to the commercial areas in town.

Property owners in the Route 31 commercial corridor whose properties can be safely reached by bicycle from the Borough should be encouraged to provide bike racks on their sites.

A major improvement in access to safe bicycle routes near the Borough would be achieved with the construction of the South Pennington Connector by LHT. This would extend the Pennington link to the LHT at King George Road to south Pennington neighborhoods. It would consist of:

- A crosswalk across East Delaware Avenue at its intersection with King George Road
- A new bicycle-capable trail along the south side of East Delaware Avenue from Stony Brook to the intersection of East Delaware Avenue and Federal City Road. This can be an off-road trail because the land is owned by the County.
- A crosswalk across Federal City Road from that intersection to the fire road access to Presidential Hill.
- Surfacing the fire road up to Madison Avenue, from which cyclists and pedestrians can safely use neighborhood streets to the southeast quadrant of Pennington.

Even if the South Pennington Connector is created as described above, there would still be no safe pedestrian connection from this new Connector route (or from the Presidential Hill neighborhood) directly into the center of Pennington. The sidewalk on the south side of East Delaware Avenue now ends after the first house on Fitzcharles Drive, leaving a gap of about 500 feet to the fire road where the Connector would run. There is some unused road right-of-way along this gap, but there is a steep bank down to the road so the cooperation of the owners of 152, 154, 156 and 158 East Delaware Avenue would be needed to allow the construction of a sidewalk. These houses are all in Pennington Borough. Alternatively, it might be possible to create an attractive footpath connecting Madison Avenue along the stream to the cul-de-sac at the end of Fitzcharles Drive. That would require reaching an understanding with one or more private property owners and working with Hopewell Township.

Many students attending the Toll Gate school ride bicycles to school on the 4-foot- wide sidewalk along the south side of E. Curlis Avenue leading to bicycle racks near the playground. The sidewalk is also used by students walking to and from school and by students being dropped off or picked up by their parents momentarily parking along E. Curlis Avenue. Since the sidewalk is adjacent to the curb, open car doors extend over the sidewalk. The 4-foot width is inadequate for both bicycle and pedestrian use and hazardous due to its proximity to parked cars. To address this hazard and make bicycling to the school safer, a separate bike path consistent with the Borough's "complete streets" policy could be constructed along the south side of E. Curlis Avenue, or the sidewalk could be widened.

Bike-friendly linkages can also be extended to the south, taking advantage of the Great Western Bikeway (GWB) route. Bike lanes along South Main Street could connect to the GWB for rides towards Lawrenceville. If bike lanes or markings were added to Wellington Drive, Borough residents could ride safely to shopping and dining opportunities on Denow Road without a Route 31 riding experience.

Pedestrian Trails:

The Pennington Loop Trail should be extended north of Baldwin Lake along the west side of the Stony Brook to Titus Mill Road and then to the Watershed Institute Reserve on the east side of the Stony Brook. Trail easements and land acquisition by Mercer County make this theoretically possible, but details of those deeds have become obstacles to achieving agreement with the owners or neighbors. Further discussions could be pursued again to determine whether agreement on such trails is now feasible.

Park Enhancement:

Important improvements have been made to the Borough's Kunkel Park and Sked Street Park. The emphasis has been on children's playground equipment. Opportunities might be found in those parks, or at other locations in the Borough, for simple facilities to enhance exercise values for runners and walkers.

Potential Synergies with Economic Development:

Although the emphasis in this OSRP is on outdoor recreation, some initiatives focused primarily on economic development could serve recreation goals as well. For example, promoting the creation of youth-friendly establishments might create indoor recreation and entertainment. The availability of outdoor-oriented shops can help residents find convenient ways to equip themselves for recreational jaunts on foot or on bikes.

7. Relationship with other Regional Plans

Hopewell Township Master Plan

The Township adopted an Open Space and Recreation Plan on June 18, 2018, to allow it to continue to participate in the Green Acres program and use the Planning Incentive Grants for the preservation of open space and recreational lands. This plan was targeted at technical and site-specific updates rather than a comprehensive update. A more comprehensive Open Space and Recreation Plan was adopted by the Township Planning Board on February 24, 2022. It included a review of and revisions to the goals and objectives of the original 2004 plan, updates to the open space and recreation inventory, amendments to the action plan based on a needs analysis and updates to the Open Space and Recreation System Map.

Pennington Borough works with partners on open space selection, acquisition and development. In addition to Hopewell Township, the partners are the Friends of Hopewell Valley Open space, D&R Greenway Land Trust, Mercer County, the New Jersey Conservation Foundation, and the State of New Jersey. These partners are actively identifying emerging land preservation opportunities. Most of the parcels close enough to be of interest to the Borough are in Hopewell Township, so it is important that the Borough and Township work together on acquisition and preservation.

Mercer County Master Plan

Mercer County has been aggressively acquiring open space since the County open space preservation trust fund tax ballot question was overwhelmingly approved by the voters in 1989. It has been continually supported since. Pennington is a beneficiary of the extensive efforts by the County to preserve open space and develop it for active or passive recreation or as wildlife preserves. Within easy reach of Pennington are Mercer Meadows (consists of Rosedale Park, the Mercer County Equestrian Center, the Pole Farm, and Curlis Woods), the Ted Stiles Reserve at

Baldpate Mountain, Howell Living History Farm, and the Hopewell Valley and Mountain View County Golf Courses. The County is also a principal supporter of the Lawrence-Hopewell Trail (LHT). The Mercer County Open Space Plan gives the history of its preservation efforts with its partners, resulting in 27% of County Land being preserved, up from 9% in 1990. The map on page 5 of the Plan shows Pennington and its surroundings as a County “action area” for acquisitions. The Borough Master Plan discusses its purchasing partners, including the County.

New Jersey State Development and Redevelopment Plan

The State Development and Redevelopment Plan (SDRP), also known as the State Plan, provides a vision for the future that will preserve and enhance the quality of life for all residents of New Jersey. The purpose of the State Plan is to coordinate planning activities and establish Statewide planning objectives in the following areas: land use, housing, economic development, transportation, natural resource conservation, agriculture and farmland retention, recreation, urban and suburban redevelopment, historic preservation, public facilities and services, and intergovernmental coordination (N.J.S.A. 52:18A-200(f)). A new SDRP was adopted by the State Planning Commission (SPC) on December 17, 2025. It replaced the 2001 SDRP.

https://www.nj.gov/state/bac/planning/documents/update-to-state-plan/sdrp_2025.pdf

Goal 8 of the ten Goals of the SDRP relates to open space:

8. Protect, enhance, and improve access to areas with exceptional archeological, historic, cultural, scenic, open space, and recreational value.

Pages 83-85 of the SDRP give Policy Objectives across the plan, The following excerpts relevant to open space and recreation:

Agriculture and Farmland Preservation:

“Encourage farmland retention and minimize conflicts with development. Prioritize farmland preservation funding in rural areas and enhancing large contiguous farmland areas. Promote diversified farming operations and adjust zoning to align with environmental sensitivity and climate change considerations. Promote agritourism that includes wineries, breweries, distilleries, cideries, and facilities that provide auxiliary activities.”

Recreation:

“Promote maximum active and passive recreational and tourism opportunities at the neighborhood, local, and regional levels by targeting the rehabilitation and development of parks within half a mile of residential neighborhoods with an appropriate density. Target parkland acquisitions and improvements, especially those that enhance large contiguous open space systems and link to other networks through redevelopment, reclamation, or restoration projects.”

8. Relationship with Other Plan Elements in the Master Plan

The Open Space and Recreation Plan Element impacts and is impacted by other Master Plan elements as follows:

Land Use Plan Element. The capacity to support open space and parks within the Borough is impacted by the development and redevelopment that the Borough permits through zoning. Where the Borough owns land that is in a natural state, its preservation should be formalized by rezoning as Open Space.

Housing Plan Element. The Borough has identified areas in need of redevelopment which may hold the opportunity for high density housing, including affordable units. The impact of these developments on the opportunities for open space acquisition should be considered.

Mobility Plan Element. The Mobility Plan includes goals to provide safe access to open spaces and to recreational facilities for pedestrians, bicyclists and those not in cars. This will enhance the opportunities for residents to access these facilities.

Community Facilities and Services Plan Element. This element documents parks and open space within the Borough and will need to be updated if additional acquisitions are made.

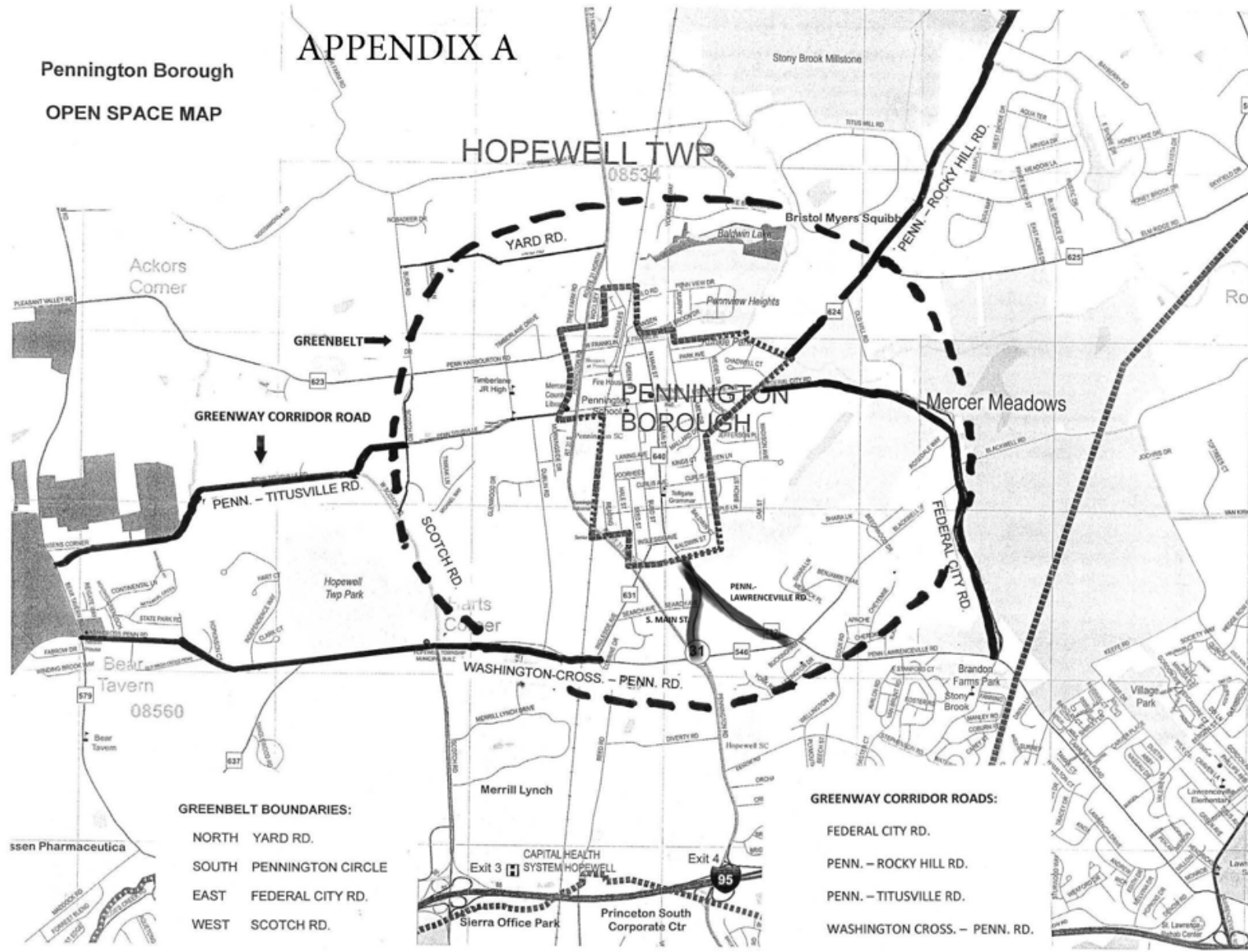
Conservation of Natural Resources Plan Element. This element along with the Environmental Resource Inventory (ERI) documents conserved resources and includes plans for additional conservation. It is closely aligned with the Open Space and Recreation Plan.

Economic Development Plan Element. This Plan considers all aspects of commerce and economic development in the Borough. The businesses in town frequently participate in the recreational activities organized by the Parks and Recreation Committee. The recreation plans should ensure that the joint efforts are supported appropriately. Open space developments and links to the town center are important to local businesses as residents and visitors can increase their customer base.

Historic Preservation Plan Element

Historic preservation aims to maintain the Borough's historic character and its goals are closely aligned with open space preservation.

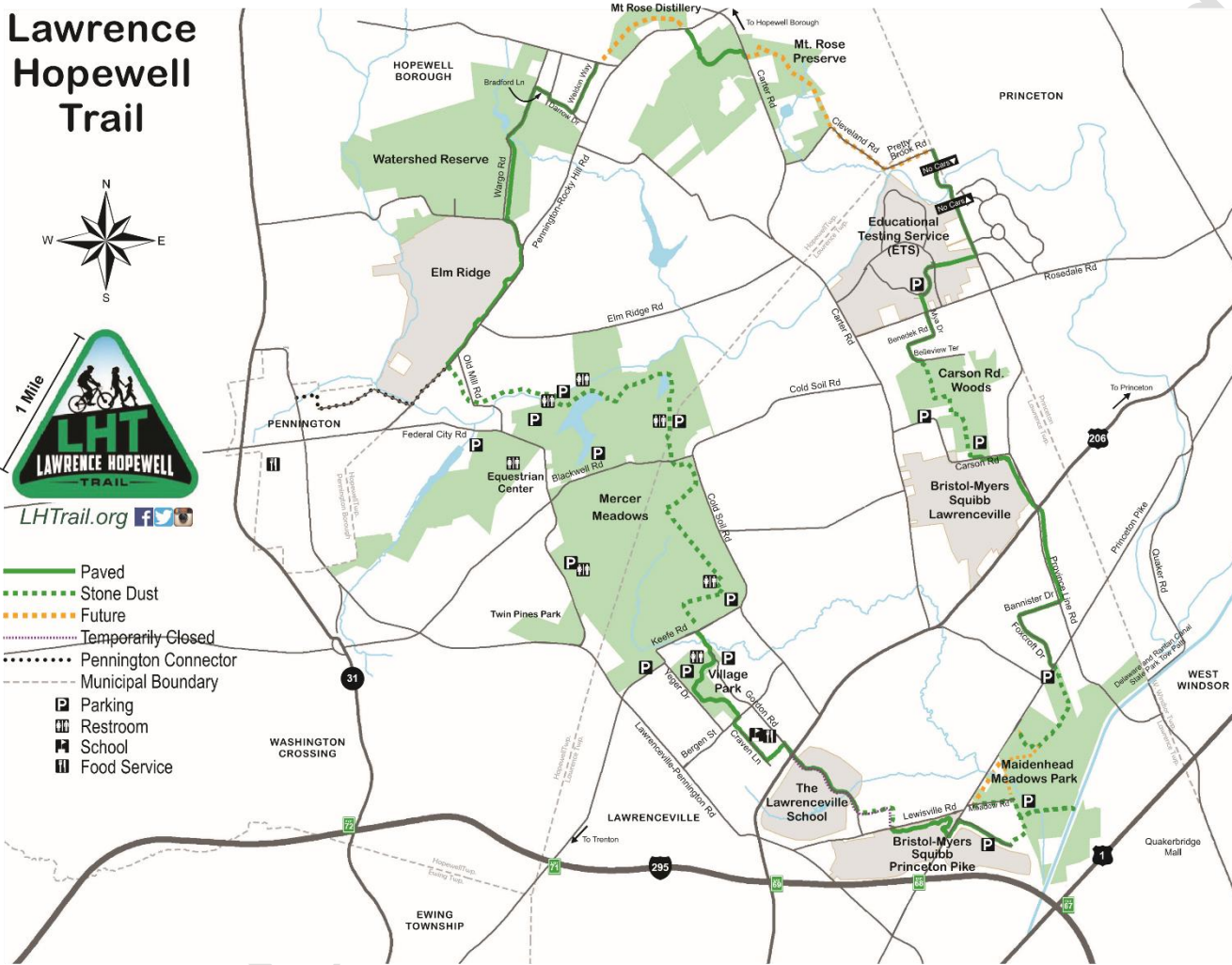
Appendix A. Open Space Map showing the proposed Greenbelt and nearby greenway corridor roads. The Greenbelt is a conceptual planning area and does not represent a change in zoning or a restriction of private property rights.



Lawrence Hopewell Trail



- Paved
- - - Stone Dust
- - - Future
- - - Temporarily Closed
- - - Pennington Connector
- Municipal Boundary
- P Parking
- R Restroom
- S School
- F Food Service



APPENDIX B

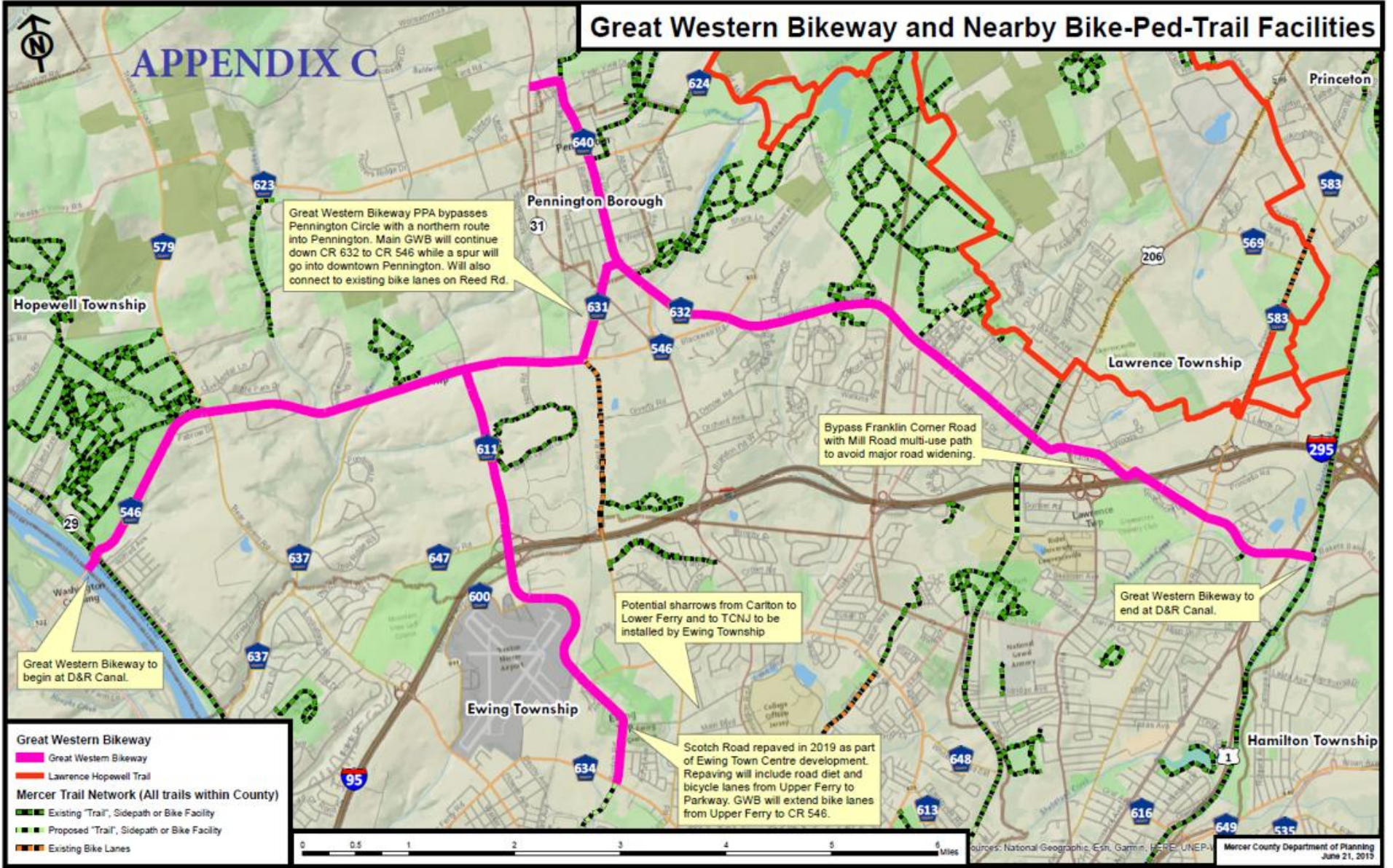


SUGGESTED ROUTES	BIKE RIDE	WALK / RUN
SHORT (<2 miles round trip)*	Carson Road Woods (5)	Carson Road Woods (5)
MEDIUM (2-5 miles round trip)	Keefe Road / Pole Farm to Rosedale Lake (13-14)	Keefe Road / Pole Farm to Rosedale Lake (13-14)
LONG (>5 miles round trip)	Village Park to Rosedale Lake (12-14)	Rosedale Lake to Main Street Lawrenceville (11-14)

*Also good for families with young children

Great Western Bikeway and Nearby Bike-Ped-Trail Facilities

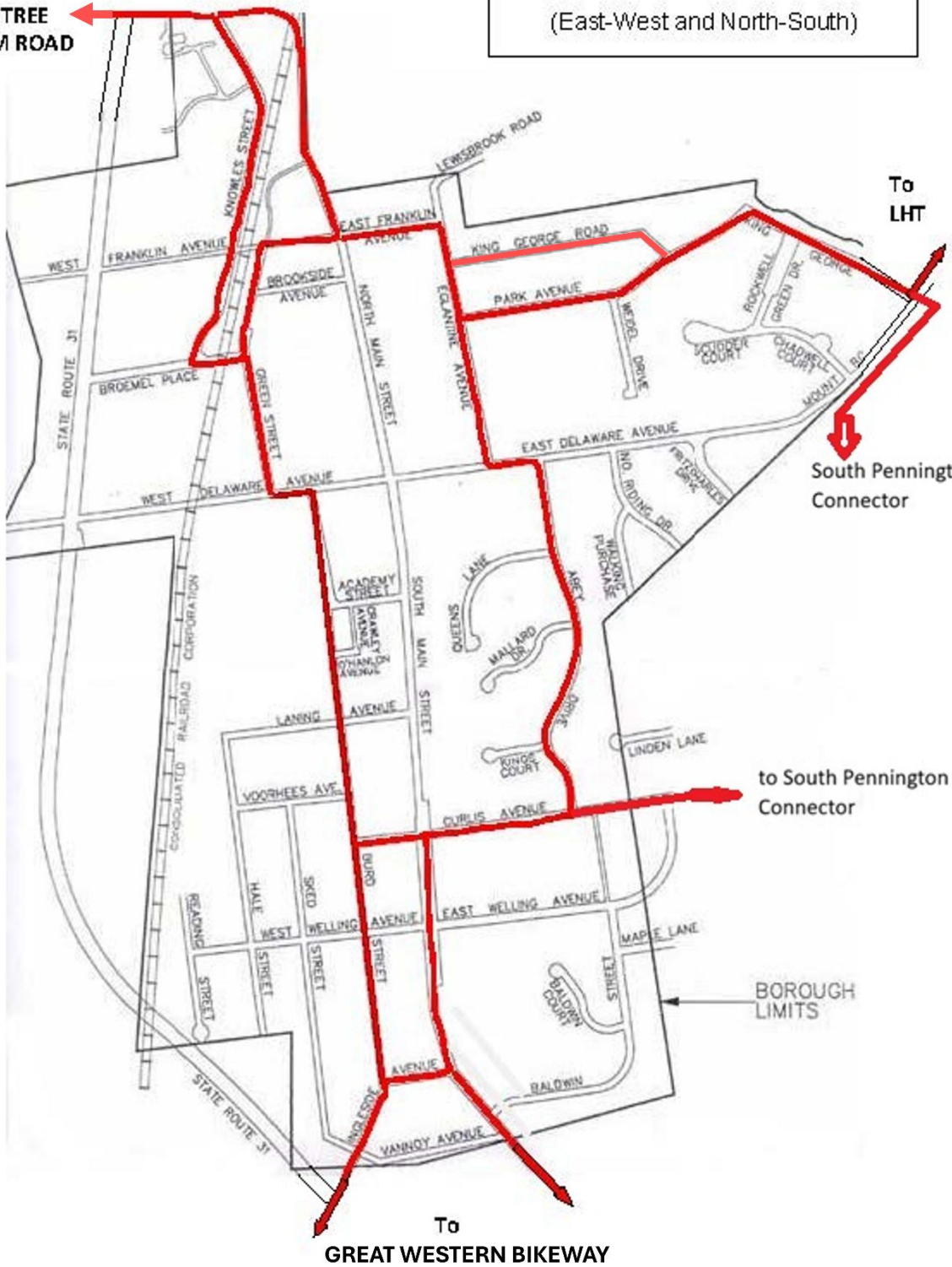
APPENDIX C



APPENDIX D

PROPOSED BICYCLE ROUTES in and through Pennington (East-West and North-South)

To TREE
FARM ROAD



To
LHT

South Pennington
Connector

to South Pennington
Connector

BOROUGH
LIMITS

To
GREAT WESTERN BIKEWAY

MASTER PLAN
BOROUGH OF PENNINGTON
NEW JERSEY

9. Economic Development Plan Element

The Economic Development Plan element draft released by the writing team was conditionally adopted by the Planning Board on August 13, 2025, and posted on the Borough website for public comment. This element will be available for comments until April 22, 2026, prior to final adoption at a public meeting of the Planning Board on May 13, 2026.

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Introduction

Overview: Pennington and Commerce

Planning Recommendations

- 1. Clarity and Business-Centric Processes**
- 2. Density**
- 3. Mobility, Access, and Parking**
- 4. Town Center Character**
- 5. Signage and Promotion**
- 6. New Development Opportunities**

Relationship with Other Economic Development Plans

- 1. Hopewell Township**
- 2. Mercer County**
- 3. The State of New Jersey**

Relationship with Other Plan Elements in Master Plan 2025

Members of the Economic Development Commission

Jason Meyer (Chair), Michelle Needham, Erin Armendinger, Raul Momo, Chris Murphy, Larissa Kelsey, Ka'Neda Bullock, Bronwyn Haley, Beatrice Anduze-Faris, Emma Rosenberg, Katrina Angarone (Council Representative).

Liaisons to the Master Plan Committee: Amy Kastler-Taub and Andy Jackson

Introduction

This Economic Development Plan Element of the Pennington Borough Master Plan is prepared pursuant to the Municipal Land Use Law (NJSA 40:55D-1et. Seq). This enables the Planning Board to adopt an Economic Development Plan Element as part of the 2025 Municipal Master Plan Update. According to NJSA 40:55D-28b (9), the purpose of the element shall be to: *“Consider all aspects of economic development and sustained economic vitality, including (a) a comparison of the types of employment expected to be provided by the economic development to be promoted with the characteristics of the labor pool resident in the municipality and nearby areas and (b) an analysis of the stability and diversity of the economic development to be promoted.”*

Commercial development is an indispensable part of Pennington. That commerce is a source of goods and services for the population of the Borough and the surrounding area, of course, but it is also part of Pennington’s “brand promise” - the identity our town wants to project to potential residents and visitors, and the identity we want our businesses to reinforce:

Pennington is, and aspires to continue to be, a welcoming, walkable, authentic, safe and prosperous hometown for a diversity of households and small businesses who seek to join in and support an historically optimistic and entrepreneurial community.

In a broad overview, Pennington Borough has two commercial areas. One is composed of the zones along or near the Route 31 corridor, which have been primarily characterized by small, low-rise “strip” shopping centers. This area includes the commercial centers along the north-bound side of Route 31 known as: Shoppes of Pennington; Pennington Square; and Old Mill Square. Just to the east lies a commercial zone of small offices in the Straube Center along West Franklin Avenue, and the proximate Cambridge School, as well as the Pennington Post Office. The Route 31 corridor is often not perceived as a unique part of Pennington’s identity; however, this district is an important source of shopping, dining, and services for the town, the greater Hopewell Valley, and those passing through on the busy State Route 31. Having a thriving and moderately dense highway-commercial district proximate to town is a feature and a benefit.

The other set of commercial zones comprise Pennington’s commercial Town Center. The businesses within the Crossroads Historic District at the intersection of Main Street and Delaware Avenue give the entire Borough a focal hub and help make the Borough a family town rather than just a collection of housing subdivisions. The town center is foreshadowed by small commercial centers several blocks to the north and south on Main Street. Our in-town businesses combine to form the core of our close-knit community. From that perspective, the center must not merely hold; it must thrive as the vibrant heartbeat of the Borough.

The Borough’s planning and zoning should facilitate the success of these commercial districts.

Overview: Pennington and Commerce

Pennington, a one-square-mile borough full of small-town charm, was named the "Best Town for Families" by New Jersey Family Magazine in 2015. The magazine singled out Pennington for its highly-rated public school system, convenient location, almost non-existent crime, affordable housing relative to average salaries, and the fact that we have preserved our quaint small-town-meets-farmland feel.

In Pennington, we are proud of our town and loyal to our entrepreneurs, who add to the thriving vitality of our community. The non-profit Pennington Business and Professionals Association has supported the businesspeople of Pennington and the area. The Pennington Economic Development Commission is a committee of the government and seeks to be an advocate and liaison for businesses in the Borough.

Census Data

In 2023, the EDC began a new census of commercial businesses within Pennington Borough. This list has been maintained and updated. The list contains information on storefront, retail, and commercial businesses in the Borough; it does not include home businesses or religious institutions. Currently, the commercial businesses break down as follows:

Count of Businesses (2023)	
Personal Care	10
Retail	9
Services (ex-personal care)	9
Food	8
Office	6
Healthcare	5
K-12 School	1

The businesses are relatively evenly broken down into personal care, retail, services, and food establishments.

- The Personal Care businesses are somewhat homogeneous: hair salons (mostly), spas, nail salons, and some fitness businesses.
- The retail businesses are more eclectic, spanning apparel, cycles, jewelry, crafting stores, precious metals, an apothecary and gifts.
- The services businesses are similarly varied, comprising everything from decorators to home care services to a funeral home.
- Pennington also has a burgeoning and diverse "food scene" with a pizza shop, bakery, cafes, and bagel shops as well as an Italian, a Thai, an Asian Fusion and a Mexican restaurant.

Commercial Factors in the 2020 US Census

Population:	2,802
Total Households:	1,138 (Families & Living Arrangements)
Average Family Size:	2.89
Median Age	47.5
Largest Age Groups:	45-49 yrs old; 60-64 yrs old
Total Housing Units:	1,088
Homeownership Rate	80.8%
Average Housing Value:	\$500,000-\$999,000
Median Residential Gross Rent:	\$1862
Median Household Income:	\$166,957
Employment Rate:	64.4%
Education:	76.2% Bachelor Degree or Higher
Commuting:	22.9 minutes (average travel time to work)
Largest Race & Ethnicity Groups:	White followed by Hispanic/Latino and Asian

The data reflects that Pennington is a generally affluent and educated community, whose residents are ready and able to purchase goods and services. To enable that purchasing locally, Pennington businesses must aim to meet the needs of the local population and must strive to be available to customers outside of traditional office and work hours. To that end, zoning and land use ordinances and enforcement should encourage businesses to extend their hours into evenings and weekends; this would in turn generate more activity and community for all businesses in the Town Center.

Planning Recommendations

To better serve our communities and meet our commercial “identity,” Pennington Borough’s master plan, and the Borough’s zoning and planning generally, should pursue the following practices:

1) Clarity and Business-Centric Processes

Generally, simplifying the Borough’s zoning of its commercial districts - fewer different zones, broader permitted uses within certain zones, and clearer definitions of permitted uses - will avoid confusion, encourage businesses to come to Pennington, and may help spur new development. Specifically:

- a) Within the Rt. 31 corridor:
 - i) Zoning districts need not and should not be highly differentiated; the area could be comprised of 1-2 zone definitions, which should encourage: mixed uses; commercial uses that may not work in the town center (such as those dependent on abundant or adjacent parking); and development that reinforces the fact that these zones lie within a distinct, small Borough.
 - ii) Areas need not be restricted to office-only uses.

iii) Permitted uses should include, for example, gyms and fitness facilities. These types of uses encourage community and gathering, and our area is currently underserved by such businesses; however, they are too dependent on car traffic to be appropriate in the town center.

b) In the Town Center and along Main Street:

- i) Zoning should be different from, and more restricted than, zoning in the Rt. 31 corridor;
- ii) Zoning should reinforce the existing historic, village-center appearance; and
- iii) Zoning should generally favor retail shopping and dining that tends to encourage walking and browsing and disallow uses that would be contrary to a family-friendly, age-diverse environment.

c) In all commercial districts, Zoning should permit:

- i) Co-working spaces, maker-spaces, sidewalk and outdoor dining, and other uses that foster community, convening and gathering; and
- ii) Small inns, boutique hotels or bed-and-breakfasts, which add retail and tourist activity. (We recommend such permitted uses be required to incorporate on-site proprietors, multiple rooms for lodging, and food service, as opposed to the private rental of a residence.)

d) Land use regulations generally, and historic restrictions and requirements specifically, need to become clearer and easier for business owners to determine.

e) Land use enforcement must be consistent and transparent but also tempered by practicalities and by the overarching goal of encouraging businesses and not applied precipitously. In addition:

- i) Means should be provided for informal inquiries, workshopping, and related dispute resolution, regarding proposed commercial uses;
- ii) Overarching goals of Borough government and development should be regularly communicated to zoning enforcement personnel.

2) Density

a) Consistent commercial development and the success of that development will be supported by increasing the population density of Pennington within walking distance of the Town Center, to the extent that may be accomplished without fundamentally altering the character and streetscape of the town. Land use policy can foster this increased density by permitting:

- i) Mixed Use developments within existing commercial zones, Our Town Center is built around mixed-use buildings, in fact. Mixed-uses increase both residential and commercial density, encourage pedestrian traffic, and enhance a village esthetic.
- ii) Accessory Dwelling Units.

- b) Mixed-Use development in commercial zones may be structured so as to facilitate the ability, financially and logistically, for entrepreneurs to live near or “above” their own businesses. Such a practice would foster a dedicated, resident business community.

3) Mobility, Access, and Parking

- a) Streetscape improvements should foster “nuisance free” walking routes to and through the Town Center. Zoning and ordinances should discourage landowners from constructing imposing fences, physical barriers for pedestrians, facilities that bring guard dogs or thorny plants into close proximity with sidewalks, and other features that would tend to discourage walking and cycling. Conversely, ordinances and enforcement should encourage clean sidewalks free of debris, garbage and snow.
- b) To encourage foot traffic, retail exploration and serendipity, and to avoid a reported negative factor for new businesses, on-site parking requirements for businesses should be reduced in favor of a greater reliance on on-street and central municipal parking.
 - i) To facilitate this shift to parking arrangements that encourage pedestrian traffic over short distances:
 - (1) Municipal parking lots may need to be expanded or added, or the Borough may need to reach arrangements with owners of nearby parking areas that tend to be underused during the business day (such as schools and churches); and
 - (2) Time limitations on on-street parking may need to be enforced — but parking should remain free and unmetered.
 - ii) Factors in the Planning and Zoning Board’s consideration of requests to vary from on-site parking requirements could include the property making available to the public:
 - (1) “Level 3” rapid EV Charging facilities;
 - (2) Bike racks; and/or
 - (3) Enhanced accessibility; that is, efforts to encourage and positively reinforce pedestrian and cycling access, interaction, and flow, not merely the minimum requirements under disabilities laws.
- c) In coordination with the Borough’s Open Space and Recreation efforts:
 - i) Open Space preservation efforts should continue to focus on creating and enhancing corridors of open space access and trails into and out of the Borough. In addition to the resulting recreational improvements, such access increases the opportunities for visitors to recreational sites in “Greater Pennington” (such as Northwest Mercer County Park, including Rosedale Park and the “Pole Farm”, and the Lawrence-Hopewell Trail) to visit and patronize Pennington Borough businesses.
 - ii) The planned Great Western Bikeway will pass through the Borough on Ingleside Avenue and South Main Street. Streetscape, land use, parking, and recreational efforts should be coordinated to enable cyclists using this route to easily and pleasantly

- divert and visit Pennington's Town Center and/or pass through Pennington as a connection to the Lawrence-Hopewell Trail.
- iii) To the extent permitted under law, some Open Space and Recreational funds should be devoted to signage and other efforts to make such recreational users aware of Pennington Borough and its businesses and to encourage them to visit.
 - d) The only current avenues for pedestrians, hikers, and cyclists to move between Town Center and Route 31 are the West Delaware Avenue bridge and the underpass on Broemel. Neither of these routes currently are pedestrian friendly, much less pleasant or encouraging. Residents also report it is difficult crossing West Delaware once one is west of Burd Street. These dis-incentives to non-vehicular movement are compounded for the large number of people (and potential business customers) seeking to cross Route 31 to travel to and from the HVRSD campus. Therefore, among other solutions:
 - i) The West Delaware and Broemel railroad crossings need to be improved, making them more welcoming to pedestrians and better lit.
 - ii) Redevelopment of the former "Landfill" area, as well as the former Senior Center property at the north end of Reading Avenue, should facilitate and encourage the creation of coordinated streetscapes and new, green, encouraging means for pedestrians and cyclists to move between the Town Center and residential areas, and the Route 31 Corridor, coordinating with the Pennington School and freight railroad as necessary.
 - iii) Plans to redevelop the Landfill and potentially rezone and redevelop properties at the intersection of Rt. 31 and West Delaware Avenue, and to enhance storm water management proximate to that intersection, should be leveraged to create improved means for pedestrians to cross Route 31. This improvement would be a significant boost to businesses along Route 31, West Delaware Avenue, in the Landfill property, and even in Town Center, by connecting them to the large high school and middle school constituencies.

4) Town Center Character

- a) See the recommendations regarding the Town Center under "Clarity and Business-Centric Processes."
- b) Most Pennington adults spend their working days more than twenty minutes away from town. These residents, and others passing through Pennington after work, know our commercial districts only by their appearance at night. Thus, land use and other ordinances should encourage activity and pedestrian traffic not only during daylight, but also after work and into evening hours. Town Center businesses also need to remain visible and appealing to passers-by, even after they may have closed for the night. Therefore, Borough ordinances and land use enforcement should require or otherwise promote:
 - i) Businesses remaining open for consistent hours through the week and into the evening;

- ii) Businesses leaving a reduced level of interior and/or window lights on after closing;
 - iii) Property owners of vacant properties providing window displays, or allowing arts groups to create window displays, to avoid the appearance of empty storefronts;
 - iv) “Pop up” retail use of vacant storefronts, and other short-term use of available space;
 - v) Sidewalk sales and dining.
- c) The “Town Center Buffer” zone appears currently unnecessary; however, zoning and planning should facilitate and permit future expansion of the central commercial district, in which residential, office, retail, and mixed uses would all be permitted. To that end:
- i) The properties now occupied by the Presbyterian Church and Methodist Church should be rezoned consistent with the Town Center commercial zoning, to provide for future expansion of the Town Center; these lots would not be appropriate for new, single-family residences and thus should no longer be zoned single-family residential as the primary intended use.
 - ii) South Main Street between Academy and Delaware Avenues, Academy Avenue between Main Street and Burd Street, and North Main Street from Delaware Avenue to Brookside Avenue, should be identified as areas for potential future expansion of the Town Center commercial zone. In the long-term, commercial development, fueled by pedestrian traffic, should be encouraged along Main Street to better connect the small commercial areas beyond Franklin (to the North) and at Main and Curlis (to the South) with the Town Center. Accordingly, even in the nearer-term:
 - (1) Appropriate commercial uses may be identified as conditional uses even within residential zones in these corridors, and
 - (2) Parking and commercial uses that would support the town center should be included in considerations for redevelopment of the lots at the intersection of North Main Street and Brookside Avenue.

5) Signage and Promotion

- a) Zoning and other ordinances should permit, and the Borough government should employ, consistent visual markers such as signs, flags, and markers, to direct residents and visitors to commercial districts and noteworthy locations, create a more unified and consistent commercial streetscape, and to identify and increase awareness of the Borough.
- b) Such “wayfinding” signage is especially important to highlight and enhance traffic pathways from the Route 31 corridor to Town Center, to make passers-by on Route 31 more aware of Pennington’s CBD.
- c) For this reason, zone-specific signage requirements should not be written or enforced in a way that thwarts consistent town-wide signage and wayfinding.
- d) Zoning and enforcement should spur property owners to maintain more accurate commercial signage, such as imposing and enforcing deadlines of 60 to 90 days to erect compliant signs that describe a property’s new use/ownership and to remove all signage that is no longer accurate.

- e) Signage ordinances should be overhauled to address new technologies; however, while digital signage may be appropriate in the Rt. 31 corridor, it would be contrary to the historic village character of the Town Center and should not be permitted there.
- f) Signage should allow businesses in the Rt. 31 corridor to more clearly make their existence known to motorists on the highway.

6) New Development Opportunities

- a) Former Landfill - See discussions above.
- b) Home-Based businesses are a reality and can encourage a daytime population that will frequent other in-town businesses. Thus, zoning should permit many home based businesses that will not negatively affect the residential character of neighborhoods or unduly create traffic or parking congestion on residential streets. Such businesses should not be required to operate covertly. Accordingly, most home office uses should be permitted as “accessory” rather than “conditional” uses, and limitations on the size and level of activity of such businesses should be regularly reexamined.
- c) Entrepreneurship - Overall, Pennington must be seen as a welcome home for entrepreneurial, owner-operated businesses, because such businesses reinforce community. For that reason, undue complexity and inconsistency should be avoided in all of the Borough’s commercial ordinances, regulations and enforcement.

Relationship with other Economic Development Plans

1) Hopewell Township Master Plan

The Hopewell Township Planning Board adopted its latest periodic reexamination of its Master Plan and development regulations on December 13, 2021. Its previous reexamination was adopted on December 15, 2011. The Master Plan does not include an Economic Development Plan.

A Township Planning Board recommendation in the 2021 reexamination report was that an Economic Development Plan element should be prepared. This was in response to the economic downturns that took place across the country during the Great Recession of 2008 and the Covid-19 pandemic of 2020-21. According to the report, “The Economic Development Plan will provide an opportunity to review existing economic contributors, land development patterns, workforce and employment characteristics of the Township. An analysis of these factors will provide a means to develop strategies to diversify the local economy, promote workforce initiative, develop economic partnerships, increase economic and natural resiliency, and foster meaningful redevelopment opportunities that will take into consideration the location and types of development that will benefit not only new residents and employees but also provide additional development and services for existing residents.”

The Tourism and Economic Development Advisory Committee was established by Hopewell Township on September 19, 2022. Its goal is to promote agriculture, historical and recreational tourism, local restaurants, and other businesses. The Committee works to support existing businesses, attract new businesses, and promote tourism in the Township and the entire Hopewell Valley. In January 2025, representatives of the Pennington Borough Economic Development Commission were invited to participate in a “business listening session” held by the Committee. An outcome was that the Township Committee and the Borough Commission may cooperate on development areas of interest to both parties. Of particular interest to the Borough is commercial development on Route 31 adjacent to the Borough. Properties to the south of West Delaware Avenue are largely in the Township, whereas those to the north are in the Borough. It would make sense that development in both locations follows a consistent and optimized plan.

2) Mercer County

Mercer County does not have an Economic Development element in its Master Plan. However, the Mercer County Office of Economic Development provides a variety of business development programs and workshops to help small and large businesses in the County build growing, successful companies. Examples are:

- Business Workshops such as Business Fundamentals, Financing, and Procurement
- Individual Business Mentoring
- Financial Assistance for Mercer County Businesses
- Foreign Trade Zone Program
- Site Selection Services
- Employee Recruitment and Training Assistance

The County offers financial assistance through a variety of grant programs. A 2025 example is the Revitalize & Grow Grant program, which provides grants to businesses for signage and façade improvements to improve traffic for businesses and support increased tourism. Another is the Business Builder Rebate Grant program to help cover some costs of startup or refreshing, such as accountant fees, office supplies, software and some website development. The Mercer County Purchasing Department offers a streamlined process for local businesses to navigate the County procurement process, a comprehensive system of specifications and competitive solicitations.

3) New Jersey State Development and Redevelopment Plan

The State Development and Redevelopment Plan (SDRP), also known as the State Plan, provides a vision for the future that will preserve and enhance the quality of life for all residents of New Jersey. The State Plan is the result of a cross-acceptance process that included thousands of New Jersey citizens in hundreds of public forums, discussing all the major aspects of the plan - its goals, strategies, policies and application.

The purpose of the State Plan is to coordinate planning activities and establish Statewide planning objectives in the following areas: land use, housing, economic development, transportation, natural resource conservation, agriculture and farmland retention, recreation,

urban and suburban redevelopment, historic preservation, public facilities and services, and intergovernmental coordination (N.J.S.A. 52:18A-200(f)).

The current plan was adopted in 2001 and is in the process of being updated by the Office of Planning Advocacy (OPA) and the State Planning Commission (SPC). The SPC approved the Preliminary SDRP on December 4, 2024. It can be found at [https://nj.gov/state/bac/planning/documents/update-to-state-plan/Draft%20Preliminary%20SDRP%20\(SPC%20Approved%2012.4.2024\).pdf](https://nj.gov/state/bac/planning/documents/update-to-state-plan/Draft%20Preliminary%20SDRP%20(SPC%20Approved%2012.4.2024).pdf)

Of the ten Goals of the updated SDRP, two are related to Economic Development:

- #1. Promote Economic Growth that Benefits all Residents of New Jersey
- #3. Economic Opportunity Through nation-leading Infrastructure

The OPC has completed the presentation of the SDRP at meetings in all the counties of New Jersey and the feedback has been incorporated into the Plan. A series of Cross-Acceptance meetings are scheduled for the second half of 2025, and it is anticipated that the final plan will be released at the end of 2025. Pennington Borough participated in a meeting on the SDRP in Mercer County and will participate in a cross-acceptance session.

Policy objectives for Economic Development can be found on page 69 of the Preliminary SDRP: Encourage new businesses, private sector investment, and tourism where appropriate and based on smart growth principles. Revise outdated zoning restrictions to promote flexible workplaces that recognize the changing needs of the contemporary workplace. Any economic development occurring outside the center should be planned and designed to maintain or enhance the area's qualities with minimum impact on agricultural or environmentally sensitive resources. Development should aim to diversify the local economy and achieve more sustainable year-round models.

It is notable that the policy encourages the revision of outdated zoning restrictions.

Relationship with Other Plan Elements in Master Plan 2025

1) Land Use Plan

The Land Use Plan will consolidate recommendations for zoning ordinance changes in the Borough. The zoning change simplifications in the Economic Development Plan aimed at broadening the allowed uses of commercial properties will be incorporated into the Land Use Plan. Recommendations for areas in need of redevelopment will be considered.

2) Housing Plan

The Housing Plan is focused on increasing the availability of affordable housing. This may allow more people who work in Pennington to reside here. The zoning changes recommended to convert some of the current commercial-only areas to mixed commercial and residential areas will be welcomed to allow the development of more affordable housing units.

3) Mobility Plan

The recommendations in this Plan about traffic, parking, and non-vehicle access to commercial areas may result in changes to the Mobility Plan if conflicts are found.

4) Utilities

The creation of new facilities for businesses or use changes of existing facilities could increase the demand for drinking water and for wastewater delivery to the SBRSA Pennington treatment plant. While there is adequate capacity for small-scale additions, larger scale developments will need to be coordinated with Public Works and may generate a request for service expansion.

5) Open Space and Recreation Plan

The businesses in town frequently participate in the recreational activities organized by the Parks and Recreation Committee. The plans should ensure that the joint efforts are supported appropriately. Open Space developments and linkages to the town center will be important to local businesses,

6) Historic Preservation Plan

Many of the businesses in the Town Center are housed in properties that are subject to preservation. While businesses should respect the recommendations of the Historic Preservation Committee, the Historic Preservation Commission should ensure that the regulations are not so onerous that they negatively impact the economics of a business.

MASTER PLAN
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NEW JERSEY

4. Mobility Plan Element

The Mobility Plan element draft released by the writing team was conditionally adopted by the Planning Board on March 12, 2025, and posted on the Borough website for public comment. Revisions made to address comments received and to ensure consistency with other Plan elements were endorsed by the Planning Board on October 8, 2025. Final changes were approved by the Planning Board on April 8, 2026. This element will be available for comments until April 22, 2026, prior to final adoption at a public meeting of the Planning Board on May 13, 2026.

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- 1. Introduction**
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- 6. Parking**
- 7. Zero-GHG-Emission Vehicles**
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Appendix A. Traffic Data in and around Pennington

Appendix B. Compilation of Pennington Circulation Plan components from the 1998 Master Plan and the 2005, 2013 and 2023 Reexamination Reports.

Appendix C. Greenhouse Gas Emissions Calculations

Mobility Plan Element Writing Team

Thanks go to the following people who helped create the Mobility Plan element: Roger Demareski, Meredith Moore, Allison Neary, Natalie Shivers, Kristin Tunkel, Rick Smith, Doug Pinelli, with Andy Jackson as chair. Special thanks go to Amy Kassler-Taub for her thorough review of the element.

1. Introduction

The Municipal Land Use Law (MLUL) includes a Circulation Plan as a permitted Master Plan element. N.J.S.A. 40:55D-28(4) describes the element as follows:

“A circulation plan element showing the location and types of facilities for all modes of transportation required for the efficient movement of people and goods into, about, and through the municipality, taking into account the functional highway classification system of the Federal Highway Administration and the types, locations, conditions and availability of existing and proposed transportation facilities, including air, water, road and rail.”

Following the lead of Mercer County, we have chosen to name this the **Mobility Plan** element since this implies a broader range of users than the name circulation. The Plan accommodates large vehicles such as cars, trucks and buses on the roads, but also mobility such as walking, bicycling and personal mobility devices, including those that are battery powered. Because of its relatively small size and its location, the Borough’s mobility network is sensitive to regional patterns, requiring coordination with regional mobility and proposals. Since the Borough is essentially a fully developed community, opportunities for major mobility infrastructure improvements are limited. With the wide variety of potential users, the system of roadways, sidewalks, bikeways and other pathways should be designed and regulated to maximize safety while ensuring efficient traffic movement.

There are seven categories in the FHA functional highway classification system. The roads in Pennington Borough are shown below under these classifications:

1. Interstates
None
2. Other Freeway/Expressway
None
3. Other Principal Arterial
State Route 31
4. Minor Arterial
County Route 640 – Pennington Road, South and North Main Street
County Route 546 – South Main Street to Lawrenceville-Pennington Road
5. Major Collector
County Route 631 – Ingleside Avenue
County Route 624 – West and East Delaware Avenue from Route 31 to Stony Brook.
6. Minor Collector
County Route 623 – Pennington-Harbourton Road
Broemel Place and Green Street south of Broemel Place
7. Local
All other Borough roads

The Delaware Valley Regional Planning Commission (DVRPC, see Section 8a below) presents traffic counts on its website <https://www.dvrpc.org/webmaps/trafficcounts/>. It can be searched by municipality or Zip Code. Traffic counts for roads in and around Pennington have been extracted from data for Zip Code 08534 and presented in Appendix A, Table A1. One set was dated June

2020 (West Delaware Avenue) and the count may have been affected by Covid restrictions, but most data are post-Covid, having been gathered between March 2022 and March 2025.

The counts have been added to a schematic map of Pennington in Figure A1 to give a general picture of traffic flow in and around Pennington. Around 8,500 vehicles per day join Route 31 northbound from Pennington Circle. Of these, ~7,800 travel as far as the North Main Street intersection, meaning a net ~700 leave Route 31 for destinations in Pennington. About 900 vehicles join Route 31 from North Main Street. Around 3,000 vehicles per day enter Pennington via Pennington Road from Pennington Circle and most of these travel as far as the Main Street traffic lights at Delaware Avenue. About 3,300 vehicles per day pass in each direction on East Delaware Avenue and onwards to Pennington-Rocky Hill Road. About 3,200 vehicles leave or join Route 31 on Pennington-Hopewell Road, representing traffic passing through Pennington on Route 31 on the way to or from Hopewell. The DVRPC count does not differentiate between automobiles and trucks. Such data would be useful.

The DVRPC daily count is generated from hourly counts which allows the visualization of how traffic is distributed during the day. Figure A2 shows three examples: southbound Route 31, north of Pennington-Harbourton Road; westbound East Delaware Avenue, east of Main Street; and northbound South Main Street, north of Curlis Avenue. All show morning and afternoon peaks with lesser peaks around lunchtime. Peaks for Route 31 are just under 700 vehicles per hour, Delaware Avenue 300 per hour and northbound Main Street 250 cars per hour. We will explore with DVRPC the opportunity to gather additional data in and around Pennington.

The preparation of this Mobility Plan element included benchmarking the Circulation Plans in the Master Plans of nearby communities: Hopewell Township, Hopewell Borough, Princeton, Bordentown, Lambertville, Stockton, Rocky Hill, and Hightstown. We also reviewed the Circulation and Sidewalk Plan of the 1998 Pennington Borough Master Plan and the circulation sections in the 2005, 2013 and 2023 Master Plan Reexamination reports (Appendix B). Additionally, the findings and recommendations relating to Pennington Borough from the 2002 Route 31 Design Study were reviewed.

The vision and goals for the Mobility Plan element are a subset of the overall Master Plan 2025 vision and goals developed by the Master Plan Committee (MPC) and the Citizens Advisory Committee (CAC) and endorsed by the Planning Board in a public meeting on January 10, 2024. In August 2025, the MPC conducted a web-based survey to seek the input of residents on Housing and Land Use. The survey also yielded responses of relevance to the Mobility Plan.

2. Mobility Plan Vision, Goals and Strategies

Pennington Borough's visions for mobility are:

- To have transportation policies that reduce automobile use in the Borough.
- To provide safe sidewalks for pedestrians of all ages and abilities, and safe routes for bicycles and other low speed personal mobility vehicles, and link them to schools, businesses and adjacent open space and recreation areas.

- To ensure that proposed mobility enhancements respect the preservation of Pennington’s historic character and, also, do not impede the passage of emergency response vehicles.
- To manage parking for customers of businesses in the town center while balancing the accessibility needs of business employees and residents.
- To continually improve highway access and crossing management for Route 31.
- To minimize the impacts of transportation on the environment, including greenhouse gas emissions, and air and noise pollution.
- To implement Complete & Green Streets, and Vision Zero policies.
- To promote public and other transit alternatives to reduce traffic congestion and provide services to individuals of all ages and abilities.

The Mobility Plan goals and strategies are blended from five sources:

- The MPC/CAC Master Plan report approved by the Planning Board in a public meeting on January 10, 2024, and presented to the public at an Open House on April 10, 2024.
- The 2023 Master Plan Reexamination report adopted by the Planning Board on May 10, 2023, which reviewed progress on the circulation goals of the 1998 Master Plan, and the reexaminations of 2005 and 2013. See Appendix B.
- The Open Space and Recreation Plan (OSRP).
- The Green Buildings and Environmental Sustainability (GBESE) Plan.
- The Economic Development Plan
- Recommendations pertaining to Pennington in the 2002 Route 31 Design Study.

Background to the topics addressed by the goals will be found in Sections 3-8.

The goals are numbered below, and the associated strategies are listed below each goal.

1. Focus on the safety of vulnerable road users who are not in motorized vehicles.
 - a. Develop a robust network of well-lit sidewalks, personal vehicle lanes, sharrows and shared-use paths. Reinforce speed limits with strategic use of traffic control devices and public awareness tools. Where feasible, use narrow lane widths to reduce pedestrian crossing distances and provide safe clearances for pedestrians, cyclists and personal transportation devices. Strive to maintain multimodal infrastructure year-round. Personal vehicle lanes should be kept like roadways and not be a repository for plowed snow, leaf piles, trash cans, etc.
 - b. Create infrastructure for pedestrians, bicycles and personal mobility vehicles, including battery-electric powered, while ensuring that new facilities respect the district’s historic aesthetic. Explore options for providing State-standard EVSE infrastructure for charging small electric vehicles and be open to State-legal e-scooter and e-bike ride-share proposals.
 - c. Follow New Jersey Complete & Green Streets design policies, adopted by Council in 2014 and modified in 2016, when designing and updating Borough roads, and prioritize personal transportation over cars and truck traffic:
https://www.nj.gov/transportation/eng/completestreets/pdf/CS_Model_Policy_2020.pdf

- d. The design modifications to Borough roads should evaluate the placement of traffic calming measures such as speed bumps to minimize impact on ambulance patients and emergency response times.
 - e. Follow the principles of Vision Zero, adopted by Council in 2022, which encourages municipalities to adopt achievable goals to prevent traffic-related severe injuries and fatalities: <https://www.visionzero4nj.org>
 - f. Install bicycle route signs and pavement marking on those streets best suited and safest for bicycles such as the Great Western Bikeway and other connections to bicycle routes outside the Borough – see the Proposed Bike Route map in the Open Space and Recreation Plan element (OSRP).
 - g. Make cycling to Toll Gate Grammar School safer by creating protected bike routes where feasible. Evaluate the potential for a bike path on East Curlis Avenue. The width of the current sidewalk has limited capacity due to bicycle & pedestrian use, and car door clearances that overlap the throughway zone.
 - h. Ensure the safety of pedestrians by keeping sidewalks safe and passable and through the administration of sidewalk maintenance and snow removal ordinances.
 - i. Encourage NJDOT to upgrade the bridge over the railroad tracks on North Main Street following the recommendations of the Federal Highway Administration for realignment and a wider deck with guardrails. Add sidewalks to reduce the hazard to pedestrians, bicyclists and micromobility vehicles on the sharply curved bridge.
2. Increase the number of ways to move around our area without getting in a car.
- a. Enhance pedestrian, bicycle and personal mobility vehicle linkages to Borough parks and trails into Mercer County.
 - b. Plan to construct sidewalks to complete the connectivity in the Borough. Missing links are; North Main Street, east side from Silo Road to Route 31, west side from Railroad Place to Route 31, including the railroad bridge; Route 31, east side from North Main Street to West Franklin Avenue, west side from North Main Street to West Delaware Avenue; East Delaware Avenue, south side from Fitzcharles Drive to the Madison Avenue fire road to link up with the future LHT South Pennington Connector, north side from North Riding Drive to King George Road.
 - c. Improve access to safe bicycle routes north and east of the Borough by construction of the South Pennington Connector by LHT. This would extend the Pennington link to the LHT at King George Road to south Pennington neighborhoods. County design of the upgrades to the bridge over Stony Brook on Pennington-Rocky Hill Road, as recommended by the Federal Highway Administration should include a sidewalk with a guardrail and a road crossing for the LHT South Pennington Connector. It would also enhance the safety of pedestrians and bicyclists if the 25-mph zone was extended north of the bridge into Hopewell Township. The current speed limit on the bridge is 45 mph. See also goal 5c addressing flooding concerns on this bridge.
 - d. Extend bike-friendly connectivity. Establish a formal link between the Great Western Bikeway (GWB) route and Pennington’s Town Center. Prioritize improvements along South Main Street corridor to facilitate safe passage for both local and touring cyclists. Consider a bike lane along South Main Street for rides toward Lawrenceville and to enable cyclists on the GWB to easily divert to visit Pennington’s Town Center and/or pass through Pennington as a connection to the Lawrence-Hopewell Trail.

- e. Ask Hopewell Township to add personal mobility vehicle lanes on Wellington Drive to allow Borough residents to ride safely to shopping and dining opportunities on Denow Road while avoiding the safety risks of riding along Route 31.
 - f. Encourage property owners in the Route 31 commercial corridor, whose properties can be safely reached by bicycle from the Borough, to provide bike racks.
3. Manage increased traffic passing through the Borough to and from Hopewell Township's new industrial and residential developments.
 - a. Work with the county to ensure good traffic flow at key intersections such as Main St and Delaware, to minimize cut-through traffic on local residential streets.
 - b. When addressing the potential impacts of increased traffic from regional developments, ensure that the historic district remains accessible without compromising its charm or safety.
 - c. Introduce new signage at the gateways to Pennington to reinforce the speed limit and educate drivers on the need to respect and protect other road users. Review models used in the UK, as described in Section 5a.
 4. Reduce congestion on Route 31 and West Delaware Avenue and increase safety for non-car users along this route and in the HMU zone to the west of the railroad tracks.
 - a. Develop and implement creative ways to reduce traffic jams at the traffic signal at Route 31 and West Delaware Avenue, while ensuring the safety of pedestrians, bicyclists and other low-speed personal mobility vehicles users crossing Route 31 at West Delaware Avenue.
 - b. Encourage NJDOT to upgrade the bridge over the railroad on West Delaware Avenue following the recommendations of the Federal Highway Administration for a wider deck with guardrails to protect the sidewalks. Coordinate bridge design with goal 4a above to improve vehicle flow across the bridge to and through the intersection with Route 31, as envisaged in the proposed Crossroads-Business (C-B) zone.
 - c. The Borough should request a copy of the CSX inspection report for the railroad bridge over Broemel Place to assure concerned residents that the bridge is safe. A beautification project to restore the degraded concrete facing can be proposed to CSX, but they state in their Public Project Manual they will not pay for such projects.
 - d. Work with Hopewell Township, Mercer County and the State to increase the number of guarded pedestrian/bicycle crossings of Route 31. Currently there are only two in the 2.9 miles between North Main Street and Denow Road, at Ingleside Avenue and West Delaware Avenue. Pedestrian, bicycle and micromobility vehicle crossing at the Pennington Circle is particularly hazardous.
 - e. Investigate strategies to reduce truck traffic on Route 31, including recommending to DVRPC a study of the possibility of a roll-on, roll-off truck-train service between I-295 in Ewing and I-287 in Bridgewater using the current CSX route.
 5. Address various parking concerns in the Borough.
 - a. Work with the Economic Development Commission to find innovative ways to increase the available parking for customers of businesses in the town center while meeting the parking needs of business employees and residents. See the Economic

- Development Plan recommendation 3. Mobility, Access and Parking, goal b. for further details.
- b. Parking solutions proposed within the historic district should prioritize compatibility with its historic setting.
 - c. Work with the County to equitably resolve the conflict between the need for residential and commercial on-street parking and the desire for dedicated bike and micro-mobility lanes on Main Street and on Delaware Avenue.
 - d. Manage temporary right-of-way obstructions to minimize the impact on traffic, particularly vulnerable micromobility vehicles that may need to move into the main traffic flow to avoid them.
 - e. Look for opportunities to replace impervious parking coverage with pervious cover to improve groundwater replenishment and reduce flooding.
6. Strive to eliminate flooding on all roads in Pennington Borough.
- a. Flooding during heavy storms occurs on Route 31, West Delaware Avenue, Broemel Place, North Main Street, Eglantine Avenue, East Franklin Avenue, Abey Drive, and King George Road. The floods can be hazardous to residents and can impede the passage of emergency vehicles to many parts of the Borough. The Borough should encourage NJDOT and Mercer County to assist with projects to alleviate flooding.
 - b. The designs by Mercer County of new bridges over Lewis Brook on Green Street, North Main Street and Eglantine Avenue should be coordinated to maximize flood control from the Broemel Place underpass to east of Eglantine Avenue.
 - c. County design of the upgrades recommended by the Federal Highway Administration to the bridge over Stony Brook on Pennington-Rocky Hill Road should include the elevation of the deck and approach roads to be above the level of the floodplain in that area as predicted by the NJ DEP Inland Flood Protection rules adopted in 2023. [See also goal 2b addressing safety concerns on this bridge.]
 - d. Increase awareness of flooding hazards to road users and pedestrians to save lives.
 - e. Flooding-related infrastructure improvements for mobility should respect the goals of the Municipal Stormwater Management Plan (MSWMP). Improvements close to waterways or wetlands, such as bridge or culvert replacements, should include restoration of the natural systems in the scope of work, where appropriate.
7. Promote the use of electric vehicles (EVs) and other zero-GHG emissions vehicles.
- a. Work with PSE&G to ensure that enough power will be available in Pennington to support electric vehicle charging and the electrification of residences aimed at reducing CO₂ emissions.
 - b. Facilitate the installation of Level 2 (220V, 45-amp) or Level 3 (440V, 150+ amp) electric vehicle charging stations at central locations for residents without access to private charging infrastructure. The placement of EV charging stations must balance modern mobility needs with the preservation of historical integrity. All installations must comply with current safety standards regarding accessibility for first responders.
 - c. Encourage all new developments to install Level 2 (220V, 45-amp) electric vehicle chargers.
 - d. Ease the permitting for the installation of Level 2 electric vehicle charging in existing homes while ensuring they are installed correctly for safety.

- e. Support commercial Level 3 charging along Route 31 and in the Borough center to incentivize visitors driving EVs to use local businesses.
 - f. Replace the Borough operational vehicle fleet with electric or hydrogen-powered vehicles when practical.
 - g. Advocate with PSE&G to allow vehicle-to-grid and vehicle-to-home bidirectional charging to improve the economics of EV ownership, replace fossil fuel home backup generators and help meet grid demand in peak periods.
 - h. Ensure that emergency service personnel are trained in EV accident response by the appropriate emergency response personnel and have the right equipment to respond to an EV fire. Provide guidance to residents on how to help when an EV is involved to avoid an electric shock.
8. Enhance public transportation and other alternative transportation options
- a. The Borough should conduct regular surveys to determine where Borough residents travel and under what circumstances they would choose public transport, and what type of services they would use.
 - b. Based on needs identified from the surveys, collaborate on regional transportation initiatives with the County and the State.
 - c. Encourage the further development of various transit services for the elderly, disabled, and other transportation-dependent people such as those too young to drive and people who do not own a car.
 - d. Explore the integration of public and private school transportation services with other transportation services to better serve the needs of the students and the community.
 - e. Encourage the expansion or development of private transportation services such as taxis, shuttles, carpools and app-based car services to reduce private car use.
 - f. Make information available to the public on transit services using print and electronic media.
 - g. Work with neighboring communities in Mercer and Somerset counties to encourage DVRPC's long-term goal to reestablish passenger train service between West Trenton and Bound Brook, with a station in Pennington if the landfill is removed.
9. The Borough should arrange for regular traffic and parking studies in and around Pennington and monitor changes to gauge the effectiveness of actions taken in response to the Mobility Plan.
- a. When the industrial and residential developments in the Township are completed, a comprehensive traffic study should be undertaken to provide recommendations for managing traffic in Pennington. This may be possible by comparing historical and ongoing traffic counts by the Delaware Valley Regional Planning Commission.
 - b. Route 31 traffic studies by DVRPC, the State or the County should be designed to generate data of use to Pennington Borough. Long-distance tractor trailer trucks should be counted separately from cars and local delivery trucks.
 - c. The Hopewell Valley Regional School District should prepare traffic projections based on student intake from surrounding areas. Items to address would be parking for student drop-off/pick-up at Toll Gate Elementary School, the impact of the Middle and High Schools on Route 31 and West Delaware intersection congestion,

- and the impact of the reduced availability of school buses in the Borough, and the effect of the cost to residents on bus use.
- d. The Borough should institute a monitoring program to measure the success of the strategies applied in traffic reduction and safety improvement.
 - e. The Economic Development Commission should conduct regular studies of business parking needs as businesses and conditions change.
 - f. Consider creating a Mobility Advisory Committee to gather and report the interests of gas/diesel vehicle owners, EV owners, pedestrians, bicyclists, personal mobility vehicle users.

3. Route 31 and its Issues

The section of Route 31 from Pennington Circle to North Main Street was originally constructed as a bypass around Pennington. It is currently a high-traffic commercial corridor. The prevalence of shopping centers and other commercial buildings with large, paved parking lots creates traffic congestion and frequent conflicts between vehicles and pedestrians., particularly at the West Delaware Avenue intersection. Congestion peaks during drop-off and pick-up hours at the Middle and High Schools. Recent storm events have also made this intersection prone to flooding.

As summarized in the introduction and reported in Appendix A, the Delaware Valley Regional Planning Commission (DVRPC) conducts regular traffic counts around the region, see website <https://www.dvrpc.org/webmaps/trafficcounts/>. Traffic counts for roads in and around Pennington are presented in Table A1 and on a schematic map of Pennington in Figure A1. From 9,000 to 9,500 vehicles per day join Route 31 northbound from Pennington Circle. Of these, around 8,400 travel as far as the North Main Street intersection, meaning around 800 leave Route 31 for destinations likely on the west side of Pennington. About 900 vehicles join Route 31 from North Main Street. About 3,200 vehicles leave or join Route 31 on Pennington-Hopewell Road, representing traffic passing on Route 31 through Pennington on the way to Hopewell Borough. The DVRPC database does not differentiate between cars and trucks and gives no information on seasonal or weekday-weekend differences. Such data would be useful. Figure A2 shows an hourly vehicle count for Route 31 and shows peaks of about 700 vehicles per hour in each direction in the morning and again in the afternoon.

Although only a half mile segment of Route 31 lies within Pennington Borough, it has a major impact on the Borough from Denow Road to North Main St. This corridor serves as the primary north-south artery and includes six gateways into the Borough: Pennington Road, Ingleside Ave, West Delaware Ave, Broemel Place, West Franklin Avenue and North Main Street. Route 31 is the main route out of the Borough to the south and the north. It is of vital interest to the well-being of the many Borough residents who frequent businesses at the Pennington Circle and at the Hopewell Crossing Shopping Center on Denow Road. Pennington Borough must work with Hopewell Township, Mercer County, NJDOT and DVRPC to ensure the interests and safety of the community.

Truck traffic on Route 31 is a major concern to Pennington Borough and Hopewell Township, and to Flemington Borough, Raritan and Somerville. Routes 31 and 202 provide the most

convenient route from I-95/I-295 to I-287/I-87 between the Atlantic states to the south and northern New Jersey, eastern New York, western New England and eastern Canada. Until 1979, through truck traffic was intended to be carried on interstate extension I-95/I-695 to be constructed from a junction north of Route 31 on I-95 (now I-295) to Route I-287. This project was de-designated in 1980 due to local opposition and one result is the current heavy truck traffic on Route 31. See: www.nycroads.com/roads/I-695_NJ/

The Mercer County Mobility Plan uses the de-designation of I-695 as a cautionary example regarding the need to preserve rights-of-way for transportation: “Preserving the possibility of future connections is one of the most important functions of this mobility plan. Several connections in this plan are almost inconceivable today, either because of current environmental regulations or stakeholder opposition. Conditions of the moment, however, should not forever preclude the possibility of a sensible project. For a cautionary example, the de-designation of an interstate link between I-95 in Hopewell Township and I-287 in Somerset County was hailed as a victory for preservationists in the 1970s. Today, the same groups rue the heavy truck traffic on US 206 and NJ 31 that the interstate link would have carried, and development has come anyway, filling in the proposed right of way. Seeking to avoid that fate, this plan identifies projects that may be highly desirable if conditions change.”

As input to this Mobility Plan, the 2002 Route 31 Design Study Report was reviewed to identify problems and recommend solutions that are still relevant to mobility today. The Report was prepared for Pennington and Hopewell Township by Dodson Associates with the aid of a Smart Growth Planning Grant and was released after three public meetings. See: <https://www.penningtonboro.org/DocumentCenter/View/697/2002-Route-31-Design-Study-PDF>

Proposals to widen Route 31 to speed up the flow of traffic from I-95 (now I-295) to Route 202 were discussed in the 2002 Study report and are a continuing concern. The existing Route 31 right of way can accommodate four lanes of traffic and widening has been discussed by NJ-DOT in the past. The 2024-2033 NJ-DOT Statewide Transportation Improvement Program (STIP) shows no proposals for Route 31, <https://www.nj.gov/transportation/capital/stip2433/sec3.shtm>. As voiced by the community at large during the public meetings held by Dodson Associates in 2002, an undivided four (4) lane highway is not acceptable to Pennington Borough and the surrounding community and will be opposed by Pennington Borough and Hopewell Township. However, it is classed by NJ-DOT as a desirable typical section of 4 lanes on the project plan Planned Projects Quadrant Map 5 in Appendix B of the Mercer County Master Plan.

The DVRPC conducts a Congestion Management Program (CMP) in accordance with Federal guidelines. Its latest report was in 2023, <https://www.dvrpc.org/reports/24135.pdf>. It explains what is meant by congestion, how it is measured, and how congested sites are ranked so that transportation funds can be most effectively used. It gives congestion data separately for Pennsylvania and New Jersey. Table 7 of the report shows 4 sections of Route 31 being classed as Focus Roadway Corridor Facilities out of 130 such sections in the five NJ counties in the DRVPC region. The section from CR 623 (Pennington Titusville Rd.) to CR 518 (Lambertville Hopewell Rd. is shown as somewhat congested. However, when other criteria are factored in, it gets a low ranking in the allocation of Transportation Improvement Program (TIP) resources compared with other congested sites in the region. A CMP Corridor and Sub-corridor Viewer

map can be found on <https://www.dvrpc.org/congestionmanagement/>. Clicking on 8C Pennington Borough brings up a “Click here” link to a table of strategies that can be tried to reduce congestion without TIP funding. This data has been copied into Appendix A, following the traffic data. The most promising statement is that it is in the top 20% of NJ sub-corridors for anticipated volume to capacity ratio (V/C) which suggests that it may be in line for funding in the long term. However, it also notes that given the levels of anticipated congestion, adding capacity to existing roads (e.g. 4 lanes for Route 31) and transit capacity-adding strategies are appropriate in this sub-corridor if strategies further up the list cannot adequately address problems without also mixing in new capacity.

Pennington Borough, Hopewell Township and Mercer County should bring their concerns about the Route 31 and West Delaware Avenue intersection to the attention of the DVRPC. As discussed in Section 8a, the DVRPC is currently updating the strategies in its long-range plan, Connections 2050, and is seeking public input on projects to be included in the Transportation Improvement Program (TIP). DVRPC has developed a performance-based Benefit Criteria Evaluation process for new project candidates. Seven benefit criteria are assigned weightings and are used to determine how candidate projects support federal Transportation Performance Measures and align with the vision and goals of the DVRPC plan. Of the seven, this intersection meets three; safety [27%], facility asset condition and maintenance (the frequent flooding) [22%] and reliability and congestion [11%] for an encouraging total weighting of 60%.

DVRPC’s long range plan, Connections 2050, presents a table and map of major regional transportation projects in the next 25 years. As discussed in Section 7c below, it includes the re-establishment of passenger service from West Trenton Station to Bridgewater, and on to Newark and New York. An innovative way to reduce truck traffic on Route 31 and Route 202 would be to upgrade this project to accommodate roll-on, roll-off “truck-trains” in addition to the passenger trains. The concept would be to rebuild the line as an electrified double track (it used to be double track until the 1980’s, so the track bed is wide enough) and build trains of roll-on, roll-off flat cars. The trains would need to run frequently to be an attractive alternative to driving Route 31/202 for truckers. The rail distance is 25 miles, which would take 30 minutes at 50 mph. The driving trip on Route 31 and Route 202 is 35 miles and takes 55 minutes off-peak. Reduction in fuel cost, driving time and driver stress may make it attractive to truckers and economically viable as an investment. The terminals at each end could be equipped with truck-rated chargers and hydrogen supply, overnight truck parking and food service. Trucks that use Route 206, Route 1 to Route 18, and other routes to and from the northeast may also find it attractive. This potential upgrade to their listed passenger train service re-establishment project should also be discussed with DVRPC.

Returning to the 2002 Route 31 Design Study, specific problems identified in the report that are still relevant today are as follows:

1. Rt. 31 divides the schools and library area to the west from the compact "walking village" of Pennington Borough to the east. Crossing Route 31 can be difficult and dangerous for pedestrians and cyclists, A safer crossing is needed for all and especially for students.

2. Delays of several cycles of the traffic lights on both Route 31 and West Delaware Avenue are experienced at peak hours - encouraging vehicles to seek alternate routes on local streets or County roads.
3. There is an opportunity to locate a new Pennington train station with parking on the east side of the landfill site, integrated with other developments on the site. Recent proposals called for a stop at the Merrill Lynch complex. If the landfill is reclaimed, it would be a good site.
4. Bicycles must compete for space with vehicles while waiting for signals and while riding across Route 31 on West Delaware.

The executive summary of the 2002 Route 31 Design Study report contained 19 general recommendations. The 5 that are still relevant to Pennington Borough today are summarized and edited here:

1. The priority should be to keep traffic on Route 31 rather than displacing it onto local or County roads.
2. Route 31 should not be a high-speed conduit for through traffic that cuts the community apart and requires screening and separation from the surrounding neighborhoods.
3. Prioritize improvement or elimination of dangerous conflicts in turning movements.
4. It is imperative to create a safe crossing at the intersection of Route 31 and West Delaware for pedestrians, bicycles, scooters, skateboards, etc. In 2002, there was much interest in the community in exploring either an aesthetically designed overpass or an underpass if it could be well lit, safe and deal with drainage problems at this low point intersection.
5. The Borough should link the Lawrence Hopewell Trail to Main Street. Facilities for safe and convenient bicycle parking should be provided to enhance commercial vitality in Pennington. Continuing the link along West Delaware Avenue and across Route 31 would help emphasize a unified center stretching to the schools.

It should be noted that 5 recommendations from the 2002 Route 31 Design Study report have been acted on, including those in Hopewell Township that have an impact on Borough residents:

1. The intersection of Route 31 and West Delaware Avenue now has left turn lanes in all four directions and left turn traffic lights. The lights are timed to allow simultaneous pedestrian crossings in all four directions, although there is still a risk of pedestrian conflict with cars turning left or right on a green light.
2. The speed limit in the Pennington Borough section of Route 31 is 35 mph.
3. The intersection of North Main Street and Route 31 now has pedestrian crossings controlled by traffic lights.
4. A concrete sidewalk now runs along the east side of Route 31 from the Pennington Golf Center north to West Franklin Avenue. There is no sidewalk on the west side of Route 31.
5. A full traffic light has been installed at the intersection of Ingleside Avenue and Route 31. The Great Western Bike Trail proposed by Mercer County made it essential to have a safe crossing of Route 31 at Ingleside Avenue.

The 2002 Route 31 Design Study report suggested that Hopewell Township and Pennington Borough should consider commissioning their own study of future transportation/land use growth for the New Jersey Route 31 corridor. This idea may be worth reviving in view of current

congestion and safety concerns, and the new industrial and residential development in the Borough and Township.

The Economic Development Commission has identified challenges for pedestrian, hiker, and cyclist to move between the Town Center and Route 31. Presently, the only available routes are the West Delaware Avenue bridge and the underpass on Broemel Place. These pathways are not pedestrian-friendly and lack the qualities that make travel pleasant or inviting. Residents also report it is difficult to cross West Delaware Avenue west of Burd Street. These obstacles discourage non-vehicular movement and impact the large number of individuals, including potential business customers, seeking to cross Route 31 to reach the HVRSD Campus. The Economic Development Plan offers strategies to address these concerns and improve connectivity for all users:

- i. The West Delaware and Broemel railroad crossings need to be improved, making them more welcoming to pedestrians and better lit.
- ii. New development and redevelopment (such as the former landfill area and the Blackwell property), should facilitate and encourage the creation of coordinated streetscapes and new, green, encouraging means for pedestrians and cyclists to move between the Town Center and residential areas, and the Route 31 Corridor, coordinating with the Pennington School and the CSX railroad as necessary.
- iii. Leverage the redevelopment of significant properties, such as the Landfill, and properties at the intersection of Route 31 and West Delaware Ave, to enhance storm water management and infrastructure improvements for pedestrians and bicycle linkages between residential areas, schools and commercial districts. This improvement would be a significant boost to businesses along Route 31, West Delaware Avenue, in the Landfill property, and even in Town Center, by connecting them to the large high school and middle school populations.

4. Bridges in Pennington

There are seven road bridges in Pennington Borough. All have deficiencies, due either to aging, or inadequacy for current needs. Three bridges are listed in the Federal Highway Administration (FHWA) National Bridge Inventory (NBI), the Pennington to Rocky Hill Road bridge over Stony Brook and the North Main Street and West Delaware Avenue bridges over the CSX railroad tracks. As described below, 2023 NBI inspections found all three to be deficient in several areas and recommended remediation work. The Stony Brook bridge is the responsibility of Mercer County, and the CSX bridges are with NJDOT. The bridge carrying the CSX tracks over Broemel Street is not in the NBI but does not look to be in good condition with spalling concrete clearly visible. It is also subject to frequent flooding under the bridge. Three aging bridges over Lewis Brook, on Green Street, North Main Street and Eglantine Avenue, also flood frequently and are under review by the County for replacement. There is also a tunnel carrying Lewis Brook under the railroad tracks just south of Broemel Place that is showing signs of damage and may be inadequate to carry the amount of water from storms like Ida (2021), resulting in overflow to Broemel Place. This section discusses the issues and concerns with these bridges.

a. Pennington to Rocky Hill Road bridge over Stony Brook

This bridge is structure 1100064 in the FHWA National Bridge Inventory. It was inspected in February 2023, and the results can be found in the inspection report summary at <https://infobridge.fhwa.dot.gov/Data/BridgeDetail/26236623> (click on NBI under the data tab on the left for data). The general condition of the bridge is Poor. The substructure is in good condition, the superstructure is in satisfactory condition, but the deck condition is serious. The bridge railings, guardrails and transitions do not meet currently acceptable standards. The deck geometry was appraised as intolerable and in need of corrective action with high priority. The report recommended that the bridge should be rehabilitated due to general deterioration. Responsibility for the work would lie with Mercer County.

The existing bridge provides little protection from motor vehicles for pedestrians and bicyclists crossing the bridge on the raised sidewalk to or from the end of the LHT Pennington Connector. The new bridge design should include a wider sidewalk, preferably with a protective guardrail. LHT has proposed a South Pennington Connector that will start by running from the bridge to Federal City Road along County land on the southeast side of the Pennington-Rocky Hill Road. This will require a road crossing for pedestrians and bicycles close to the bridge. The location and design of the crossing should be part of the bridge project. It would also enhance the safety of pedestrians and bicyclists if the 25-mph zone was extended some distance north of the bridge into Hopewell Township. Currently the speed limit is 45 mph on the bridge.

This bridge was built in 1987 and the type of service it was designed for was “highway-pedestrian”. The deck elevation was probably set to be above the 100-year flood as predicted at the time of construction. However, changing climate has resulted in more intense storms and the expected peak height for 100-year floods has been raised. In 2023 the NJ DEP adopted Inland Flood Protection rules that increase the extent of areas regulated by the NJ Flood Hazard Area Control Act. These new regulations increase the fluvial design flood elevation to 3 feet above the FEMA-mapped 100-year floodplain. The geographic extent of the new area has been estimated by Rutgers University and provided at <https://www.njfloodmapper.org/>. Figure 1 shows the map for Pennington in the area of King George Road and the Stony Brook bridge. Elevations of the new 100 -year flood height were determined by cross-referencing this map with a Google Earth Pro map and using its elevation tool. The flood height is about 149 feet and the current deck height is 145 feet, which suggests that when the bridge is rehabilitated, the deck should be raised by a minimum of 5 feet. The low point in the road just north of the bridge is 143 feet. The elevation of the approach roads also needs to be raised if flooding is to be avoided. The minimum elevation of King George Road would need to be raised to over 150 feet on the approach to the bridge to avoid flooding.

The County is in the process of designing a new Stony Brook bridge. It is not known whether the new flood height estimates are being taken into account in the design. It is of interest that the maximum flood elevation during tropical storm Ida on September 1, 2021, reached the rear deck of 113 Lewis Brook Road between 10 and 11 pm, as video-recorded by the owner. As shown in Figure 1, that deck is 151 feet elevation, which suggests that tropical storm Ida was already a future 100-year flood and more like Ida will be experienced during the life of the new bridge.



Figure 1. NJ flood elevation (2023) flood in the area of the Stony Brook bridge.

b. North Main Street bridge over the CSX railroad tracks.

This bridge is structure 1150161 in the FHWA National Bridge Inventory (NBI). It was inspected in October 2023, and the results can be found in the inspection report summary on <https://infobridge.fhwa.dot.gov/Data/BridgeDetail/26236744> (click on NBI under the data tab on the left for data). The general condition of the bridge is Fair. The structural evaluation said the bridge is equal to the present minimum criteria and the deck geometry is the minimum tolerable. It noted the lack of sidewalks on either side and described the approach alignment as being intolerable and in need of corrective action with high priority. The report recommended that the bridge should be widened. Responsibility for the work is with NJDOT.

This bridge was built in 1996 and the type of service it was designed for was “highway”. The other two NBI bridges were designed as “highway-pedestrian”. In 1996, Pennington Point was under construction but there was little else that would generate pedestrian traffic on the bridge. There has been considerable development since, to the west the Tree Farm shopping and office areas in 2001-2003, Pennington Public Works in 2006, and Heritage from 2014, and to the east Silo Road from 2000. If the bridge were to be designed now, it would likely be for highway-pedestrian service. Since the improvements recommended are deck widening and realignment, it would be reasonable to request that NJDOT upgrade the bridge to highway-pedestrian and include protected pedestrian/bicycle lanes on both sides.

An alternative to adding pedestrian/bicycle lanes to a wider deck could be to use the piers from the previous road bridge, just north of the current bridge, to support a new pedestrian/bicycle bridge connecting the Baldwin Lake Preserve and the Borough Public Works property. The bridge could be similar in design to the steel bridges on the LHT in Rosedale Park. It would be in Hopewell Township but both Borough and Township residents would benefit, and it could become part of a western extension of the LHT. The County has 20+ feet of right-of-way to the east of North Main Street, giving enough room for realignment and a sidewalk.

Until the bridge is modified, there is a significant hazard to pedestrians and bicyclists from the lack of dedicated, protected sidewalk on the sharply curved bridge. In the near-term, pedestrian warning signs could be installed at both ends of the bridge to alert drivers to the hazard. The speed limit on the bridge is 25 mph, but the short sightlines still make it dangerous.

c. West Delaware Avenue bridge over the CSX railroad tracks

This bridge is structure 1150160 in the FHWA National Bridge Inventory (NBI). It was inspected in October 2023, and the results can be found in the inspection report summary on <https://infobridge.fhwa.dot.gov/Data/BridgeDetail/26236745> (click on NBI under the data tab on the left for data). The general condition of the bridge is Fair. It has a timber frame and the deck structure is wood with a bituminous surface. The structural evaluation said the bridge is equal to the present minimum criteria, but the deck geometry appraisal is intolerable and in need of corrective action with high priority. The bridge railings, guardrails and transitions do not meet currently acceptable standards. The report recommended that the bridge should be widened. Responsibility for such work lies with NJDOT.

The bridge was built in 1914 and refurbished in 1975. and the type of service it was designed for was “highway-pedestrian”. Observations of the bridge are as follows:

- i. The wooden railings on the sides of the bridge do not appear to be strong enough to prevent a vehicle involved in a glancing accident at the top of the bridge from falling onto the railroad tracks, possibly leading to derailment of a train passing under the bridge. They also do not appear to be designed to protect children from fitting through the gaps. Railing design rules are given in the NJ DOT Design Manual for Bridges & Structures, <https://www.nj.gov/transportation/eng/documents/BSDM/pdf/2016DesignManualforBridgesandStructures20210729.pdf>.
- ii. Clearer sightlines to westbound towards traffic stopped at the Route 31 traffic light and to eastbound traffic turning right into the Pennington School are needed.
- iii. The bridge does not appear to be safe for pedestrians, bicyclists, and personal mobility users. Existing sidewalks are narrow and not protected from vehicles by a guardrail.
- iv. The bridge is surrounded on three corners by woodland and if a forest fire occurs in the area, its timber frame and wooden deck could be threatened.
- v. There is an exposed steel pipe on top of the bridge that should be better protected.

If NJDOT begins a study on upgrading the bridge to address the NBI recommendations, the above observations should be brought to their attention by the Borough.

The west side of the bridge leads to the proposed Crossroads-Business (C-B) zone created to recognize that addressing the serious concerns of congestion, safety and flooding at the

intersection of Route 31 and West Delaware Avenue may have land use implications. It would include Block 201, Lots 5, 6 and 7, Block 206, Lot 1, Block 501, Lots 1-4 and Block 502, Lot 2 and the portion of Lot 1 that lies within the Borough. It is recommended that since NJDOT has responsibility for both the West Delaware Avenue railroad bridge and the Route 31 intersection, that an integrated project should be considered to optimize any redesign of the bridge and the intersection for congestion reduction and the safety of pedestrians, bicyclists and personal mobility vehicle users. The road between the bridge and the intersection is County Route 624 and Mercer County would also be involved.

d. The CSX bridge over Broemel Place

According to the plate on the side of the railroad bridge over Broemel Place, it was built in 1937. This bridge is not listed in the National Bridge Inventory. A casual observer may conclude from the damage to the exposed concrete that the bridge is in a state of disrepair. Unlike road bridges over the railroad, which may be repaired or replaced by the transport authority responsible for the road (NJDOT for the two bridges discussed above), the inspection and maintenance or replacement of bridges carrying the railroad over a road or waterway are the responsibility of the railroad owner, CSX in this case.

A 2007 report to Congress from the U.S. Government Accountability Office (GAO) on the Federal role in providing safety oversight of railroad bridges and tunnels does not offer much hope for having the bridge repaired or replaced, see <https://www.gao.gov/assets/gao-07-770.pdf>. The “Results in Brief” summary of the GAO report contains the following: “Freight railroads use bridge and tunnel condition along with other information, to set investment priorities to generate the greatest private return on their investment. Bridge replacement has a lower rate of return, making it more likely that railroads would invest in other enhancements before rehabilitation or replacement of railroad bridges. The federal role in overseeing railroad bridge and tunnel safety is limited because the Federal Railroad Administration (FRA) has determined that railroads responsible for bridges and tunnels are sufficiently ensuring these structures’ stability.” The report also states that 50% of the current bridges were built before 1920.

The FRA issued non-regulatory safety advisory 2007-03 on bridges, which recommended annual inspections and reports. The reports are not made public, but the Borough could ask (possibly through NJDOT) for the report on the Broemel Place bridge to assure the public that the bridge is safe. Presumably there is also a report on the Lewis Brook tunnel to the south of Broemel Place. It appears in an 1887 “bird’s eye” sketch of Pennington by T. M. Fowler (Fig. 6.3 in Hopewell: A Historic Geography by Hopewell Township Historic Sites Committee, 1990) so it may be over 140 years old. It looks to be in reasonable shape but may be too small to carry the water from future storms, resulting in water overflowing into Broemel Place.

If the bridge is deemed safe, the Borough may propose a “beautification” project to repair the damaged concrete exterior for CSX consideration. CSX rules for construction and improvement projects that may involve the railroad can be found in their online Public Project Manual. If a beautification project is approved, the manual states that CSX do not pay for such projects: <https://www.csx.com/index.cfm/library/files/about-us/property/public-project-manual/>

e. Bridges over Lewis Brook on Green Street, North Main Street and Eglantine Avenue.

The County is planning to replace all three of these bridges due to their age and dilapidation and because they play a role in flood control. There is no question that they should be replaced, but there is an argument to be made to integrate the design of all three at the same time to manage flood control in that section of Lewis Brook. The elevations of the end points of this section of the brook are 172 feet for the roadbed under the Broemel Place railroad bridge down to 156 feet in the streambed to the east of the Eglantine Avenue bridge. The distance between these two points is ~1900 feet, giving an average gradient of a gentle 0.8%. Critical elements for each bridge are the cross-sectional area to manage the flow volume and the elevation of the stream bed to optimize flow rate across the section.

Each bridge has its quirks:

The Green Street bridge is a partial arch with too little depth to accommodate water flow during a major storm. The backed-up water causes a 4-foot deep flood under the Broemel Street bridge and can only escape towards the Blackwell property by sheet flow across a ~200 foot length of Green Street. Simply replacing the bridge under Green Street will not solve the flooding problem under the Broemel Place bridge as the rectangular tunnel under Broemel Place is too small for the flow coming from the landfill and the pipe carrying stormwater from Route 31 north of the Neurosciences building and from the Straube area is too small. These overflow under the Broemel Place bridge and will continue to cause flooding there. The complex of bridge, pipe and tunnel needs to be considered together to eliminate flooding.

The North Main Street bridge may have sufficient cross-sectional area to carry the Lewis Brook flow but is compromised because much of the flow bypasses the entrance to the bridge. It is supposed to flow under the garage near the bridge, but the pipe is too small for heavy storms. The excess water takes two routes, either across the garage forecourt or down Brookside Avenue and then recombines as sheet flow across North Main Street. The flooding problem in this area and stretching all the way back to Green Street will not be solved until the brook is daylighted all the way to the western inlet of the bridge.

The Eglantine Bridge may need a larger cross-sectional area to carry predicted heavy storm flow and it also has an inlet flow restriction problem. The brook flows into two pipes under the back yards of 20 and 22 East Franklin Avenue and the pipes are too small for heavy storm flow. The excess water floods the back yards of the two properties and continues as sheet flow across Eglantine Avenue. This flooding problem will only be solved if the pipes are replaced by a larger culvert to the bridge inlet, or the brook is daylighted.

5. Complete & Green Streets and Vision Zero

Pennington Borough adopted a customized version of the NJDOT Complete & Green Streets policy in 2016. New Jersey has been recognized as a national leader for advancing Complete Streets, which promote safety for pedestrians, bicyclists and other users of New Jersey roadways. NJDOT adoption of a Complete Streets policy in December 2009 made New Jersey one of the

first ten states in the nation to make Complete Streets an official internal policy. Mercer County adopted a Complete Streets policy in 2012 and incorporated it into its Mobility Plan Element as revised in 2016 (see Section 8c).

The NJDOT policy requires that future roadway improvement projects include safe accommodation for all users, including bicyclists, pedestrians, transit riders and the mobility impaired. Roads should be built to safely accommodate a variety of transportation modes and users of all ages and abilities. Complete & Green Streets are planned, designed, and constructed to blend with the local community, while meeting transportation needs.

Complete & Green Streets improve safety by providing pedestrians, bicyclists, and drivers with adequate facilities and by reducing travel speeds so that all users can safely use the streets together. Complete Streets improve mobility and accessibility by enhancing the quality and availability of the connections between residences, schools, parks, public transportation, offices, and retail destinations. A walkable community improves overall quality of life by creating an environment where people are encouraged to interact and develop a sense of community.

A review of safety research by the Federal Highway Administration (FHWA) found that a variety of facilities commonly found in Complete & Green Streets design (e.g., marked crosswalks, raised medians, pedestrian refuge islands, traffic control devices, careful bus stop placement, safe routes to school, traffic-calming measures, continuous sidewalks, and walkways, etc.) can serve as efficient countermeasures to pedestrian accidents. Bicyclists and other low-speed vehicle users also benefit from Complete & Green Streets due to slower traffic speeds and the provision of low-speed vehicle-friendly facilities. The benefits of Green Streets also come from the use of green infrastructure (e.g., street trees, rain gardens, permeable pavement, etc.) to manage stormwater and reduce flooding.

The NJDOT Complete & Green Streets program falls under the NJFIT (NJ Future in Transportation) initiative. A complete description of the Complete & Green Streets model policy, along with model resolutions and model ordinances can be found in:

https://www.nj.gov/transportation/eng/completestreets/pdf/CS_Model_Policy_2020.pdf .

A Complete & Green Streets policy includes several elements; traffic calming, streetscaping, sidewalk plan and pedestrian mobility, and bicycle and other low-speed vehicle paths:

a. Traffic Calming and Streetscaping

Traffic calming strategies and techniques are important for enhancing the safety of pedestrians and users of bicycles and personal mobility vehicles by controlling traffic speed and increasing awareness of other road users. They help to maintain the residential character of Borough streets and can provide clearly marked pedestrian access routes between residential neighborhoods and local facilities, including schools, shops, recreational facilities, and open space outside the Borough. The Borough has initiated the use of roadway modifications such as “chokers” that reduce the width of the road at pedestrian crossings. Other modifications such as raised crosswalks and speed bumps should be considered.

Street trees, especially with branches that overhang the street, can have a calming effect on traffic. The Shade Tree Committee should continue its work to maintain and replace trees lining Borough streets and should continue to work with the County to maintain and replace trees on County roads in the Borough. All streets in the Borough would benefit from a consistent tree maintenance policy. However, accommodating the road, parking spaces, sidewalks, and future bikeways within the right-of-way of Main Street and Delaware Avenue is a challenge that is made difficult by the location of the large trunks of older trees. The root systems of these trees can cause the sidewalk to become uneven and dangerous. In some cases, the trunks are so large that the sidewalk needs to be narrowed. As these large trees die or are removed, the location and eventual size of replacements should be considered as part of the design plan for mobility. This is addressed to a certain extent in Goal 3 “Maintain public safety by reducing hazardous trees and conflicts” in the Pennington Borough Community Forestry Management Plan, which is not part of the Master Plan.

Street lighting, landscaping and furniture (streetscape) play a role in calming traffic and enhancing the pedestrian environment in the downtown area. New sidewalks, decorative streetlights, signs, and benches have been added in the past and this program of beautification should be continued. Enhanced lighting and walkability will support both residents and visitors, encouraging appreciation of the district’s historical assets.

Speed limits play a major role in traffic calming, especially when enforced as the police try to do in Pennington. The speed limit in the Borough is 25 mph with one exception, Green Street, which is 30 mph. It is the only street in town with a higher speed limit, even though it is bounded by a Pennington School playing field used recreationally by children of all ages. The start of the 25-mph limit on South Main Street northbound is marked but the sign is partially hidden by a tree branch. The location of the change from 25 to 35 mph going south on South Main Street towards the Circle is unclear as there is no sign on the opposite side of the road from the northbound 25 mph sign. The Borough boundary is just south of Vannoy Avenue, so that is where the 25 mph to 35 mph likely takes place. This should be clearly marked.

The Borough should consider adopting a uniform 25 mph zone with clear zone markings at every gateway. There are 8 “gateways” to Pennington. From Route 31 they are Ingleside Avenue, West Delaware Avenue, Broemel Place, West Franklin Avenue and North Main Street. From the east are Pennington Rocky Hill Road at King George Road and Federal City Road at West Delaware Avenue. From the south is South Main Street at Vannoy Avenue. In addition to these speed measures, the Borough should consider cohesive wayfinding signage at these entry points to reinforce the transition into a slower paced, pedestrian friendly and multimodal environment. For reference, the UK Department for Transport’s Circular 01/2013 Revised 2024, is an example of an integrated approach using consistent gateway signage and speed-management practices: <https://www.gov.uk/government/publications/setting-local-speed-limits/setting-local-speed-limits> . The signage could be modeled on the growing number of “20 mph zones” in the UK that clearly indicate a change in road character, but in Pennington’s case would be 25 mph. These often have colored markings and symbols on the roadway in addition to clear speed limit signs on both sides of the road. Specific rules on speed limit signs and road markings can be found in Section 8 of <https://assets.publishing.service.gov.uk/media/5c78f895e5274a0ebfec719b/traffic-signs-manual-chapter-03.pdf> .

The Borough should work with Hopewell Township to extend the zone markings and signs to all Township streets that can only be accessed through the Borough.

b. Pedestrian, Bicycle, and Personal Mobility Vehicle Routes

The Borough's limited right-of-way on local and County roads requires a cohesive, integrated network of roadways, sidewalks and bikeways. In most of the Borough there is not enough room for separate bikeways, and in several locations narrow roadways with parking spaces are hazardous for other than the most experienced bicyclists. In practice, Borough sidewalks are frequently used by bicycles and other personal mobility vehicles. New Jersey law does not prohibit bicycles or low-speed personal mobility vehicles on sidewalks, but NJ DOT policy discourages bicycles except for young cyclists. Municipalities are allowed to regulate this, but Pennington Borough Code has no such regulations. Safety remains a priority and bicyclists should yield to pedestrians on sidewalks. Sidewalk redesigns should ensure that pedestrians can be protected from bicycles and personal mobility vehicles. Prioritizing pedestrian safety does not mean other vehicles are not important or considered; it means the Borough desires to be a place where safety, comfort, and livability for all ages and abilities is of the utmost concern. Facilitating travel to and through the Borough by means other than conventional cars and trucks will contribute to the feeling of community.

To promote and encourage personal mobility, the Borough should:

- Design and develop a safe, convenient Borough-wide network of pathways for pedestrians, bicycles, wheelchairs and other personal mobility vehicles. Eliminate gaps in the current network that prevent a continuous route to destinations such as schools, businesses, churches, recreational facilities, parks, and open space outside the Borough.
- Indicate clearly which roads are part of the share-the-road programs and evaluate the efficacy of shared lane markers and best practices.
- Designate safe walking, bicycling and low-speed personal mobility vehicle routes to schools, which will benefit children and their parents alike by inculcating healthy habits and independence for the students and reducing the need for parents to chauffeur their children to and from the school and other destinations around town.
- Ensure that the network of pathways is well-maintained year-round and kept clear of obstructions for the safety of users.
- Provide safe and ADA-compliant crosswalks at roadway intersections or intermediary points, where appropriate, especially on routes to schools. Crosswalks should incorporate contemporary best practices, e.g. high visibility signaling and traffic-calming technology to maximize safety for pedestrian and bike/personal mobility.
- Encourage walking and alternate vehicle use for local trips to mitigate roadway congestion and parking demand issues in the downtown core.
- Educate pedestrians, bicyclists, motorists, and other users about the rights and responsibilities of those using Borough roads and other pathways safely. Promote mutual respect among all roadway users through education, enforcement, and encouragement.
- Provide street furniture appropriate to pedestrian and bicyclist needs.
- Develop a downtown bicycle parking plan with appropriate zoning standards.

It is the policy of the previous Borough Master Plan that high volume streets have sidewalks on both sides and that low volume streets, such as cul-de-sacs, loop, and other non-through streets have sidewalks on at least one side, where consistent with potential usage, available right-of-way, environmental concerns, and engineering constraints. This policy is continued in this Plan.

The Borough should update the Circulation/Sidewalk Plan map from the 1998 Master Plan that shows the location of all existing and proposed sidewalks and bikeways in the Borough as of 1998. This update should also indicate where future sidewalks/bikeways and crosswalks could be constructed as funding permits. Priority should be given to the completion of missing links in existing sidewalks and to connecting sidewalks to existing or planned open space pathways.

As noted in the Open Space and Recreation Plan element, the LHT is planning to construct the South Pennington Connector to link the LHT with the Pennington neighborhoods south of East Delaware Ave. It would consist of:

- A crosswalk across East Delaware Avenue at its intersection with King George Road.
- A new bicycle-capable trail along the southeast side of East Delaware Avenue from Stony Brook to the intersection of East Delaware Avenue and Federal City Road. This can be an off-road trail because the land is owned by the County.
- A crosswalk across Federal City Road at that intersection to the fire road access to Presidential Hill.
- Surfacing the fire road up to Madison Avenue, from which cyclists and pedestrians can safely use neighborhood streets to the southeast quadrant of Pennington.

The Greater Mercer Transportation Management Association (GMTMA) published its Greater Mercer Trails Plan in November 2019, see: https://gmtma.org/wp-content/uploads/2020/02/gmtn_report_final_updated_print-v2-1.pdf . This report is a valuable resource on existing trails and future trail plans. Chapter One summarizes engagement and collaboration efforts to understand and evaluate vision, goals, and priorities. Chapter Two establishes the region's baseline conditions and context, and defines mobility and safety needs, existing barriers and constraints, and opportunities for improvement. Chapter Three presents the Framework Plan with hundreds of proposed individual actions to improve multimodal mobility and safety. Chapter Four documents the prioritization methodology and Implementation Matrix of proposed improvements.

A recent addition to the Mercer County Master Plan is the 2020 Bicycle Master Plan <https://www.mercercounty.org/home/showpublisheddocument/19206/63735261860000000> .

The New Jersey Bicycle and Pedestrian Master Plan describes initiatives to promote walking and bicycling by providing technical and financial aid. The Borough should consult this plan as it designs and implements its network of pathways. See: <https://www.nj.gov/transportation/commuter/bike/pdf/bikepedmasterplanexecsumm2016.pdf#:~:text=The%20New%20Jersey%20Bicycle%20and%20Pedestrian%20Master%20Plan,are%20route%20convenient%20and%20secure%20throughout%20the%20state> .

It recommends that sidewalk and bikeway improvements should be implemented when:

- Roads are due for resurfacing or other routine maintenance
- Grants or other funding is available

- Programs are developed that support a walking and bicycle friendly community and encourage more people to walk or bicycle as a means of daily transportation.

c. Borough Roadway Improvements

In addition to recommendations specific to Route 31 detailed in Section 3, there are improvements that should be considered for Borough streets and County roads:

- The recent realignment and traffic signal timing at the intersection of Main Street and Delaware Avenue has created multi-light-change delays for traffic on Main Street in peak periods. The delays are due to traffic trying to turn left onto East or West Delaware Avenue being prevented from turning by oncoming traffic on both South and North Main Street. Traffic also backs up due to the elimination of the right turn from South Main to East Delaware. The consequence is that many drivers bypass the intersection using Abey Drive and Eglantine Avenue. Some strategies to address this might include, but are not limited to, creating divided light timing for Main Street traffic as is done for Delaware Avenue traffic and creating a left turn lane on northbound South Main Street so that straight ahead and right-turn traffic can proceed without waiting for left-turning cars. This problem is acute for northbound traffic on South Main Street at peak periods and is exacerbated by the (necessary) traffic light hold for pedestrians to cross.
- The bridge replacement planned by Mercer County over Stony Brook on Pennington to Rocky Hill Road should be designed and built to accommodate safe bicyclist and pedestrian crossing of Stony Brook on both sides of the road. It is the sole connector between Pennington Borough and the Lawrence Hopewell Trail (LHT).
- Stormwater and flooding should be investigated and addressed, including the extent of flooding experienced during tropical storm Ida in 2021 and Debby in 2024 on Abey Drive, Broemel Place, Knowles Street, Eglantine Avenue, King George Road and North Main Street.

6. Parking

Anecdotally, parking in the Town Center is perceived as insufficient for local business needs. The Economic Development Commission (EDC) should survey local businesses to quantify this issue, identifying the specific volume and duration of parking required. This analysis should distinguish between all-day employee needs, short-term customer turnover, and the long-term requirements of Town Center residents. The EDC should determine if parking constraints act as an impediment to new business investment. Any proposed parking solutions must prioritize compatibility with the district's historic setting.

Upon completion of the parking study, the Borough should evaluate creative strategies to expand capacity where deficits are identified. This could potentially include a shared parking program, enabling entities with excess capacity, such as religious institutions, schools, and private businesses, to offer public parking. Additionally, the Borough should explore the potential of physical expansion through strategic partnerships or land-use agreements, as well as evaluating the rear-lot portions on the west side of South Main Street to create a centralized public parking

asset. All new parking infrastructure must prioritize pervious materials and design standards compatible with the historic district.

On Main Street and Delaware Avenue, narrow rights-of-way can create conflicts between parked vehicles, cyclists and personal mobility users. Since these corridors are direct routes for travel, the Borough should investigate traffic calming and Complete Street strategies.

7. Zero-GHG-Emission Vehicles

An essential contribution to mitigating the effects of climate change is to limit the emission of greenhouse gases from human activity. Recognizing that cities and states throughout the U.S. are adopting greenhouse gas emission reduction targets and strategies, Pennington Borough Council resolved in Resolution 2021-3.4 that:

1. The Environmental Commission will be responsible for reporting to Council on an annual basis the amount of carbon released by the Borough and the amount of carbon offset.
2. The Environmental Commission will assist the Borough in developing strategies to migrate away from carbon energy sources.
3. Pennington Borough will become Carbon Neutral in all of its operations by 2035.
4. The Environmental Commission will use the Borough's efforts to become carbon neutral as a way to educate and encourage Borough residents and businesses to become carbon neutral.

In response to item 4, the Environmental Commission, with Council approval, will develop a Community Energy Plan following a template developed by Sustainable Jersey under a grant from the New Jersey Clean Energy Program (NJCEP). The template lists seven strategies, the first of which is to reduce energy consumption and emissions from the transportation sector. The transportation strategy contains the following elements:

1. Adopt supportive zoning and regulations for EV infrastructure.
2. Install public chargers and encourage workplace EV charging infrastructure.
3. Improve municipal fleet efficiency and purchase alternative fuel vehicles.
4. Train first responders and non-emergency staff on EVs and charging equipment.

If Borough residents converted to EVs, it is possible to reduce the Borough's annual CO₂e (carbon dioxide equivalent) emissions by over 7,000 metric tons per year, 2.5 tons per year per resident. This is 25 times larger than the reduction of 276 tons that can be achieved by making all municipal operations carbon neutral. See Appendix C for details.

It should be noted that there are two other zero-GHG emissions technologies that are competing with battery-electric vehicles. Both are based on green hydrogen, which can be produced by electrolysis of water using solar or wind electric power generated in excess of grid demand. The first hydrogen technology is the fuel cell, which uses electrochemistry to combine hydrogen with oxygen from the atmosphere to generate electricity and water. The electricity produced will charge a battery and drive an electric motor. The second technology uses hydrogen directly in an internal combustion engine, which could be either a piston engine or a gas turbine. Hydrogen is under test for use in buses, trucks, and rail. These contribute about 25% of the CO₂e emissions,

or about 10 MMT CO₂e in New Jersey. Whilst Pennington is not home to many trucks or buses, hydrogen filling stations should be considered along with EV battery charging on Route 31.

Two issues being addressed by the EV industry are increasing the energy storage density of batteries to increase range, and battery recharging time. To compare EV to gasoline charging times, the 10 gallons needed for a range of 300 miles with the 30-mpg car takes about a minute to pump at a gas station. For the EV average 2.9 kWh/mile, a charge of 103 (300/2.9) kWh is needed. Appendix C calculates the time needed to deliver 103 kWh for each of the three classes of EV charger:

- Home Level 1 Charger: 120V 20A = 43 hours per 300 miles range
- Home Level 2 Charger: 240V 40A = 11 hours per 300 miles range
- Commercial Level 3, NJ: 480V 310A = 40 minutes per 300 miles range
- Commercial Level 3, max: 480V 730A = 18 minutes per 300 miles range

The actual charging time depends on the EV's battery control system, so times may be longer. Also, the total number of Level 3 charges during the lifetime of an EV battery may be limited due to the high electric current. The analysis tells us that a 120 V Level home charger would only give a range of about 80 miles after an overnight 12-hour charge. This may be sufficient if all car use is local and infrequent, but for many users, a Level 2 charger is needed.

There are currently some financial incentives for Level 1 and Level 2 charger installations in New Jersey. Details can be found on the DEP website <https://dep.nj.gov/drivegreen>. PSE&G, which serves Pennington Borough, has an Electric Vehicle (EV) Charging Program to support the deployment of residential, mixed-use (commercial), and public Direct Current Fast Charging (DCFC) electric vehicle chargers for a broad range of customers.

A development that is gaining traction is the concept of bidirectional charging. This comes in various forms, vehicle to grid (V2G), vehicle to home (V2H), vehicle to load (V2L), vehicle to vehicle (V2V) and vehicle to everything (VTX). V2G allows utility companies to use EV batteries as a supplemental storage capacity for the grid. Electronic control and smart meters can balance energy withdrawals from car batteries to meet high demand, while charging to meet the anticipated needs of drivers. Avoiding charging in periods of high demand and high cost and promoting off-peak charging at a reduced cost provide economic incentives to V2G EV owners. V2H allows a car battery to be used in place of a fossil-fueled generator to provide power to a home during power outages. It can also be used to replace high-cost, peak demand electricity for powering a home with power from the EV battery and recharging the EV when the grid cost drops. This too will need a smart meter and support from the utility. Pennington Borough should canvas PSE&G for this capability for its residents. V2L allows camping and outdoors equipment to be powered from the EV battery and could be of value to contractors working in remote locations. In both cases it could replace gasoline-powered generators. V2V allows the transfer of charge from one vehicle to another and could help those who run out of charge on the road. V2X does not yet exist but is proposed.

Amendments to the Municipal Land Use Law adopted in August of 2021 included many provisions specific to the installation of electric vehicle supply equipment. The details can be

found in the 2023 Pennington Borough Master Plan Reexamination report, Section C8, Electric Vehicles.

The landscape for personal EVs is changing dramatically. All major domestic and foreign automobile manufacturers have EVs in their portfolio and there is significant growth in the industry. Tariffs have been imposed and proposed to protect domestic manufacturers in many countries, including the US. There is tremendous academic and commercial innovation on EV drive train design and batteries, and the market is continually changing. Competition is fierce and prices are dropping, while quality, reliability and vehicle capabilities are improving. Some states are introducing regulations to limit or eliminate the sale of new fossil fueled cars by a certain date. Under its Zero Emission Vehicle (ZEV) rules, New Jersey has set 2035 as the last year for the sale of new fossil fueled cars and light trucks, which necessitates the installation of charging stations in homes and public places soon.

Commercial charging stations in the country are becoming profitable as the number of EVs increases, and private investment is taking the place of state-led initiatives. Energy companies such as BP (BP Pulse) and Shell (Shell Recharge) are dedicating forecourt space at gas stations to Level 3 fast chargers, as well as installing standalone charging locations. ExxonMobil has not yet shown signs of interest, but the Exxon gas station at Route 31 and West Delaware may be an option for fast chargers in Pennington. There is a move to harmonize the charging infrastructure so that EVs from different manufacturers will be able to recharge at any charging station.

There is also a need to increase the capacity and robustness of the grid to supply the electricity needed for the growing EV fleet, both personal and commercial, and for the switch to electricity for many domestic and commercial applications. Pennington Borough can only advocate in support of this. Without it, the grid is in danger of becoming unstable in periods of high demand.

A final area to consider is safety. It is generally considered to be safe to charge an EV in an attached garage at home if the charger is installed correctly, used correctly, and maintained periodically. Installation is covered by the NJ Uniform Construction code. The Borough should request that EMS and Fire Department volunteers and professionals receive training and the correct equipment to deal with EVs involved in accidents. Guidance should be offered to Public Works staff if they have problems with the Borough's EV fleet or are the first to arrive at an accident scene and offer help. Similar guidance could also be offered to residents.

The Borough needs to be flexible and nimble with regulations to keep up with rapid developments in the EV field. We should consider allowing EV repair and maintenance facilities to locate in the Borough as these would have minimal impact on the environment and would be good business opportunities. We should educate our residents that as the EV fleet grows, it will be necessary for the state to charge EV owners annually to pay for roads as revenue from the gasoline tax declines.

8. Public Transit

The Greater Mercer Transportation Management Association (GMTMA) was established in 1984, and consists of large and small employers, local governments, authorities and state agencies who share a commitment to providing transportation choices that are good for commuters, good for business and good for the environment. Their website <https://gmtma.org> has links to a variety of publications and services. GMTMA publishes a Mobility Guide for Mercer County annually. It gives links to timetables, transportation company websites and transport apps. Under community transportation, it covers the following options available to Pennington residents, Mercer County T.R.A.D.E., Hopewell Valley Rides, RideProvide, and Medicaid transportation provided by Modivcare.

While high-frequency transit is most effective in dense urban centers, suburban communities like Pennington Borough rely on a mix of personal vehicles, regional rail, and ride-share services. The personal vehicle remains the primary mode of transportation due to the Borough's low-density surroundings. However, transit is a competitive alternative for long-distance trips, factoring in cost of fuel, tolls, parking fees, and the connections to regional rail hubs and airports.

The Borough should conduct a survey to determine where people travel and under what circumstances they would choose public transport and what type of services they would use. With this data, collaboration on regional transportation initiatives with the Delaware Valley Regional Planning Commission, Hopewell Township, Mercer County and the State will be possible. Below is a summary of current public transit options serving Pennington.

a. Bus Route

The Borough is currently served by NJ Transit Bus route 624, which runs between Pennington and Plum St. at Enterprise Avenue in East Trenton via the Trenton Transit Center. There are 17 services on weekdays running hourly from Pennington from 5:20 am to 8:20 pm with a late bus at 9:50 pm, and 6 services on Saturdays, every two hours between 8:00 am to 6:00 pm. Holiday services are as for Saturdays with the addition of a 6:00 am bus. There is no service on Sundays. Buses circulate with return service from Trenton to Pennington after a waiting time of about 15 minutes at Plum Street. The waiting time at Broemel Place in Pennington is about 40 minutes.

The Trenton Transit Center (TTC) serves as a vital multimodal hub for the Borough, providing access to Amtrak, NJ Transit, SEPTA, and the River Line. To increase ridership and provide a viable alternative to the \$20 daily parking fees at the TTC, the Borough should advocate for service needs to encourage ridership, which might include frequency and expanded weekend service.

The Borough should evaluate the feasibility of recapturing underutilized layover time by extending service into the northern section of the Borough, potentially in a loop incorporating Broemel Place, Green Street, Franklin Avenue, Eglantine Avenue, King George Road and East Delaware Avenue.

The Borough should evaluate potential improvements to the rider experience and promote transit as a primary mode of travel. Borough bus stops lack shelter. The NJ Transit Shelter Program will provide for the cost and installation of bus shelters via municipal resolution if a local sponsor assumes maintenance and liability.

b. Mercer County T.R.A.D.E.

Mercer County T.R.A.D.E. (Transportation Resources to Aid the Disadvantaged and Elderly) provides transportation services to Mercer County residents who are senior citizens (60+) or people with disabilities or are economically disadvantaged. Trips are either by subscription or on demand as needed and reservations must be made in advance by phone. Trips are free but there is a \$1.00 suggested donation. This service should be promoted within the Borough.
<https://www.mercercounty.org/departments/human-services/aging-disability-resource-connection/trade-division>.

c. Hopewell Valley Rides

Hopewell Valley Rides is a transportation service offered by Hopewell Township. It is available to residents aged 60+ and adults with disabilities within Hopewell Valley (Pennington, Hopewell Borough, Hopewell Twp.) Wheelchair accessible service is available. Rides are provided by car through the RideProvide program. After registering, eligible residents can purchase vouchers for \$5 per one-way trip. Rides can be requested by calling RideProvide 48 hours in advance to ensure availability. Rides are available from 8:00 am to 5:00 pm Monday through Friday. Free trips are provided to and from Princeton Healthcare System facilities and RWJ Hospital and other select facilities. A brochure on the service can be found at:
<https://www.hopewelltp.org/DocumentCenter/View/129/Hopewell-Valley-Rides-Brochure-PDF>

d. Passenger Rail

While the Borough does not have direct rail service, it is strategically positioned within reach of three major regional transit hubs. The Trenton Transit Center is a primary multimodal hub offering local, Northeast Corridor, and long-distance travel. The West Trenton Station provides a direct connection via the SEPTA West Trenton line, offering a commuter route to Center City Philadelphia. Hamilton Station serves as a high-capacity NJ Transit facility on the Northeast Corridor, utilized by residents for its extensive parking and direct services. These stations provide essential links for commuters and long-distance travelers to the Philadelphia and New York metropolitan areas.

The Borough should continue to advocate for the re-establishment of passenger service on the CSX line from West Trenton to Bridgewater (and on to Newark), which is listed on the Delaware Valley Regional Planning Commission's Table of Major Regional Projects (<https://www.dvrpc.org/webmaps/mrp2050/#page2>) [enter West Trenton in the webpage filter to find this quickly]. It is shown as an illustrative project under Transit Expansion that needs to occur in the next 25 years but has not yet been moved into the Transportation Improvement Program (TIP). It is also shown on the DVRPC map of projects

<https://www.dvrpc.org/webmaps/mrp2050/#map>. Since DVRPC only covers Mercer County, it only mentions future stations near I-295 in Hopewell Township and in Hopewell Borough, but it is likely to include one or more stations in Somerset County. The table shows a cost estimate of ~\$700 million. The Borough should advocate the DVRPC for a strategically located passenger rail station in Pennington Borough, potentially in conjunction with the landfill redevelopment, instead of the Merrill Lynch site.

An interesting discussion on the history and issues of the West Trenton to Bound Brook and Bridgewater rail line can be found online in <https://railroad.net/reviving-passenger-service-between-west-trenton-bound-brook-t8100-270.html>. Passenger trains last ran on this line in 1981 and there was no stop in Pennington. CSX may resist this change because the overhead electric catenary does not provide enough clearance for their double-decker freight trains. The SEPTA and CSX tracks south from West Trenton were separated recently for this reason. However, two-way scheduling should be easier for CSX with a return to double track and CSX could run the truck trains for profit.

The Borough should engage in a public engagement survey, including residents of Pennington Borough, Hopewell Township and Somerset County for community feedback on reactivation of passenger rail lines, and should stay up to date with the matter through GMTMA or DVRPC.

9. Relationship with Regional Transportation Plans

a. Delaware Valley Regional Planning Commission (DVRPC)

DVRPC is the federally designated Metropolitan Planning Organization (MPO) for the Greater Philadelphia region, established by an Interstate Compact between the Commonwealth of Pennsylvania and the State of New Jersey. Pennsylvania members are Bucks, Chester, Delaware, Montgomery, and Philadelphia counties, plus the City of Chester. New Jersey members are Burlington, Camden, Gloucester, and Mercer counties, plus the cities of Camden and Trenton. DVRPC serves strictly as an advisory agency. Any planning or design concepts as prepared by DVRPC are conceptual and will require engineering design and feasibility analysis. Actual authority for carrying out any planning proposals rests solely with the governing bodies of the states, local governments or authorities that have the primary responsibility to own, manage or maintain any transportation facility.

DVRPC's vision for the Greater Philadelphia Region is a prosperous, innovative, equitable, resilient, and sustainable region that increases mobility choices by investing in a safe and modern transportation system; that protects and preserves our natural resources while creating healthy communities; and that fosters greater opportunities for all. DVRPC's mission is to achieve this vision by convening the widest array of partners to inform and facilitate data-driven decision-making. They are engaged across the region, and strive to be leaders and innovators, exploring new ideas and creating best practices. DVRPC provides services to member governments and others through planning analysis, data collection, and mapping services. Aerial photographs, maps and a variety of DVRPC publications are available to the public. The DVRPC traffic count

data was used in the analysis in Appendix A, as discussed in Sections 1 and 3 above and the DVRPC emissions report results are mentioned in Section 6.

As an MPO, DVRPC conducts the regional Congestion Management Program in accordance with Federal guidelines. Its latest report was in 2023, <https://www.dvrpc.org/reports/24135.pdf> and the current recommendations for Pennington Borough are discussed in Section 3 above. An update to DVRPC's current strategic plan, Connections 2050, was adopted in September 2025 and can be found on <https://www.dvrpc.org/plan/>. The Plan serves as a blueprint for prioritizing \$78 billion in capital transportation investment in the region by 2050. It considers future population growth, economic trends, environmental concerns, and technological advancements to guide investments in roads, public transit, biking, walking infrastructure, and other transportation modes.

As a member of the DVRPC, Pennington is also a member of the Central Jersey Transportation Forum (CJTF) formed in 1999, <https://www.dvrpc.org/centraljerseytff/>. CJTF strives to integrate land use and transportation among municipal and county leaders at the border of two Metropolitan Planning Organizations in the Central Jersey area. Facilitated by the DVRPC in coordination with the North Jersey Transportation Planning Authority and New Jersey Department of Transportation, this partnership has maintained progress toward coordinated land use and transportation planning and development, information sharing and collaboration, and the exchange of information and resources. continue this participation to gain technical assistance and influence regional transportation issues.

b. Hopewell Township Master Plan

Since all traffic entering and leaving Pennington Borough does so through Hopewell Township, the Circulation Plan element of the Township's Master Plan and this Mobility element should be largely in agreement on traffic management issues. In addition, since a much larger stretch of Route 31 is in Hopewell Township, any proposals for Route 31 will impact Pennington. The current version of the Township's Master Plan was adopted in May 2002. It can be found at <https://www.hopewelltp.org/DocumentCenter/View/856/Master-Plan-2002-PDF>. The Master Plan did not include a circulation plan element, but 12 transportation goals were presented, the first of which was to develop a circulation plan. A Circulation Plan was adopted in March 2006: <https://www.hopewelltp.org/DocumentCenter/View/8613/Circulation-Plan-Element---Adopted-March-9-2006>. The Route 31 aspects of the Plan build off the recommendations in the 2002 Route 31 Design Study, discussed in Section 3 above. There was also a positive discussion on the merits of reestablishing passenger trains on the West Trenton line. At the time it was shown as an NJ Transit candidate project. A Master Plan reexamination report was adopted in December 2021: <https://www.hopewelltp.org/DocumentCenter/View/8410/2021-Periodic-Reexamination-of-the-Master-Plan-and-Development-Regulations-PDF>. The only additions to circulation in the reexamination report were related to the Lawrence Hopewell Trail.

c. Mercer County Master Plan

The Mercer County Master Plan was adopted in September 2010 and amended in May 2016. The Master Plan and associated plan elements were developed after three public meetings held in

2006/7, resulting in a Regional Action Plan (RAP). The framework document can be found at: <https://www.mercercounty.org/home/showpublisheddocument/1242/636058423221200000>

Mercer County's vision for balanced growth throughout the county focuses on four outcomes, two of which concern transportation:

- Adequate level of housing choice and affordability that makes it possible for residents to live in the county throughout their lives.
- Adequate transportation and housing choice to maintain an educated workforce and a stable economy.
- Enhanced core transportation corridors through the implementation of access management, connectivity, and wise land use decisions.
- Continued strategic investment in open space and recreational facilities so that residents and employees enjoy enhanced quality of life in the county.

The Master Plan is divided into three sections; economy, transportation and environment. Under transportation, the key findings from the RAP meetings were

1. Commute times continue to increase.
2. People live further from their jobs or are commuting on congested roads.
3. The automobile continues to dominate personal transportation while public transit usage remains limited.
4. Land use patterns contribute to roadway congestion, auto dependency, and demand for public transit.

Key goals identified were

1. Enhance travel options.
2. Encourage land uses to support transit.
3. Improve social equity in access and mobility.
4. Manage congestion.

The following introduction to Transportation Policies and Strategies is taken directly from the Master Plan Framework document:

“Mercer County is closely linked to a growing global economy through its transportation network. The variety of existing transportation options in the county contributes to residents’ quality of life. The county will continue to invest and maintain investments in existing roads, bridges, and airports, and strategically invest in future public transportation projects in order to move people efficiently to and from destinations within the county and beyond to support regional economies.

With aging infrastructure and the increasing costs associated with construction of new roads and bridges, there is an increasing opportunity to improve roadway capacity on existing roads especially where they service redevelopment and new development resulting in centralized land use patterns.

The availability and accessibility of a variety of transportation options for residents and workers in the county, including site conditions that encourage pedestrian activity, is a critical element to

successful, sustainable mixed-income housing development. Planning for denser housing near transit service not only reduces roadway congestion but also addresses social equity objectives by providing mobility and access for population segments with no access or limited access to automobiles and for those populations who have no desire for an auto-dependent lifestyle.

Recognizing that not all workers will live where they work, transportation policy encourages expansion of existing public transportation capacity and roadway improvements that support commuters and appropriately direct freight movement through the county to surrounding metropolitan areas. County input on the effect of state and federal road improvements, especially those directly connecting the surrounding metropolitan areas of Philadelphia and New York City, on county travel patterns will continue to be needed as capital investments are made in the future to support economic growth statewide.”

Policies developed for transportation are as follows.

1. Direct growth to transit corridors and centers.
2. Promote compact design, walkable and mixed-use centers, that support transit.
3. Match jobs to housing to reduce long auto commutes to work.
4. Promote strategic capacity expansion to support compact development and multimodal options.
5. Promote county road access management to enhance safety and capacity.

Strategies associated with these policies may be found in the online Framework document.

The County Mobility Plan was also adopted in September 2010 and amended in May 2016:

<https://www.mercercounty.org/home/showpublisheddocument/1250/636058423231670000>

The County is working on an update to the Plan and Pennington Borough has been invited to participate in the process.

Section 4 of the Mobility Plan details policies and associated strategies. The policies are

1. Preserve existing transportation facilities.
2. Improve safety for all travelers.
3. Promote choice of travel mode.
4. Promote land uses that reduce reliance on automobiles.
5. Link transportation improvements to economic and environmental goals.

Strategies associated with these policies may be found in the online Mobility Plan document.

Observations from the County Mobility Plan of relevance to Pennington are as follows:

1. *“Preserving the possibility of future connections is one of the most important functions of this mobility plan. Several connections in this plan are almost inconceivable today, either because of current environmental regulations or stakeholder opposition. Conditions of the moment, however, should not forever preclude the possibility of a sensible project. For a cautionary example, the de-designation of an interstate link between I-95 in Hopewell Township and I-287 in Somerset County was hailed as a victory for preservationists in the 1970s. Today, the same groups rue the heavy truck traffic on US 206 and NJ 31 that the interstate link would have carried, and development has come*

anyway, filling in the proposed right of way. Seeking to avoid that fate, this plan identifies projects that may be highly desirable if conditions change.”

2. Route 31 is classed by NJ-DOT as a desirable typical section of 4 lanes on the Planned Projects Quadrant Map 5 in Appendix B. No proposed projects are shown for Route 31.
3. Under Policy 3, Promote choice of travel mode, Freight: Work with NJDOT, DVRPC, and municipalities to develop standard routes for freight vehicles, both through the county and to destinations within the county, including retail and commercial and industrial sites, distribution centers, and intermodal facilities.

d. New Jersey Department of Transportation (NJDOT) Long Range Transportation Plan

The current New Jersey mobility plan is the State Long-Range Transportation Plan (SLRTP), published in October 2008 with the title “Transportation Choices 2030”. It can be found at <https://www.nj.gov/transportation/works/njchoices/pdf/2030plan.pdf>. The goals of the plan are given in Section 5 and are reproduced here with the associated policies. Strategies for each policy can be found in Section 5 of the plan.

- 1) Maintain and renew transportation infrastructure
 - Fix it first
 - Fix it efficiently
 - Back to basics
- 2) Integrate transportation and land use planning
 - Champion smart growth
 - Create better "tools"
- 3) Increase safety and security
 - Make travel safer
 - Reduce risk
- 4) Improve mobility, accessibility, and reliability
 - Counter congestion with multimodal solutions
 - Improve connections
- 5) Operate efficiently
 - Reduce delay
 - Give customers choices
- 6) Respect the environment
 - Promote environmental stewardship
 - Enhance quality of life
- 7) Optimize freight movement
 - Increase freight system capacity and efficiency
 - Integrate freight into transportation and land use planning
 - Target investments in key freight hubs and corridors
- 8) Continue to improve agency effectiveness
 - Enhance interagency coordination
 - Improve customer satisfaction
 - Deliver projects and services on time and within budget

The State is currently working on an updated plan “Keep It Moving NJ!” aimed at 2050 <https://www.nj2050lrtp.com>. No release date for the plan has been given. NJDOT describes the plan as *“a forward-thinking initiative to consider current challenges and anticipate future needs, ensuring that our transportation infrastructure remains robust and resilient. By developing this plan, we aim to create a sustainable and adaptable transportation network that promotes safety, reduces congestion, supports economic growth, and improves the overall well-being of our citizens for decades to come.”* They are currently obtaining input from the public and the themes under consideration can be found in the first question of their online survey:

“NJDOT and NJ transit have proposed the following goals for New Jersey. Which three are most important to you?:

- 1) Maintenance
 - Keep our transportation infrastructure (roads, bridges and public transportation), facilities and equipment in good condition.
- 2) Eco-friendly
 - Promote a more environmentally friendly transportation system.
- 3) Effectiveness
 - Improve the effectiveness of transportation agencies.
- 4) Accessibility
 - Expand equitable access to jobs and services through transportation, especially in areas that do not have as many resources.
- 5) Resilience
 - Ensure that the transportation system can withstand climate change, extreme weather conditions and emergencies.
- 6) Partnership
 - Integrate transportation and land use planning
- 7) Safety
 - Enhance safety and reduce traffic deaths
- 8) Mobility
 - Make travel more accessible, easier, and reliable
- 9) Goods movement
 - Identify opportunities to move freight more efficiently
- 10) Efficiency
 - Operate the transportation system efficiently.”

In its Mobility Plan, Mercer County describes its relationship with NJDOT as follows:

“NJDOT is a primary partner with Mercer County for local project implementation through its local aid formula funding (state funds) for bridge and highway maintenance. NJDOT is also a very active participant in developing DVRPC's TIP, since most federal funding goes to projects on state-maintained interstates and federal highways. County participation and support for these projects is vital because federal and state highways are the primary links in the county's transportation network.” This relationship is key to projects on State Route 31 in Pennington and Hopewell Township.

10. Relationship with Other Plan Elements in Master Plan 2025

The Mobility Plan impacts and is impacted by other Master Plan elements as follows:

Land Use Plan Element. This plan relates to the Borough's zoning and potential redevelopment areas. Mobility needs will be impacted by the Borough's development and redevelopment plans. Land required for suggested improvements in roads, sidewalks and trails will need to be incorporated in the Land Use Plan.

Housing Plan Element. The borough has identified areas of redevelopment which have the opportunity for high density housing, including affordable. The impact of these developments on highway access and increased traffic volume needs to be considered in the Mobility Plan. The Plan also should keep abreast of development in areas surrounding the Borough, which may have an impact on Borough traffic and require remediation.

Utility Services Plan Element. The implementation and maintenance of many of the goals and strategies of the Mobility Plan will be the responsibility of the Department of Public Works. We need to be mindful of the capacity of the Department to do this work and build it into the Utility Services Plan. The impact of Mobility projects on local taxes needs to be kept under control so we may retain the diverse age of population we have now instead of people moving away once their children are gone. The Municipal Stormwater Management Plan (MSWMP) is not part of the Master Plan but is referenced in the Utilities Plan. The goals of the MSWMP must be respected when considering mobility infrastructure changes. Improvements close to waterways or wetlands, such as bridge or culvert replacements, should include restoration of the natural systems in the scope of work, where appropriate. Heavy rainfall and flooding, damage from severe storms, and pollutant infiltration from road runoff may impact the operation of Borough utilities.

Economic Development Plan Element. This Plan considers all aspects of commerce and economic development in the Borough. Effective and diverse mobility options are an important piece of economic activity. Parking is critical and a balance of the needs of residents, employees and customers will need to be found. There is also an opportunity to reduce the amount of impervious coverage for parking by replacing it with pervious cover to improve groundwater replenishment and reduce flooding. Many such opportunities exist with business parking.

Open Space and Recreation Plan Element. This Plan makes recommendations on improving access to local recreation facilities and open spaces. These are mostly for cyclists and pedestrians and often require dedicated trails or road lanes. The Mobility Plan and the Open Space and Recreation Plan need to be consistent.

Conservation Plan Element. Conflicts between the Mobility Plan recommendations and the Conservation Plan need to be avoided. The Conservation Plan incorporates the Borough's Community Forestry Management Plan by reference and many of the Borough's trees grow on the rights-of-way of Borough and County Roads. The desire for shade trees and Mobility Plan strategies for space for pedestrians, bicyclists and other personal vehicle users should be consistent.

Green Buildings and Environmental Sustainability Plan Element (GBESE). Several goals and strategies in the GBESE are aimed at reducing the Borough's contributions to climate change. Section D of the GBESE is Land Use and Mobility. The goals in this section and in the Mobility Plan should be consistent. The GBESE includes the Community Energy Plan under development and a significant part of that plan is focused on transportation energy use and greenhouse gas emissions. The goals of the Mobility Plan and the Community Energy plan must be consistent.

Historic Preservation Plan Element. The Pennington Historic Commission supports the aim to enhance mobility but underscores the need to integrate mobility enhancements with the preservation of the Borough's historic character. Improvements in pedestrian and bicycle infrastructure within and around the Historic District should align with Complete Streets policies, ensuring that new facilities respect the district's aesthetic while improving safety and connectivity. Parking solutions within the district should prioritize compatibility with its historic setting. Measures such as strategically placed EV charging stations must balance modern mobility needs with the preservation of historical integrity. Additionally, careful planning is required to address the potential impacts of increased traffic from regional developments, ensuring the Historic District remains accessible without compromising its charm or safety.

Appendix A. Traffic data in and around Pennington

The Delaware Valley Regional Planning Commission (DVRPC - <https://www.dvrpc.org>) presents traffic counts on its website. DVRPC is the federally designated Metropolitan Planning Organization for the Greater Philadelphia region, established by an Interstate Compact between the Commonwealth of Pennsylvania and the State of New Jersey. It includes Mercer County.

Regional traffic count data is available on <https://www.dvrpc.org/webmaps/trafficcounts/>. It can be searched by municipality or Zip Code. Traffic counts are reported as Annual Average Daily Traffic (AADT), which represents an estimate of all traffic during a 24-hour period at the location indicated for the year in which it was collected. AADT counts for roads in and around Pennington have been extracted from data for Zip Code 08534 and presented in Table A1. Traffic counts are a daily average based on counts taken over three to five days, depending on location. All counts were taken midweek. Counts are given in both directions for each road. The DVRPC count does not differentiate between cars and trucks. Such data would be useful. The month each count was taken is shown on the table. Most are between March 2022 and March 2025, which are post-Covid, but one set was from June 2020 (West Delaware Avenue), which may have been affected by Covid restrictions. This count was taken June 16-18. The last day of school was June 17, so it only partially included school traffic.

The counts have been added to a schematic map of Pennington in Figure A1. Counts in and out of each junction do not sum exactly as they were done on different dates for different roads. However, a general picture of traffic flow in Pennington can be discerned. Around 8,500 vehicles per day join Route 31 northbound from Pennington Circle. Of these, ~7,800 travel as far as the North Main Street intersection, meaning ~700 leave Route 31 for destinations in Pennington. About 900 vehicles join Route 31 from North Main Street. About 3,200 vehicles leave or join Route 31 on Pennington-Hopewell Road, representing traffic passing through Pennington on the way to or from Hopewell. Around 3,000 vehicles per day enter Pennington via Pennington Road from Pennington Circle. Most of these travel as far as the Main Street traffic lights at Delaware Avenue. About 3,300 vehicles per day pass in each direction on East Delaware Avenue heading to Pennington-Rocky Hill Road.

The DVRPC daily data is generated from hourly counts which allows the visualization of how traffic is distributed during the day. Figure A2 shows three examples: southbound Route 31, north of Pennington-Harbourton Road; westbound East Delaware Avenue, east of Main Street; and northbound South Main Street, north of Curlis Avenue. All show morning and afternoon peaks with lesser peaks around lunchtime. Peaks for Route 31 are just under 700 vehicles per hour, Delaware Avenue 300 per hour and northbound Main Street 350 cars per hour. The Borough should explore with DVRPC the opportunity to gather additional data.

The New Jersey Office of Information Technology (NJOIT - data.nj.gov) also provides annual average daily traffic by location (county and municipality) and route. See: <https://data.nj.gov/Transportation/Annual-Average-Daily-Traffic-by-Location-and-Route/dfun-zupj>. Data was collected between 2016 to 2019. We chose to use the more recent DVRPC data.

Figure A1. DVRPC Annual Average Daily Traffic counts presented on a schematic map of Pennington

Annual Average Daily Traffic (AADT) is an estimate of all traffic during a 24-hour period at the location indicated for the year in which it was collected. AADT counts for roads in and around Pennington have been extracted from data for Zip Code 08534 and presented in Table A1.

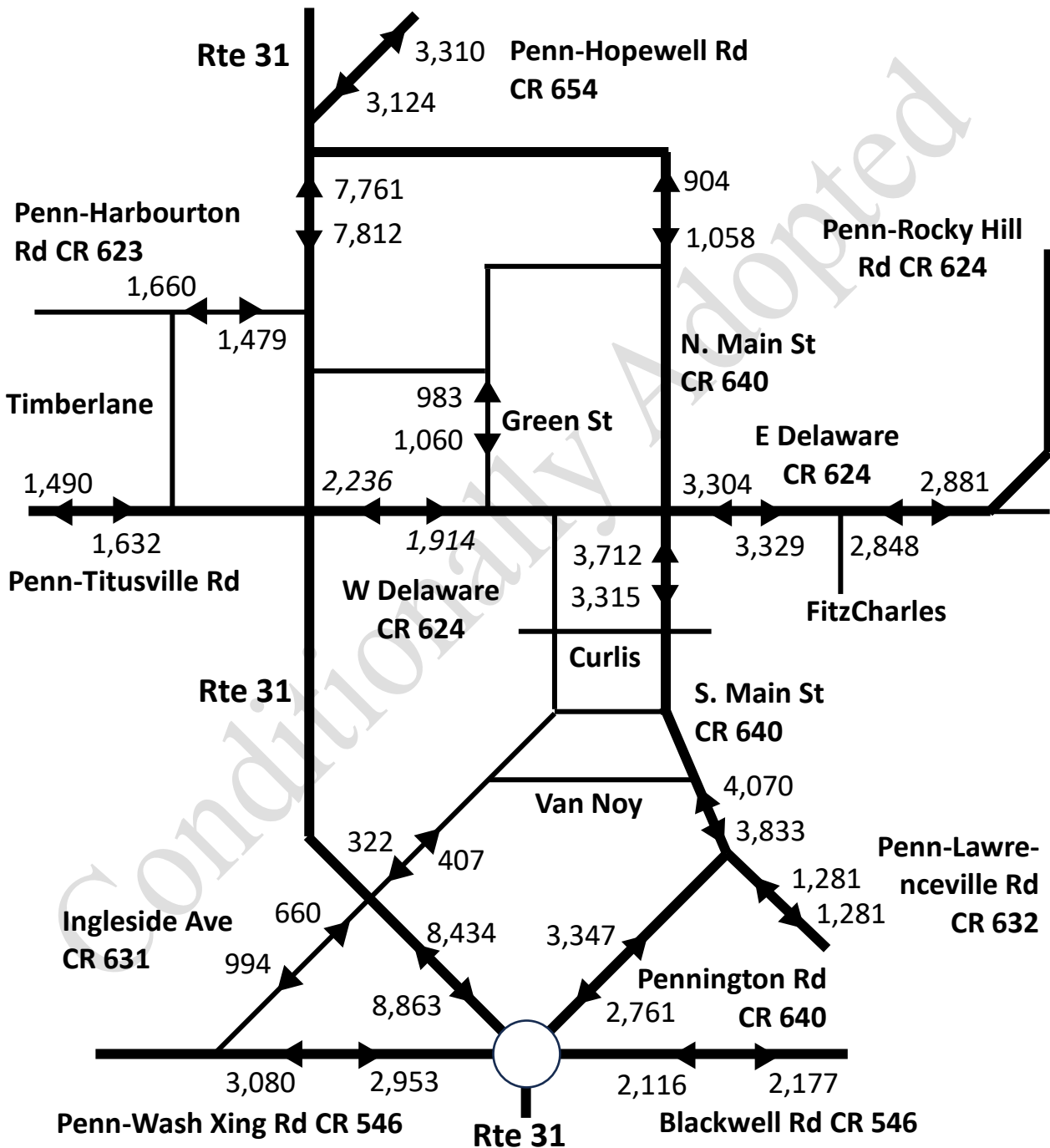


Figure A2. DVRPC hourly traffic counts for three roads

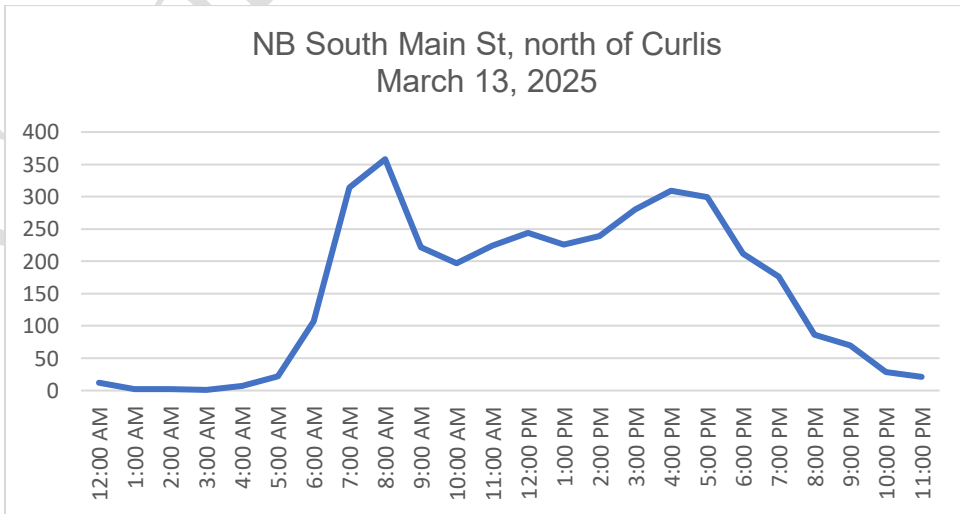
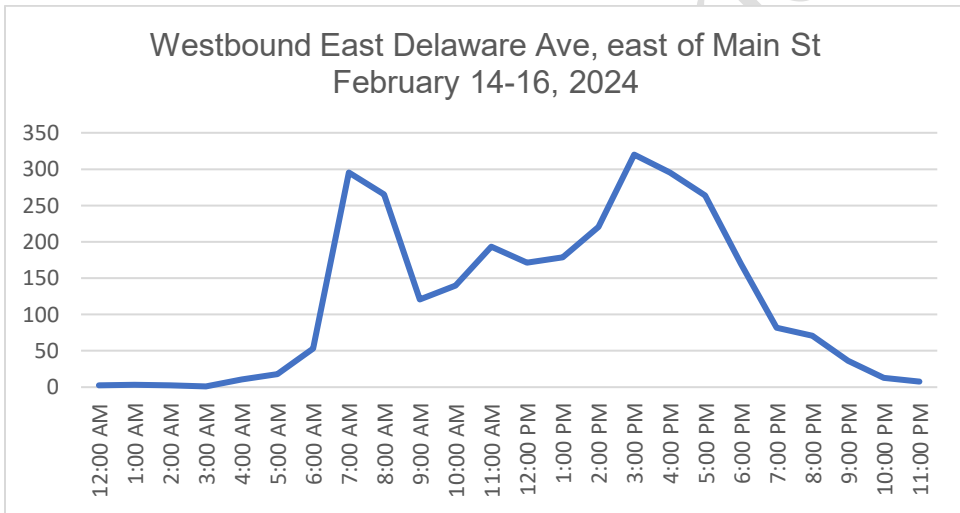
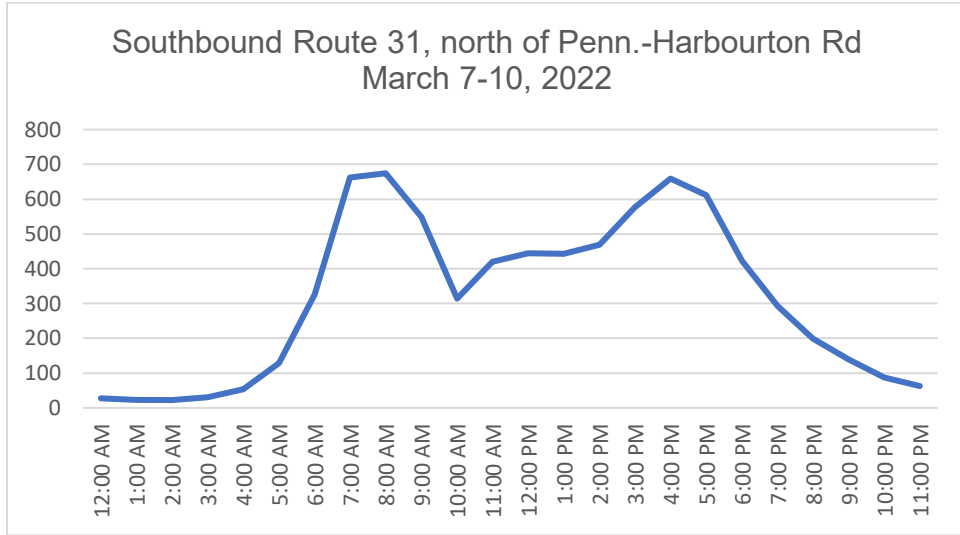


Table A1. Vehicle counts from the Delaware Valley Regional Planning Commission<https://www.dvrpc.org/webmaps/trafficcounts/>

Road	Location	Veh./day	Month
NJ 31 - SB	North of West Franklin	7,812	Mar-22
NJ 31 - NB	North of West Franklin	7,761	Mar-22
NJ 31 - SB	South of Search Ave	8,863	Mar-22
NJ 31 - NB	South of Search Ave	8,434	Mar-22
Pennington Titusville Rd - WB	West of Timberlane	1,490	Feb-24
Pennington Titusville Rd - EB	West of Timberlane	1,632	Feb-24
W Delaware Ave - WB	West of Green St	2,236	Jun-20
W Delaware Ave - EB	West of Green St	1,914	Jun-20
Green St - SB	South of Broemel Place	1,060	May-23
Green St - NB	South of Broemel Place	983	May-23
E Delaware Ave - WB	East of Main St	3,304	Feb-24
E Delaware Ave - EB	East of Main St	3,329	Feb-24
CR 624 (E Delaware Ave) - SB	East of Fitzcharles	2,848	Feb-24
CR 624 (E Delaware Ave) - NB	East of Fitzcharles	2,881	Feb-24
CR 640 (N Main St) - SB	South of Railroad Pl	1058	Mar-25
CR 640 (N Main St) - NB	South of Railroad Pl	904	Mar-25
CR 640 (S Main St) - SB	North of Curlis	3,315	Mar-25
CR 640 (S Main St) - NB	North of Curlis	3,712	Mar-25
CR 640 (S Main St) - SB	South of Vannoy	3,833	Mar-25
CR 640 (S Main St) - NB	South of Vannoy	4,070	Mar-25
CR 640 (Pennington Rd) - SB	North of the Circle	2,671	Feb-24
CR 640 (Pennington Rd) - NB	North of the Circle	3,347	Feb-24
CR 631 (Ingleside Ave) - SB	North of Search Ave	984	Mar-25
CR 631 (Ingleside Ave) - NB	North of Search Ave	660	Mar-25
CR 631 (Ingleside Ave) - SB	West of Vannoy	322	Mar-25
CR 631 (Ingleside Ave) - NB	West of Vannoy	407	Mar-25
CR 654 (Pennington Hopewell Rd) - SB	North of Woosamonsa	3,124	Mar-23
CR 654 (Pennington Hopewell Rd) - NB	North of Woosamonsa	3,310	Mar-23
CR 623 (Pennington Harbourton Rd) - WB	East of Timberlane Dr	1,660	Mar-25
CR 623 (Pennington Harbourton Rd) - EB	East of Timberlane Dr	1,479	Mar-25
CR 546 (Pennington Wash Xing Rd) - WB	West of Dublin Rd	3,080	Mar-25
CR 546 (Pennington Wash Xing Rd) - EB	West of Dublin Rd	2,953	Mar-25
CR 546 (Blackwell Rd) - WB	East of Circle	2,116	Feb-24
CR 546 (Blackwell Rd) - EB	East of Circle	2,177	Feb-24
CR 632 (Pennington Lawrenceville Rd) - WB	North of Blackwell	1,281	Mar-25
CR 632 (Pennington Lawrenceville Rd) - EB	North of Blackwell	1,281	Mar-25

The DVRPC Congestion Management Process (CMP) analysis of Pennington is as follows:

Corridor 8, Sub-corridor C: Pennington Borough

This sub-corridor area includes Pennington Borough, which has a mix of main street/village and strip development patterns. It is impacted by through truck traffic on NJ 31. It is in the top 20% of NJ sub-corridors for anticipated volume to capacity ratio (V/C), transit score and land use centers.

Priority Congested Corridor and Sub-corridor Area: **No**

Congested Corridor and Sub-corridor Area with Major single-occupant vehicle (SOV) Capacity-Adding Strategies: **No**

Very Appropriate Strategies

1. Signal Improvements
Strategies, ranging from basic to sophisticated, that improve the efficiency of signals individually and in systems. This includes specific applications, such as for pre-emption for emergency vehicles or buses.
2. Improve Circulation
Strategies designed to move more vehicles through the existing road system, often using engineering approaches.
3. Walking and Bicycling Improvements
These are strategies to reduce congestion and promote livability by making it safer and more convenient to travel by walking and bicycling.
4. Turning Movement Enhancements
Strategies to reduce congestion and crashes through safer turning movements.
5. Land Use/Transportation Policies
Strategies that reduce congestion by changing land use and development patterns to encourage mobility options and limit new trip generation.
6. Transportation Services for Specific Populations
This is the provision of services that addresses specific needs or populations and includes employer-supported shuttles for employees. It also includes services oriented towards senior citizens and persons with disabilities.

Strategy Notes

1. Proposed walking and bicycling improvements as part of the Great Western Bikeway project near Pennington.
2. Given the levels of anticipated congestion, adding capacity to existing roads and transit capacity-adding strategies are appropriate in this sub-corridor if strategies further up the list cannot adequately address problems without also mixing in new capacity.
3. Placemaking and non-motorized transportation for corridors like this one that are high in land use centers.

Appendix B. Review of Pennington Circulation Plan components from the 1998 Master Plan and the 2005, 2013 and 2023 Reexamination Reports

1998 Pennington Borough Master Plan, pages 14-15

<https://www.penningtonboro.org/DocumentCenter/View/690/1998-Master-Plan-PDF>

The following is a summary of the concerns and suggestions in the 1998 Plan:

1. Increased truck traffic on Route 31 since I-287 was completed in northern New Jersey was a concern. A suggestion about widening Route 31 in the Borough and adjacent areas was not deemed acceptable. The existing right of way can accommodate four lanes of traffic. Widening of Route 31 has been part of the State Highway master plan for many years, but no implementation date has been set.
2. Merrill Lynch and Bristol Myers Squibb will likely increase traffic on Borough streets. The Borough should work with the Township, Mercer County, and NJDOT to develop solutions to reduce this impact. Solutions included providing alternate routes and discouraging through traffic with traffic calming techniques.
3. A Town Center Area Concept Plan map suggested an access road to link Green Street with an expanded Town Center parking lot. A walkway/bike path from Borough Hall to Broemel Place and sidewalk to Green Street was also suggested.
4. Street trees, especially with branches that overhang the street, can have a calming effect on traffic. It is recommended that the current excellent street planting program be augmented with an expanded effort to plant additional trees on those streets with high traffic. Special consideration would be given to the main entrances to the Borough, e.g. North and South Main, East and West Delaware, Ingleside, and West Franklin.
5. The 1998 Plan contained a "Circulation and Sidewalk Plan" map. The policy of the Plan is that high volume streets have sidewalks on both sides and that low volume streets, such as cul-de-sacs, loop, and other non-through streets have sidewalks on at least one side. Also shown on the map is a walkway/bike path linkage between Curlis Avenue and Welling Avenue, using the former Baldwin Boulevard right-of-way.
6. It was recommended that the more intensively used crosswalks be designated by permanent crosswalk "pavers."
7. The reactivation of passenger service had been proposed for the West Trenton line. Possible sites for a new station should be explored.

The actions that have been taken regarding 1998 recommendations are as follows:

1. A bike/sidewalk connection from North Main Street to the proposed (Township) development on the west side of Route 31 was installed, with a traffic light.
2. A "four way" pedestrian crossing was implemented at the intersection of Main Street and Delaware Avenue.

2005 Pennington Borough Reexamination Report, pages 9-10 and 25-27.

<https://www.penningtonboro.org/DocumentCenter/View/691/2005-Master-Plan-Reexamination-Report-PDF>

Due to concern over Route 31, Pennington Borough participated with Hopewell Township in the "Route 31 Design Study" conducted by Dodson Associates with the aid of a Smart Growth Planning Grant. Recommendations for improvements pertaining to Route 31 in Pennington from the Study Report of 2002 are summarized in Section 3. Since these improvements are proposed within the State right-of-way, it was recommended that Pennington Borough and Hopewell Township should continue to work with the State Department of Transportation on the execution of these recommendations.

The following is a summary of the concerns and suggestions in the 2005 Reexamination:

1. Traffic congestion along State Highway Route 31 and Delaware Avenue has increased over the years, especially during the peak hours. The construction of the new Merrill Lynch facility in Hopewell Township to the west of the Borough has brought more traffic along State Highway Route 31 and through the Borough.
2. Truck traffic on Route 31 continues to be a major concern. In 1995, NJDOT announced a six (6) point action plan to address truck safety concerns on Route 31, which included reducing speed limits; implementing a truck safety inspection plan by the State Police; pursuing a permanent truck inspection station; forming a truck safety advisory group including municipal, county and state representatives; and working with the New Jersey Turnpike Authority on a truck-friendly policy to encourage the use of the Turnpike as a major through corridor for commercial traffic.
3. As confirmed by the community at the public meetings held by Dodson Associates during the study, making Route 31 an undivided four lane highway is not acceptable to Pennington Borough and the surrounding community.
4. The report proposes several Route 31 roadway improvements in Pennington Borough for consideration, including the following:
 - a. A two (2) lane roadway with enhanced striping and medians at the signalized intersections for the safe crossing of pedestrians and bicyclists;
 - b. A two (2) lane roadway with either a signalized intersection or a modern roundabout; or
 - c. A four (4) lane boulevard with either a signalized intersection or a modern roundabout.

Since the middle and high schools serve students in Pennington Borough, safe pedestrian and bicycle crossings are high priorities for any improvement plan to the highway.

5. The design of any roadway improvements to State Highway Route 31 should effect the goals and objectives of the Borough of Pennington, as follows:
 - a. Any improvements to State Highway Route 31 should not divert through traffic onto other roads through the Borough;
 - b. Safe and convenient pedestrian access within designated crosswalks across State Highway Route 31 should be provided; and
 - c. No left turning movements should be permitted onto State Highway Route 31, except at signalized intersections.

Additionally, improvements to the State Highway Route 31 intersection with Broemel Place are necessary to alleviate any impediments to emergency vehicle access to and from the Pennington Fire Company and Pennington First Aid Squad facilities on Broemel Place. An emergency vehicle signal, at minimum, should be erected at the intersection.

6. A Streetscape Committee report recommended improvements to Main Street and Delaware Avenue to create a better alignment at the intersection to facilitate the flow of traffic and to provide safe pedestrian crossings.
7. The sidewalk along the north side of East Delaware Avenue should continue eastward to the Borough border at the Stony Brook bridge, then connect with the Lawrence Hopewell Trail along Pennington Rocky Hill Road.
8. Delaware Avenue has been designated through the Borough to its intersection with Federal City Road as a bicycle compatible roadway, as indicated in "Bicycling Mercer County: A Guide To Bicycling In And Around The Capitol County", which was prepared by the Greater Mercer Transportation Management Association with input from local cycling clubs and advocacy groups, the Delaware Valley Regional Planning Commission, Mercer County, the New Jersey Department of Transportation and various municipalities. Improvements to the northeasterly extension of East Delaware Avenue to its connection to the Lawrence Hopewell Trail are recommended to complete the safe bicycle accessibility of the roadway.

Actions that have been taken on 2005 Reexamination recommendations are as follows:

1. A collaborative partnership between non-profit organizations, citizens, private corporations, and local, county and state government lead to the planning of the Lawrence Hopewell Trail. This twenty-mile biking and walking pathway will loop through Lawrence and Hopewell Townships to connect several corporate parks, schools, residential areas and recreational sites, including Rosedale Park and Northwest Mercer County Park east of Pennington Borough.
2. Bristol Myers Squibb received approval from the Hopewell Township Planning Board to build the first link of the proposed pathway along Pennington-Rocky Hill Road from Old Mill Road to the Titus Mill and Wargo Roads intersection.
3. Pedestrian improvements along Route 31 in concert with the 1998 "Circulation and Sidewalk Plan" provide connections between the Straube Center and West Franklin Avenue to the north and between Broemel Place and the U.S. Post Office to the south.
4. The new traffic light at the intersection of the realigned North Main Street with Route 31 provides protected pedestrian and bike crossings and improved left turns onto Route 31.
5. A traffic light at Elm Ridge Road and improvements made by Bristol Meyers Squibb to Pennington-Rocky Hill Road also have helped with the traffic circulation in the eastern portion of the Borough.

2013 Pennington Borough Reexamination Report, pages 8-9

<https://www.penningtonboro.org/DocumentCenter/View/686/2013-Master-Plan-Reexamination-Report-PDF>

The following is a summary of the concerns and suggestions in the 2013 Reexamination:

1. The need to provide for better traffic and pedestrian circulation in the Route 31 corridor still exists. Although the development of the Shoppes at Pennington along Route 31

incorporated design recommendations found in the 2002 Route 31 Design Study, traffic continues to build on Route 31 creating pedestrian difficulties for crossing the highway and vehicular access problems for traffic crossing or entering the highway.

Additional actions that have been taken on 2005 Reexamination recommendations reported in the 2013 reexamination are as follows:

1. Pedestrian circulation has been addressed since 2005 with the construction of new sidewalks on lower King George Road and on the east side of Sked Street south of Sked Street Park. In addition, pedestrian activated flashing signals have been installed at two crosswalks to improve pedestrian safety primarily for school children crossing South Main Street at Curlis Avenue and crossing West Delaware Avenue at Green Street.
2. Pennington residents on foot or on bicycle will also soon benefit by having access to the Lawrence-Hopewell Trail via the Pennington Connection starting at the Stony Brook bridge on Pennington-Rocky Hill Road.
3. Although not following the expansive scope of the "Streetscape Report", the Borough this year had less costly but significant improvements made to enhance the pedestrian environment in the downtown area. New sidewalks with brick pavers, decorative streetlights and signage, benches, free guards, bollards, and additional trees were included in the improvements. However, many of the recommendations made in the 1998 and 2005 Master Plan documents remain.

[Note: No additions to the circulation plan were made in the 2014 Land Use Plan Amendment.]

2023 Pennington Borough Reexamination Report

<https://www.penningtonboro.org/DocumentCenter/View/688/2023-Master-Plan-Reexamination-Report-PDF>

Pennington Borough Planning Board adopted its ten-year reexamination report in a public meeting at Borough Hall on May 10, 2023. It reviewed progress on the 1998 Master Plan goals and the additional goals from the 2005 and 2013 reexamination reports and discussed those goals which were not yet met or had been discontinued. It also reported on progress that had been made in the Borough since 2013 through the actions of Borough Council. It then reported changes in assumptions, policies and objectives at the local, county and state levels that need to be considered for the Master Plan and concluded that it was time for an updated plan.

Mobility issues addressed throughout the 2023 Reexamination Report are summarized here.

Concerns remaining from the 1998 Master Plan and 2005 and 2013 reexaminations:

1. The visual quality and historic character of the Borough should be protected and enhanced. Reduce through traffic and enhance pedestrian safety and access.
 - Through traffic and pedestrian safety and access remain a concern. Sidewalks in the area of Main Street and Delaware Avenue were improved under the Streetscape project.
2. The existing distinction between highway business uses and town center housing and business uses should be maintained. Pedestrian linkages between the two business areas should be improved.

- Pedestrian linkages between the two business areas remain as they were in 2013, although the pedestrian environment near Main Street and Delaware Avenue has been improved.
- 3. The Borough should work toward a more proactive effort on regional issues such as traffic and circulation, open space preservation, community facilities, stream corridor protection, and water quality improvement.
 - Pennington and Hopewell Township have worked together on Route 31 traffic and safety issues. They have not always agreed but have generally worked to influence NJ DOT on safety issues. The Borough prevailed over the Township on the speed limit on Route 31 in the Borough which is set at 35 mph rather than the Township's preferred 40 mph.
- 4. The 2002 Route 31 Design Study detailed design guidelines for the corridor and for roadway improvements along State Highway Route 31.
 - Certain improvements to the roadway have been constructed along the Route 31 corridor since the time of this recommendation. The intersection of Route 31 and West Delaware Avenue now has left turn lanes in all four directions and left turn traffic lights. The speed limit in the Pennington Borough section of Route 31 is 35 mph, although it is frequently exceeded. The intersection of North Main Street and Route 31 now has pedestrian crossings controlled by traffic lights. A concrete sidewalk now runs along the east side of Route 31 from the Pennington Golf Center north to West Franklin Avenue. There is no sidewalk on the west side of Route 31.

Council actions and concerns on Mobility between 2013 and the 2023 reexamination:

1. The Borough remains concerned about traffic safety particularly at the intersection of Route 31 and West Delaware Avenue given that as many as 100 children and pedestrians cross this intersection daily to get to and from Timberlane Middle School and Hopewell Valley Central High School. A pedestrian fatality occurred there in October 2021, which prompted the Borough Council to pass Resolution 2021-11.14 urging NJDOT to re-visit the 2002 study of the Route 31 and West Delaware intersection in Pennington Borough. In response, the mayor received a letter from the NJDOT indicating that they do not see a problem with the intersection. The Council then passed Resolution 2022-5.19 reaffirming the previous resolution and sent certified copies to the Governor, Senator, Members of the Assembly, and the Mercer County Executive. [In 2025, the lights were retimed to allow simultaneous pedestrian crossings in all four directions, although there is still a risk of pedestrian conflict with cars turning left or right on a green light and with cars turning right at a red light.]
2. Two new Hopewell Township developments taking place on Scotch Road and Washington Crossing Road will have a major impact on traffic. The Scotch Road development, by US Home Corp./Lennar, brings 1077 new living units onto the market. The Washington Crossing Road development by US Home at Hopewell Urban Renewal brings 379 units. The total of 1456 added units exceeds Pennington's existing 1146 housing units. These large residential developments will significantly increase traffic in the area and, of concern to the Borough, will be increased traffic crossing Route 31 at West Delaware Avenue, Ingleside Avenue, and Pennington Circle. In 2014, Borough Council adopted the NJ DOT Complete Streets policy. The benefits of complete streets include improving safety for pedestrians, bicyclists, children, older citizens, and the

mobility challenged, reducing traffic congestion and reliance on carbon fuels, and saving money by incorporating sidewalks, bike lanes, and safe crossings into the initial design of a project to spare the expense of later retrofits. The Council reaffirmed the policy in 2016 but allowed four exemptions, which must be documented and approved by the Council, for the following four conditions, where:

- a. Bicyclists and pedestrians are prohibited by law from using the roadway. Detrimental environmental or social impacts outweigh the need for these accommodations.
 - b. The safety or timing of a project is compromised by the inclusion of Complete Streets design practices.
 - c. The cost of incorporating new bicycle, pedestrian, and/or public transit facilities is excessive.
 - d. The need for and/or probable use of the facility shall be considered in making the determination as to whether an exception should be approved at this time or held for future consideration.
3. In 2021, the Council adopted a resolution in support of the 2020 Mercer County Bicycle Master Plan. In 2022, a resolution was adopted to endorse Vision Zero, which encourages municipalities to adopt achievable goals to prevent traffic-related severe injuries and fatalities based on the following principles:
- a. Deaths and severe injuries caused by traffic accidents are preventable.
 - b. Human life and health should be prioritized in all transportation systems and in all aspects of transportation planning.
 - c. Human error is inevitable, and transportation systems should be forgiving.
 - d. Transportation planning should focus on systems-level changes above influencing individual behavior.
 - e. Speed is the single most important factor in crash severity.
4. A "Streetscape Report" prepared by the Streetscape Committee of the Borough set forth recommendations for hardscape and other improvements within the Town Center area and the report was incorporated into the Master Plan by reference. The streetscape improvements recommended in the area around the Main Street and Delaware Avenue intersection are being constructed as funding from NJ DOT's Transport Alternatives is obtained. The first project, to improve curbing on North Main Street was completed in 2014. In 2017 a grant was approved for a Phase II project on improvements on East and West Delaware Avenue and South Main Street. The project is ongoing.
5. The Council is also concerned that the responsibility of adjacent property owners to maintain their sidewalks is often ignored. Chapter 177 of the Borough Code covers repair of sidewalks, snow and ice removal, and the clearance and control of debris and overgrowth. Responsibility for enforcement needs to be clarified.

Changes in assumptions, policies and objectives at the local, county and state levels:

1. The COVID-19 pandemic will have a lasting impact on the State's economy and how its residents and businesses operate and interact with one another in the future.
 - a. Pedestrian and bicycle facilities: With the temporary closure of businesses and residents working from home, the desire to walk and bike around the community for recreation increased. It is likely this will create new habits among residents

- and increase the demand for safe and convenient pedestrian and bicycle facilities. The Borough should explore how these facilities can be provided between destinations where they do not exist and where enhancements are necessary.
- b. Drop-off / Pick-up: Temporary closure of businesses and concern about safety of indoor spaces have generated increased demand for take-out food and deliveries of online purchases and restaurant food. The Borough may be faced with increased demand for customer pick-up locations and home delivery. Such accommodation has already generated reconfigured parking lots and curbside pick-up arrangements. These accommodations have addressed not only health and safety concerns for employees and customers but also enhanced convenience for local businesses.
2. The popularity of electric personal vehicles has grown substantially.
- a. While many owners will conduct charging at their home and will do so in accordance with the applicable building code, many will also need and/or desire to charge while at work, shopping or otherwise away from their homes. This requires electric vehicle charging stations. Support for charging stations is consistent with the Strategy 1 of the *2020 New Jersey Energy Master Plan* which states as a goal: “Reducing Energy Consumption and Emissions from the Transportation Sector, including encouraging electric vehicle adoption, electrifying transportation systems, and leveraging technology to reduce emissions and miles traveled.”
 - b. Amendments to the Municipal Land Use Law adopted in August 2021 included many provisions specific to the installation of electric vehicle supply equipment, which are detailed in the 2023 Master Plan Reexamination report, Section C8, Electric Vehicles.

Appendix C. Greenhouse Gas Emissions Calculations

It is instructive to estimate the annual CO₂e (carbon dioxide equivalent) emissions reduction possible if Pennington Borough residents converted to electric vehicles. The US EPA reports annual data on CO₂e emissions in the United States, and a breakdown by sector in:

<https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions#transportation> .

Data on energy annual usage can be found in charts prepared by Lawrence Livermore National Laboratory from DOE/EIA data in <https://flowcharts.llnl.gov/commodities/energy>.

In 2021, transportation in NJ used 0.132 Quads (39 TWh) of fossil fuel energy and contributed 40.7 MMT (million metric tons) per year of CO₂e to the atmosphere. At the same time, NJ electricity generation of 0.194 Quads (57 TWh) contributed only 13.5 MMT of CO₂e (this can be converted to 0.52 lb/kWh). If the 39 TWh required to move vehicles came from electricity at the current rate of CO₂e production, it would contribute only 9.2 MMT of CO₂e (13.5 x 39/57), saving 31.5 MMT (40.7 - 9.2) per year. Personal vehicles (cars, SUVs, pickup trucks and minivans) generate 57% of the emissions, so changing to battery powered electric vehicles in New Jersey would save about 18.0 MMT (57% of 31.5).

The population of Pennington is around 2,800, and of New Jersey is about 9.3 million, so on a proportional basis, the CO₂e reduction from Pennington with all electric personal vehicles would be 5,400 MT (metric tons)/year. This is about 20 times the 276 MT used by Borough operations, which Borough Council resolved to reduce to zero by 2035, as discussed earlier. As New Jersey moves towards its goal of zero CO₂e emissions from electric power generation by 2035, the 9.2 MMT from the generation of the electricity to power vehicles would drop to zero and the total CO₂e reduction from personal vehicles in New Jersey would be 23 MMT (57% of 40.7). For Pennington, this would be about 7,000 MT per year, which is 2.5 MT per resident per year.

Looking at this on an individual car basis, the average EV gets 2.9 miles/kWh. To go 2.9 miles, a 30-mpg gasoline car uses $2.9/30 = 0.097$ US gallons of gasoline and at 19.6 lbs of CO₂e per US gallon, CO₂e from the gas car = $19.6 \times 0.097 = 1.9$ lbs/kWh. As detailed above, electricity generated in New Jersey produces 0.52 lbs/kWh, which is 3.7 times lower. (Wyoming and West Virginia electricity generation produces over 2.0 lbs/kWh due to the prevalence of coal-fired power stations so their EVs give no CO₂e benefit). Two issues being addressed by the EV industry are increasing the energy storage density of batteries to increase range, and battery recharging time.

To compare EV to gasoline charging times, the reference is that the 10 gallons needed for a range of 300 miles with the 30-mpg car takes about a minute to pump at a gas station. For the EV average 2.9 kWh/mile, a charge of 103 (300/2.9) kWh is needed. There are 3 classes of EV charger, and the time needed to deliver 103 kWh can be calculated for each:

- Home Level 1 Charger: 120V 20A = 2.4 kW. $103 \text{ kWh}/2.4\text{kW} = 43$ hours per 300 miles
- Home Level 2 Charger: 240V 40A = 9.6 kW. $103 \text{ kWh}/9.6\text{kW} = 11$ hours per 300 miles
- Commercial Level 3, NJ: 480V 310A = 150 kW. $103 \text{ kWh}/150\text{kW} = 40$ mins per 300 miles
- Commercial Level 3, max: 480V 730A = 350 kW. $103 \text{ kWh}/350\text{kW} = 18$ mins per 300 miles

The charging rate depends on the EV's battery control system, so actual times may be longer. Also, the total number of Level 3 charges during the lifetime of an EV battery may be limited due to the high amperage. The analysis tells us that a 120 V Level home charger would only give a range of about 80 miles after an overnight 12-hour charge. This may be sufficient if all car use is local and infrequent, but for many users, a Level 2 charger is needed.

LAND USE PLAN ELEMENT

BOROUGH OF PENNINGTON

MERCER COUNTY

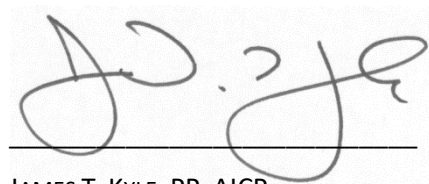
NEW JERSEY

APRIL 14, 2026

AS CONDITIONALLY ADOPTED BY THE PLANNING BOARD ON:

APRIL 8, 2026

PREPARED BY:



JAMES T. KYLE, PP, AICP

NEW JERSEY PROFESSIONAL PLANNER LICENSE 5667

KYLE McMANUS ASSOCIATES

A SIGNED AND SEALED ORIGINAL IS ON FILE WITH THE BOROUGH CLERK



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1. INTRODUCTION

The Land Use Plan is the master plan element most closely related to the Borough's zoning and potential redevelopment areas. Pursuant to the Municipal Land Use Law it is required to:

- (a) Take into account and state its relationship to other master plan elements and natural conditions.
- (b) Show the existing and proposed location, extent and intensity of development of land to be used in the future for varying types of residential, commercial, industrial, agricultural, recreational, open space, educational and other public and private purposes or combination of purposes including any provisions for cluster development; and state the relationship thereof to the existing and any proposed zone plan and zoning ordinance.
- (c) Include a statement of the standards of population density and development intensity recommended for the Borough.

Pennington's Land Use Plan is based on analysis of the Borough's population, employment, historic development and housing forecasts combined with community sentiment gauged through a survey to provide recommendations for how the Borough's land use and zoning districts and standards currently function and where they need to be amended to better reflect the Borough's vision.

Additionally, the Land Use Plan Element recommendations have been coordinated with those of all other elements to ensure consistency throughout the Master Plan and Borough policies as a whole. The Land Use Plan Element addresses the new climate change-related hazard vulnerability assessment (CCRHVA) now required by the Municipal Land Use Law. Given the importance of Main Street and the gateway that commercial development along Route 31 represents, the Land Use Plan element addresses community design principles. In addition to the analysis and recommendations described herein, the Land Use Plan Element includes an existing land use map, existing zoning map, and maps depicting proposed changes to zoning boundaries. The latter constitutes the proposed land use plan.

2. LOCAL AND REGIONAL CONTEXT

Pennington Borough is a one square mile municipality surrounded by Hopewell Township. As is the case with many municipalities in New Jersey, Pennington shares its zip code with the Township, and a distinction between the Borough proper and the much larger 08534 zip code area is warranted. Pennington Borough has about 1,100 housing units and a population of 2,800. The Pennington zip code has 5,300 units, an area of about 20 square miles, and a population of 13,300. Many of the 10,500 Hopewell Township residents with "Pennington 08534" addresses call themselves Pennington residents, which leads to some confusion over planning responsibility. The Borough and the Township each have their own land use plans, and their vision and goals are not coordinated.

<https://newjersey.hometownlocator.com/zip-codes/data.zipcode,08534.cfm>

The 2025 State Development and Redevelopment Plan (SDRP) places Pennington Borough within a 10 square mile Fringe Planning Area (PA3) that stretches about 8 miles from Washington Crossing then west-northwest to Mount Rose. The areas of Hopewell Township to the north are in the Rural Planning Area (PA4) and to the south are in the Suburban Planning Area (PA2). In fringe planning areas, the SDRP intends that growth will be accommodated in Centers with sewer and water services. Although Pennington Borough is not identified as a Center in the SDRP, it has many of the characteristics of a Center. Another intent of the SDRP is to protect and diversify the character of existing stable communities in fringe planning areas. The land use goals for Pennington Borough will in part be guided by this.

From the viewpoint of economic development, considering Zip Code 08534 as “Greater Pennington” offers enhanced opportunities to local businesses if targeted appropriately. This is a goal of the Borough’s new Economic Development Plan. The Hopewell Township Planning Board recommended in 2021 that an Economic Development Plan element be prepared. They established a Tourism and Economic Development Advisory Committee which is working to support existing businesses, attract new businesses, and promote tourism in the entire Hopewell Valley. The Township Advisory Committee and the Pennington Borough Economic Development Commission plan to work together on issues of interest to both parties. Commercial development along Route 31 is relevant to this Land Use Plan. Properties to the south of West Delaware Avenue are largely in the Township, whereas those 0.7 miles north up to the North Main Street intersection are in the Borough. It would make sense that land use policies along Route 31 in both municipalities follow a consistent plan and that coordination with the Township occurs.

The name Hopewell Valley covers Hopewell Township and the two Boroughs it surrounds, Pennington and Hopewell. In addition to sharing the Hopewell Valley Regional School District with Hopewell Township and Hopewell Borough, Pennington has shared service agreements with the Township for Emergency Management, Fire Services, Public Health, Senior Services, and Animal Control. The Green Team and Municipal Alliance operate across the Hopewell Valley. Since all traffic entering and leaving Pennington Borough does so through Hopewell Township, much of it on roads under the jurisdiction of the County, the Borough’s Mobility Plan, the County’s Mobility Plan, and the Township’s Circulation Plan should be in agreement on traffic management issues.

Pennington Borough is one of 12 municipalities in Mercer County. The County’s Master Plan elements relating to land use and infrastructure are relevant to the Borough. All County Government departments play a role in the lives of Borough residents. The County Planning Department is responsible for the County Master Plan. The County’s Engineering and Highway divisions are responsible for County roads and bridges and other infrastructure. County Roads in the Borough are Route 640 – Pennington Road, South and North Main Street, Route 546 – South Main Street to Lawrenceville-Pennington Road, Route 631 – Ingleside Avenue, Route 624 – West and East Delaware Avenue, and Route 623 – Pennington-Harbourton Road. The County is the Borough’s point of contact with the Delaware Valley Regional Planning Commission (DVRPC), the federally designated Metropolitan Planning Organization (MPO) for the Greater Philadelphia region, and with the New Jersey Department of Transportation, which has responsibility for State Route 31. Consistency with the Master Plans of Hopewell Township and Mercer County and with the State Development and Redevelopment Plan is discussed in Section 14 of this Plan.

3. PUBLIC PARTICIPATION

Public participation has been a foundation for development of the Master Plan. More than 75 Borough residents have been directly involved in the preparation and writing of the Master Plan elements, and residents have been continuously kept informed, which speaks well to public participation.

The Plan’s development has been led by a 4-person Master Plan Committee (MPC) assisted by a Citizens Advisory Committee (CAC) of 15 residents appointed by the Mayor in October 2023. CAC members have served as community contacts, obtaining feedback as the Master Plan and its elements were developed and have also served on element-writing teams. The MPC and CAC developed a vision statement and goals that were presented to the public at an open house at Borough Hall in April 2024. The Land Use Plan goals are shown in Section 5.

The MPC assigned responsibility for developing initial drafts of five of the elements to related Committees and Commissions and specialized teams were formed for the remainder. Element drafts were posted on the Master Plan page on the Borough website and email blasts were sent to notify residents. Comments received were considered and appropriate changes were made. Final drafts of the elements were

presented to the Planning Board for conditional adoption at public meetings and posted on the website for further public review.

In August 2025, the MPC presented a web-based survey to seek the input of residents on Housing and Land Use. The survey yielded 550 responses, and a summary of the responses is given below.

Summary of Survey Results

- i. **Most Valued Qualities of Pennington Borough:**
Participants indicated that they most value Pennington Borough’s walkable Main Street with its mix of retail, restaurants, and residences (85%), walkable community connected to open spaces (65%), and parks and gathering spaces (46%). Pennington Borough residents also highlighted the town’s historic character (45%).
- ii. **Desired Changes in Pennington Borough:**
Respondents expressed a desire for more restaurants and retail, and improved walking and biking connections between the Borough and surrounding areas.
- iii. **A Vibrant Town Center:**
To make the Town Center more vibrant, participants suggested adding pedestrian-friendly spaces with outdoor dining, shaded seating, and bike racks. Streetscaping with plants, trees, seasonal lighting, and public art was also highly rated. Pocket parks and greenways connecting the center to surrounding areas were popular ideas, along with mixed-use development to integrate residences above retail space. Participants desire more restaurants, retail and activities in the Town Center. Respondents emphasized the importance of locally-owned businesses and community gathering spaces.
- iv. **Hwy-31 Corridor Improvements:**
Participants prioritize traffic safety, pedestrian and cycling connectivity, and the aesthetic quality of the Hwy-31 Corridor. Suggestions included adding traffic lights, restricting truck traffic, lowering speed limits, and adding safety improvements for pedestrians and cyclists. Many respondents called for reimagining the strip malls with green infrastructure, outdoor dining, and pedestrian-oriented designs.
- v. **Housing and Development:**
The survey highlighted the need for diverse and affordable housing options, with respondents indicating a preference for cottage courts, duplexes, accessory dwelling units (ADUs), and mixed-use. Respondents emphasized preserving the Borough’s historic building quality and small-scale, neighborhood-centric environment while addressing housing affordability. In addition, they expressed strong concerns about infrastructure strain, environmental impact, and school capacity.
- vi. **Stormwater Management:**
To address stormwater issues, respondents supported strategies such as uncovering and restoring (“daylighting”) streams, integrating green infrastructure into existing spaces, and stormwater infrastructure doubling as parks. Suggestions included planting native vegetation, improving drainage systems, and implementing public education programs on stormwater management.
- vii. **Improving Quality of Life:**
Respondents indicate a need for more restaurants, green spaces, community events, and activities for all ages. Respondents emphasized the importance of walkability, bikeability, and historic preservation while creating vibrant hubs and civic spaces. Responders to the survey also liked parks / community gathering spaces, fitness and wellness centers, a theater and event spaces.

The full results of the survey can be found on the Borough website: <https://www.penningtonboro.org/DocumentCenter/View/1683/Master-Plan-2025-Survey-Results-Summary?bidId=>

4. PENNINGTON'S VISION

At the outset of the Master Plan process, the MPC and CAC formulated an overall vision for Pennington, one that would inform the more specific goals and objectives for each of the elements that at the time were yet to be prepared. This vision is seen as the foundation for policies that will help shape the Borough over the course of the next decade.

A Vision for Pennington

Pennington is viewed as a welcoming, healthy, safe and resilient community with friendly, supportive neighborhoods and a diverse downtown that is inviting to residents and visitors of all ages and interests. Historic preservation remains key to the Borough's character and pride. We foresee open spaces and parks that offer both passive and interactive recreational resources for all. The Borough of Pennington responsibly supports affordable housing, while balancing development and preservation opportunities that enhance the quality of life for those of all ages who live, work, and play in our community. Pennington strives to be a sustainable, climate-resilient community.

5. LAND USE GOALS AND OBJECTIVES

Informed by the above vision, goals were developed by the MPC and CAC for all elements of the Master Plan in the fall of 2023 and were subsequently endorsed by the Planning Board on January 10, 2024. The following are the Land Use goals extracted from that list. They have been used to guide discussion during development of the Land Use recommendations in Sections 6, 10 and 11.

1. Remove barriers to increased residential density in appropriate areas of the Borough to promote housing affordability and a greater variety of housing types and dwelling sizes that better fit a broader spectrum of households and income levels in a manner consistent with the goals of the Master Plan.
2. Provide greater opportunities for economic development within the downtown and Route 31 districts by permitting uses that better reflect the realities of the current real estate market. Sustain a mix of residential, public, semi-public, and business uses in Town Center to provide greater opportunity for economic development.
3. Streamline review, permitting, and approval procedures to reduce the cost to developers and homeowners and increase the opportunity for investment.
4. Improve resiliency to climate change and natural hazards by managing and regulating flooding and stormwater, protecting critical facilities necessary for evacuation and sustaining the community during natural disasters by implementing the recommendations in the Climate Change-Related Hazard Vulnerability Assessment.
5. Preserve, protect and enhance Pennington's historic district and historic properties through regulations implemented in the zoning ordinance. Work with the Historic Preservation Commission to identify additional historic properties outside the current Pennington Crossroads Historic District with the goal of affording them protection.
6. Identify opportunities to create new affordable housing units in anticipation of future rounds of affordable housing obligations while securing affordable units whenever possible.

7. Provide additional opportunities for accessory dwelling units and duplexes in the R-80 and R-100 zoning districts.
8. Continue redevelopment planning efforts related to the former Borough landfill site through a public process that considers the need to improve drainage and alleviate flooding at the Route 31 and West Delaware Avenue intersection.
9. Promote a balance of residential and nonresidential uses within the Borough to stabilize tax rates by providing new ratables.

6. RECOMMENDED ZONING CHANGES

As part of preparation of the reexamination report in 2023 and preparation of the various elements of the Master Plan since that time, a number of land use recommendations have come to light. These are summarized below and depicted on the proposed Land Use Plan map, Figure 1. It is recommended that the Ordinance Advisory Committee review these issues and prepare ordinance amendments for review by the Planning Board and implementation by the Mayor and Council.

- A) Town Center mixed-use zoning and expansion of the TC zone to certain areas will provide the opportunity for construction of as many as 40 multifamily apartments yielding as many as 8 affordable units. The Board recommends the following specific changes:
 - 1) Consistent with certain recommendations in the Economic Development Plan, the Board recommends the Town Center zone be extended south on the west side of South Main Street to Academy Avenue. This would add Block 503, Lot 25, the Methodist Church, currently R-80, to the TC zone. They also recommend adding Block 601, Lots 20, 21 and 22, the Presbyterian Church and cemetery, currently R-100, to the TC zone. This will fill the gap between this site and Block 601, Lots 14-19, which are already in the TC zone. The reason to include the two churches and their associated buildings is to provide for future expansion of the Town Center in the event portions of these sites can be repurposed in the future.
 - 2) The Town Center (TC) zone should be expanded to include the two Office-Residential (O-R) properties on the east side of North Main Street, including Block 301, Lots 7, 8 and 53.
 - 3) Based on its ineffectiveness since implementation in 2001, it is recommended the Town Center Buffer (TCB) zone be eliminated. The TCB comprises a total of 20 lots, identified below, all but one of which should be reclassified as R-80.
 - a) Three lots on the west side of North Main Street, Block 205, Lots 13, 14 and 15. Lots 13 and 14 should be included in the R-80 zone while Lot 15, which currently contains office uses, should be rezoned to TC.
 - b) Four lots on East Delaware Avenue, Block 301, Lots 51 and 52 on the North side and Block 601, Lots 23 and 24 on the south side.
 - c) Six lots on the south side of West Delaware Avenue, Block 503, Lots 8.01, 8.02, 9, 10, 11 and 12.
 - d) Seven lots on the east side of Burd Street, Block 503, Lots 2, 3.01, 3.02, 4, 5, 6 and 7.
 - 4) Consistent with the Economic Development Plan, the Board recommends that TC zoning reinforce the existing historic, village-center appearance by favoring retail shopping and dining that will encourage walking and browsing. To help achieve this, the Ordinance Advisory Committee should review current standards to address the following:
 - a) Consider permitting co-working spaces, makerspaces, sidewalk and outdoor dining, and other uses that foster community convening and gathering.
 - b) Consider permitting small inns, boutique hotels or bed-and-breakfasts, which add retail and tourist activity. Such permitted uses should have on-site proprietors, multiple rooms for lodging, and food service, as opposed to the private, short-term rental of a residence.

- c) Consider permitting uses mentioned in survey responses, including breweries, pubs, farmers' markets and fitness and wellness uses.
 - d) Review bulk standards and incorporate amendments that facilitate expansion of existing buildings.
- 5) The Economic Development Plan also recommends that land use regulations generally, and historic restrictions and requirements specifically, become simpler, clearer and easier for business owners to follow. Land use enforcement should be consistent and transparent and tempered by practicalities and the goal of encouraging businesses to open in the Borough and should not be applied precipitously.
- B) C-B to Replace B-H, O-B, O-R and Route 31 Corridor Overlay Zones. Consistent with recommendations in the Economic Development Plan, the Board recommends the following changes to the zoning ordinance:
- 1) Eliminate the Route 31 Corridor Overlay Zone.
 - 2) Eliminate H-B, O-B and O-R zones.
 - 3) Create a new zone to recognize that addressing the serious concerns of congestion, safety and flooding at the intersection of Route 31 and West Delaware Avenue may have land use implications. An appropriate name for the new zone would be Crossroads-Business (C-B). It should include Block 201, Lots 5, 6 and 7, Block 206, Lot 1, Block 501, Lots 1-4 and Block 502, Lot 2 and the portion of Lot 1 that lies within the Borough. The zone would expand business opportunities by allowing most nonresidential uses permitted in the new H-MU zone but should not allow residential uses. It is recommended that the C-B zone be established as shown on the Land Use Plan Map in Figure 1.
 - 4) Rezone the southern portions of Block 201, Lots 1, 2 and 9 currently within the O-B zone to R-100.
- C) MU-1 and MU-2. To reduce redundancy and permit additional opportunity for mixed-use development, the Board recommends properties along North Main Street and Brookside Avenue and Green Street currently zoned MU-1 and MU-2 be rezoned to MU.
- 1) Block 203, Lots 1, 2, 3, 4 and 5 and Block 204, Lots 1, 2 and 18 should be rezoned from MU-2 to MU.
 - 2) Block 103, Lot 8 should be rezoned from MU-1 to MU.
- D) Parks and Recreation areas
- 1) To assure these are retained in perpetuity, all Borough-owned open space as shown on the Recreation and Open Space Inventory should be rezoned PR – Parks and Recreation Areas. This would include Kunkel Park, Sked Street Park, African Cemetery and adjacent lot, Eileen Heinzl Arboretum, Veterans Memorial Park (Knowles Street), the Pennington Cemetery (Block 601, Lots 29, 63, 64 and 65), and other properties reclassified as open space in the future.
- E) Consistent with the Historic Preservation Plan, the Board recommends the following:
- 1) Develop a Historic District Overlay to cover both the contiguous Pennington Crossroads Historic District in the Town Center and other properties outside the Historic District that are deemed historic and should be preserved. The zoning map should be amended to show the District and any individual historic sites and the Board should work with the Historic Preservation Commission to develop overlay standards.
 - 2) It is recommended that Toll Gate Grammar School, Block 1003, Lot 15.01, and the HVRSD Administration Building, Block 1002, Lot 9 be rezoned as E-3 Educational to potentially aid preservation of these two 100-year-old structures. Toll Gate is currently within the R-80 zone and the Administration building is within the R-100 zone, which leaves them vulnerable. The Historic Preservation Commission should explore inclusion of both properties in the Pennington Crossroads Historic District. Since they do not currently abut the District, identification and regulation as historic sites consistent with the MLUL (40:55D-65.1) is another option as regulation of both districts and sites is permitted under this provision.

- F) The Board recommends modifications to §215-67 R-80 and §215-68 R-100 to allow infill residences for extended families, more affordable (including deed-restricted) housing and to address FAR standards. It is recommended the Ordinance Advisory Committee consider the following amendments:
- 1) Conditionally permit Accessory Dwelling Units (ADUs), which could be separate buildings or garage additions and conversions as well as conversion of a portion of an existing dwelling to an ADU. Appropriate standards related to minimum lot area, setbacks, off-street parking and **size in relation to surrounding buildings** should be developed.
 - 2) Allow existing houses to be converted to duplexes under certain conditions and permit new duplexes in both districts. Appropriate bulk standards should be developed for both districts.
 - 3) Assess FAR standards for both the R-80 and R-100 zones and determine if maximum dwelling size limits are still appropriate. FAR standards should be adjusted for both zones to include an allowance of additional floor area for ADU's.
 - 4) The definition of "gross floor area" should be reviewed and amended to clarify what areas of a dwelling should be included when calculating gross floor area and FAR.
 - 5) **The gradual development of Pennington's housing, especially that pre-dating 1980, provides the interesting stylistic rhythm and variety that characterizes the town. To maintain this character, the massing, form and size of new or modified residences should respect their neighborhood context and the respective zone's underlying bulk standards. In areas that reflect Pennington's historic development pattern - particularly around the Crossroads and adjacent neighborhoods - new construction should reinforce the established rhythm and scale of the streetscape.**
 - 6) **Zoning should permit home-based businesses that do not negatively affect the residential character of neighborhoods or unduly create traffic or parking problems. Home office uses should be permitted as "accessory" rather than "conditional" uses, and limitations on the size and level of activity of such businesses should be regularly reexamined.**
- G) Parking.
- 1) There are several recommendations about parking in the Mobility Plan and the Economic Development Plan. Both advocate for finding more sites for off-street parking within the Town Center zone. Chapter 200, Article III covers the regulations on parking, including parking in the municipal lot. While walking or bicycling may be recommended, the reality is that for a variety of reasons, most people would prefer to use some form of covered motorized vehicle - too cold, too hot, rainy, too far, not a bike user, coming from out of town, etc.
 - 2) The Economic Development Plan recommends that, to encourage foot traffic, retail exploration and serendipity, and to avoid a reported negative factor for new businesses, on-site, off-street parking requirements for businesses should be reduced in favor of a greater reliance on street and central municipal parking. To facilitate a shift to parking arrangements that encourage pedestrian traffic over short distances:
 - a) Municipal parking lots may need to be expanded or added, or the Borough may need to reach arrangements with owners of nearby parking areas that tend to be underused during the business day (such as schools and churches).
 - b) Time limitations on on-street parking may need to be enforced but on-street parking should remain free and unmetered. However, charging or metered parking in private lots may need to be allowed to encourage property owners to make it available to the public.
 - 3) The Mobility Plan recommends looking for opportunities to replace impervious parking coverage with pervious cover to improve groundwater replenishment and reduce flooding. The survey responses suggested repurposing existing underutilized surface parking and increasing green infrastructure.
 - 4) Land use planning needs to be creative in finding additional off-street parking and amending ordinances to facilitate it.

- H) Bike routes and walkways.
 - 1) The Mobility Plan offers a number of ways to move around the Borough without traveling by car. Land use planning needs to study road rights-of-way and be creative in finding possible routes through existing residential areas.
 - 2) The Mobility Plan is concerned about the conflict between the need for residential and commercial on-street parking and the desire for dedicated bike and micro-mobility lanes on Main Street and on Delaware Avenue and recommends that the Borough work with the County to equitably resolve this
- I) Donation drop-off bins. To better address the potential impact of unattended donation bins in the Borough, the Board recommends standards be developed limiting the number of such bins on any one property and ensuring they are appropriately sited to avoid loss of parking or impacts to circulation. Standards should also address the potential visual impact of donation bins.
- J) Flooding and Stormwater Management. The Board recommends the following:
 - 1) The Borough should prepare its stormwater management plan as required by NJPACT, which will be adopted as a future element of the Borough's Master Plan.
 - 2) In conjunction with preparation of the stormwater management plan, the Borough's stormwater management requirements should be updated by the January 20, 2027 deadline imposed by NJPACT.
 - 3) Work with the Environmental Commission to assess whether standards requiring stormwater management for additional impervious surface below thresholds in the State's stormwater management rules for major projects are warranted.
- K) Utility Services Plan. New or revised ordinances or resolutions may be needed on the following topics to fulfill the goals of the Plan:
 - 1) Stormwater management, forestry management, drinking water and wastewater capacity, riparian zones, floodplain restoration, impervious coverage, bridges, culverts and daylighting streams.
 - 2) The Utility Services Plan suggests that resolutions or ordinances be adopted as the various components of the Plan are implemented. Several will have a land use component.
- L) Green Buildings and Environmental Plan Element (GBESE).
 - 1) Topics from the GBESE that have relevance to land use are Renewable Energy, Green Building and Design, and On-Site Water Management.
 - 2) Resolutions or ordinances can be adopted as the various components of the Plan are implemented.
- M) Signage. The Board recommends that current signage requirements be reviewed in conjunction with the Economic Development Commission and amended as necessary.
- N) Lighting. The Board recommends that the Ordinance Advisory Committee work with the Environmental Commission to develop appropriate standards for lighting. This should include establishing maximum intensity levels permitted at property lines, uniformity requirements, minimum averages in parking areas and along pedestrian paths, a requirement to utilize LED lighting of a specific color temperature and maximum height of light poles and fixtures. Residential lighting standards should also be developed to eliminate light trespass and nuisance issues associated with unshielded fixtures.
- O) Solar and electrification. The Board recommends review of the zoning ordinance to ensure regulations encourage the use of renewable energy. The ordinance should permit solar panels, including both those mounted to a roof or on the ground, as an accessory use in all zone districts. Appropriate standards for ground-mounted solar arrays, including coverage, location, setbacks and screening should be prepared.
- P) Driveway standards. The Board recommends that minimum and maximum driveway width standards be included in the zoning ordinance along with minimum setback standards.

Q) Nonconforming uses and structures. The Board recommends that §215-52.B and §215-57 of the zoning ordinance be amended to clarify additions to nonconforming structures as follows:

(1) § 215-52 Continuation of use of existing buildings.

Except as otherwise provided in this article, the lawful use of legally existing nonconforming buildings existing at the date of the adoption of this chapter may be continued although such use or building does not conform to the regulations specified by this chapter for the zone in which such building is located; provided, however, that:

A. No nonconforming lot shall be further reduced in size.

B. No nonconforming building shall be enlarged, extended or increased, provided, however, that alterations or enlargements that do not increase the degree of nonconformity related to required front, side or rear yard setbacks are permitted so long as such alteration or enlargement represents a 25% or less increase in the original length of the building or portion of the building that is nonconforming. Increasing the degree of nonconformity by construction or alteration is considered to be a further reduction of already nonconforming front, side or rear yard setbacks, further increase of already nonconforming lot coverage or further increase in already nonconforming building height.

§ 215-57 Alterations.

A nonconforming building that is partially destroyed may be reconstructed to its original condition but not enlarged or extended unless in conformance with the requirements of §215-52.B. Nothing in this section shall limit the ability to reconstruct only a portion of a building that is partially destroyed provided previous nonconforming conditions that existed at the time of partial destruction are not exceeded.

R) Keeping of chickens. The Board recommends standards be included in the zoning ordinance to permit the keeping of chickens on residential properties of a certain minimum size in the Borough. The following is recommended:

On properties other than those devoted to agricultural or horticultural use and eligible for farmland assessment, the following requirements shall be met.

A. The keeping of chickens shall be prohibited on multiunit properties, including any property in common ownership as part of a homeowner's association or owned or maintained by a management company or landlord.

B. The keeping of chickens shall be prohibited on nonresidential properties and residential properties that do not meet the minimum lot size for the zone district in which the property is located.

C. A maximum of nine (9) chickens may be kept on any one property.

D. Roosters shall be prohibited.

E. Chickens shall be provided an enclosure which is covered, ventilated, and predator/rodent resistant. Said enclosure shall provide a minimum of four (4) square feet per bird when outdoor space of equal or greater space is provided or ten (10) square feet per bird where outdoor space of equal or greater space is not provided. Enclosures shall be located within rear yards only and only one (1) enclosure shall be permitted on any property.

F. Chickens and their enclosure shall be contained within an area completely enclosed by fencing a minimum of four (4) feet in height. Chickens shall not be permitted to roam freely outside of fenced areas.

G. The enclosure and any fenced run shall be well drained so that there is no accumulation of moisture. The floors and walls of the enclosure shall be kept in a

clean and sanitary condition, with all droppings collected at least weekly. Animal solid waste shall be kept in a covered and secured container until composted, applied as fertilizer or transported off-premises.

- H. All enclosures shall be a minimum of 5 feet from a side or rear lot line.
- I. Any exterior lighting proposed shall be shielded so as not to shine on adjacent properties.

7. SUMMARY OF POPULATION, HOUSING CHARACTERISTICS AND TRENDS

The population of Pennington Borough has nearly doubled since 1940, growing from 1,492 to 2,802 residents according to data from U.S. Census Bureau decennial censuses. While the Borough experienced growth in the 1940s, its largest decade over decade population increase came in the 1950's with 22.7%. Growth slowed to 4.3% in the 1960's and declined by 2% in the 1970's. Pennington saw a 20.3% population increase in the 1980's and a 6.3% rate of growth in the 1990's although the Borough lost population in the 2000's. More recently, population has increased, registering an 8.4% growth rate in the 2010's. By age group, 25.1% are 35 to 54, 24.4% are over 65 years of age, 16.9% are 55 to 64, 16.5% are 5 to 19, 11.9% are 20 and 34, and 5.1% are under 5. The Borough has a median age of 49.0, which is substantially older than the median age of 39.2 for Mercer County and 40.1 for New Jersey.

Pennington residents have high rates of educational attainment, with 73.6% having at least a bachelor's degree while 39.5% have a graduate or professional degree. These rates far surpass those for Mercer County as a whole at 44.9% and 20.6% respectively. Overall, 98.3% of residents have earned a high school diploma, compared to 89.9% in Mercer County. These high levels of educational attainment play a major role in shaping the Borough's economy, as they have translated into higher incomes. The Borough's median household income of \$171,282 is far higher than that of the County (\$96,333) and the State (\$101,050). Fully 69.1% of Pennington households have an income of over \$100,000, with 41.1% over \$200,000, 20.2% earning \$50,000 to \$99,000, 3.2% earning between \$25,000 and \$49,999 and 7.6% earning less than \$25,000.

There are 1,168 households in Pennington. The average household size is 2.31, significantly below 2.58 in Mercer County. Household sizes are 1-person 28.8%, 2-person 38.4%, 3-person 14.6%, 4-person 13.5% and 4.7% with 5 or more people. Ownership is the predominant form of tenure in Pennington with 79.5% of housing units owner-occupied, exceeding the County at 61.9% and State at 63.7%. The remaining 20.5% of the Borough's dwelling units are home to rental tenants. Single-family housing accounts for most owner-occupied units. Altogether, one-unit attached and detached dwellings comprise 92.5% of owner-occupied housing units, with 79.3% in detached residences and 13.1% in attached residences. Of the 20.5% renters, 40.6% are in single-family housing, 23.0% are in 2- to 4-unit structures, 13.0% are in 5- to 49-unit structures and 23.4% are in structures with 50 or more units.

Regarding race and ethnicity, people considered by the Census Bureau as "White alone" make up 83% of Pennington residents compared with 44% in Mercer County and 52% in New Jersey. "Hispanic or Latino" make up 5.8% in Pennington versus 22% for both County and State. "Asian alone" is 7.4%, versus 12% for the County and 10 % for the State.

A full demographic analysis can be found in Appendix 1 of the Housing Element and Fair Share Plan.

8. EXISTING LAND USE AND ZONING

Pennington began to develop in the early 1700's and was known as Queenstown, which changed to Pennington in the mid-1700's. Some buildings near the crossroads of Main and Delaware date back to this

period. By the late 1800's, the Borough's population had grown to around 700 and in 1890, following a petition, the Borough of Pennington was established by the NJ State Legislature. Despite considerable housing growth in the area surrounding the Borough, Pennington's boundaries have not changed since its incorporation.

The population of the new Borough grew to 1,300 by 1920 as large lots close to North and South Main Street were subdivided to build new housing. Population grew steadily from 1930 to 1960 as the R-80 zone east of Eglantine Avenue and West of Burd Street filled in. Population stabilized at about 2,100, then increased between 1976 and 1988 as new developments in the R-100 zones were built: Abey Drive, North Riding, Baldwin, Scudder Court and Railroad Place. The Pennington School, founded in 1838 as a Methodist seminary, covers 11.8 acres between the west side of the town center and the CSX tracks. Two public school properties cover 13.8 acres on the east side of South Main Street. The Borough east of the CSX tracks is mostly built out.

To the west of the railroad tracks, two new developments have been built in the northwest area of the Borough: Pennington Point adult community in 1995-96 and Heritage at Pennington in 2017-19. The population of the Borough has stabilized at about 2,800. The remainder of the Borough west of the tracks is largely business and commercial. The only undeveloped land in this area is the 7.8 acre closed landfill, which is designated as an area in need of redevelopment. This area of the Borough is divided by 0.7 miles of State Route 31, built in the early 1930's to bypass Main Street. Route 31 is heavily travelled by cars and trucks as it is the shortest connection between Interstates I-95/I-295 and I-78/I-278. While this presents opportunities for businesses in the corridor, it creates safety and congestion issues for Pennington that complicate zoning policy.

Analysis of property tax data reveals that Pennington is largely a residential community, with 88% of its properties classified as such and covering approximately 65% of the Borough's total land area. Commercial and industrial uses account for only 5.4% of the Borough's properties but cover 10% of its land area while exempt properties (schools, parks, public properties, churches and cemeteries) account for 5% but cover more than 21% of its area. Table 1, below, summarizes the Borough's land use characteristics based on property class while the map opposite illustrates the geographic distribution of various land uses.

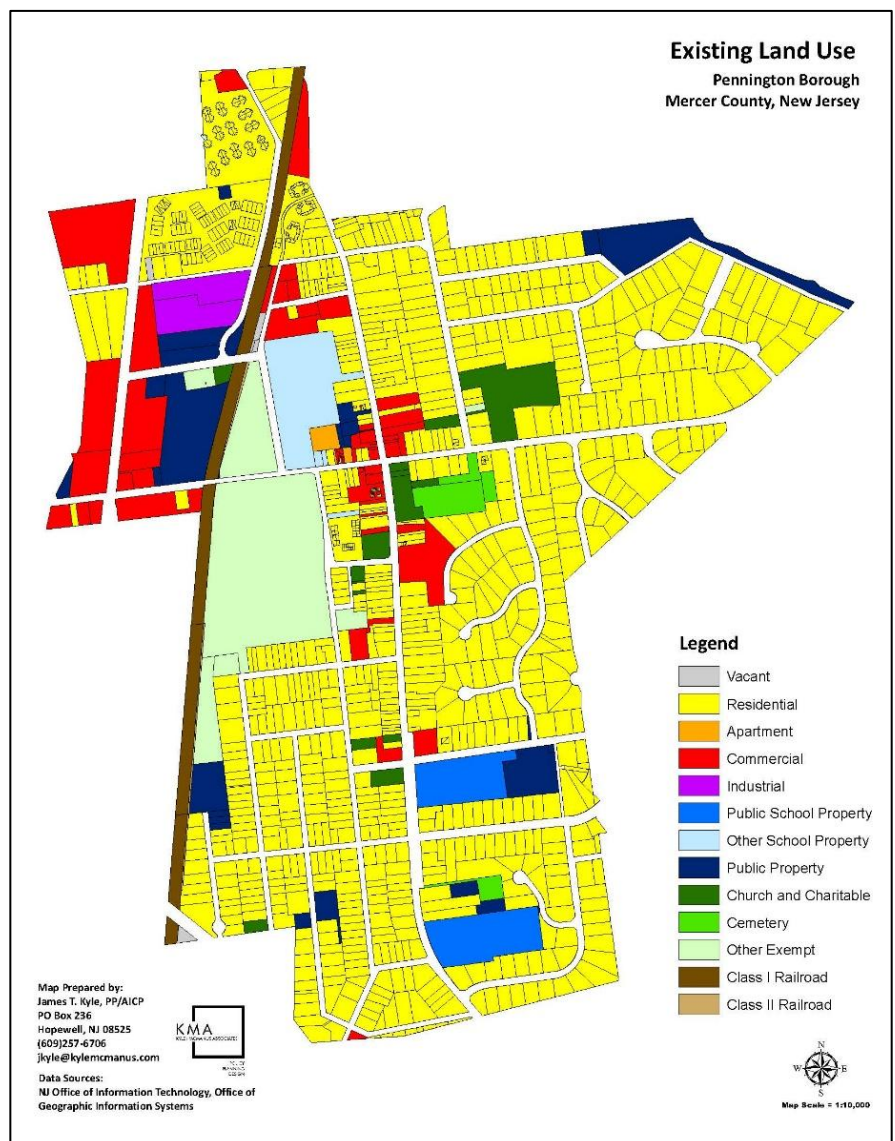
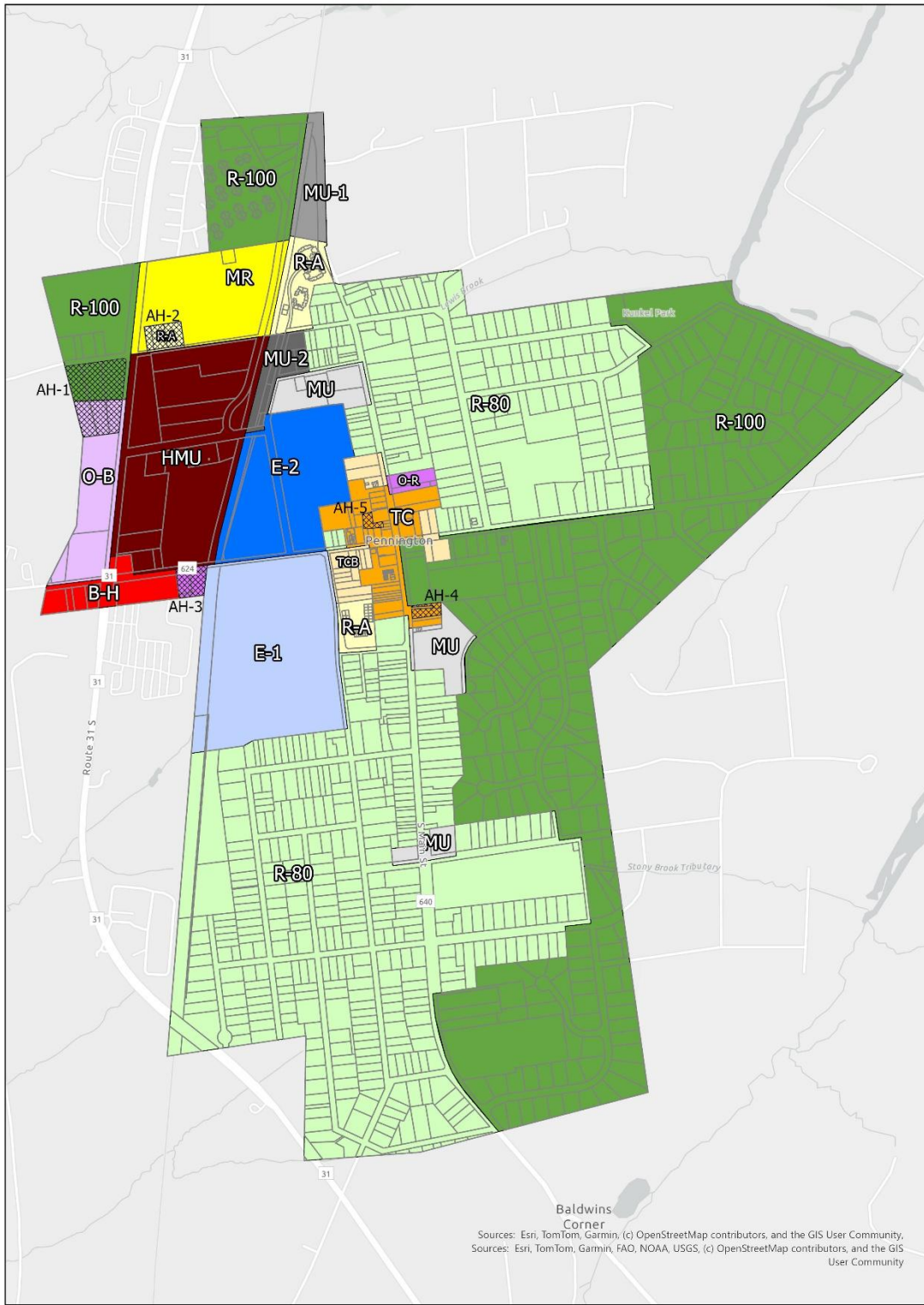


Table 1
Borough of Pennington - Existing Land Use by Property Class

Property Type	# Properties	% of Total Properties	Total Acreage	% Total Acreage
Vacant	5	0.43%	0.85	0.16%
Residential	1,010	87.67%	351.12	65.15%
Apartment	2	0.17%	1.19	0.22%
Commercial	61	5.3%	46.96	8.71%
Industrial	2	0.17%	7	1.30 %
Public School Property	2	0.17%	13.75	2.55%
Other School Property	4	0.17%	11.79	2.19%
Public Property	27	2.34%	30.71	5.70%
Church and Charitable	15	1.3%	13.08	2.43%
Cemetery	4	0.35%	5.53	1.03%
Other Exempt	8	0.69%	41.14	7.63%
Class I Railroad	7	0.61%	15.07	2.80%
Class II Railroad	5	0.43%	0.73	0.13%

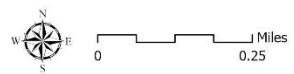
The Borough is divided into 16 zoning districts along with two conditional use overlays, the Route 31 Corridor Business Overlay Zone and 5 affordable housing overlay zones, as shown on the zoning map on the following page. Table 2, farther below, summarizes the area each zoning district covers. Residential districts cover 77% of the Borough with nonresidential and mixed-use districts covering the remaining 33%. The R-80 and R-100 districts, which permit only single-family detached housing, account for 73% of the Borough’s land area.



Sources: Esri, TomTom, Garmin, (c) OpenStreetMap contributors, and the GIS User Community
 Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community

**Borough of Pennington
 Zoning Map**

February 2026



Legend

- | | | |
|-------------|------|-----|
| AH Overlays | TCB | O-B |
| R-80 | MU | O-R |
| R-100 | MU-1 | P-O |
| R-A | MU-2 | E-1 |
| MR | HMU | E-2 |
| TC | B-H | |

Map Prepared by:
 James T. Kyle, PP/AICP
 NJ PP# 5667



Table 2 Summary of Zoning Districts			
Zone District	Symbol	Acreage	% of Total Acreage
R-80 Residence Zone	R-80	254.213	40.8%
R-100 Residence Zone	R-100	201.363	32.3%
R-A Apartment Townhouse Residence Zone	R-A	8.639	1.4%
O-R Office Residence Zone	O-R	2.254	0.4%
TC Town Center Zone	TC	11.275	1.8%
TCB Town Center Buffer Zone	TCB	5.450	0.9%
O-B Office Building Business Zone	O-B	10.274	1.6%
B-H Highway Business Zone	B-H	5.721	0.9%
E-1 Education Zone	E-1	33.578	5.4%
E-2 Education Zone	E-2	20.44	3.3%
HMU - Highway Mixed Use Zone	HMU	34.977	5.6%
MU - Mixed Use Zone	MU	11.111	1.8%
MU-1 Mixed Use Zone 1	MU-1	4.388	0.7%
MU-2 Mixed Use Zone 2	MU-2	3.631	0.6%
MR Mixed Residence Zone	MR	16.167	2.6%
Total		623.481	

9. ADDRESSING THE NEED FOR AFFORDABLE HOUSING

Since the New Jersey Supreme Court’s first decision in Mt. Laurel I, all municipalities in the State have borne a constitutional obligation to provide opportunity for the construction of housing affordable to low and moderate income households. Throughout each round of affordable housing compliance, municipalities have been assigned or have negotiated their obligations and created plans to meet that obligation, which entitles them to immunity from exclusionary zoning litigation through builder’s remedy lawsuits. But housing affordability is more than providing deed restricted units to meet a mandate, as many households that do not qualify for such units are left in limbo. More needs to be done to address this segment of the population so the Borough’s overall housing policy is more inclusive.

Pennington’s Fourth Round affordable housing obligation is 58 units. As the Borough did not receive a judgment of compliance and repose through Court approval for the Third Round, it must address some part of its Unmet Need of 125 units. Since there has been little development in the Borough over the last 20 years, payment of development fees to the affordable housing trust fund has been limited. The current balance of about half a million dollars will be spent on affordability assistance, rehabilitation of existing units occupied by low and moderate income households and the extension of expiring controls, as the high cost to subsidize compliance mechanisms that forgo market rate units cannot be supported by the limited trust funds available. As such, the Borough must rely on residential developers to construct inclusionary projects which provide a setaside of units affordable to low and moderate income households. In Pennington’s case, every new project will be required to provide a 20% setaside of affordable housing units.

One problem that has plagued the Borough throughout its history of affordable housing compliance is the availability of vacant land. As detailed in the adopted Fourth Round housing plan, the only Borough-owned vacant land is the 7.8-acre former municipal landfill, which is currently inappropriate for residential development due to documented contamination as well as regulatory issues surrounding wetlands, flood hazard areas and riparian zones associated with the Lewis Brook located on the property. Five smaller vacant parcels total another 0.9 acres, and 3.1 acres may become available at the Senior Center property on Reading Street once the new Community Center is built on Reed Road in Hopewell Township. Given a lack of usable vacant land, developers would need to identify private properties to purchase and redevelop.

Opportunities for new mixed-use development exist along the Route 31 corridor on the western side of town, and Mayor and Council recently enacted zoning amendments to create the HMU Highway Mixed Use Zone which permits residential dwelling units above nonresidential uses as well as multifamily residential buildings for portions of the zone that do not front directly on Route 31. The MU Mixed Use Zone was also enacted and covers properties formerly zoned P-O and O-R along South Main Street and MU-2 on North Main Street and Brookside Avenue, permitting ground floor nonresidential uses and dwelling units on second and third floors.

Changes to R-80 and R-100 zones, which make up the majority of residential areas of the Borough, could allow in-fill development with smaller units. Strategies could include accessory dwelling units (ADU's) or combining adjacent lots with the goal of increasing residential density to promote housing affordability. While deed restricted affordable housing units are an important part of any affordability strategy, offering a greater variety of housing types and sizes would better fit a broad spectrum of household size and income levels.

As a result of the proposed zoning changes to allow mixed use in discrete areas of the Borough, the Housing Plan Element of this Master Plan has identified sufficient opportunities to meet the entire Fourth Round obligation. Details can be found in the Housing Plan, but in summary the locations are as follows:

- A townhouse development on the south side of West Franklin Avenue west of Route 31.
- A rental building on the north side of West Franklin Avenue east of Route 31.
- A rental building on the south side of West Delaware Avenue east of Route 31
- A rental building to the east of the Straube Center
- A conversion of a commercial building to an apartment building at 12 North Main Street
- Conversion of the Senior Center on Reading Street to Supportive Housing Bedrooms
- Redevelopment of the Blackwell property on North Main Street to mixed use.

The proposed zoning changes also resulted in additional housing opportunities that can address part of the Unmet Need from the Third Round affordable housing obligation, including:

- Residences above the two shopping malls on the east side of Route 31.
- Possible redevelopment of the 3.8 acres at Howe Commons on South Main Street.
- Proposed apartment building at the rear of 37, 41 and 43 South Main Street.
- Allowing upper story residential units at 245 and 250 South Main Street.

Details of how these housing opportunities help fulfill the Borough's obligations can be found in the Housing Plan, but in summary, the 58-unit Fourth Round obligation would be fully met and 37 units of the Third Round 125 unit Unmet Need would be satisfied. This is much larger than the realistic development potential (RDP) calculated based on available vacant land in the Borough and as such, the Borough must rely on redevelopment opportunities to meet its affordable housing requirements.

10. CURRENT LAND USE ISSUES

When the Planning Board undertook comprehensive reexamination of the Master Plan in 2023, there were several land use issues identified and discussed and in some cases recommendations were offered. While some progress was made on implementing those recommendations, some remain unfulfilled and therefore bear discussion in the Land Use Plan. Not surprisingly, new issues have also surfaced.

Flooding

As discussed at length in the Borough's Climate Change-Related Hazard Vulnerability Assessment, the Borough has experienced an increase in flooding events over the last 10-15 years. With storm intensity and frequency increasing due to climate change, Pennington has witnessed a number of remarkable rainfall events that led to widespread flooding in critical areas, often blocking roads into and out of the Borough for periods of time. Much of the existing development in the Borough predates modern stormwater management regulations and was not designed to attenuate rainfall events such as those that seem more frequent these days. Redevelopment of certain properties presents the opportunity to improve antiquated stormwater control measures and potentially reduce the extent of impervious surfaces. Changes to the State's stormwater management requirements enacted in January 2026 will help ensure that redeveloped properties better address stormwater impacts.

The Borough is participating in efforts led by Mercer County and including the Watershed Institute and Hopewell Township aimed at addressing flooding along Lewis Brook. While the initial focus has been the intersection of West Delaware Avenue and Route 31, which experienced catastrophic flooding in 2021, the entire reach from Route 31 to the Stony Brook is being studied. The County is planning to improve bridges on Green Street and North Main Street and has compiled significant data on Lewis Brook, including defining the drainage area that contributes to it. Redevelopment efforts along Brookside Avenue in conjunction with these County efforts may lead to reduced flooding. More work is needed however, and some potential fixes involve private property. Potential redevelopment within the drainage area offers an opportunity to implement better stormwater control measures and improve water quality. All redevelopment efforts should be coordinated around the goals of improving stormwater management, reducing flooding and creating sustainable development.

Pennington is situated mostly within the Stony Brook watershed, with the Stony Brook flowing along the Borough's eastern boundary with Hopewell Township. Tributaries to the Stony Brook, including Lewis Brook, lie within the Borough. In 2025, the Borough agreed to partner with Lawrence, Hopewell, Princeton and the Watershed Institute to collaborate on a Watershed Improvement Plan (WIP) for the Stony Brook watershed, which the communities share. A first-of-its-kind approach, the goal of the WIP, expected to be completed in 2026, is to improve stream water quality in the region and reduce flooding.

Neighborhood Character

While neighborhood character is a broad and often subjective term, the American Planning Association notes that "*community character refers to the distinct identity of a place.....the collective impression a neighborhood or town makes on residents and visitors.*"¹ Fully 42% of Borough respondents to the survey noted concern over impact to neighborhood character that may result from new housing in the

¹ [What Does Community Character Mean Anyway? | ULI Boston/New England](#)

community. So, what factors actually define the character of Pennington or its individual neighborhoods? Historic homes? Main Street shops? Schools? Or maybe it's all those things together? Although protecting neighborhood character can mean different things to different people, it is clear it should be given consideration in the Borough's planning process.

As the Borough considers opportunities to increase residential density and expand housing options, such development should be guided by design principles that ensure compatibility with the scale and character of surrounding neighborhoods. Particular attention should be given to transitions between new development and established areas, including the Pennington Crossroads Historic District.

A priority for the Borough is ensuring that future growth is thoughtfully integrated in a way that enhances and complements our unique identity and scale of our neighborhoods. In order to meet its constitutional obligation to provide the opportunity for affordable housing, the Borough needed to consider new zoning that would permit construction of townhomes and apartments in a municipality that is largely characterized by single-family detached dwellings. Other than the construction of Pennington Point in the mid 90's and more recently the Heritage townhome project along West Franklin Avenue 10 years ago, Pennington has not seen significant new residential development. The two developments noted above were constructed on the last remaining vacant parcels that could accommodate projects of that size. As vacant land has become almost nonexistent Pennington, alternatives needed to be considered. Much of the new development anticipated will occur just east of the Route 31 corridor, an area almost entirely nonresidential in nature, now envisioned to be a mixed-use environment, a concept that was generally favored according to survey results. Unfortunately, this area alone is not enough to meet the pressing need for affordable housing.

As new housing is integrated into areas of the Borough that primarily consist of single-family detached and historic homes, it will be important to ensure it is compatible with what exists. In the Pennington Crossroads Historic District, this will mean review and approval by the Historic Preservation Commission. In other areas it will mean buildings of appropriate size and scale given their context along with materials that are compatible with the neighborhood vernacular.

The character of residential neighborhoods in the Borough has long been discussed in past master plans and master plan reexamination reports. Initially brought forth in the 2005 reexamination report, floor area ratio (FAR) requirements were thought to be a means to stem the replacement or expansion of smaller homes that was resulting in structures that seemed too large and therefore out of sync with Pennington's residential character. Shortly after the 2005 reexamination report, FAR standards were implemented in the R-80 and R-100 zones and were later modified to permit a maximum FAR of 0.265 not exceeding 3,500 total square feet in the R-80 zone and 0.25 not exceeding 4,000 total square feet in the R-100 zone. Over the course of the last decade, the Zoning Board has reviewed and approved a number of applications for FAR relief, but all were related to exceeding the maximum dwelling size as opposed to the maximum FAR permitted. In all cases, the size of the dwelling seemed appropriate for the particular lot based on the Board's analysis despite exceeding the maximum square footage permitted.

Recommendations related to the R-80 and R-100 zones can be found in section 6F.

Accessory Dwelling Units

Utilized extensively in California and other expensive housing markets in the US, accessory dwelling units have been slow to catch on in New Jersey. Recently both Princeton and South Orange have adopted progressive accessory dwelling unit (ADU) ordinances, permitting additional dwellings on even small lots in the former Borough of Princeton. The benefits of permitting ADU's are two-fold. First, they provide

smaller rental units that tend to be more affordable, even if not restricted to low- and moderate-income households. Second, they allow homeowners a revenue stream to assist with housing costs, which is particularly useful to residents that may not be able to afford to maintain their current home in retirement. While generally supported by survey respondents, common concerns were impacts to on-street parking and the potential for changing the feel of residential streets.

Although the Borough is providing opportunity for the creation of deed-restricted affordable housing through its compliance approach, those units are only available to income-qualified low and moderate income households. Based on current regional income limits, that would be a 1 person household making \$75,440 or less annually (80% of median). For those residents with incomes over 80% and up to 120% of the regional median, market-rate units are the only available option. Given that the majority of residential units in the Borough are single-family dwellings, ADU's represent an alternative that could help address affordability beyond the provision of deed-restricted units.

Recommendations related to accessory dwelling units can be found in section 6F.

Signage

Currently the Borough regulates signs in Article III "Sign Regulations", which resides within the Zoning Ordinance and was last amended in 1996. As noted in the Economic Development Plan Element, signage is critically important to businesses, particularly those along Route 31. Given the width of existing right of way on the east side of Route 31, there are limited potential locations on existing developed properties for signs that conform to setback requirements in the HMU zone. The Plan also notes the current ordinance has not kept pace with advancements in sign technology, as it does not address LED.

The Economic Development Plan Element notes the nature of signage in Town Center should be consistent with the historic village character of Main Street and distinct from signage permitted along Route 31. It also discusses the need for better and more consistent wayfinding signage to identify points of interest and direct shoppers to businesses. Current standards in §215-42 permit a variety of sign types including wall, shingle, awning and window signs. Wall and awning signs together cannot exceed an area equal to 10% of the ground floor façade, shingle signs cannot exceed 12 square feet and window signs cannot exceed 40% of the window area. Sidewalk sale signs and restaurant menu boards are permitted provided they are not more than 6 square feet in area, are only displayed during business hours, do not exceed 5 feet in height and do not block a public way.

Recommendations relative to signage can be found in section 6M.

Donation Drop-Off Bins

Many communities have seen a proliferation of unattended donation bins, often seemingly appearing out of nowhere. While they serve a purpose, they also have the potential to impact the sites where they are located. With unknown collection intervals, it is common for donated material to be set on the ground outside bins if they are full. If placed thoughtlessly, they can impact circulation patterns and reduce available parking or negatively impact the visual environment.

Recommendations related to donation drop-off bins can be found in section 6I.

Stormwater Management

The State of New Jersey has been incredibly progressive in adapting stormwater management regulations to address climate-change-related increases in rainfall intensity and frequency. While unpopular with

developers as they have become ever more restrictive, these regulations are critical to ensuring development is sustainable in the future.

In 2004 the New Jersey Department of Environmental Protection (NJDEP) enacted significant changes to the rules governing stormwater management. To meet requirements of the Federal Clean Water Act, NJDEP enacted a permitting program for municipalities to operate small municipal separate stormwater sewer systems (MS4's), the goal of which was to reduce nonpoint source pollutant loads. Through the Statewide Basic Requirements, permittees were required to implement ordinances, develop a municipal stormwater management plan and implement certain controls. NJDEP also adopted the Stormwater Management Rules (N.J.A.C. 7:8), which set forth the requirements for municipal and regional stormwater management plans, but also established design standards for new development to address groundwater recharge, runoff quantity and runoff quality.

NJDEP amended the rules in 2021 to implement green infrastructure requirements and published the NJ Stormwater Best Management Practices Manual (BMP). While recharge, quality and quantity requirements remained, the rules mandated use of BMP's, which include green roofs, drywells, pervious paving systems, infiltration basins and certain manufactured treatment devices, to address the requirements. They also implemented a limitation on the size of drainage areas that can be treated with BMP's, with no individual drainage area permitted to be greater than 2.5 acres, with a 1 acre maximum for dry wells. Further amendments in 2023 implemented adjustment factors in stormwater design analysis to accommodate a likely increase in rainfall intensity resulting from climate change.

Most recently NJDEP adopted both REAL (Resilient Environments and Landscapes) and New Jersey's Protecting Against Climate Threats (NJPACT), which became effective on January 20, 2026 and significantly amended Coastal Zone Management Rules, Freshwater Wetlands Protection Rules, Flood Hazard Area Control Act rules and the Stormwater Management rules. For stormwater management, the Department now requires certain redevelopment that reconstructs motor vehicle surfaces (not including milling and repaving) to meet current runoff quality standards. Since most "new" development anticipated in Pennington over the course of the next few years will be redevelopment of existing sites, this rule change should aid the Borough in addressing water quality issues. NJPACT also requires the Borough to adopt a stormwater management plan and updated stormwater control requirements by January 20, 2027. The stormwater management plan, which will be an element of the Borough Master Plan adopted by the Planning Board, presents an opportunity to ensure ordinance requirements relate to the Borough's overall vision and are aligned with goals related to improving stormwater management, reducing flooding and promoting sustainable development. The New Jersey Department of Environmental Protection (NJDEP) requires that all municipal stormwater ordinances conform to current state regulations, although they are permitted to be more restrictive. Many local communities have enacted more stringent standards, requiring stormwater management measures for as little as 250 square feet of new impervious surfaces. While residential projects increasing impervious coverage by 300-500 square feet individually seem minor, the cumulative effects of many such increases could have substantial impacts.

Recommendations related to flooding and stormwater management can be found in section 6J.

Driveway Standards

The 2023 reexamination report noted the need for standards related to construction of driveways for residential homes. A lack of requirements has resulted in driveways being built too close to adjoining property lines, with doors being opened onto adjacent property or stormwater runoff flowing onto adjacent property. It is recommended that minimum and maximum width and setback standards be included in the zoning ordinance. Recommendations can be found in section 6P.

B-H, O-B, O-R and Route 31 Corridor Business Overlay Zone

In conjunction with preparation of the Economic Development Plan Element, the Economic Development Commission reviewed zoning along the Route 31 corridor, which currently includes the B-H, O-B, O-R and Route 31 Corridor Business Overlay zones. One key recommendation of the Plan is to permit mixed-use along Route 31, which has been implemented as part of the Borough's affordable housing compliance plan through creation of the HMU Highway Mixed-Use zone. As adopted by Council, the HMU will permit ground floor nonresidential uses with residential units above in up to two additional stories. In addition, the HMU standards permit residential apartment buildings provided such building does not front directly on Route 31.

The current B-H, O-B, O-R and Route 31 Corridor Business Overlay zones are antiquated and not reflective of modern uses or the current nonresidential market. The Route 31 Corridor Business Overlay zone was put into effect *"to create a mixed-use, pedestrian-friendly development that is aesthetically pleasing."* One key difference with the overlay was the addition of retail and bank uses with drive-through facilities as conditionally permitted uses. Despite being coined a "mixed-use" district, the overlay does not permit residential uses.

The Economic Development Plan Element recommends the Route 31 corridor be rezoned to eliminate the current B-H, OB and O-R zones which is achieved through creation of the HMU Highway Mixed-Use and C-B Crossroads Business zones as shown on the proposed Land Use Plan Map, Figure 1. The HMU standards, already adopted by Council to provide opportunity for affordable housing, permit a variety of retail, restaurant and office uses, animal hospitals, hardware stores, wholesale businesses, technical training centers, educational uses (other than schools), child care centers and municipal service uses. Residential multifamily apartments are permitted on second and third floors of buildings and fully residential buildings are permitted provided they do not front directly on Route 31.

The C-B zone should be created and permit retail, personal service, restaurant and office uses. Given safety concerns at the intersection of Route 31 and West Delaware Avenue, uses that generate significant peak hour traffic such as convenience stores with automotive fuel sales and traditional fast-food restaurants with drive through should not be permitted. Hybrid restaurants with options for pickup would be appropriate. The Crossroads Business zone is differentiated from the HMU zone in that residential uses are not permitted, although mixed-use with office or other nonresidential uses on a second floor is encouraged. This overall approach to the Route 31 corridor is generally supported by survey respondents, with outdoor, pedestrian-oriented shopping centers with green infrastructure being the most preferred with offices over retail and restaurants and residences over retail and restaurants a close second. Standalone commercial strip centers such as those that already exist were not viewed as desirable by the majority of survey respondents and the new HMU zone seeks to prevent that. The hope is that owners of existing commercial strip centers are provided enough incentive through zoning to spur mixed-use redevelopment.

Recommendations related to the Route 31 corridor are found in section 6B.

Town Center

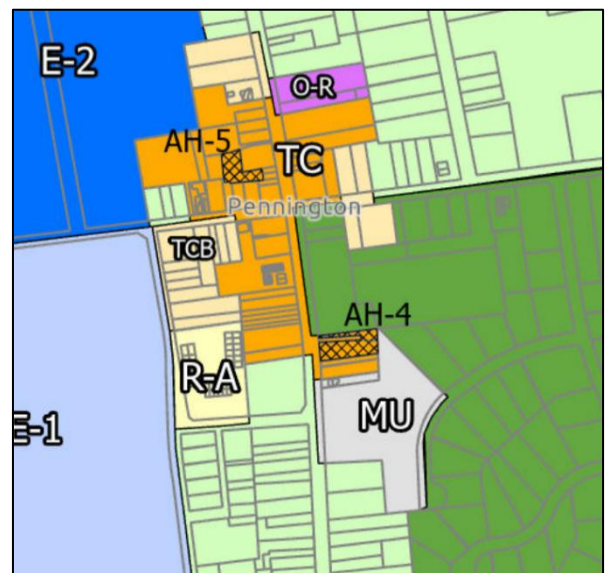
Pennington is blessed with a Main Street that exudes traditional character reflective of the Borough's history. While it is a form that is desirable, it is often almost impossible to replicate. The Economic Development Plan Element notes a need for Town Center zoning to be distinct from that along Route 31, reinforcing the existing historic village appearance and focusing on retail shopping and dining to encourage pedestrian traffic. Survey respondents felt that retail and dining and community gathering and events were key to bringing activity and purpose to Town Center. Additionally, the survey results indicated broad support for:

- pedestrian ways with a mix of businesses, residences and outdoor dining
- sidewalks with space for shade cover, bicycle racks, seating and outdoor dining
- sense of place created by streetscaping, plants, trees, seasonal lighting and public art
- pocket parks and/or greenways that connect to areas around Town Center
- more mixed-use development including residential

Current Town Center zoning standards permit a wide variety of neighborhood retail and specialty shops, including stores selling groceries, meats, baked goods and similar food items, hardware and general merchandise stores, pharmacies, photo shops and pet grooming establishments, stationary stores, florists, antique shops, bookstores, toy stores and gift shops, jewelry, clothing and shoe shops, consignment shops, delicatessens, luncheonettes, pizza parlors, ice cream parlors and coffee shops, full service restaurants and other uses found by the Planning Board to be of the same character. Personal service establishments are also permitted, including banks, shoe repair and tailor shops, barber shops and beauty salons, travel agencies and other personal service establishments found by the Planning Board to be of the same character. One and two-family uses existing are permitted to remain and dwelling units are permitted on upper floors. General business offices are only permitted on upper floors. Required bulk standards are reflective of existing conditions relative to lot area and setbacks, while building height must be at least two stories or 28 feet and no more than 3 stories or 40 feet. Lot coverage may not exceed 80%.

Generally speaking, the uses currently permitted in Town Center reflect those appropriate for a historic village and are business types that are more likely to be locally-owned as opposed to being owned and operated as national chains. A few uses mentioned in survey responses that are not currently permitted include breweries, pubs, farmers’ markets and fitness and wellness uses, all of which may also be appropriate. Permitted uses respect, protect and enhance the historic character of Main Street.

The current zoning map limits the extent of the Town Center zone to the east and west side of North main Street and the east side of South Main Street to the Pennington United Methodist Church (see image at right). The east side of South Main Street, including the Pennington Presbyterian Church, lies within the R-100 zone. The Economic Development Plan Element recommends the Town Center zone be extended along the west side of South Main Street to Academy Avenue and along the east side of South Main Street to include the Presbyterian Church and cemetery and further recommends the existing O-R zone on the east side of North Main Street be incorporated into the Town Center zone.



Current TC and TCB zone extent.

Recommendations related to the Town Center zone can be found in section 6A.

Town Center Buffer Zone

Created in 2001, the TCB Town Center Buffer Zone was intended to “...function as a transition between the more intensive town center uses and nearby residential areas.” As shown on the image above, the TCB flanks the east and west sides of the TC zone as well as the east side of North Main Street. The zone permits one-family dwellings, multifamily dwellings in existence on the effective date of the ordinance,

dwelling within a structure containing a permitted nonresidential use and home occupations. Permitted nonresidential uses, which must be within a building containing a permitted residential use, include professional, medical, general and executive offices along with counseling, financial services, Red Cross and YMCA.

After 25 years in effect, it is clear the TCB zone is not yielding the desired results. Areas of TCB on the east side of the TC zone (Block 503, Lots 2-9, Block 205, Lots 32-34) and west side of the TC zone along East Delaware Avenue (Block 301, Lots 50 and 51 and Block 601, Lots 23 and 24) contain existing single-family residential dwellings, some of which are new and others that have been substantially improved over the years. It is unlikely at this point that they would be converted to the mixed commercial use envisioned in the zone. The TCB on the north side of the TC along North Main Street (Block 205, Lots 13-15) includes one office property adjacent to the driveway to the municipal complex and two single-family dwellings. While the Economic Development Plan Element recommended the Town Center zone be expanded to include all the current Town Center Buffer zones, as noted some of these areas are primarily occupied by single-family detached homes. Limited expansion of the TC zone to extend farther north and south along Main Street is seen as a viable means to permit expansion of typical Main Street uses without impacting the character of stable residential properties close to Main Street.

Recommendations for the Town Center Buffer Zone are included in section 6A(3).

Keeping of Chickens

A somewhat new phenomenon for suburban communities like Pennington is a desire by residents to keep chickens on their property. With some current residents keeping chickens on their properties, it is important to ensure this activity does not result in impacts to adjacent properties from impacts including noise, trespass and sanitary conditions. Recommendations related to the keeping of chickens are located in section 6R.

Nonconforming Uses and Structures

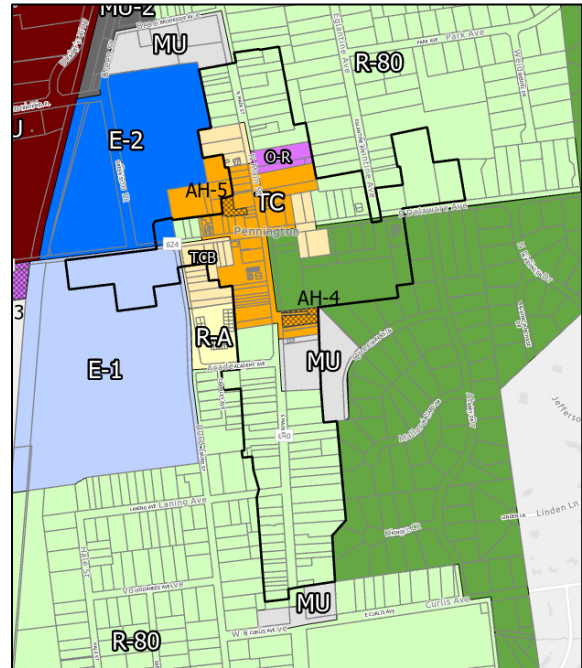
Article V of the zoning ordinance regulates nonconforming uses and structures. Presently the language in §215-52.B and §215-57 seems to intend to permit additions for nonconforming structures without the need for variance relief provided the degree of nonconformity is not increased. In reviewing specific applications submitted to the Borough for residential addition, it appears the language governing nonconforming uses and structures in two sections of the ordinance is unclear. This fact was also noted in the Board's 2023 reexamination report. Recommendations relative to nonconforming uses and structures are included in section 6Q.

Lighting Standards

Lighting is regulated in Chapter 163, Site Plan Review, Article IV, but only in a very limited way. Current standards are not reflective of modern lighting requirements and do little to address lighting on individual residential properties. They also do not address issues such as lighting color temperature and shielding of fixtures to prevent light trespass. While site plan submission standards require details on type, location, footprint and light intensity, the ordinance does not provide specific limitations for this information to be compared to nor does it provide average intensity requirements, uniformity requirements or limitations on intensity at property lines. Recommendations relative to lighting are found in section 6N.

Historic Preservation

Pennington Borough is fortunate to contain significant historic resources, something that contributes substantially to its overall character and desirability as a place to live. The Pennington Crossroads Historic District (see map at right, outlined in black), enacted locally by ordinance in 2011, is centered on North and South Main Streets and showcases a variety of historic architectural styles spanning 1790 to 1920. As noted in the Historic Preservation Plan Element, the regulatory approach taken by the Borough has stemmed the indiscriminate destruction of historic structures in the District, an important step to safeguarding Pennington’s historic resources. It also notes that more protection is needed for historic resources outside the District, including Toll Gate Grammar School, the HVRSD administration building and the train station, which could be achieved by identifying these individual sites on the zoning map. Under the Municipal Land Use Law, 40:55D-65.1, the Borough can designate and regulate both historic districts and historic sites provided they are identified in the Historic Preservation Plan Element.



As new development is contemplated within and around the District, input from the Historic Preservation Commission will be critical to insuring projects meet the “visual compatibility” requirements of the Historic Preservation ordinance. This goes beyond mere compatibility of building materials and window styles to focus on the scale and character of a site’s surroundings. The goal of historic standards is not to require new development to itself look historic, but rather to ensure that new development is sympathetic to the character of historic resources and the historic district.

Recommendations relative to historic preservation are found in section 6E.

11. LAND USE ISSUES IDENTIFIED IN OTHER ELEMENTS OF THE MASTER PLAN

This section reviews aspects of other elements of the Master Plan that may have an impact on land use. The current version of all Master Plan elements can be accessed via the Master Plan link on the Planning and Zoning section under Departments on the Borough website.

Housing Element and Fair Share Plan

The Housing Element and Fair Share Plan addresses how the Borough’s fourth-round affordable housing obligation will be met. Because there is little vacant land available, the plan focuses on areas that can potentially be redeveloped to include affordable housing. Actions taken are summarized in Section 8 of this Land Use Plan. Two new draft zoning ordinances (H-MU and M-U) are presented in the Housing and Fair Share Plan based on recommendations from the Master Plan Committee as they worked on this Land

Use plan. Five other draft ordinances, AH-1 to AH-5, in the Housing Element and Fair Share Plan address the particulars of individual sites. The Housing Element and Fair Share Plan and these ordinances have been adopted by the Planning Board and endorsed by Council to meet state-mandated submission by March 15, 2026.

Mobility Plan

Pennington Borough's visions for mobility are to reduce automobile use in the Borough and to provide safe sidewalks for pedestrians and safe routes for bicycles and other low speed personal vehicles. The Borough also works to improve Route 31 intersection management, emphasizing safety, and to reduce flooding on all roads in the Borough. Complete & Green Streets, and Vision Zero policies are being implemented. The Mobility Plan makes recommendations in response to a call in the Economic Development Plan to find innovative ways to increase the available parking for customers of businesses in the town center while meeting the parking needs of business employees and residents. The Plan also promotes public and other transit alternatives to reduce traffic congestion and provide services to residents in need.

To address the congestion, safety, and flooding issues at the intersection of Route 31 and West Delaware Avenue, it is recommended that a new zone, Crossroads-Business (C-B), be created to include the properties adjacent to the intersection as discussed in Section 6B(3) of this Land Use Plan. Parking recommendations can be found in Section 6G. Safe sidewalks and bikeways are addressed in Section 6H. The Mobility Plan discusses the poor state of repair, inadequacy and safety of the CSX railroad bridges on West Delaware Avenue and Broemel Place. The solutions to these problems may require land outside the current rights-of-way of these two roads.

Many of the Mobility Plan goals could be met by Council resolutions without new ordinances. There are two chapters of the Borough Code that address Mobility. Chapter 177, Streets and Sidewalks, covers design and safety of sidewalks. The design of sidewalk or road improvements to accommodate bicycles and other low speed personal vehicles may require new ordinances in Chapter 177. Amended or new ordinances may be needed to implement the Complete & Green Streets, and Vision Zero policies as the rules of these two programs evolve. Parking is addressed in Article III of Chapter 200, Vehicles and Traffic, but ordinance changes may be needed to enhance parking in the Town Center. The remaining vision items associated with reducing automobile use, reducing impact on the environment, EV charging, and public transit are not covered by Chapter 200 and may need new ordinances. Some of these areas are addressed briefly in Chapter 215 part 28, Traffic Management, but this needs to be updated.

Utility Services Plan

Pennington Borough's vision for utility services is to provide first-class, cost-effective services such as stormwater management, tree management, infrastructure maintenance and upgrades, snowplowing, and road repairs. It will also maintain and improve water and wastewater systems to ensure uninterrupted service and reduce the long-term cost of municipal ownership. It will work to protect water quality and maintain Municipal Separate Storm Sewer System (MS4) permit compliance, and to reduce the impact of severe storms on flooding in the Borough. The topics of Flooding and Stormwater Management are Covered in Section 10 of this Land Use Plan.

New or revised ordinances or resolutions may be needed on the following topics to fulfill these goals: stormwater management, forestry management, drinking water and wastewater capacity, riparian zones, floodplain restoration, impervious coverage, bridges, culverts and daylighting streams. It is suggested that

these be written and adopted as the various components of the Utility Services Plan element are implemented, as recommended in Section 6K.

Community Facilities and Services Plan

This plan includes data on municipal facilities, other non-municipal facilities that may be available for public use, parks and recreation, schools, and churches, and services they provide. Pennington Borough has an extensive range of community facilities to serve its population. With limited vacant land and little opportunity for new development, no major additions to, or expansion of the existing community facilities are anticipated. However, it may be necessary to consider renting some nearby space or repurposing other borough buildings if needs arise.

Two concerns are raised in the Community Facilities and Services Plan of relevance to land use that may require resolutions and ordinances to implement. First, church attendance is in decline and some of the churches in the Borough may close or consolidate. These buildings are often historic and to preserve the history the Borough should encourage repurposing rather than demolition. Second, Toll Gate Grammar School and the original Central High School, which now houses the HVRSD administration offices, were built in the 1920's and are well-preserved historic landmarks in Pennington. If either were to be vacated by HVRSD, they should be considered for adaptive reuse to preserve the historic architecture. It is recommended in Section 6E2 that these be rezoned as E-3 educational so that Council will be able to work with a developer to modify the zoning to preserve the facades of the building as they are repurposed.

Open Space and Recreation Plan

The mission of the Open Space Committee is to retain the village identity of Pennington and the semi-rural character of nearby surrounding areas, by collaborating with Hopewell Township, Mercer County, the State of New Jersey, and non-profit land preservation organizations, Through these collaborations, the committee seeks to permanently protect open space in, adjacent to, and near the Borough as well as open space along roads, waterways and other undeveloped greenway corridors leading to and from the Borough. This open space will be accessible to all by numerous greenway corridors and trail systems. The vision of the Parks and Recreation Commission is to maximize participation in outdoor and indoor recreation, and to collaborate with other Borough entities to maximize synergies between recreation, education, and economic development efforts inside and outside the Borough.

A recommendation from the Open Space and Recreation Plan relevant to the Land Use Plan is to create or enhance links that allow pedestrian access to open space and recreational opportunities outside the Borough from multiple points within the Borough. This provides additional support to the Mobility Plan recommendation on bike routes and walkways in Section 6H. Also, the Plan recommends that where the Borough owns parks and recreational space, it should formalize its preservation by rezoning as Parks and Recreation, PR. This is shown in Section 6D.

Conservation of Natural Resources Plan

The Conservation of Natural Resources Plan element assists in the conservation of the Borough natural resources by identifying and characterizing its environmentally significant features and by putting forth key goals for the Borough conservation efforts. This element incorporates the 2024 Environmental Resources Inventory (ERI) of Pennington Borough. There are no recommendations for ordinance changes in the Land Use Plan except an overall recommendation that development be coordinated to preserve, enhance and restore natural resources that focus on environmental health, climate resilience and biodiversity. Growth should be

directed to areas with existing infrastructure to limit disturbance of environmentally sensitive lands. Several of these recommendations would be implemented by the Public Works Department, following the guidance of the Utility Services Plan element. In general terms, these goals aim to preserve a significant aspect of the neighborhood character, as discussed in Section 10.

Economic Development Plan

The Economic Development Plan is a new addition to the list of Pennington Borough Master Plan elements. It was written by the Economic Development Commission to support the Borough's entrepreneurs, who add to the thriving vitality of the community. Commercial development is an indispensable part of Pennington. It is a source of goods and services for the residents of the Borough and the nearby area and is also part of Pennington's brand promise for potential residents and visitors. The Plan provides a strategic framework for supporting Pennington's businesses across two distinct locations, the Route 31 corridor and the historic Town Center at Main Street and Delaware Avenue. Recommendations related to signage, distinct to both Route 31 and Town Center, are also discussed.

The Plan recommends simplification of the zoning in the Route 31 corridor and extending it to mixed uses. Extending the uses to include residential became a major contributor to addressing the Borough's affordable housing obligation as covered in the Housing Element and Fair Share Plan. This led to the recommendation of the HMU zone and to the ordinance now adopted by the Borough Council. The Economic Development Plan also recommended extending the Town Center Zone and elimination of the Town Center Buffer Zone. This is discussed in detail in Section 10 and led to the zoning recommendations in Section 6A. Parking recommendations are included in Section 6G. A recommendation to update the signage and lighting ordinances is discussed in Section 10 and 6M and 6N.

The Plan also recommends support for entrepreneurship by encouraging home-based businesses. These are increasing in number and can encourage a daytime population that will frequent other in-town businesses. Zoning should permit home-based businesses that do not negatively affect the residential character of neighborhoods or unduly create traffic or parking problems. Home office uses should be permitted as "accessory" rather than "conditional" uses, and limitations on the size and level of activity of such businesses should be regularly reexamined.

Historic Preservation Plan

The Borough of Pennington is fortunate to have a remarkable collection of early 19th century through early 20th century structures, generally well-maintained and in good condition. Revisions to the Historic Preservation Regulatory Ordinance approved by the Borough Council on December 2, 2024, strengthened and clarified the language to minimize ambiguity in the original text. The Plan recommended the creation of a Historic District Overlay in the zoning code and map to cover both the contiguous Historic District in the Town Center and other lots outside the Historic District that are deemed historic. It also promotes the preservation of threatened historic resources such as the Railroad Station and the HVRSD Administration Building. These are covered in Section 6E.

Green Buildings and Environmental Sustainability Plan

The Green Buildings and Environmental Sustainability Plan element (GBESE) is intended to ensure that future planning and development in Pennington Borough enhances the environmental sustainability and resilience of the community and minimizes negative effects resulting from its environmental footprint. It

also encourages the reversing of negative effects from previous development. Specifically, its purpose is to guide and serve as a basis for Borough land use decisions, ordinances, and policies that are related to buildings and sustainability.

The Plan strongly encourages LEED certification (or comparable standards) for new construction and renovations, with goals for energy efficiency, electrification of buildings and transportation, renewable energy installation (solar, geothermal), water conservation, green infrastructure, and smart growth principles. Specific strategies include installing solar panels on municipal buildings, facilitating EV charging, updating building codes for sustainability, expediting green permits, regulating lawn equipment to reduce emissions and noise, harvesting rainwater, and treating redevelopment as an opportunity to restore sites. New or revised ordinances or resolutions may be needed to enable these goals. It is suggested that these be written and adopted as the various components of the GBESE are implemented, as recommended in Section 6L.

12. REDEVELOPMENT

Three areas of the Borough have been designated by the Borough Council as areas of redevelopment with one additional property at 12 North Main Street currently in the preliminary investigation phase. These are summarized below.

1) The Blackwell Property – Block 205, Lots 2, 3, 4, 5, 6 (designated)

This consists of approximately 4 acres of land on the south side of Brookside Avenue stretching from Green Street to North Main Street. Each lot contains existing structures and, overall, the property has supported a variety of uses. Lot 2 contains a 1-story single family dwelling and other buildings. Lot 3 has 2-story single family dwelling. Lot 4 has a 2.5-story wood frame garage. Lot 5 has a 1-story garage. Lot 6 has a 2-story single family dwelling and a detached 1-story garage. The area does not contain any wetlands. Lewis Brook flows roughly west to east in an open channel, but the portion that flows under the existing garage on Lot 5 enters a pipe that restricts water flow and in heavy rain causes flooding on the property. There are no known contaminated sites documented by NJDEP in the area. The area is in the MU-2 Mixed Use Zone. Except for the single-family dwellings, most of the existing uses of the property are legally existing nonconforming uses not currently permitted under the MU-2 standards.

2) Pennington Landfill - Block 206, Lots 4, 5 and 12 (designated)

The area consists of approximately 8.5 acres of land on the north side of West Delaware Avenue and south side of Broemel Place immediately west of the railroad. At present Lot 4 is vacant and contains remnants of a driveway, Lot 5 contains the former Pennington Landfill, and a garage formerly used by the public works department and a municipal water supply well and treatment equipment. Lot 12 currently contains an abandoned municipal well, enclosed in a brick building, and a steel water tank. Flood hazard areas, riparian zones, wetlands and required wetland buffers have all been delineated. A Lewis Brook tributary flows through Lot 5 to a tunnel under the railroad tracks in the northeast corner of the lot. Property to the west includes the Old Mill Shopping Center, a gas station, Starbucks and the Pennington Square Shopping Center, North of the area is the Pennington Fire Department and the unused Emergency Services building. In view of the recent increases in land value in Pennington, the Borough should consider returning the property to greenfield status by transferring the contents of the landfill to a modern, lined landfill such as the GROWS landfill in Morrisville PA, which receives various waste types from Pennington via the Mercer County transfer station.

3) Wells Fargo Site - Block 201, Lots 6 and 7 (designated)

The area consists of approximately 2.8 acres of land on the northwest corner of West Delaware Avenue and Route 31. Improvements present on each lot are: Lot 6, a 2-story brick office building with bank drive-through lanes, parking areas and a detention basin and Lot 7, a vacant wooded area with drainage features. The area does not contain any wetlands. A tributary of the Lewis Brook flows roughly west to east through Lot 6 in its northwest corner, eventually flowing under Route 31. There are no known contaminated sites documented by NJDEP that lie within the study area. The study area is bounded to the west by Hopewell Valley Central High School and the County Library, to the north by the Global Neurosciences Institute. It is currently in the O-B zone, which does not allow residential use.

4) 12 North Main Street – Block 205 Lot 22 (investigation phase)

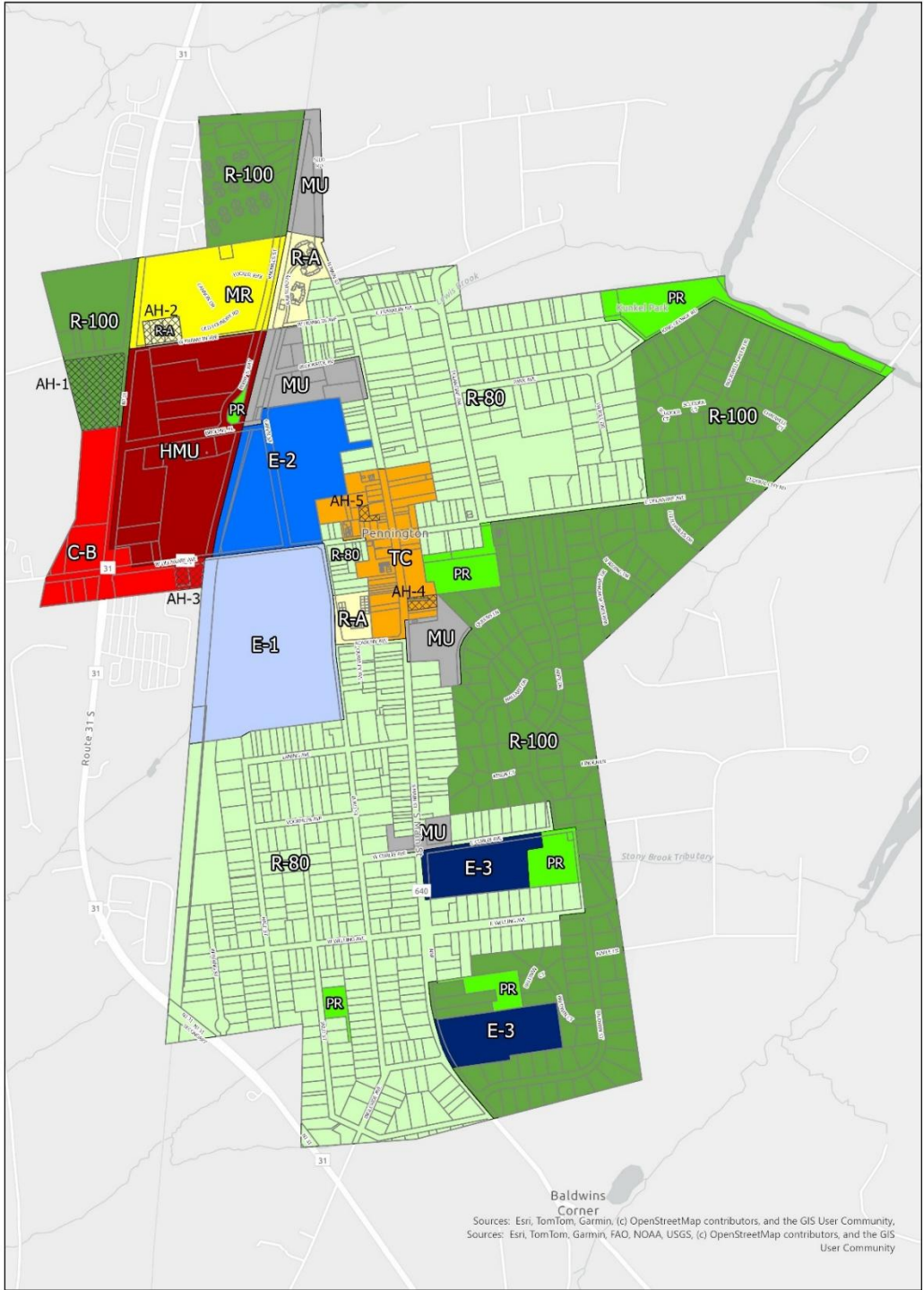
On April 9, 2025, the Planning Board approved the subdivision of 12 North Main Street, Block 205 Lot 22 into two lots, Lot 22.01, which consists of a fully developed multi-use building with 22.89 feet fronting on Main Street and Lot 22.02 consist of two flat-roofed buildings, a parking lot, and small yards which are accessed via the municipal parking lot adjacent to 30 North Main Street. The subdivision cleared the way to redevelop the property in the future according to recent initiatives by the Pennington Planning Board. The preliminary investigation report recommending Lot 22.02 as an area in need of redevelopment is currently in preparation.

13. PROPOSED LAND USE PLAN

The map depicted in Figure 1, on the following page, illustrates the proposed Land Use Plan for the Borough of Pennington, consistent with the recommendations contained in previous sections. It incorporates zoning changes proposed as well as those that have already been made in conjunction with the Borough’s Housing Plan Element and Fair Share Plan. Table 3 summarizes the area of each zone district.

Table 3 Summary of Proposed Zoning District			
Zone District	Symbol	Acreage	% of Total Acreage
Crossroads Business	C-B	14.99	2.40%
Education Zone	E-1	33.58	5.38%
Education Zone	E-2	20.44	3.28%
Education Zone	E-3	15.47	2.48%
Highway Mixed-Use	HMU	34.49	5.53%
Mixed-Use	MU	19.26	3.09%
Mixed-Residence	MR	16.17	2.59%
Residence Zone	R-80	246.99	39.60%
Residence Zone	R-100	178.96	28.69%
Apartment-Townhouse Residence	R-A	8.74	1.40%
Town Center	TC	16.42	2.63%
Parks and Recreation	PR	18.19	2.92%
		623.69	

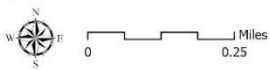
Figure 1 – Proposed Land Use Plan Map



Sources: Esri, TomTom, Garmin, (c) OpenStreetMap contributors, and the GIS User Community.
 Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community

**Borough of Pennington
 Land Use Plan Map**

April 2026



Legend

- AH Overlays
- R-80
- R-100
- R-A
- MR
- TC
- MU
- HMU
- C-B
- E-1
- E-2
- E-3
- PR

Map Prepared by:
 James T. Kyle, PP/AICP
 NJ PP# 5667



14. CONSISTENCY WITH OTHER PLANS

Pennington Borough's approach to external planning is to maintain vigilant monitoring of regional developments that may adversely affect Borough interests or conflict with adopted Master Plan policies. The Borough should ensure that its interests are protected through early identification of potential threats and timely, informed advocacy positions developed by Borough Council based on Planning Board recommendations.

Three plans directly impact Pennington Borough's Land Use Plan.

1. The State Development and Redevelopment Plan (SDRP)
2. The Mercer County Master Plan and its Land Development Ordinance
3. Hopewell Township Master Plan and its Land Use Plan element

These plans and their relationship with the Pennington Borough Land Use Plan element are discussed below.

a. New Jersey State Development and Redevelopment Plan (SDRP)

The State Development and Redevelopment Plan (SDRP), also known as the State Plan, provides a vision for the future that will preserve and enhance the quality of life for all residents of New Jersey. The purpose of the State Plan is to coordinate planning activities and establish Statewide planning objectives in the following areas: land use, housing, economic development, transportation, natural resource conservation, agriculture and farmland retention, recreation, urban and suburban redevelopment, historic preservation, public facilities and services, and intergovernmental coordination (N.J.S.A. 52:18A-200(f)). A new SDRP was adopted by the State Planning Commission (SPC) on December 17, 2025, replacing the 2001 SDRP. The plan was developed by the Office of Planning Advocacy (OPA), which published a preliminary draft on December 14, 2024. The draft was presented at meetings in all NJ counties and feedback was incorporated. A series of cross-acceptance meetings were held in the second half of 2025. Pennington Borough participated in a Mercer County meeting where the preliminary SDRP was presented, and in a cross-acceptance session. The new SDRP can be found online at

https://www.nj.gov/state/bac/planning/documents/update-to-state-plan/sdrp_2025.pdf

Pages 83-85 of the 2025 SDRP give Policy Objectives in 12 areas. Five policy objectives of particular interest to the Pennington Land Use Plan. These are Land Use, Housing, Economic Development, Redevelopment, and Climate Change. The following policy objectives are copied directly from the SDRP:

Land Use: Plan and zone to promote a variety of land uses that create balanced communities. Guide development and redevelopment in or near appropriately located Centers, Cores, and Nodes to accommodate growth based on smart growth principles. Encourage densities that support public transit, where appropriate. Preserve the character of agricultural land, prime soils, open space, and environmentally sensitive areas, with appropriate scaling of public facilities and services, without compromising the planning area's capacity to accommodate future growth. Environs should be protected and enhanced. Future development in the Environs should be carefully considered. It should be in the form of contextually Appropriate Density. Clustered and compact development should also avoid environmental features and areas that are vulnerable to natural hazards.

Housing: Provide a full range of housing choices to accommodate projected growth. Development should occur primarily in or near Centers and at Appropriate Densities through new construction, redevelopment, and adaptive reuse. Provide an adequate supply of diverse housing types particularly for affordable units, senior citizen developments, accessory dwelling units, for residents with special needs, and co-housing, and that, wherever feasible, it is developed with maximum access to a full range of commercial, cultural, educational, recreational, health, and transportation services and facilities. Any housing outside the Center should be planned to maintain or enhance the existing character. Location of any type of housing in vulnerable areas is not consistent with the State Development and Redevelopment Plan.

Economic Development: Encourage new businesses, private sector investment, and tourism where appropriate and based on smart growth principles. Revise outdated zoning restrictions to promote flexible workplaces that recognize the changing needs of the contemporary workplace. Any economic development occurring outside the center should be planned and designed to maintain or enhance the area's qualities with minimum impact on agricultural or environmentally sensitive resources. Development should aim to diversify the local economy and achieve more sustainable year-round models.

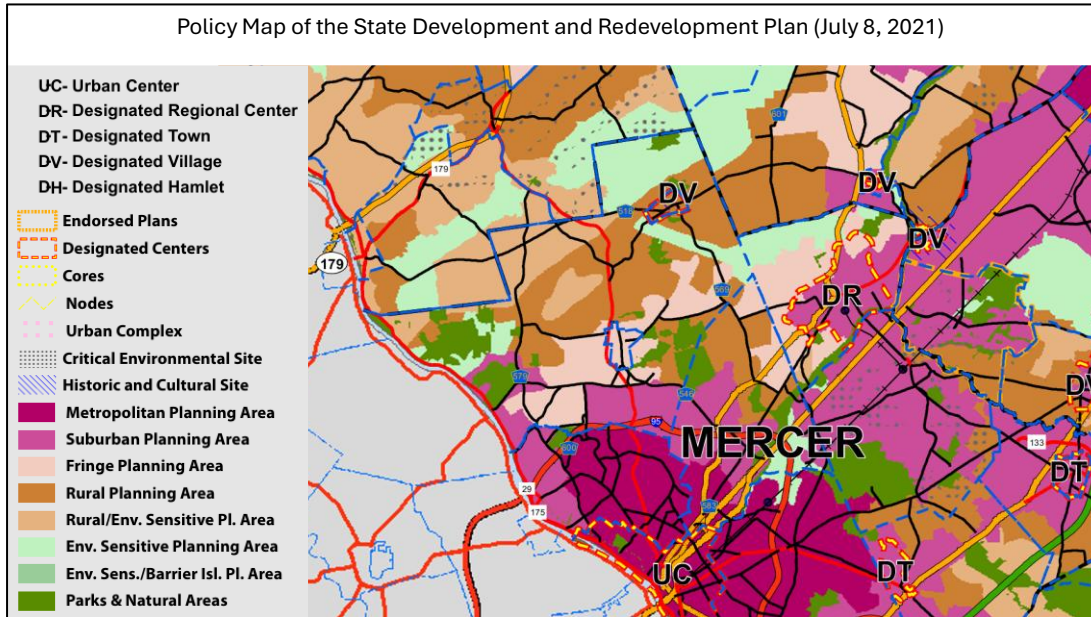
Redevelopment: Encourage environmentally appropriate redevelopment in existing Centers and in developed areas that are or have the potential to become Centers. This can accommodate growth that would otherwise occur in the Environs and in ways that supports Center-based development. Redevelop with a broad range of uses, an efficient use of infrastructure, and at sufficient densities to support transit with physical design features that enhance public safety, facilitate pedestrian and bicycle activity, and reduce auto-dependency. Redevelop or repurpose obsolete commercial buildings. Amend zoning provisions to eliminate barriers that diversify existing building stock. For existing structures located in flood prone areas, elevate buildings and critical infrastructure to reduce the impacts of natural hazards.

Climate Change: Encourage development and redevelopment in areas with low flood risk and existing infrastructure. Support climate adaptation by discouraging development in vulnerable areas, and instead, investing in resilient infrastructure and implementing mitigation strategies. Flood prone and wildfire risk areas will require careful consideration to ensure land uses minimize risk to people, assets, and neighboring lands. New development or redevelopment projects within already developed high risk areas are encouraged to follow and implement resilient design and hazard mitigation initiatives.

The SDRP provides a balance between growth and conservation by designating planning areas that share common conditions regarding development and environmental features. The 2025 SDRP revised the planning areas slightly from the 2001 Plan and the criteria can be found in the 2025 SDRP, from page 85 onwards. The 2025 SDRP places Pennington Borough within a 6,800 acres (10.6 sq. mile) Fringe Planning Area (PA3) that runs about 8 miles WNW from Washington Crossing to Mount Rose, as shown in Figure 2. In PA3, the intention of the State Plan is to:

- Accommodate growth in Centers, excluding flood prone areas.
- Protect and enhance natural resources.
- Protect the environs primarily as open space or forested areas.
- Provide a transition between more developed Metropolitan and Suburban Planning Areas and less developed Rural and Environmentally Sensitive Planning Areas.
- Confine programmed sewers and public water services to Centers, except where public health is at stake.
- Revitalize towns and older traditional communities.
- Protect and diversify the character of existing stable communities.

Figure 2. SDRP Policy Map. Pennington Borough can be seen within the pink area.



Links to the 2025 SDRP Policy Map:

<https://nj.gov/state/bac/planning/documents/maps/stateplanmapMarch2025.jpg>

and

<https://njgis-newjersey.opendata.arcgis.com/datasets/dosopa::planning-area-boundaries-of-the-nj-state-development-and-redevelopment-plan-new-jersey-1/explore>

The following criteria are intended as a general guide for delineating the Fringe Planning Area (PA3). Local conditions may require flexible application of the criteria to achieve the Policy Objectives of this Planning Area.

- Population density of less than 1,000 people per square mile.
- Generally lacking in major infrastructure investments. The circulation system is mainly provided by state and county roadways with major emphasis on moving traffic through the area. Some Centers are served by public water and sewer.
- Land area is greater than one (1) square mile.

Note that Pennington is not currently designated by the State as a Center. Hopewell Borough is a Designated Village, one of the classifications of a Center.

b. Mercer County Master Plan

The Borough is one of 12 municipalities in Mercer County and the County’s Master Plan elements relating to land use and infrastructure are relevant to the Borough. The Mercer County Master Plan was adopted by the Mercer County Planning Board on September 8, 2010. It consists of a Framework document and six elements:

- Farmland Preservation (2020)
- Historic Preservation (2010)
- Mobility (2010, amended 2016)
- Open Space (2021)
- Mercer County Bicycle Plan (2020)
- Mercer County Corridor Enhancement Program (2025)

<https://www.mercercounty.org/departments/planning/plans-and-reports/mercer-county-master-plan>

The Borough’s Mobility Plan element discusses links to the County Mobility Plan and the Mercer County Bicycle Plan. Section 4 of the County Mobility Plan details policies and associated strategies, including the promotion of land uses that reduce reliance on automobiles.

The County adopted a new Land Development Ordinance on May 23, 2024. It replaced the Land Development Standards in force since 1970. It covers all applications to subdivide property in the County and all site plan applications affecting or abutting County drainage facilities, County roads, and County property, Exceptions are site plans not abutting County roads that include less than a combined total of one acre of existing and proposed impervious surfaces, and site plans for a single-family residential home or multifamily structures containing four or fewer units.

<https://www.mercercounty.org/home/showpublisheddocument/30976/638543926182800000>

The power to review and approve all Subdivisions and Site Plans rests with the Mercer County Planning Board through its Land Development Committee, whose meetings take place after the regularly scheduled Mercer County Planning Board meetings. Site plans on County Roads in the Borough should be reviewed to see if they need to be submitted to the County.

According to the County website, the purpose of the Ordinance is to:

1. Promote the public health, safety, convenience and general welfare of the citizens of Mercer County.
2. Provide the rules, regulations and standards for all subdivisions and (re)development projects that guide the design of development of land affecting or abutting County drainage facilities, County roads, County property and other County facilities in Mercer County.
3. Ensure that land development within the County proceeds in accordance with, and is consistent with, the goals and objectives of the Mercer County Master Plan and other adopted County plans/sub-elements.
4. Allow land development that is compatible and harmonious with the existing, planned and contemplated infrastructure base of the County.
5. Institute standards for assessing developers for a proportionate share of the cost of County improvements located outside of a given development to achieve the goals of the County Master Plan which must be made to accommodate the increased traffic, stormwater runoff, and/or other impact generated as a result of the development.
6. Mitigate adverse traffic and drainage impacts from proposed development on roads, drainage facilities, buildings and lands owned and/or maintained by the County.
7. Facilitate pedestrian and/or bicycle traffic along County Roads.
8. Create and/or maintain aesthetically pleasing landscapes along County roads.
9. Ensure that development and redevelopment occurring under the County’s jurisdiction minimizes any adverse impacts to the physical and living environment and is developed with the long-term goal of energy and natural resource conservation and environmental sustainability.
10. Achieve maximum coordination between the Applicants’ professionals, the local municipality and the County development review staff.

11. Provide for the coordinated review of development projects involving various other State and County agencies that have regulatory responsibilities pursuant to the requirements of the following statutes including but not limited to:
 - a. Stormwater Management (N.J.A.C. 7:8 et seq.)
 - b. Flood Hazard Area Control Act (N.J.S.A. 58:16A-50)
 - c. Soil Erosion and Sediment Control Act (N.J.S.A. 4:24-39 et seq.)
 - d. Solid Waste Management Act (N.J.S.A. 13:1E-1 et seq.)
 - e. Storm Water Management Act (P.L. 1981, C. 32 N.J.S.A. 40:55D-1 et seq.)
 - f. Freshwater Wetlands Protection Act of 1987 (N.J.S.A. 13:9B-1 et seq.)
 - g. Realty Improvement, Water Supply & Sewer System Act (N.J.S.A. 58:11-37)
 - h. State Highway Access Management Act (N.J.S.A. 27:7-1 et seq.)
 - i. NJDOT Access Code, NJAC 16:47-1 et seq.
 - j. New Jersey Municipal Land Use Law (N.J.S.A. 40:55-1 et seq.)
 - k. Water Quality Planning Act (N.J.S.A. 58:11A-1 et seq.)
 - l. Waterfront Development Law (N.J.S.A. 12:5-3)
 - m. The Americans with Disabilities Act (42 U.S.C. §12101, et seq.)
 - n. New Jersey Map Filing Law (N.J.S.A 46:23-9.8 et seq.)
 - o. Residential Site Improvement Standards (N.J.A.C. 5:21)
 - p. Fair Housing Act (N.J.S.A 52:27D-301 et seq.)
 - q. New Jersey Public Records Law (N.J.S.A 47:1A-1 et seq.)
 - r. New Jersey Uniform Construction Code (N.J.A.C 5:23)
 - s. County Roads and Highways (N.J.S.A. 27:16-31)
 - t. New Jersey Open Public Meetings Act (N.J.S.A 10:4-6 et seq.)

The County is the Borough's point of contact with the Delaware Valley Regional Planning Commission (DVRPC), the federally designated Metropolitan Planning Organization (MPO) for the Greater Philadelphia region. DVRPC provides services to member governments and others through planning analysis, data collection, and mapping services. Aerial photographs, maps and a variety of DVRPC publications are available to the public. Any planning or design concepts as prepared by DVRPC are conceptual and will require engineering design and feasibility analysis. Actual authority for carrying out any planning proposals rests solely with the governing bodies of the states, local governments or other authorities that have the primary responsibility for implementation.

c. Hopewell Township Master Plan

Hopewell Township surrounds the Borough and its Land Use Plan and actions have a direct impact on the Borough and its residents. The Hopewell Township Planning Board adopted its Land Use Plan Element on November 19, 2009, and completed its most recent reexamination on December 19, 2021.

<https://www.hopewelltpw.org/DocumentCenter/View/8619/Land-Use-Plan-Element---Adopted-November-19-2009>

<https://www.hopewelltpw.org/DocumentCenter/View/8410/2021-Periodic-Reexamination-of-the-Master-Plan-and-Development-Regulations-PDF>

Hopewell Township Land Use issues addressed in the 2021 reexamination report were focused on how the Township would satisfy its Round 3 Fair Share Housing obligations. The large housing developments on Scotch Road and Pennington-Washington Crossing Road near Pennington Circle are the outcome of these recommendations. The 2021 reexamination report said that the Township had directed the Planning Board to prepare a Preliminary Investigation Report and Redevelopment Plan for the BMS site, located at

Titus Mill Road and Pennington Rocky Hill Road. The Plan was completed and has resulted in developments on the site, including the BeOne Medicines (BeiGene) facility and the Princeton West Innovation Campus. Pennington Borough was not consulted on these developments, even though they surround Pennington and have an impact on traffic, housing, services and local businesses.

On June 26, 2025, The Township adopted its Round 4 Housing Element and Fair Share Plan.

<https://www.hopewelltp.org/DocumentCenter/View/16096/Hopewell-Township-HEFSP-Filed-6-27-25>

A Township Planning Board recommendation in the 2021 reexamination report was that an Economic Development Plan element should be prepared. According to the report, *“The Economic Development Plan will provide an opportunity to review existing economic contributors, land development patterns, workforce and employment characteristics of the Township. An analysis of these factors will provide a means to develop strategies to diversify the local economy, promote workforce initiative, develop economic partnerships, increase economic and natural resiliency, and foster meaningful redevelopment opportunities that will take into consideration the location and types of development that will benefit not only new residents and employees but also provide additional development and services for existing residents.”*

The Tourism and Economic Development Advisory Committee was established by Hopewell Township Resolution 22-334 on September 19, 2022. The Committee works to support existing businesses, attract new businesses, and promote tourism in the Township and the entire Hopewell Valley. In January 2025, representatives of the Pennington Borough Economic Development Commission were invited to participate in a “business-listening session” held by the Advisory Committee. An outcome was that the Township Committee and Borough Commission would work together on development areas of interest to both parties. Of particular interest to the Borough is commercial development on Route 31. Properties to the south of West Delaware Avenue are largely in the Township, those to the north are in the Borough. It would make sense that development in both locations follows a consistent and optimized Land Use Plan.

15. CLIMATE CHANGE-RELATED HAZARD VULNERABILITY ASSESSMENT

The Borough’s climate change-related hazard vulnerability assessment (CCRHVA), required under N.J.S.A. 40:55D-28.b.h, is provided as a separate document that can be found under the Master Plan tab in the Planning and Zoning section of the Pennington Borough website. It is incorporated herein by reference and made a part of the Borough’s Land Use Plan Element.

MASTER PLAN
BOROUGH OF PENNINGTON
NEW JERSEY

12. Relation to Other Plans

The Relation to Other Plans element draft released by the writing team was conditionally adopted by the Planning Board on October 13, 2025. This element will be available for comments until April 22, 2026, prior to final adoption at a public meeting of the Planning Board on May 13, 2026.

Contents:

- 1 Introduction**
- 2 Planning Board Roles and Responsibilities for External Plan Monitoring**
- 3 Framework for Ongoing Master Plan Implementation**
- 4 Hopewell Township Master Plan**
- 5 Mercer County Master Plan**
- 6 New Jersey State Development and Redevelopment Plan (SDRP)**
- 7 MCIA District Solid Waste Management Plan**
- 8 Other Regional Plans**
 - a. Delaware Valley Regional Planning Commission Strategic Plan**
 - b. NJ Department of Transportation Long Range Transportation Plan**
- 9 Influence of External Plans on Other Elements of Master Plan 2025**

Members of the Master Plan Committee

Andy Jackson (Chair), Nadine Stern, Amy Kastler-Taub, Kate O'Neill, and Board Planner Jim Kyle of KMA.

Thanks to Mayor Jim Davy for editing the sections on Planning Board responsibilities and implementation.

1. Introduction

The Municipal Land Use Law (MLUL) N.J.S.A. 40:55D-28(4)d states that the master plan shall include a specific policy statement indicating the relationship of the proposed development of the municipality, as developed in the master plan to (1) the master plans of contiguous municipalities, (2) the master plan of the county in which the municipality is located, (3) the State Development and Redevelopment Plan adopted pursuant to the State Planning Act, sections 1 through 12 of P.L.1985, c.398 (C.52:18A-196 et seq.) and (4) the district solid waste management plan required pursuant to the provisions of the Solid Waste Management Act: P.L.1970, c.39 (C.13:1E-1 et seq.) of the county in which the municipality is located.

Pennington Borough has chosen to include this topic as a separate element in the Master Plan. Four plans directly impact Pennington Borough.

- Hopewell Township surrounds the Borough, so its Master Plan and actions have a direct impact on the Borough and its residents. The Township and Borough also have several shared services and cooperate in a number of areas.
- The Borough is one of 12 municipalities in Mercer County and the County's Master Plan elements relating to land use and infrastructure are relevant to the Borough. All County Government departments play a role in the lives of Borough residents. The County Planning Department is responsible for the County Master Plan and has approval authority over the master plans of County municipalities. The County's Engineering and Highway divisions are responsible for County roads and bridges and other infrastructure. The County is the Borough's point of contact with the Delaware Valley Regional Planning Commission (DVRPC), the federally designated Metropolitan Planning Organization (MPO) for the Greater Philadelphia region, and the New Jersey Department of Transportation. These relationships are key to projects on State Route 31.
- The State of New Jersey Office of Planning Advocacy (OPA) and the State Planning Commission (SPC) are responsible for the State Development and Redevelopment Plan (SDRP). The SPC adopted a new SDRP on December 17, 2025. Its vision is "A stronger and Fairer New Jersey in 2050". The Mercer County Planning Department connects its municipalities and the State for SDRP development and implementation. Pennington Borough participated in the cross-acceptance process for the new SDRP during 2025.
- The Mercer County Improvement Authority (MCIA) is an independent agency set up to provide services and programs for the County and its municipalities. It is responsible for developing, amending, and administering the District Solid Waste Management Plan. It manages the recycling or disposal of all waste in the County, including the municipal solid waste (MSW) collected by the Borough and delivered to the MCIA transfer station, and the recyclable materials collected by an independent contractor.

Other plans that have an impact on the Borough are the Delaware Valley Regional Planning Commission (DVRPC) Strategic Plan and the NJ Department of Transportation (NJDOT) Long Range Transportation Plan. The County is the Borough's point of contact for these entities.

Borough Vision on External Plans - Be Proactive; Not Reactive

The vision for Pennington Borough's approach to external planning matters is to maintain vigilant monitoring of regional developments that may adversely affect Borough interests or conflict with adopted Master Plan policies. The Borough should ensure that its interests are protected through early identification of potential threats and timely, informed advocacy positions developed by Borough Council based on Planning Board recommendations.

2. Planning Board Roles and Responsibilities for External Plan Monitoring

1. **External Plan Monitoring and Early Warning System** - The Pennington Borough Planning Board shall monitor external plans and developments from surrounding municipalities, County, State, and regional agencies to identify potential adverse impacts to Pennington Borough from proposed changes or developments. The Board shall assess consistency between external plans and the Borough's adopted Master Plan and flag inconsistencies or conflicts that could undermine Borough planning objectives. Whenever a change in an external plan is deemed to impact Pennington, the then-current Master Plan elements and ordinances affected should be reviewed by the Planning Board to determine if they remain consistent or need updating.
2. **Borough Council Advisory and Reporting Function** - The Chair of the Planning Board will provide regular reports to Borough Council summarizing: external planning activities that may affect the Borough, potential adverse impacts identified through monitoring, inconsistencies with the Borough Master Plan, and recommended Borough responses or positions. Urgent matters that require prompt Borough action or response shall be brought to Council immediately by the Council representative to the Planning Board or the Mayor or Mayor's representative. The Planning Board shall recommend Council positions on external plans during public comment periods or cross-acceptance processes.
3. **Impact Assessment - Hopewell Township Developments** -- The Planning Board must monitor Township activities and alert Council to:
 - a. **Economic Development Impacts** - Monitor Township commercial development plans, particularly along Route 31 corridor. Assess traffic, infrastructure, and economic impacts on the Borough from Township development decisions. Identify opportunities for coordinated development that benefits both municipalities. Alert Council to Township developments that may adversely affect Borough businesses or infrastructure. Of particular interest to the Borough is development on Route 31. Properties south of West Delaware Avenue are largely in the Township, whereas those to North Main Street are in the Borough.
 - b. **Transportation and Infrastructure Impacts** - Monitor Township transportation planning and Route 31 corridor studies. Assess potential traffic impacts on Borough streets and intersections. Identify needed Borough positions on regional transportation improvements. Recommend coordinated advocacy positions for

Council consideration. Mobility issues on Route 31 and its intersections are of great concern to the Borough.

- c. **Open Space and Land Use Impacts** - Monitor Township land use decisions that may affect Borough viewsheds, traffic patterns, or environmental conditions. Identify and alert Council and the Borough's Open Space Committee about opportunities for joint open space acquisition that serves Borough interests. Assess impacts of Township density changes on Borough infrastructure and services.
- d. **County and Regional Plan Assessment** -- The Planning Board shall monitor Mercer County planning initiatives for potential Borough impacts and assess County infrastructure plans that may affect Borough services or development capacity. The Board shall evaluate DVRPC and State transportation plans for Route 31 and regional mobility impacts and recommend Borough positions on County and State planning initiatives. Relationships with the Mercer County Planning Department, DVRPC, and the NJ Department of Transportation are key to projects on State Route 31 in Pennington Borough and Hopewell Township.
- e. **State Development Plan Compliance and Impact Assessment** -- The Planning Board shall monitor State Development and Redevelopment Plan updates and policy changes, assess impacts of State planning area designations on Borough development capacity, and evaluate consistency between State policies and Borough Master Plan objectives. The Board shall recommend to the Mayor and Borough Council participation in cross-acceptance processes when Borough interests are at stake.

The external plans outlined above are discussed in detail in later sections.

3. Framework for Ongoing Master Plan Implementation

Threat Assessment and Opportunity Identification --The Planning Board shall conduct regular reviews to identify external developments that may; adversely impact Borough infrastructure, services, or quality of life; create inconsistencies with Borough Master Plan goals; present opportunities for beneficial regional coordination; or require Borough advocacy or opposition positions.

Strategic Recommendations to Council -- The Planning Board shall recommend proactive Council actions to address identified threats or opportunities, propose Borough positions on external planning matters, suggest timing for Borough participation in regional planning processes, and identify resource needs for effective Borough participation in regional planning.

Master Plan Consistency Review --The Planning Board shall evaluate external plans against Borough Master Plan elements, recommend Master Plan amendments when external changes create inconsistencies, assess need for ordinance updates to maintain consistency with regional

requirements, and propose defensive measures to protect Borough planning objectives from adverse external impacts.

The Master Plan implementation process shall coordinate implementation priorities with external plan monitoring findings, adjust implementation strategies based on identified external threats or opportunities, align implementation timing with regional planning cycles when beneficial to Borough interests, and incorporate defensive measures into the implementation plan to protect against adverse external impacts. See the Framing element for additional detail in implementation.

4. Hopewell Township Master Plan

The Hopewell Township Planning Board adopted its latest periodic reexamination of its Master Plan and Development Regulations on December 13, 2021. Its previous reexamination was adopted on December 15, 2011.

The current list of Township Master Plan elements, with adoption dates, is as follows:

- Round 4 Housing Element and Fair Share Plan (adopted June 26, 2025)
- Open Space and Recreation Plan Element (adopted February 24, 2022)
- Master Plan Amendment: Creation of the OP1 Zone (adopted December 8, 2016)
- Farmland Preservation Plan Element (adopted January 26, 2012)
- Land Use Plan Element (adopted November 19, 2009)
- Utility Services Plan Element (adopted November 19, 2009)
- Community Facilities Plan Element (adopted April 12, 2007)
- Circulation Plan Element (adopted March 9, 2006)
- Stormwater Management Plan Element (adopted March 22, 2005)
- Historic Preservation Plan Element (adopted December 9, 2004)

<https://www.hopewelltp.org/DocumentCenter/View/8410/2021-Periodic-Reexamination-of-the-Master-Plan-and-Development-Regulations-PDF>

A Township Planning Board recommendation in the 2021 reexamination report was that an Economic Development Plan element should be prepared. This was in response to the economic impact on the Township of the economic downturns that took place across the country during the Great Recession of 2008 and the Covid-19 pandemic of 2020-21. According to the report, “*The Economic Development Plan will provide an opportunity to review existing economic contributors, land development patterns, workforce and employment characteristics of the Township. An analysis of these factors will provide a means to develop strategies to diversify the local economy, promote workforce initiative, develop economic partnerships, increase economic and natural resiliency, and foster meaningful redevelopment opportunities that will take into consideration the location and types of development that will benefit not only new residents and employees but also provide additional development and services for existing residents.*”

The Tourism and Economic Development Advisory Committee was established by Hopewell Township Resolution 22-334 on September 19, 2022. Its goal is to promote agriculture, historical

and recreational tourism, local restaurants, and other businesses. The Committee works to support existing businesses, attract new businesses, and promote tourism in the Township and the entire Hopewell Valley. In January 2025, representatives of the Pennington Borough Economic Development Commission were invited to participate in a “business-listening session” held by the Advisory Committee. An outcome was that the Township Committee and Borough Commission would work together on development areas of interest to both parties. Of particular interest to the Borough is commercial development on Route 31. Properties to the south of West Delaware Avenue are largely in the Township, whereas those to the north are in the Borough. It would make sense that development in both locations follows a consistent and optimized plan.

The Township adopted an Open Space and Recreation Plan on June 18, 2018, to allow it to continue to participate in the Green Acres program and use the Planning Incentive Grants for the preservation of open space and recreational lands. This plan was targeted at technical and site-specific updates rather than a comprehensive update. A more comprehensive Open Space and Recreation Plan was adopted by the Township Planning Board on February 24, 2022. It included a review of and revisions to the goals and objectives of the original 2004 plan, updates to the open space and recreation inventory, amendments to the action plan based on a needs analysis and updates to the Open Space and Recreation System Map.

Pennington Borough works with partners on open space selection, acquisition and development. In addition to Hopewell Township, the partners are the Friends of Hopewell Valley Open space, D&R Greenway Land Trust, Mercer County, the New Jersey Conservation Foundation, and the State of New Jersey. These partners are actively identifying emerging land preservation opportunities. Most of the parcels close enough to be of interest to the Borough are in Hopewell Township, so it is important that the Borough and Township work together on acquisition and preservation.

Hopewell Township Land Use issues addressed in the 2021 reexamination report were focused on how the Township would satisfy its Round 3 Fair Share Housing obligations. The large housing developments on Scotch Road and Pennington-Washington Crossing Road near Pennington Circle are the outcome of these recommendations. On June 26, 2025, The Township adopted its Round 4 Housing Element and Fair Share Plan. The 2021 reexamination report said that the Township had directed the Planning Board to prepare a Preliminary Investigation Report and Redevelopment Plan for the BMS site, located at Titus Mill Road and Pennington Rocky Hill Road. The Plan was completed and has resulted in developments on the site, including the BeOne Medicines (BeiGene) facility and the Princeton West Innovation Campus. Pennington Borough was not consulted on these developments, even though they surround Pennington and have an impact on traffic, housing, services and local businesses.

Since all traffic entering and leaving Pennington Borough does so through Hopewell Township, the Circulation Plan element of the Township’s Master Plan and the Borough’s Mobility element should be largely in agreement on traffic management issues. In addition, since a much larger stretch of Route 31 is in Hopewell Township, any Township proposals for Route 31 will impact Pennington. The Route 31 aspects of the 2006 Circulation Plan build off the recommendations in the 2002 Route 31 Design Study. There was a positive discussion on the merits of reestablishing passenger trains on the West Trenton line. At the time it was shown as an NJ Transit candidate

project. The only additions to circulation in the 2021 reexamination report were related to the Lawrence Hopewell Trail. Circulation issues on Route 31 and its intersections are of great concern to the Borough. The Borough and the Township should provide a uniform face to Mercer County and the State of New Jersey on requests for improvements to address common concerns.

In addition to partnering with Hopewell Township and Hopewell Borough in the Hopewell Valley Regional School District, the Borough has shared services agreements with the Township for Emergency Management, Fire Services, Public Health, Senior Services, and Animal Control. The Green Team and Municipal Alliance operate across Hopewell Valley.

5. Mercer County Master Plan

The Mercer County Master Plan was adopted by the Mercer County Planning Board on September 8, 2010. It consists of a Framework document and six elements:

- Farmland Preservation (2020)
- Historic Preservation (2010)
- Mobility (2010, amended 2016)
- Open Space (2021)
- Mercer County Bicycle Plan (2020)
- Mercer County Corridor Enhancement Program (2025)

<https://www.mercercounty.org/departments/planning/plans-and-reports/mercer-county-master-plan>

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2. Provide the rules, regulations and standards for all Subdivisions and (re)development projects that guide the design of development of land affecting or abutting County drainage facilities, County roads, County property and other County facilities in Mercer County.
3. Ensure that land development within the County proceeds in accordance with, and is consistent with, the goals and objectives of the Mercer County Master Plan and other adopted County plans/sub-elements.

4. Allow land development that is compatible and harmonious with the existing, planned and contemplated infrastructure base of the County.
5. Institute standards for assessing developers for a proportionate share of the cost of County improvements located outside of a given development to achieve the goals of the County Master Plan which must be made to accommodate the increased traffic, stormwater runoff, and/or other impact which would be generated as a result of the development.
6. Mitigate adverse traffic and drainage impacts from proposed development on roads, drainage facilities, buildings and lands owned and/or maintained by the County.
7. Facilitate pedestrian and/or bicycle traffic along County Roads.
8. Create and/or maintain aesthetically pleasing landscapes along County roads.
9. Ensure that development and redevelopment occurring under the County's jurisdiction minimizes any adverse impacts to the physical and living environment and is developed with the long-term goal of energy and natural resource conservation and environmental sustainability.
10. Achieve maximum coordination between the Applicants' professionals, the local municipality and the County development review staff.
11. Provide for the coordinated review of development projects involving various other State and County agencies which have regulatory responsibilities pursuant to the requirements of the following statutes including but not limited to:
 - a. Stormwater Management (N.J.A.C. 7:8 et seq.)
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 - j. New Jersey Municipal Land Use Law (N.J.S.A. 40:55-1 et seq.)
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 - q. New Jersey Public Records Law (N.J.S.A. 47:1A-1 et seq.)
 - r. New Jersey Uniform Construction Code (N.J.A.C. 5:23)
 - s. County Roads and Highways (N.J.S.A. 27:16-31)
 - t. New Jersey Open Public Meetings Act (N.J.S.A. 10:4-6 et seq.)

The Borough's Mobility Plan element discusses links to the County Mobility Plan and the Mercer County Bicycle Plan. Section 4 of the County Mobility Plan details policies and associated strategies. The policies are

1. Preserve existing transportation facilities.
2. Improve safety for all travelers.

3. Promote choice of travel mode.
4. Promote land uses that reduce reliance on automobiles.
5. Link transportation improvements to economic and environmental goals.

Strategies associated with these policies may be found in the online County Mobility Plan.

Mercer County has been aggressively acquiring open space since the County open space preservation trust fund tax ballot question was overwhelmingly approved by the voters in 1989. It has been continually supported since. Pennington is a beneficiary of the extensive efforts by the County to preserve open space and develop it for active or passive recreation or as wildlife preserves. Within easy reach of Pennington are Mercer Meadows (consists of Rosedale Park, the Mercer County Equestrian Center, the Pole Farm, and Curlis Woods), the Ted Stiles Reserve at Baldpate Mountain, Howell Living History Farm, and the Hopewell Valley and Mountain View County Golf Courses. The County is also a principal supporter of the Lawrence-Hopewell Trail (LHT). The Mercer County Open Space Plan gives the history of its preservation efforts with its partners, resulting in 27% of County Land being preserved, up from 9% in 1990. The map on page 5 of the Plan shows Pennington and its surroundings as a County “action area” for acquisitions. The Borough Master Plan discusses its purchasing partners, including the County.

Mercer County does not have an Economic Development element in its Master Plan. However, the Mercer County Office of Economic Development provides a variety of business development programs and workshops to help small and large businesses in the County build growing, successful companies, such as:

- Business Workshops; e.g. Business Fundamentals, Financing, and Procurement
- Individual Business Mentoring
- Financial Assistance for Mercer County Businesses
- Foreign Trade Zone Program
- Site Selection Services
- Employee Recruitment and Training Assistance

The County offers financial assistance through a variety of grant programs. An example in 2025 is the Revitalize & Grow Grant program, which provides grants to businesses for signage and façade improvements to improve traffic for businesses and support increased tourism. Another is the Business Builder Rebate Grant program for items to help business startup or refreshing, such as accountant fees, office supplies, software and some website development. The Mercer County Purchasing Department offers a streamlined process for local businesses to navigate the County procurement process, a comprehensive system of specifications and competitive solicitations.

The County is the Borough’s point of contact with the Delaware Valley Regional Planning Commission (DVRPC) and the New Jersey Department of Transportation (NJDOT), see Section 8 below. These relationships are key to projects on State Route 31 in Pennington Borough.

6. New Jersey State Development and Redevelopment Plan

The State Development and Redevelopment Plan (SDRP), also known as the State Plan, provides a vision for the future that will preserve and enhance the quality of life for all residents of New

Jersey. The purpose of the State Plan is to coordinate planning activities and establish Statewide planning objectives in the following areas: land use, housing, economic development, transportation, natural resource conservation, agriculture and farmland retention, recreation, urban and suburban redevelopment, historic preservation, public facilities and services, and intergovernmental coordination (N.J.S.A. 52:18A-200(f)). A new SDRP was adopted by the State Planning Commission (SPC) on December 17, 2025. It replaced the 2001 SDRP. The plan was developed by the Office of Planning Advocacy (OPA) who published a preliminary draft on December 14, 2024. The draft was presented at meetings in all NJ counties and feedback was incorporated. A series of cross-acceptance meetings were held in the second half of 2025. Pennington Borough participated in a Mercer County meeting where the preliminary SDRP was presented, and in a cross-acceptance session. The new SDRP can be found online at https://www.nj.gov/state/bac/planning/documents/update-to-state-plan/sdrp_2025.pdf

The Goals of the 2025 SDRP are to:

1. Promote economic growth that benefits all residents of New Jersey.
2. Provide an adequate supply of housing for residents of all ages and incomes in communities of their choosing, that meet their needs and offer ready access to the full range of supportive goods and services.
3. Create economic opportunities through nation-leading infrastructure.
4. Revitalize and recenter the State's underutilized developed areas.
5. Effectively address the adverse impacts of global climate change.
6. Protect, maintain, and restore the State's natural and water resources and ecosystems.
7. Protect the environment; prevent and clean up pollution.
8. Protect, enhance, and improve access to areas with exceptional archeological, historic, cultural, scenic, open space, or recreational value.
9. Implement equitable planning practices to promote thriving communities for all New Jerseyans.
10. Foster sound and integrated planning and implementation at all levels statewide.

Pages 83-85 of the 2025 SDRP give Policy Objectives in 12 areas. They are reproduced below. All are directly relevant to Pennington except Agriculture and Farmland Preservation, and this is included below as it is relevant to Hopewell Township and thereby indirectly relevant to the Borough. Statements of direct relevance to Pennington Borough are underlined. Although most of the elements in the Borough's new Master Plan were developed by writing teams before the 2025 SDRP was available, it is clear that the Borough and State goals are aligned.

Land Use: Plan and zone to promote a variety of land uses that create balanced communities. Guide development and redevelopment in or near appropriately located Centers, Cores, and Nodes to accommodate growth based on smart growth principles. Encourage densities that support public transit, where appropriate. Preserve the character of agricultural land, prime soils, open space, and environmentally sensitive areas, with appropriate scaling of public facilities and services, without compromising the planning area's capacity to accommodate future growth. Environs should be protected and enhanced. Future development in the Environs should be carefully considered. It should be in the form of contextually Appropriate Density. Clustered and compact development should also avoid environmental features and areas that are vulnerable to natural hazards.

Housing: Provide a full range of housing choices to accommodate projected growth. Development should occur primarily in or near Centers and at Appropriate Densities through new construction, redevelopment, and adaptive reuse. Provide an adequate supply of diverse housing types particularly for affordable units, senior citizen developments, accessory dwelling units, for residents with special needs, and cohousing and that wherever feasible, it is developed with maximum access to a full range of commercial, cultural, educational, recreational, health, and transportation services and facilities. Any housing outside the Center should be planned to maintain or enhance the existing character. Location of any type of housing in vulnerable areas is not consistent with the State Development and Redevelopment Plan.

Economic Development: Encourage new businesses, private sector investment, and tourism where appropriate and based on smart growth principles. Revise outdated zoning restrictions to promote flexible workplaces that recognize the changing needs of the contemporary workplace. Any economic development occurring outside the center should be planned and designed to maintain or enhance the area's qualities with minimum impact on agricultural or environmentally sensitive resources. Development should aim to diversify the local economy and achieve more sustainable year-round models.

Transportation: Encourage a variety of public transportation modes, including pedestrian, bicycle, and micromobility, over the single-occupancy vehicle to maximize circulation and mobility options. Accommodate seasonal demands of travel and tourism. Implement a vigorous traffic calming program. Emphasize the use of public transportation systems and alternative modes of transportation where appropriate and feasible. Maximize circulation and mobility options (including pedestrian and bicycle connections between developments) throughout the transportation systems. Encourage significant redevelopment and intensification around existing and planned rail stations along transit corridors and ferry stations along waterfronts. Promote flexible (variable route) transit and support employer-operated shuttle services. Preserve and stabilize general aviation airports and, where appropriate, encourage community economic development.

Natural Resource Conservation: Conserve continuous natural systems, strategically locate open space, and buffer Critical Environmental Sites. In Metropolitan and Suburban Planning areas use open space to reinforce neighborhood and community identity and protect natural linear systems, including regional systems that provide connectivity to neighboring communities and to urban and suburban amenities. Minimize conflicts between development/ redevelopment, agricultural practices, and sensitive environmental resources. Protect and preserve large, contiguous tracts and corridors of recreational areas, forests, or other open space land that protect natural systems and sensitive natural resources, including endangered species, ground and surface water resources, wetland systems, Steep Slope areas, scenic vistas, and other significant Environmentally Sensitive Features, including marshlands and coastal recreational areas. In coastal areas, prioritize water conservation measures to prevent saltwater intrusion, protect vital ecological zones, and restore native shellfish populations while promoting compatible development near sensitive areas.

Agriculture and Farmland Preservation: Guide development and redevelopment opportunities to meet the needs of the agricultural industry, including production, processing, and marketing. Promote urban farming initiatives such as rooftop farms and community gardens to address food deserts and highlight the benefits of healthy diets. Support the fishing industry and appropriate aquaculture. Guide development away from farmland to sustain agriculture, promoting intensive farming practices and new crop enterprises. Ensure the availability of adequate water resources in large contiguous tracts of land with minimal land use conflicts. Encourage farmland retention and minimize conflicts with development. Prioritize farmland preservation funding in rural areas and enhancing large contiguous farmland areas. Promote diversified farming operations and adjust zoning to align with environmental sensitivity and climate change considerations. Strategies may include, but are not limited to, clustering, density transfers, and limiting the extent of infrastructure investments in agricultural areas. Promote agritourism that includes wineries, breweries, distilleries, cideries, and facilities that provide auxiliary activities.

Recreation: Promote maximum active and passive recreational and tourism opportunities at the neighborhood, local, and regional levels by targeting the rehabilitation and development of parks within half a mile of residential neighborhoods with an Appropriate Density. Target parkland acquisitions and improvements, especially those that enhance large contiguous open space systems and link to other networks through redevelopment, reclamation, or restoration projects. Create public access and recreation opportunities and linkages along ocean front areas, bayfronts, and riverfronts. Convert obsolete railroad Rights-Of-Way and canal pathways to multi-purpose trails equipped with amenities such as convenience stations including restrooms, bicycle rentals, and interpretive signage.

Redevelopment: Encourage environmentally appropriate redevelopment in existing Centers and in developed areas that are or have the potential to become Centers. This can accommodate growth that would otherwise occur in the Environs and in ways that supports Center-based development. Redevelop with a broad range of uses, an efficient use of infrastructure, and at sufficient densities to support transit with physical design features that enhance public safety, facilitate pedestrian and bicycle activity, and reduce auto-dependency. Redevelop or repurpose obsolete commercial buildings. Amend zoning provisions to eliminate barriers that diversify existing building stock. For existing structures located in floodprone areas, elevate buildings and critical infrastructure to reduce the impacts of natural hazards.

Historic Preservation: Encourage the preservation and adaptive reuse of historic or significant buildings, Historical and Cultural Sites, neighborhoods, and districts in ways that do not compromise the historic resource or the area's ability to develop or redevelop. Coordinate historic preservation needs with open space and farmland preservation efforts. Coordinate and promote historic preservation with tourism efforts.

Public Facilities and Services: Program and phase the extension/expansion of existing systems or new public facilities and services to support planned development and redevelopment in appropriate areas while safeguarding farmlands and open spaces. Locate central facilities that serve a sizeable population in or near dense populations. Encourage private investments and public-private partnerships to provide necessary facilities and services, particularly wastewater systems. Advocate for public utilities that are designed to withstand the impacts of climate

change and its hazards and invest in the hardening of public infrastructure systems to prevent failures during dangerous weather conditions.

Intergovernmental Coordination: Coordinate efforts of various Federal and State agencies, county and municipal governments, and regional, and intra/interstate agencies to support regional approaches to planning and implementation of their Master Plans. Foster partnerships between public and private sectors to attract, locate, and facilitate coordinated development and redevelopment. Policies and programs should support economic development and environmental protection efforts by examining the effects of financial lending, government policies and regulations, and tax implications.

Climate Change: Encourage development and redevelopment in areas with low flood risk and existing infrastructure. Support climate adaptation by discouraging development in vulnerable areas, and instead, investing in resilient infrastructure and implementing mitigation strategies. Floodprone and wildfire risk areas will require careful consideration to ensure land uses minimize risk to people, assets, and neighboring lands. New development or redevelopment projects within already developed high risk areas are encouraged to follow and implement resilient design and hazard mitigation initiatives.

The SDRP provides a balance between growth and conservation by designating planning areas that share common conditions regarding development and environmental features. The 2025 SDRP revised the planning areas slightly from the 2001 Plan and the criteria can be found in the 2025 SDRP, from page 85 onwards:

- Metropolitan Planning Area (PA1), to provide for much of the state's future growth in compact development and redevelopment.
- Metropolitan/Flood prone Planning Area (PA1B), to recognize developed areas that face current and future flood risk.
- Suburban Planning Area (PA2) to provide for a portion of the state's future growth in compact development and redevelopment in Centers and other appropriate areas.
- Suburban/Flood prone Planning Area (PA2B), to recognize developed areas that face current and future flood risk.
- Fringe Planning Area (PA3), to accommodate growth in Centers, excluding flood prone areas.
- Rural Planning Area (PA4) and Rural/Environmentally Sensitive Planning Areas (PA4B), to maintain the Environs as large contiguous areas of farmland, open space and forested areas.
- Environmentally Sensitive Planning Area (PA5) and Barrier Islands (PA5B).
- Critical Environmental Sites (CES) & Historical and Cultural Sites (HCS)

The 2025 SDRP places Pennington Borough within a 6,800 acres (10.6 sq. mile) Fringe Planning Area (PA3) that runs about 8 miles WNW from Washington Crossing to Mount Rose, as shown in Figure 1. In a PA3 area, the intention of the State Plan is to:

- Accommodate growth in Centers, excluding flood prone areas.
- Protect and enhance natural resources.
- Protect the environs primarily as open space or forested areas.

- Provide a transition between more developed Metropolitan and Suburban Planning Areas and less developed Rural and Environmentally Sensitive Planning Areas.
- Confine programmed sewers and public water services to Centers, except where public health is at stake.
- Revitalize towns and older traditional communities.
- Protect and diversify the character of existing stable communities.

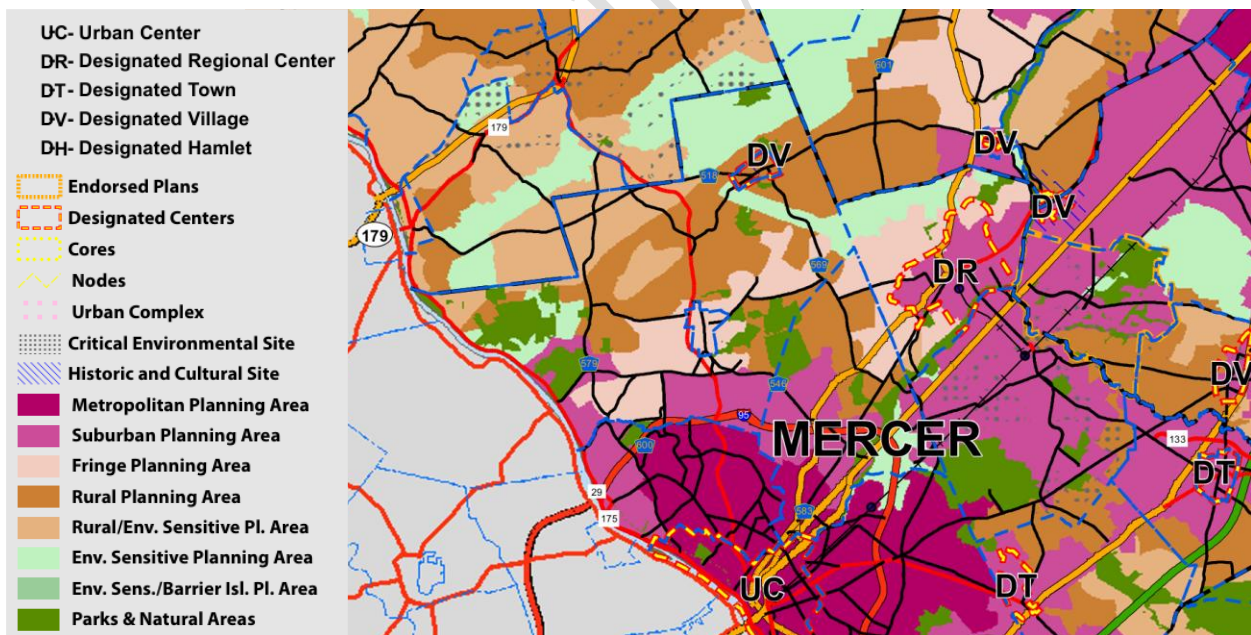
The following criteria are intended as a general guide for delineating the Fringe Planning Area PA3. Local conditions may require flexible application of the criteria to achieve the Policy Objectives of this Planning Area.

- Population density of less than 1,000 people per square mile.
- Generally lacking in major infrastructure investments. The circulation system is mainly provided by state and county roadways with major emphasis on moving traffic through the area. Some Centers are served by public water and sewer.
- Land area is greater than one (1) square mile.

Note that Pennington is not currently designated by the State as a Center. Hopewell Borough is a Designated Village, one of the classifications as a Center.

Figure 1. SDRP Policy Map. Pennington Borough can be seen within the pink area.

Policy Map of the State Development and Redevelopment Plan (July 8, 2021)



Links to the 2025 SDRP Policy Map:

<https://nj.gov/state/bac/planning/documents/maps/stateplanmapMarch2025.jpg>

and

<https://njogis-newjersey.opendata.arcgis.com/datasets/dosopa::planning-area-boundaries-of-the-nj-state-development-and-redevelopment-plan-new-jersey-1/explore>

7. MCIA District Solid Waste Management Plan

In 2002, the New Jersey Department of Environmental Protection (NJDEP) was required to update and re-adopt the Statewide Solid Waste Management Plan because of significant changes to the regulatory and legal environment since the last plan update in 1993. The Department issued a revised plan on January 3, 2006. As a requirement of the State Plan update, each county was required to amend its District Solid Waste Management Plan to reflect the findings and recommendations of the State Plan. In particular, the State Plan calls for the maximization of Source Reduction techniques to reduce or eliminate the disposal of certain waste from the solid waste stream. Equally important, the State Plan called for the continued aggressive approach to recycle 60% of the state's total solid waste stream and 50% of the state's municipal solid waste (MSW) stream. As the designated planning and implementation agency, the independent Mercer County Improvement Authority (MCIA), prepared the District Plan update in December 2006. It can be found at www.mcianj.org/filestorage/133/154/SWMP.pdf

The State Plan mandated that the District Plan include the following:

- Designation of the department, unit or committee of county government to supervise the implementation of the District Plan.
- An inventory of the quantity of solid waste generated within the district for the ten-year period commencing with the adoption of the District Plan.
- An inventory of all solid waste facilities and recycling facilities including approved waste types and amounts, hours of operation and approved truck routes.
- An outline of the solid waste disposal strategy to be utilized by the district for the ten-year planning period.
- A procedure for processing applications for inclusion of solid waste and recycling facilities into the District Plan.
- A strategy for attainment of the recycling goals as outlined in the State Plan.
- An analysis of the existing solid waste collection systems and transportation routes within the solid waste management district.
- The methods of financing solid waste management within the district.

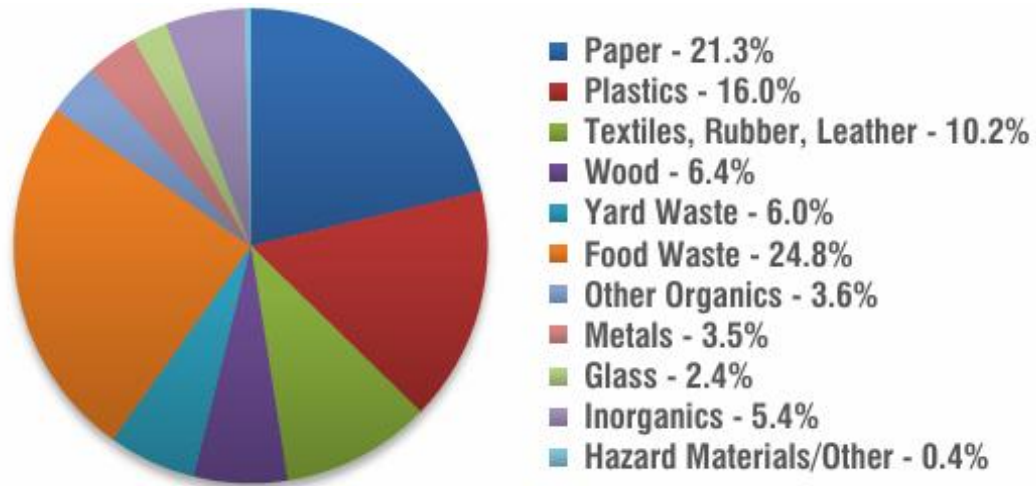
The District Plan includes a draft ordinance for Municipalities on Recycling. Pennington Borough adopted its current recycling plan on December 29, 2008 by Ordinance 2008-08. It can be found in Chapter 172 of the Borough Code.

In September 2015, T&M Associates prepared a report for the MCIA on the quantification and characterization of solid waste and recycling, following a yearlong study of waste delivered to the MCIA waste transfer station in Ewing Township in 2013. The composition of the MSW can be found in the pie chart in Figure 2.

The study also found that the County's waste stream met the State's goal of an overall recycling rate of 60% but at 42% fell short of the 50% target for municipal solid waste. As a result of the study, targets have been set to increase the recycling levels of certain components of the MSW

and these have been communicated to the municipalities. The 25% of food waste was noted and programs for composting were recommended.

Figure 2. Composition of waste delivered to the MCIA transfer station in Ewing in 2013.



8. Other Regional Plans

a. Delaware Valley Regional Planning Commission (DVRPC)

DVRPC is the federally designated Metropolitan Planning Organization (MPO) for the Greater Philadelphia region, established by an Interstate Compact between the Commonwealth of Pennsylvania and the State of New Jersey. Pennsylvania members are Bucks, Chester, Delaware, Montgomery, and Philadelphia counties, plus the City of Chester. New Jersey members are Burlington, Camden, Gloucester, and Mercer counties, plus the cities of Camden and Trenton. DVRPC serves strictly as an advisory agency. Any planning or design concepts as prepared by DVRPC are conceptual and will require engineering design and feasibility analysis. Actual authority for carrying out any planning proposals rests solely with the governing bodies of the states, local governments or authorities that have the primary responsibility to own, manage or maintain any transportation facility.

DVRPC provides services to member governments and others through planning analysis, data collection, and mapping services. Aerial photographs, maps and a variety of DVRPC publications are available to the public. The DVRPC traffic count data was used in the analysis in Appendix A of the Mobility Plan in the Borough's Master Plan 2025. DVRPC's current strategic plan, Connections 2050, was approved in 2021 and is currently being updated. Details of the process can be found on <https://www.dvrpc.org/plan/>. Public input is being sought to update the strategic plan, and proposed projects will be considered under their weighted Benefits Criteria process for inclusion in the Transportation Improvement Program (TIP).

The County is the Borough's point of contact with the Delaware Valley Regional Planning Commission (DVRPC).

b. New Jersey Department of Transportation (NJDOT) Long Range Transportation Plan

The current New Jersey mobility plan is the State Long-Range Transportation Plan (SLRTP), published in October 2008 with the title "Transportation Choices 2030". It can be found at <https://www.nj.gov/transportation/works/njchoices/pdf/2030plan.pdf>. The ten goals of the plan can be found in its Section 5. The State is currently working on an updated plan "Keep It Moving NJ!" aimed at 2050. No release date for the plan has been given. NJDOT describes the plan as "*a forward-thinking initiative to consider current challenges and anticipate future needs, ensuring that our transportation infrastructure remains robust and resilient*". NJDOT is currently obtaining input from the public.

In its Mobility Plan, Mercer County describes its relationship with NJDOT as follows: "*NJDOT is a primary partner with Mercer County for local project implementation through its local aid formula funding (state funds) for bridge and highway maintenance. NJDOT is also a very active participant in developing DVRPC's TIP, since most federal funding goes to projects on state-maintained interstates and federal highways. County participation and support for these projects is vital because federal and state highways are the primary links in the county's transportation network.*" This relationship is key to projects on State Route 31 in Pennington Borough and Hopewell Township.

9. Influence of External Plans on Other Elements of Master Plan 2025

The wide range of topics addressed by the external plans described above can influence any of the elements of the Pennington Borough Master Plan. The monitoring process recommended in the goals may trigger amendments to Master Plan elements and the Borough Code to meet mandated sections of County, State and MCIA plans. In some cases, this may trigger an update and readoption of an element. The monitoring process will allow a proactive response by the Council and Planning Board, rather than a reactive one.

MASTER PLAN
BOROUGH OF PENNINGTON
NEW JERSEY

Climate Change-Related Hazard Vulnerability Assessment (CCRHVA)

The CCRHVA is part of the Land Use Plan element. Because it may need to be updated more frequently than the Land Use Plan element, it is kept as a separate document on the Master Plan page in the Planning and Zoning section of the Pennington Borough website.

The CCHRVA draft was posted on the Borough on December 22, 2025, and conditionally adopted by the Planning Board on January 14, 2026. The writing of Section E, the Build Out Analysis, was delayed until after the Amended 2025 Fourth Round Housing Plan was adopted by the Planning Board and Council adopted the HMU, MU and AH 1-5 ordinances in March, 2026. The CCRHVA will be available for comments until April 22, 2026, prior to final adoption at a public meeting of the Planning Board on May 13, 2026..

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H. Impacts on the Other Elements of the Master Plan

I. Consistency with Other Plans

Appendix: Mercer County Hazard Mitigation Plan Critical Facilities Map

Acknowledgements

Development of the CCHRVA was led by Andy Jackson. Thanks go to Yasmine Zein, who wrote the first draft and to Rick Smith and Doug Pinelli, who made significant additions. An extensive review by Kati Angerone and Nick Angerone greatly enhanced the final product, and thanks go to them.

A. CCRHVA Requirements

In 2021, the Municipal Land Use Law, N.J.S.A. 40:55D-28 was amended to include a provision requiring that a vulnerability assessment for hazards related to climate change be included in the land use plan element of any future Master Plan. The amendment requires that the climate change-related hazard vulnerability assessment meet the following criteria:

1. Municipalities are to analyze current and future threats to, and vulnerabilities of, the municipality associated with climate change-related natural hazards.
2. Include a build-out analysis of future residential, commercial, industrial, and other development in the municipality, and an assessment of the threats and vulnerabilities identified above related to that development.
3. Identify critical facilities, utilities, roadways, and other infrastructure that is necessary for evacuation purposes and sustaining quality of life during a natural disaster, to be maintained at all times in an operational state.
4. Analyze the potential impact of natural hazards on relevant components and elements of the master plan.
5. Provide strategies and design standards that may be implemented to reduce or avoid risks associated with natural hazards.
6. Include a specific policy statement on the consistency, coordination, and integration of the climate-change related hazard vulnerability assessment with certain other plans adopted by the municipality.
7. Rely on the most recent natural hazard projections and best available science provided by the New Jersey DEP.

The purpose of this vulnerability assessment is to assess Pennington Borough's vulnerability and resilience to the impacts of climate change using the best available data, to inform any future policy and development decisions for which climate-related hazards are relevant considerations, and to recommend actions the Borough can take to improve its resilience to climate change-related hazards.

B. Climate Change-Related Natural Hazards

This vulnerability assessment considers the extent to which Pennington Borough is at risk from various natural hazards, several of which are projected to increase in frequency or become more severe due to climate change. This section was developed using the best available science and natural hazard projections including the NJ DEP's 2020 Scientific Report on Climate Change and the 2021 Update to the Mercer County Hazard Mitigation Plan.

[New Jersey Scientific Report on Climate Change](#)

[Mercer County Hazard Mitigation Plan | Mercer County, NJ.](#)

NJ DEP's 2020 Scientific Report on Climate Change describes multiple climate change-related natural hazards in New Jersey. Some effects, such as increases in ocean temperature and acidification, the rise in sea level and other impacts on marine and coastal ecosystems and communities do not directly impact Pennington Borough and its residents. The highlights below, taken from the 2020 report, are those of relevance to Pennington:

1. Rising temperatures

- New Jersey is warming faster than the rest of the Northeast region and the world.
- Since 1895, New Jersey’s annual temperature has increased by 3.5°F.
- Historically unprecedented warming is projected for the 21st century with average annual temperatures in New Jersey increasing by 4.1°F to 5.7°F by 2050.
- Heatwaves are expected to impact larger areas, with more frequency and longer duration by 2050.
- Climate change could result in a 55% increase in summer heat-related mortalities.

More recent data on temperature rise can be found in “A 30-Year Heat Wave Analysis in New Jersey” published by the NJ DEP Division of Science and Research (2005):

<https://dep.nj.gov/wp-content/uploads/dsr/heat-wave-analysis.pdf>

2. Precipitation

- Annual precipitation in New Jersey is expected to increase by 4% to 11% by 2050.
- The intensity and frequency of precipitation events is anticipated to increase due to climate change, resulting in flooding that can impact safety and the ability to access emergency services.
- Tropical storms have the potential to increase in intensity due to the warmer atmosphere and warmer oceans that will occur with climate change, resulting in power outages and damage from strong winds, hail and ice storms, in addition to flooding.
- Droughts may occur more frequently due to the expected changes in precipitation patterns.

3. Air Quality

- The effects of climate change are likely to contribute to an increase in air pollution, lead to increased respiratory and cardiovascular health problems, like asthma and hay fever, and a greater number of premature deaths.
- Environmental degradation from climate-induced increases in air pollution will reduce visibility and cause damage to crops and forests.
- Wildfire seasons could be lengthened, and the frequency of large fires increased due to the hot, dry periods that will result from increased temperatures. Wildfires not only threaten life and property but even at a great distance, e.g. Western Canada and Colorado, they can impact air quality, resulting in adverse health effects.
- Climate change is expected to lead to an increase in air pollution due to meteorological changes (known as the ozone-climate penalty).

4. Freshwater Resources

- Extreme temperatures and more frequent droughts will stress the water supply.
- Surface and groundwater quality will be impaired as contaminants, pathogens, and nutrients from fertilizers enter waters due to runoff from more intense rain events.

- While freshwater wetland ecosystems are generally resilient, environmental and human stressors may reduce the natural capacity of wetlands to rebound.
- Freshwater fish, like brook trout, that need cold-water habitats are expected to lose habitat as water temperatures increase due to climate change.
- Harmful algal blooms may increase as changes to precipitation patterns lead to increased nutrients and thus eutrophic conditions that favor the growth of blooms.

5. Terrestrial Systems

- The loss of forest habitats to climate change will result in carbon losses and increase New Jersey’s net greenhouse gas emissions.
- Climate change will facilitate the range infilling and expansion of invasive plant species.
- Increasing temperatures will move the range of invasive pests to the north, and spread them into areas where they were not previously found.
- A third of New Jersey’s bird species are vulnerable to climate change, including the State bird, the American Goldfinch.

The 2020 Scientific Report on Climate Change concludes with recommendations on research data gaps and needs. This is a rapidly changing field and continual adjustment to adaptation strategies will be needed as the impacts unfold.

C. Vulnerability Assessment

The 2021 Update to the Mercer County Hazard Mitigation Plan (HMP) assesses the vulnerability of the Borough to various natural hazards, and the Borough’s adaptive capacity with respect to each hazard. The methodology of the assessment is described below, and results are summarized in this table.

Hazard	Risk/Vulnerability	Adaptive Capacity
Dam Failure	Low	Moderate
Disease Outbreak	High	Moderate
Drought	Medium	Moderate
Flood	Medium	Moderate
Hurricane/Tropical Storm	High	Moderate
Infestation and Invasive Species	High	Moderate
Nor’Easter	Medium	Moderate
Severe Weather	High	Moderate
Severe Winter Weather	High	Strong
Wildfire	Low	Moderate

Mercer County Hazard Mitigation Plan, 2021 Update. Volume II. Tables 9.10-8 and 9.10-12.

The hazard ranking, which evaluates risk or vulnerability, “involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property,

and the economy as well as community capability and changing future climate conditions” (Mercer County HMP, 9.10-20). Based on these considerations, the risk to the Borough from each natural hazard is ranked on a scale of Low to High.

The Mercer County HMP also considers adaptive capacity. Adaptive capacity is the ability of systems, institutions, humans and other organisms to adjust to potential damage, take advantage of opportunities, or respond to consequences. Using this definition, the Borough submitted to the County a ranking of its capacity to adapt to various natural hazards on a scale of Weak to Strong, where a rating of Strong indicates that the capacity exists and is in use, a rating of Moderate indicates that the capacity may exist, but is not used or could use some improvement, and a rating of Weak indicates that the capacity does not exist or could use substantial improvement.

D. Climate Change-Related Hazards in Pennington

1. Flooding

As with much of New Jersey, flooding is the most frequent and impactful climate hazard that occurs in Pennington Borough. With multiple waterways running through town, and significant amounts of impervious surface and aging infrastructure, the Borough is vulnerable to both fluvial (non-tidal) and pluvial (stormwater) flooding.

The Federal Emergency Management Agency (FEMA) designates Flood Zone AE as an area with a 1% annual chance of flooding (often called a 100-year-flood). AE is classified as a Special Flood Hazard Area (SFHA), and property owners in these areas are required to follow strict building codes and obtain flood insurance to mitigate the risks associated with flooding. In the Borough, FEMA has identified 2.1 acres of AE regulatory floodway and 1.3 acres of AE base floodplain along Stony Brook and its tributaries, adjacent to King George Road. The rest of the Borough is considered by FEMA to have minimal flood hazard. However, FEMA mapping is based on historical data and is not representative of potential increases in climate change-induced flooding. In fact, FEMA estimates that approximately 20% of flood impacts occur outside of mapped floodplains.

New Jersey rainfall studies released by the NJ DEP in 2021 show that data used to inform flood potential was out of date, and that the state was experiencing extreme precipitation 2.5-10% higher than data used by FEMA, depending on location in the state. These studies further projected a high likelihood that precipitation intensity will increase in the latter half of the century. For example, projections suggest that the amount of precipitation associated with the 100-year, 24-hour storm is likely to increase by up to 36% in Mercer County.

Recognizing that New Jersey is already experiencing regular flooding that is more extreme, and extends further than FEMA mapping, and based on the 2021 rainfall studies, in 2023 the NJ DEP adopted Inland Flood Protection rules that increase the extent of areas regulated by the NJ Flood Hazard Area Control Act. These new regulations increase the fluvial design flood elevation (height of the lowest floor level of a building) to 3 feet above the FEMA-mapped 1% annual floodplain and thus extends the area of the regulated floodplain. The geographic extent of this

new area is estimated by Rutgers University and provided at <https://www.njfloodmapper.org/>. This is shown in Figure 1 for Pennington. Areas in Pennington mapped as prone to fluvial flooding are limited and include the intersection of East Delaware and King George Road at the Stony Brook bridge, and within Kunkel Park at the confluence of Lewis Brook and Stony Brook.

Figure 1. NJ flood elevation (2023), 3 feet above FEMA 100-year flood.



The Borough has also experienced flooding at several other locations during heavy rainfall events. Areas of concern include the intersection of Route 31 and West Delaware Avenue, the railroad underpass at Broemel Place, and the intersection of East Franklin Avenue and Eglantine Avenue, all of which have experienced flooding on multiple occasions. Flooding at the intersection of Route 31 and West Delaware Avenue results from outdated, inadequate stormwater management infrastructure controlled by the State and County, and by surrounding properties.

Multiple private properties also experience flooding, particularly along tributaries to Lewis Brook, due to culverts that pipe streams under roads and private homes and are unable to sufficiently drain at a rate commensurate with recent storm events. There is one repetitive loss property in the Borough that has repeatedly filed National Flood Insurance Program claims. Flooding can occur near Stony Brook, Lewis Brook and their tributaries because of overwhelmed stormwater systems.

Tropical Storm Ida impacted the region on September 1, 2021, causing one of the most severe flooding events in the Borough's recent history. During Ida, flooded roadways included the

intersection of Route 31 and West Delaware Avenue, Broemel Place at Green Street, King George Road at East Delaware Avenue, Eglantine at East Franklin, and North Main Street at Brookside. Three motorists were stranded in their vehicles at the intersection of Route 31 and West Delaware Avenue and were rescued by the police department. Several roadways became impassable, which could have severely hindered the ability of emergency vehicles to enter the Borough should an unrelated emergency have occurred. Figure 2 shows eight floods that occurred during Tropical Storm Ida on September 1, 2021. These areas are likely to flood again in the future unless steps are taken to update the stormwater management infrastructure that cause the flooding.

Figure 2. Flooding locations along Lewis Brook.



The Mercer County Hazard Mitigation Plan identifies 11 flood events and 5 severe weather events that impacted Pennington Borough in the years from 2008 to 2015. Note that multiple recent floods and severe weather events referenced here occurred after 2015.

Finally, the Stony Brook Regional Sewerage Authority (SBRSA) Pennington Treatment Plant experienced major flooding from Stony Brook during Tropical Storm Ida. A likely cause was the build-up of a large beaver dam on Stony Brook just east of the East Delaware Avenue bridge. The beaver dam was eventually washed away by Ida and the flood abated somewhat. The plant treats all of Pennington Borough's wastewater and sewage. While the plant is not located in Pennington Borough, the Borough is concerned about the risk of damage to the plant if another severe flooding event occurs. Figures 3-6 show floods at various locations in the Borough.

Figure 3. Flooding at the Route 31 and West Delaware Avenue intersection.



Figure 4. Flooding at North Main Street and Brookside Avenue



Figure 5. Flooding just north of the Stony Brook bridge on Pennington-Rocky Hill Road from an unnamed storm on August 22, 2021. Picture downloaded from <https://mycoast.org/nj/>.



Figure 6. Flooding of the Stony Brook onto King George Road, near the intersection with E. Delaware Avenue on August 22, 2021. Picture downloaded from <https://mycoast.org/nj/>.



2. Severe weather

Intense storms can result in a variety of hazardous conditions in addition to flooding. Strong winds can topple trees, damage buildings, and bring down overhead power lines. Tornadoes were rare in the past but are becoming more frequent in the area and are a threat to life. Snow and ice from winter storms can create life-threatening driving conditions and make roads impassable, hindering rescue services. Ice storms can bring down trees and power lines and immobilize traffic.

Helping the public respond to such emergencies is the role of the Hopewell Valley regional Office of Emergency Management (OEM), which covers Hopewell Township, Hopewell Borough and Pennington Borough and coordinates with County and State emergency services. The Hopewell Valley OEM uses several methods of alerting the public when there is an emergency event approaching or taking place. The Everbridge secure portal allows residents and businesses to add their contact information to receive emergency messages. The OEM has identified public and private facilities that can provide refuge in various kinds of emergencies and will coordinate public evacuation to the facilities as needed. Strong winds and ice storms can cause interruptions in electric power supply so refuge buildings, such as those designated as warming or cooling centers, should have backup power. Borough Hall is one such facility and it has backup power.

3. Drinking Water Availability

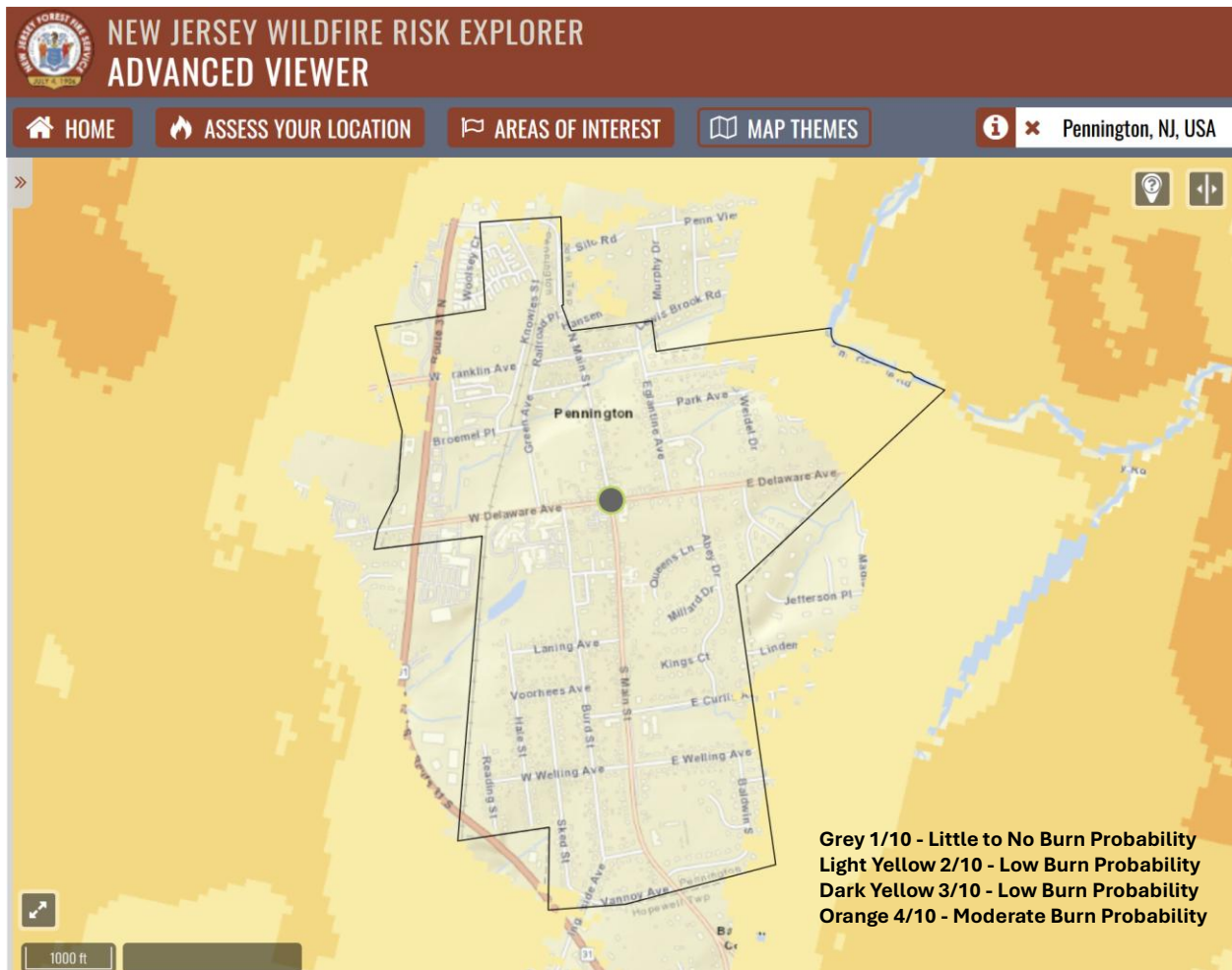
There currently are four active water supply wells in the Borough. Failure of the wells may reduce the amount of water available for consumption and firefighting. Backup power is needed in case of emergencies. Well 9, one of four wells supplying water for the Borough, is hooked up to a portable generator. With rationing, Well 9 should be able to meet the short-term needs of the customers of the Pennington Water Department. Average water demand in 2024 was 7.5 million gallons per month, or 175 gpm (gallons per minute), and Well 9 can produce 250 gpm. It may be prudent to add back-up power to Well 7 with a capacity of 190 gpm in case Well 9 develops a problem during an emergency. Battery back-up may be a better option for both in place of diesel generators. The Borough has a 600,000-gallon tank adjacent to Borough Hall as a back-up. At an emergency usage rate of 175 gpm, it could supply water for over two days. During heavy precipitation and flooding events, inflow and infiltration issues result in higher rates of wastewater, which has the potential to lead to sewage overflows and other related problems.

4. Wildfires

The New Jersey Forest Fire Service developed the Wildfire Risk Explorer tool which includes multiple datasets on local risk to wildfire hazards (<https://wrap.newjerseywildfirerisk.com/>). The majority of the Borough is classed as 1/10 Little or No Burn Probability, the outer edges are classed as 2/10 Low Burn Probability, see Figure 7. Risk to structures is also classed as low on this website. However, the Borough is not risk-free. In March 2025, a forest fire occurred in Hopewell Township between Woosamonsa and Poor Farm Roads It burned for two days and impacted 293 acres. Pennington experienced a severe 81-day drought from Sept. 1 to Nov. 20, 2024. There was no rain at all for 77 days. Less than 0.4 inches fell September 27-28 and 0.3

days on November 11-12 (data from the Rutgers NJ Weather Network for the weather station at The Watershed Institute in Hopewell Township, found on <https://www.njweather.org/data>). Foliage and grasses were very dry and could have presented a fire risk. We are proud of Pennington being a Tree City but the density of the canopy and spacing of trees should be controlled to prevent the spread of fire. Moving from lawns to meadows can increase fuel load and fire risk should be balanced against the benefits of rainwater capture.

Figure 7. Wildfire Risk in Pennington Borough



5. Infestations and invasive species

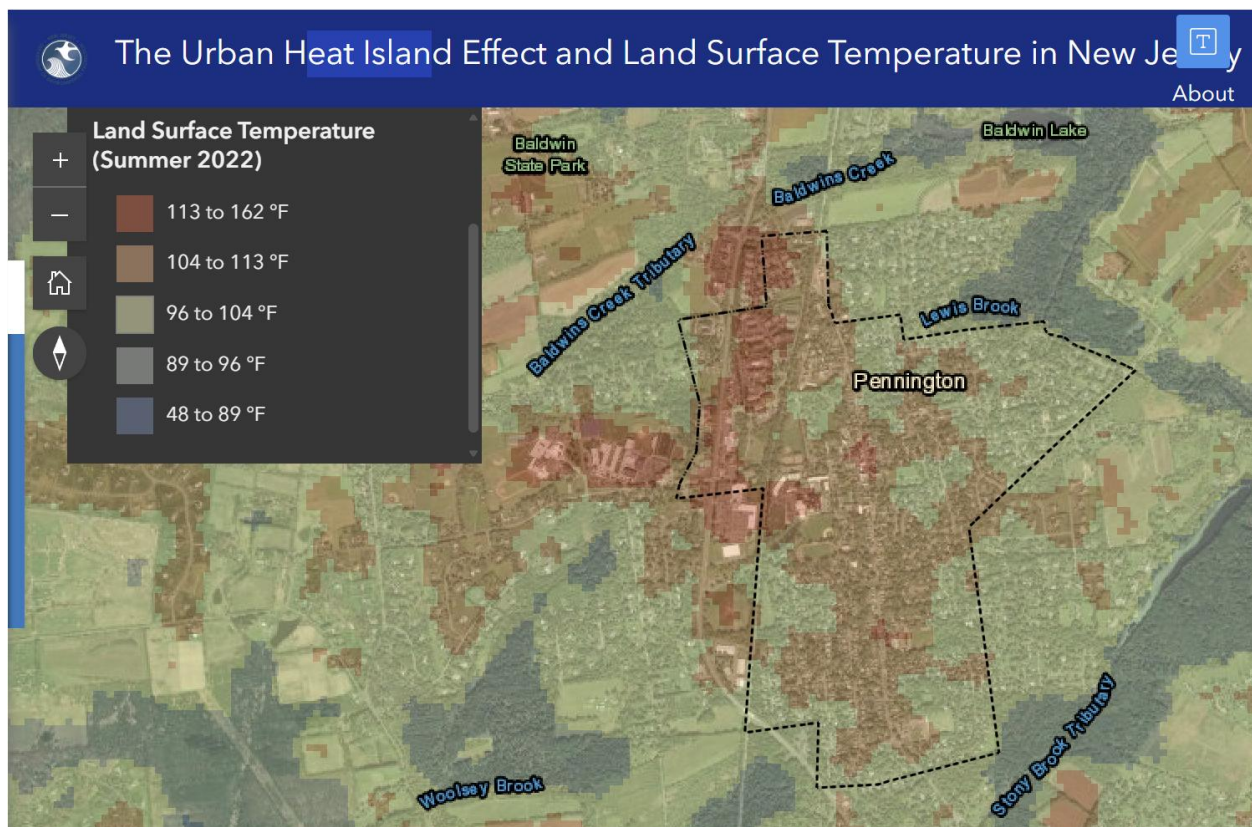
The Borough's Pin Oak trees have been impacted by Bacterial Leaf Scorch (BLS). Public Works has removed many dead and dying trees. However, there are 50-60 very large Pin Oaks within the Borough that exceed the Department's capabilities due to their size. Falling trees may result in damage to infrastructure and private property, as well as injuries or death in a worst-case scenario. The NJ DEP's 2020 Scientific Report on Climate Change projects that BLS may become more prevalent as temperatures increase while other pests and diseases may also spread more easily.

Emerald ash borer was first discovered in New Jersey in 2014 and has taken a toll on the Borough's ash trees. In addition to the loss of many of the Borough's mature shade trees, the weakened trees and dead limbs are dangerous. Fallen trees and branches also clog streams and culverts and can aggravate flooding. Regular removal of dead tree branches and trunks from streams near the entrance to culverts is a good practice to follow.

6. Extreme Heat

Extreme heat events significantly impact daily activities and public health, particularly for vulnerable populations such as the young, elderly, pregnant and those with chronic health issues. Federal statistics over a 30-year period show extreme heat is the leading cause of weather-related deaths in the United States. Communities in New Jersey are particularly at risk during extreme heat events due to the Urban Heat Island Effect, when urban areas are hotter than surrounding rural or forested areas. While Pennington's greenery and location in a rural area mitigates the most extreme impacts from heat, the Borough is not immune from this climate hazard.

Figure 8. Urban Heat Island effect in Pennington, Summer 2022



There are multiple tools that assess vulnerability to extreme heat, many of which are located on Heat Hub NJ (<http://heathub.nj.gov/>), New Jersey's one-stop hub for information regarding extreme heat. One such tool – The Urban Heat Island Effect and Land Surface Temperature in NJ – shows land surface temperature from satellite measurements during the summer of 2022 (see Figure 8). It shows the hottest areas in the northwest portion of the Borough, generally along

the Route 31 corridor, as well as on the Pennington School campus, Toll Gate, and in the town center. These areas show surface temperatures between 113 and 162-degrees F. Areas with less impervious surface (e.g. buildings, roads) and more green space have lower temperatures.

Similarly, the 2024 Heat Severity Map shows areas that are hotter than the average temperature for the area as a whole. In the Borough, the post office, Cambridge School, Straube Center and portions of Heritage townhouses and Pennington Point show as “extreme.” Notably, other areas adjacent but important to Borough residents also show as extreme, including Timberlane Middle School, Hopewell Central High School, and the Pennington Quality Market parking lot.

Interestingly, a tool called “Where Will Tree Planting Improve Urban Heat Health?” seeks to identify areas that would benefit most from planting more trees to mitigate against extreme heat. Pennington Borough ranks 2.3 on a scale of 1-5, suggesting some improvement could be made through a tree planting campaign.

Finally, Heat Hub NJ includes a mapping application called “Chill Out NJ” that identifies places to visit to seek relief from the heat, but that are not necessarily official “cooling centers.” In Pennington, both the Borough Library and Senior Center are identified, as are the Hopewell Branch of the Mercer County Library system and multiple county parks and in the surrounding area.

7. Air Quality

Along with extreme heat and wildfire in recent years air quality impacts come. New Jersey’s air quality will be impacted by climate change, leading to increased exposure to pollutants (e.g., ground level ozone and particulate matter), which has been associated with symptoms ranging from eye irritation to severe respiratory distress, and exacerbates pre-existing conditions. Additionally, as experienced multiple times in recent year, most dramatically in 2023, smoke from wildfires also has a significant impact on air quality and has pushed the Air Quality Index to reach “unhealthy” and “very unhealthy” levels.

E. Build Out Analysis

Future construction in Pennington Borough will be almost entirely to meet state-mandated affordable housing obligations. Pennington’s Fourth Round affordable housing obligation is 58 units and its unmet need from the Third Round is 125 units. In January 2026, the Pennington Borough Planning Board adopted an Amended 2025 Fourth Round Housing Plan designed to address the above obligation. Opportunities exist in the Route 31 corridor on the western side of the CSX railroad tracks, except that existing zoning did not allow residential development. In addition, several zones to the east of the railroad tracks limited residential use. The Housing Plan recommended two new ordinances, HMU (Housing Mixed Use) and MU (Mixed Use) to allow housing, including affordable in these areas. These two ordinances were adopted by Borough Council along with five affordable housing ordinances, AH 1-5, to address issues specific to certain sites. Council also adopted a revised Zoning Map which can be found on the Borough website.

A vacant land analysis in the 2026 Housing Plan concluded that only 5 lots are classified as vacant, totaling 0.85 acres. This is 0.14% of the 624 acres (0.97 square miles) area of the Borough. Publicly owned property takes up 30.7 acres and is either permanently restricted as open space, or for public uses such as Borough Hall, the library, parking or water supply. Two exceptions are the 7.8 acres of the former Borough landfill, and 2.7 acres north of the Senior Center close to the railroad on Reading Street. A Licensed Site Remediation Professional (LSRP) was contracted to conduct a preliminary environmental assessment and a floodplain analysis of the landfill site to inform future development. The assessment indicated that due to the landfill materials present on the property and environmental constraints associated with Lewis Brook, which runs through the property (wetlands, wetland transition areas, flood hazard areas and riparian buffers), development of the site will be significantly constrained unless the landfill materials are removed.

Since private and public vacant land is in limited supply, redevelopment and rehabilitation of existing facilities will be needed to meet the affordable housing obligation. The Borough will need to make it attractive to developers to pursue such opportunities. Since there has been little development in the Borough, the income to the Borough's Affordable Housing Trust fund has been small. The current balance will be spent on affordability assistance, rehabilitation and the extension of existing controls, leaving little to support new construction of affordable housing units. Such construction would therefore rely on requiring developers to set aside 15-20% of units in a development as affordable housing, which means that the total number of housing units to be built will be 4 to 5 times the number of affordable units.

The 2026 Housing Plan presents 11 such redevelopment opportunities. Details of each can be found in the Plan, but in summary the 58-unit obligation of the Fourth Round could be met along with 37 of the Third Round 125 unmet need. It is important to contemplate how these developments will impact the Borough's vulnerability to climate change-related hazards. These may come from the impact on stormwater management of an increase in impervious coverage, an impact on the heat island effect from reduced tree cover and increased roof areas or an increase in the need for emergency services during and after a major climate-related event.

The table below shows where the 11 areas proposed in the Housing Plan would be located and briefly what type of development it would be. Column 2 shows 82 affordable units are proposed, and the total number of units, based on developer set asides, is shown in column 3 as 360. The current average household size in the Borough is 2.31, so 360 units would add about 830 new residents to the Borough, increasing the population to over 3,600. While this would add tax income to the Borough, it will also add to the need for services and bring the Borough close to the limit of current drinking water and wastewater capacity. More places will be needed in the schools. It will increase the use of energy and add greenhouse gases to the Borough total. The impact of the increase in population on the hazards from climate change is small, however, but it could add to the need for services during a serious climate change-related event.

The area of the lots proposed for the developments is shown in column 4, with a total of 24 acres. This was gleaned from the Borough Tax Map, except for the development at the Straube Center, which was estimated using Google Earth Pro. Since most of the developments will be

replacements or conversions of existing buildings and would use existing parking lots with some additions, the added impervious area will be less than 24 acres. Column 5 is an estimate from observations in Google Earth Pro of the proportion of the unused land that may be needed for the development. The total is estimated at 5.7 acres.

	Affordable units	Total Units	Lot area acres	% new cover	New cover acres
Route 31 Shopping Centers (Block 202, Lot 1, Block 206, Lot 3) - add 2 stories for new apartments	22	106	6.44	0%	0.00
Howe Commons (Block 601, Lot 12.01) -Convert some commercial buildings, and add new buildings	8	40	3.72	20%	0.74
Levin Limousine (Block 502, Lot 2) - Replace existing building with an apartment building	3	12	0.34	0%	0.00
37, 41 and 43 South Main Street (Block 601, Lots 17 and 19) - New buildings in the rear of the lots	2	9	0.39	25%	0.10
245 and 250 South Main Street (Block 801, Lot 22, Block 703, Lot 30) - Add new stories or new buildings	4	16	1.52	10%	0.15
West Franklin 2 (Block 102, Lots 6, 7 and 8) - Replace two residences with an apartment building	6	30	1.12	70%	0.78
West Franklin 1 (Block 201, Lots 1, 2 and 9) - New townhouses	6	26	4.51	50%	2.26
Straube Center (Block 202, Lot 2) - New apartment building on the east side of the Center	15	75	0.70	40%	0.28
12 North Main (Block 205, Lot 22) - convert a commercial building to apartments	4	16	0.18	0%	0.00
Senior Center (Block 701, Lots 5, 6, 7 and 8) - Convert building to give 6 assisted living bedrooms	6	0	0.60	0%	0.00
Blackwell property (Block 205, Lots 2, 3, 4, 5 and 6) - Replace/add buildings to create mixed use area	6	30	4.53	30%	1.36
Totals	82	360	24.05		5.67

A reasonable estimate of the current impervious coverage of the total land area of the Borough is 30%, which is about 187 acres of the 624 total, so adding 5.7 is a 3% increase. This will reduce groundwater recharge during normal rain events but could be mitigated by the addition of new detention basins or improvements to existing basins. It will not have a significant impact on the rain flowing to the various town streams during heavy storms, since very little of that water is absorbed and the total amount of rain will be the same regardless of the developments.

Figure 8 shows the “heat island” effect in Pennington Borough. Three of the proposed developments fall in areas with the highest current heat island effect. Each will be impacted by being in the high heat area, but the contributions to the heat will be small. The additional land cover from the three, Straube Center apartment building, 0.28 acres, West Franklin 2 apartment building, 0.78 acres, and apartments over the Route 31 shopping centers, 0 acres, amounts to 1.06 acres. The area of high heat island effect in the Borough is about 55 acres, so the contribution from the three developments is about 2%. This could be mitigated by landscaping.

Finally, the Land Use Plan proposes changes to the R-80 and R-100 zones to allow in-fill development with accessory dwelling units (ADUs) and allowing conversion of existing residences to multi-family to promote housing affordability and offer a greater variety of housing types, and dwelling sizes to better fit a spectrum of household size and income levels. Demand for these is not known, but an estimate of 20 ADUs of 500 square feet in land cover area would be less than half an acre and should have a minimal effect on stormwater management.

The target year for achieving the affordable housing obligation is 2035, so development will happen slowly. This will give the Borough time to monitor the effect on climate change-related hazards and to make adjustments to the plans if needed.

F. Critical Facility Identification

Critical Facility	Facility Type
NJ State Highway Route 31	Roadway
East and West Delaware Avenues	Roadway
North Main Street	Roadway
NJ Transit Bus Line	Transit
West Delaware Avenue Bridge over CSX railroad	Bridge
Route 31 Bridge over CSX railroad	Bridge
North Main Street Bridge over CSX railroad	Bridge
Pennington Borough Hall	Government
Pennington Fire Department	Community Facility
Pennington Police Department	Community Facility
Hopewell Valley Senior Center	Community Facility
Pennington Water Department Active Wells (4)	Potable Water
Drinking Water Storage Tank	Potable Water
Curlis Avenue Pumping Station	Wastewater Utility
Sked Street Pumping Station	Wastewater Utility
Schools, Childcare, and other Education (5)	Educational Facilities

In the event of a disaster, certain facilities, utilities, roadways, and other infrastructure must remain functioning to ensure the safety and quality of life of residents or for evacuation purposes. The Borough identified 34 critical facilities in the action plan of the Mercer County

Hazard Mitigation (HMP) using FEMA’s community lifelines approach. The locations of these facilities are shown in the Appendix Map 1. Note that the map was from an earlier report (2016) and some of the facilities no longer exist. The chart above from the Mercer County HMP lists critical facilities that may be vulnerable to natural hazards or that are especially important for safety, quality of life, and evacuation purposes. FEMA’s community lifelines approach may assist the Borough in allocating adaptation investment among critical facilities.

1. Critical Facility Vulnerability.

There are no critical facilities located in the 1% annual risk floodplains identified by FEMA or the expanded flood prone areas identified by Rutgers University <https://www.njfloodmapper.org> (FEMA +3 ft). As discussed previously, several roads in the Borough are known to flood during periods of significant rainfall, including the busy intersection of Route 31 and West Delaware Avenue, and Broemel Place, which is an important means of access for the Fire Department to the rest of the town.

The EMS facility on Broemel Place has reverted to Borough ownership since the First Aid Squad went out of business. The parking apron of the facility floods during heavy rain events which prevented egress of the ambulances and limits the ability of the facility to provide critical services. The facility also lacks backup power.

G. Climate Change Resilience Strategies

The Borough should continue to reduce its vulnerability to the climate change-related natural hazards. Existing measures and potential strategies to reduce vulnerability are described below. The Borough Government is doing its part to reduce greenhouse gas emissions and is developing a community energy plan that will focus on residential and commercial energy efficiency and moving energy demand towards renewables. Pennington Borough should do all it can to limit government emissions and promote policies that incentivize and do not hinder individual action.

However, greenhouse gas emissions reduction policy in the United States is currently under threat and global targets for atmospheric CO₂ limits go unmet. It is therefore critical that Pennington pursue ways to adapt to climate change and to protect the community in extreme events. The following strategies are proposed.

1. Planning and General Strategies

- 1) Review the action plan in the Borough of Pennington annex in Section 9.9 of the 2021 Mercer County Hazard Mitigation Plan. It includes resources and information to assist public and private sectors with reducing losses from future hazard events. The annex is not intended as guidance for actions to take *during* an emergency. It provides actions that can be implemented *in advance* to protect people and reduce or eliminate damage to property. Following a general overview of Pennington, the annex presents an action plan that should be implemented to achieve a more resilient community.

- a) Table 9.9-14. Status of Previous Mitigation Actions. As of 2021, 10 actions were listed, 3 were complete, 5 were in progress and 2 were not yet started.
 - b) Table 9.9-16. Proposed Hazard Mitigation Initiatives and Associated Priority. These are listed in the table in a Problem/Solution mode as summarized here and the 2025 status is shown in *italics*:
 - i) Stormwater management upgrades. *In progress.*
 - ii) Backup power for Well 7. *Not yet started.*
 - iii) EMS flood protection and backup power. *Reviewing options for the building.*
 - iv) Repetitive flood loss mitigation. *Completed.*
 - v) All hazards - public education and outreach. *In progress.*
 - vi) Disaster debris management plan. *Completed.*
 - vii) Flood damage prevention ordinance update. *In progress.*
 - viii) Increase staff hazard training and responsibilities. *In progress.*
 - ix) Backup power for the Senior Center. *Obsolete.*
 - x) Hazardous tree removal. *Not yet started.*
 - xi) Backup water supply. *In progress.*
 - xii) Reduce inflow and infiltration. *In progress.*
 - c) Table 9.9-17. Summary Evaluation and Action Priority. This presented a scoring system to determine whether the items in Table 9-9-16 above were low, medium or high priority. All were ranked as high priority.
- 2) Increase public outreach and education about natural hazard risks, wildfire prevention, flood risk, extreme heat and other emergency preparedness topics.
- a) Document and provide public information on the locations and circumstances of flooding in the borough.
 - b) Engage residents in taking pictures (safely) of flooding using mobile phones, which date and time stamp the images. Create a Borough repository for these images as they are invaluable data points for validating future models of flooding in Pennington.
 - c) Include educational material in regular borough outreach strategies, such as the borough newsletter.
 - d) Assess the needs of limited-income and socially vulnerable populations, such as the elderly, who may be at increased risk from natural hazards. In addition, work to build climate resilience within these communities through outreach and emergency planning at the municipal level. Target education and outreach to socially vulnerable populations and collaborate with appropriate messengers such as the Mercer County Office on Aging, Senior Advisory Board, and Board of Health to promulgate messaging.
 - e) Create a “Welcome to Pennington” information package for new residents, including information on climate resilience and hazard mitigation, while providing other important government information (unrelated to resilience), and promoting local business.
- 3) Increase the awareness of Borough residents and businesses of the role of the Hopewell Valley regional Office of Emergency Management (OEM) in managing the response to a variety of emergencies.
- a) Send out occasional email reminders of the role of the OEM.
 - b) Remind residents and businesses to sign up for the Everbridge secure portal in order to receive timely emergency messages.

- c) Encourage residents to access the website of the New Jersey Office of Emergency Management (<https://nj.gov/njoem/>). The “Plan and Prepare” tab contains a wealth of information on weather and natural hazards; winter, hurricanes, earthquakes, droughts, floods, lightning/thunderstorms, pandemic influenza, tornados, and wildfires. It also covers man-made and technological hazards: nuclear power plants, power outages, chemical emergencies, hazardous materials, and terrorism
- 4) Identify and pursue funding opportunities to ensure investment in the adaptation measures needed to protect the Borough’s residents and businesses from climate change-related natural hazards.
 - a) Use the [NJ Climate Resilience Funding Directory](#) to identify grant and program opportunities for resilience projects.
 - b) Assess the opportunities for financing of projects that include resilience from the [NJ Infrastructure Bank](#), which includes opportunities for water infrastructure, transportation, and resilience projects.
 - c) Partner with private landowners to implement mutually beneficial risk mitigation strategies, such as green infrastructure. One example of such an opportunity is to implement the [Green Infrastructure Site Designs](#) prepared by The Watershed Institute in 2021 for several properties in Pennington Borough.
 - d) Maintain and monitor climate resilience and risk mitigation actions continuously to ensure goals are met and new challenges are addressed.
 - 5) Pennington Borough is in two watersheds (HUC11) and is surrounded by another municipality, so it is significantly impacted by decisions outside its borders. Consider participating in regional planning programs (such as [Resilient NJ](#)) and continue working with regional partners, such as Mercer County, Hopewell Township, and The Watershed Institute, to address climate impacts.
 - 6) Incorporate resilience and hazard mitigation into all capital projects and adopt a “dig-once” policy to consolidate construction projects.
 - a) For example, when repaving streets, take the opportunity to install upgraded water/sewer lines; move electric wires and internet utilities underground; install stormwater green infrastructure that also acts of traffic calming; place sidewalks on the opposite side of the street from power lines allowing tree-planting to mitigate heat impacts on pedestrians.
 - b) Incorporate and incentivize resilience and hazard mitigation into redevelopment projects, including green infrastructure, open space, tree planting, and shade structures.
 - 7) Engage all borough boards, commissions, and committees in climate resilience; each has purview over resilience and risk mitigation activities, and/or represents communities/sectors that are impacted.
 - 8) The Greater Mercer Public Health Partnership (GMPHP) has released a Community Health Improvement Plan (CHIP). It does not include climate change-related health issues, but it is described as a living document that will be amended as additional data and resources are identified. Our Board of Health representative on the GMPHP could suggest the addition of a climate change section in an expanded CHIP referencing the Health Addendum to the Science Report. <https://dSPACE.njstatelib.org/items/8d5e35b0-bf75-40a0-9955-dff93eae3711>.

Topics to cover are the effects of climate change on:

- a) An increase in vector-borne diseases.
- b) Stress from extreme heat or cold.
- c) Declining air quality.
- d) Mental health issues from coping with a disaster.

2. Flooding Strategies

The Borough has taken many steps to improve its resilience to flooding, one of the most urgent natural hazards it faces. The Stormwater Control and Flood Damage Prevention ordinances have continually been updated to remain in compliance with NJ DEP rules. In addition, in 2020, The Watershed Institute prepared an Impervious Surface Assessment and Reduction Plan for the Borough, designed to help assess and guide future policies. However, while the Borough continues to experience flooding during extreme rainfall events, new modeling tools and data are available, and a regional stormwater study is forthcoming. Pennington should consider updating climate-informed ordinances that will improve resilience and reduce flooding. Potential strategies to improve resilience to flooding include:

- 1) The Borough should consider infrastructure improvements, stormwater management improvements, reduction of impervious cover, and other strategies to mitigate flooding without exacerbating flooding downstream.
- 2) Work with the county and state to address flooding at the intersection of West Delaware Avenue and Route 31 and on North Main Street, while improving other state/county-owned infrastructure that reduces the efficient delivery of emergency services.
- 3) Increase the drainage or absorption capacity of the current stormwater management system, prioritizing stream sheds with flood-prone locations. Measures would include adding/enhancing detention or retention basins, relief drains, vegetated planters or swales, perform logjam and debris removal, and enhancing culverts.
 - a) Most, if not all, stormwater management infrastructure in Pennington was built based on requirements that are out of date and do not consider increasing precipitation from climate change. Such infrastructure creates pinch points or fails to manage stormwater during extreme events and may flood adjacent areas, including transportation infrastructure. The borough should assess all stormwater management infrastructure and prioritize the replacement/appropriate sizing or increasing of drainage/absorption capacities of those structures deemed inadequately designed to withstand climate change-related disasters.
- 4) Update ordinances to restrict increases in and reduce impervious surfaces throughout the Borough.
- 5) Ensure that redevelopment and construction of new critical facilities, utilities, and community facilities meet or exceed statewide minimum stormwater standards and occurs away from floodplains.

- 6) Conduct a hydrology and hydraulic study of the watersheds feeding into the Borough's tributaries to identify the locations with the most severe flooding and to determine appropriate mitigation measures.
- 7) Address the following specific areas of deficient stormwater pipes and drainage
 - a) the pipes to the landfill from the intersection of Route 31 and West Delaware Ave.
 - b) the driveway bridge on the landfill property,
 - c) the Lewis Brook tunnel from the landfill under the CSX tracks,
 - d) the channel under the CSX railroad tracks at Knowles St. and Bixby's Way,
 - e) the bridge tunnel and pipes at the Green Street and Broemel Place intersection,
 - f) the tunnel under the garage on the Blackwell property,
 - g) the pipes under the rear yards of 20 and 22 East Franklin Avenue.
- 8) The Lewis Brook bridges under Green Street, North Main Street and Eglantine Avenue are old and in poor condition. The County is looking to replace and upgrade the Green Street and Eglantine Avenue bridges.
- 9) Inflow and infiltration issues result in higher rates of wastewater during heavy precipitation and flooding events. Identify and address stormwater inflow and infiltration issues during heavy rainfall events.
- 10) Consider the use of open space funds to acquire properties both inside and outside of the borough to 1) attenuate existing flooding, and 2) that would result in additional flooding within the borough if developed.
- 11) Consider the acquisition/purchase or elevation/moving of the most flood-prone residential properties in the borough.
 - a) Convert properties to open space designed to flood during extreme events and mitigate flooding in the area.
 - b) Offset housing and ratable loss with increased density in the town center and appropriate redevelopment areas.
- 12) Consider daylighting streams in the borough that have been piped. Returning streams and buffers to natural function improves flood attenuation and slows stream flow, reducing flood impacts. Co-benefits of such action include heat island mitigation, additional open space, improved water quality, restored habitat, and neighborhood beautification.
- 13) Add green infrastructure throughout the borough, prioritizing public lands to lead by example.
 - a) Work with Watershed Institute to utilize public green infrastructure for use as demonstration projects, education, and training opportunities.
 - b) To promote stormwater infiltration, resurface impervious pavement such as borough-owned parking lots, with pervious surfaces.
 - c) Incorporate stormwater green infrastructure in road designs that serve to mitigate stormwater flooding, while calming traffic and beautifying neighborhoods.
 - d) Adopt and implement a Complete and Green Streets policy.

3. Severe Weather Strategies

The Borough has made concerted efforts to ensure that its critical facilities can remain functional in the event of a power interruption. So far, the municipal building, which serves as a cooling center, traffic signals at Main and Delaware and Route 31 and West Delaware, and Well 9 have been equipped with auxiliary power systems.

Potential strategies to improve resilience to severe weather include:

- 1) Work with PSE&G to ensure that the electrical grid is more resistant to severe weather, including high-speed winds. Measure would include replacing utility poles, reinforcing key infrastructure, burying power lines, managing vegetation, and pruning trees near power lines.
- 2) Ensure that remaining critical infrastructure facilities have auxiliary power systems installed and regularly tested.
- 3) Increase the Borough's long-term resilience through distributed renewable energy such as Community Solar or Wind projects.
- 4) Assess the vulnerability of the Borough's Historic District and other cultural resources to determine if adaptive measures are needed.
- 5) Assess the opportunity to enhance the Borough Hall/library into a resilience hub. Typically, resilience hubs are existing community-serving facilities that are upgraded to provide local communities with shelter and electricity during extreme heat events, poor air quality, and disasters. Resilience hubs should also act as education centers, where community members can go to learn about climate-related hazards and other effects, how to prepare and respond to them, and enhance community connections to increase adaptive capacity.
- 6) Ongoing natural weather hazards warrant the need for additional integration to allow for better emergency preparedness.
- 7) Public Works has removed many trees but estimates there are 50-60 very large pin oaks remaining that are outside of the Department's capabilities due to their size. A strategy is needed to remove these trees. Ash trees have also become a problem due to the emerald ash borer invasion and need to be managed.

4. Extreme Heat Strategies

Potential strategies to improve resilience to heat and air quality include:

- 1) Maintain or increase vegetated cover and shade tree plantings where possible to mitigate the urban heat island effect, especially adjacent to walkways and the shopping district.
- 2) Promote the use of heat-reflective building materials, shade structures, and other heat adaptations.

- 3) Plan for extreme temperature events to protect Borough residents that are uniquely vulnerable to extreme heat waves by promoting awareness of cooling centers and the signs and symptoms of heat related illness.
- 4) Coordinate with PSE&G to limit unnecessary tree loss, and to promote appropriate tree planting.
- 5) Prioritize tree planting in areas with hotter than average temperatures, including the post office, Cambridge School, Straube Center, and portions of Heritage townhouses and Pennington Pointe.

5. Air Quality Strategies

While the opportunities to address air quality impacts are limited, as these largely occur on a regional scale, there are some actions that Pennington can take:

- 1) Enforce anti-idling regulations, which negatively impact local air quality, particularly for vulnerable populations (e.g youth, elderly, those with pre-existing conditions).
- 2) Promote “green transportation” such as walking, biking, public transit, and electric vehicles, including the infrastructure to support and incentivize those uses. For example:
 - a) Install EV charging stations
 - b) Ensure that sidewalks and walkable areas are shaded
 - c) Install bike lanes
 - d) Work with NJ Transit to install shade-providing bus shelters at stops in the Borough, or if needed, install shade and seating at bus stops.

6. Wildfire Strategies

While Pennington has a low risk of wildfire, recent events demonstrate a need to remain vigilant. Additionally, while drought response is largely addressed by state resources, there are actions that the borough can take to ensure that we do our part to limit extensive impacts.

- 1) Ensure that public buildings are resistant to fire and manage risk from wildfire on an ongoing basis using forestry management strategies, wildfire fuel management, etc.
- 2) Consider participating in the Firewise Communities Program, a foundational action for community wildfire preparedness, and one included in the Sustainable Jersey program.

7. Drought Strategies

- 1) Prepare a drought emergency strategy, which may include:
 - a) Criteria or triggers for drought-related actions
 - b) A communication plan
 - c) Agreements for secondary water sources

- d) Mandatory water conservation measures for non-essential usage beyond state minimums (also a Sustainable Jersey action)
- e) Increase public awareness of wildfire risk during periods of prolonged drought.

H. Impacts on the Other Elements of the Master Plan

Land Use Plan Element. The Land Use Plan Element informs and underpins the Borough's zoning and potential redevelopment areas. As discussed in this analysis, natural hazard vulnerability is a key consideration for the Borough as it plans for redevelopment. Climate change-related natural hazards are relevant to all land uses in the Borough.

Community Facilities and Services Plan Element. This element analyzes the existing and proposed locations of educational, cultural, health- and safety-related, and other community facilities in the Borough. The risk to community facilities from natural hazards and opportunities to improve their resilience are discussed in this vulnerability assessment.

Public Works Services Plan Element. Risk from natural hazards, especially flooding, is a key concern for the Utility Service Plan Element. The element considers the need for and location of water supply and distribution facilities, drainage and flood control facilities, sewage and wastewater treatment, stormwater management facilities and others. Heavy rainfall and flooding, damage from severe storms, and pollutant infiltration may impact the continued operation of the Borough's utilities.

Mobility Plan Element. Extreme rainfall and flooding events, most notably during tropical storm Ida in 2021, have historically impeded circulation in the Borough. The assessment of existing and future development should address mobility concerns due to these stressors.

Economic Development Plan Element. The Economic Plan Element considers all aspects of economic development in the Borough. Economic activity is impacted by disasters when businesses suffer damage or losses or business is interrupted by power loss or road closures. Resilience planning for businesses includes working with the county, state and landowners to ensure that stormwater is managed to reduce flood disruption and damage and that trees are planted to reduce daytime heat in business areas.

Historic Preservation Plan Element. Pennington's Crossroads Historic District consists of properties and landmarks whose historic character and architecture the Borough seeks to preserve. Severe storms, wind, flooding, and other natural hazards have the potential to cause damage to the historic district and its properties. The Borough and the Historic Preservation Commission should explore how to improve the resilience of these properties, and repair them if damaged, while maintaining their historic character.

Open Space and Recreation Plan Element. Flooding and damage from other hazards to the Borough's open spaces and recreation areas may negatively impact quality of life. The design of open spaces and recreation facilities can incorporate natural hazard adaptation measures as well as tree canopy and stormwater management measures that have the potential to enhance the

Borough's overall resilience. Open space acquisition that can prevent flooding, reduce local heat island effects, or protect water quality should be prioritized.

Conservation Plan Element. The Conservation Plan Element addresses the conservation, preservation, and utilization of the Borough's natural resources. Climate change and natural hazards are projected to impact wildlife habitats, water supplies, forests, and other natural resources. Conservation efforts can be strategically planned to increase the resilience of Pennington's environment and community.

Green Buildings and Environmental Sustainability Plan Element. The assessment of opportunities related to renewable energy systems, water conservation and reuse, the interactions between buildings and the environment, and the Borough's carbon footprint are fundamentally linked to future climate impacts and the costs associated with those impacts. Strategies discussed in the Green Buildings and Environmental Sustainability Plan Element have the potential to reduce the Borough's contributions to climate change, reduce future costs and improve its long-term resilience to natural hazards.

I. Consistency with Other Plans

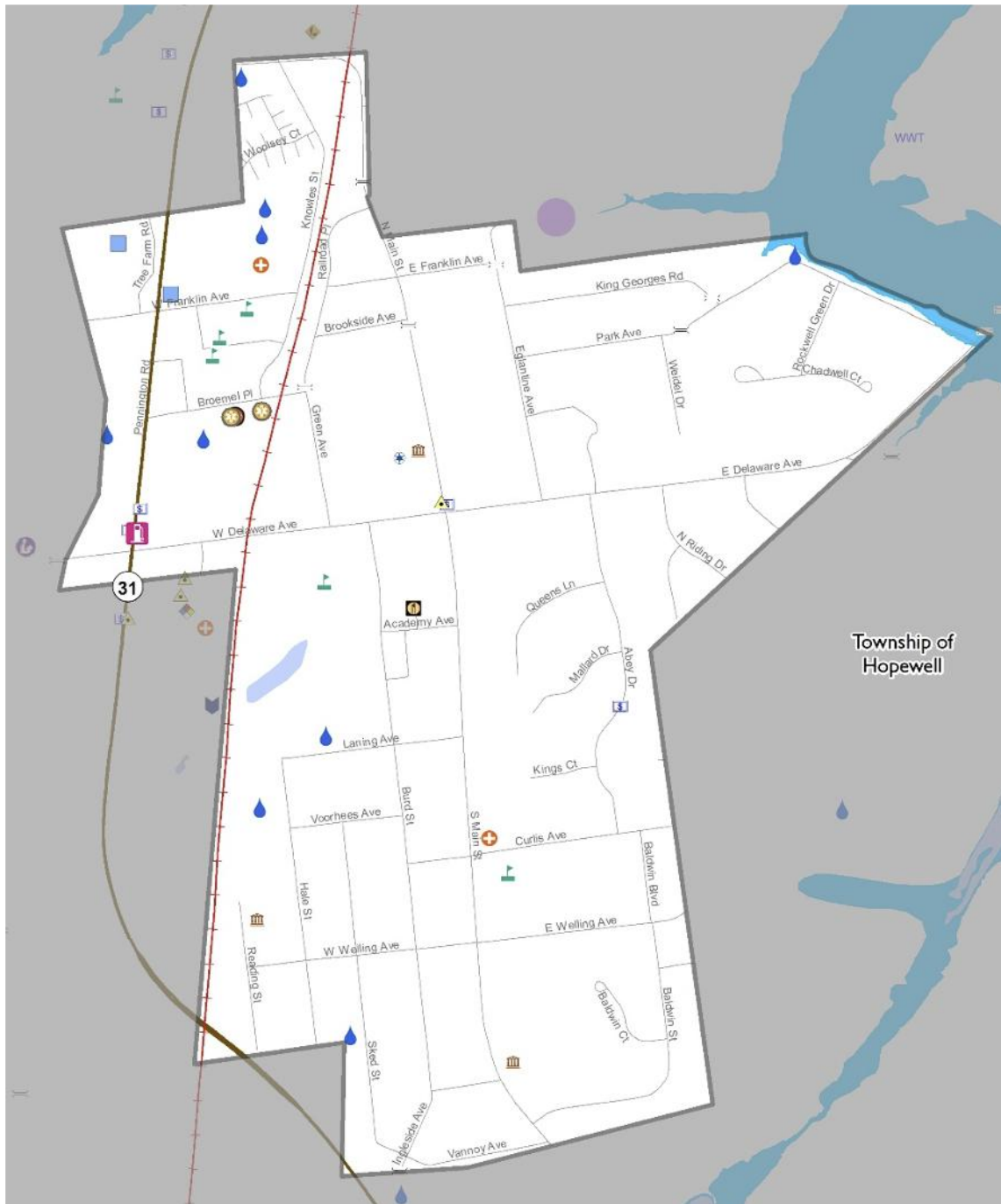
This assessment is intended to help Pennington Borough reduce its vulnerability to climate change-related natural hazards by identifying risks and suggesting strategies to improve resilience. This document builds upon and is consistent, coordinated, and integrated with the Mercer County Hazard Mitigation Plan as well as the Borough's Master Plan, Community Forestry Management Plan, and the Municipal Stormwater Management Plan.

In 2025, Pennington Borough joined Princeton, Hopewell Township, and Lawrence Township in a collaborative effort to address stormwater management requirements for the Stony Brook Watershed. The Borough Council approved a resolution authorizing participation in this regional initiative to develop a comprehensive Watershed Improvement Plan (WIP). The partnership will allow the four municipalities to share resources and expertise while working with a respected watershed management firm to collect essential technical data needed to meet state stormwater discharge requirements and plan for climate change. Work on the project is expected to be completed by Fall 2026, in advance of state deadlines for required reports. The resulting data and recommendations will help Pennington identify effective strategies to improve water quality, address pollutants, and mitigate flooding issues within the Stony Brook Watershed, benefiting residents, businesses, and the environment for years to come.

With an understanding that mitigating climate impacts is generally understood to be fiscally positive, the Borough will continue to implement and explore policies that improve resilience to climate change-related natural hazards and that align with and, where appropriate, exceed state and federal minimums. The findings and recommendations described here, in addition to the best available science, will be used to guide the Borough's resilience efforts and should be incorporated into future planning efforts and updates.

Appendix: Mercer County Hazard Mitigation Plan Critical Facilities Map

Note: Key to the symbols can be found on the next page.



A key to the symbols is on the next page.

Borough of Pennington

 Airport	 Fire Station	 Pharmacy
 Bank	 Food Distribution	 Police Station
 Bridge	 Gas Station	 Post Office
 Bus Facility	 HazMat Facility	 Potable Water
 Child Care	 Helicopter	 Public Health
 Communication	 Library	 Public Housing
 Community Services	 Major Employer	 Rail Facility
 County Building	 Marine	 Religious Site
 Cultural	 Medical	 Senior Facility
 DPW	 Municipal Building	 Shelter
 Dam	 Natural Gas	 State Building
 EMS	 Oil Facility	 Transportation
 EOC	 Park/Recreation	 Veterinary
 Education	 Parking	 WWT Wastewater
 Electric		

BOROUGH OF PENNINGTON

COUNTY OF MERCER

STATE OF NEW JERSEY

RESOLUTION ADOPTING 2026 MASTER PLAN

WHEREAS, N.J.S.A. 40:55D-28 authorizes the Pennington Borough Planning Board (hereinafter “Board”) to prepare a Master Plan to provide guidance for the development of lands within said Borough; and

WHEREAS, the Board through a Master Plan subcommittee and with the assistance of a Citizen’s Advisory Committee has worked for the past three years to create a new Master Plan for the Borough of Pennington; and

WHEREAS, pursuant to N.J.S.A. 40:55D-13(1), the required Public Notice for the Board’s consideration and adoption of said plan has been provided not only to numerous residents of the Borough but to the adjoining Municipality, the Township of Hopewell, and to the New Jersey Office of Planning Advocacy and the Mercer County Planning Board as required by law; and

WHEREAS, the proposed 2026 Master Plan has been on file for at least 10 days prior to the Board hearing on said plan on May 13, 2026; and

WHEREAS, the Board conducted a public hearing on said plan at its meeting on May 13, 2026, and following said hearing, voted unanimously to adopt the 2026 Pennington Borough Master Plan and to include therein the previously adopted Housing Element and Fair Share Plan.

NOW, THEREFORE, BE IT RESOLVED, by the Pennington Borough Planning Board that the 2026 Pennington Borough Master Plan be and the same is hereby adopted.

CERTIFICATION

I, Robin Tillou, Administrative Secretary to the Pennington Borough Planning Board does hereby certify that the foregoing is a true copy of a Resolution adopted by the Pennington Board Planning Board at its meeting on May 13, 2026. Certified copies of this Resolution together with the adopted Master Plan shall be furnished by me to the New Jersey Office of Planning Advocacy and the Mercer County Planning Board.

Robin Tillou
Pennington Borough Planning Board
Land Use Administrator
HPC Secretary

**PENNINGTON BOROUGH
PLANNING BOARD MINUTES
REGULAR MEETING
April 8, 2026 7:30 PM**

TIME AND PLACE OF MEETING

The Meeting of the Pennington Borough Planning Board was held on April 8, 2026 at 7:30 p.m. via Zoom.

CALL TO ORDER

Jim Reilly, Chairperson, called the meeting to order at 7:30 p.m. and announced compliance with the provisions of the Open Public Meetings Act.

STATEMENT OF ADEQUATE NOTICE

Adequate notice of this meeting has been posted in Borough Hall and sent to the officially designated newspapers: Hopewell Valley News and The Times of Trenton.

MEMBERS IN ATTENDANCE

Mark Blackwell; Gian Paolo Caminiti; Mayor James Davy; Andrew Jackson – Vice-Chair; Amy Kassler-Taub; Kate O’Neill; Jim Reilly – Chair; Jennifer Tracy; Fred Jacobs, Alt. I; Sarah Calabi, Alt. II

MEMBERS ABSENT:

Nazli Rex

PENNINGTON BOROUGH PROFESSIONALS IN ATTENDANCE:

Robin Tillou, Pennington Borough PB Secretary/Land Use Administrator
Edwin Schmierer, Board Attorney
Jim Kyle, Board Planner

PUBLIC COMMENT FOR NON-AGENDA ITEMS ONLY

Chair Reilly opened the meeting to the public for non-agenda items. With no public comment the public forum was closed.

RESOLUTION

**#25-001 12 N. Main Street Pennington NJ LLC
12 N. Main Street – Block 205, Lot 22 – TC (Town Center) Zone
Subdivision, d(2) Variance, Bulk Variances – 120 Day Extension Request to
Perfect Minor Subdivision Approval**

MOTIONED TO APPROVE RESOLUTION FOR EXTENSION: Mr. Caminiti

SECONDED: Mr. Blackwell

ROLL CALL:

AYES: Mr. Caminiti, Mr. Davy, Mr. Jackson, Ms. Kassler-Taub, Ms. O’Neill, Ms. Tracy, Mr. Jacobs and Mr. Reilly

NAYS: None.

ABSTAIN: None.
MOTION PASSED

MASTER PLAN COMMITTEE UPDATE

Land Use Plan Element for Conditional Adoption

Mr. Jackson advised that any suggested changes will be included in the final draft and all elements will be posted on the Pennington Borough website and the deadline for any suggestions will conclude on April 22, 2026.

Mr. Kyle, Board Planner, reviewed the drafted Land Use Plan which can be found at the Pennington Borough website
<https://www.penningtonboro.org/DocumentCenter/View/1977/Land-Use-Plan?bidId=>.

Mr. Kyle and Mayor Davey reviewed the steps involved in having the Land Use ordinance addressed within the drafted Master Plan. Mr. Kyle noted that there has been discussion about establishing an Ordinance Advisory Committee, potentially composed of several Council members, the Mayor, representatives from the Planning and Zoning Board, and Borough professionals.

Board members discussed and proposed revisions to the Land Use plan. One suggestion was to Section 215-57 (Alteration) of the Land Use Plan, including the removal of the phrase “not exceeded” from the section.

Chair Reilly opened the meeting to the public.

Kit Chandler, Pennington Borough Resident, advised the R-80 zone has a vacant lot owned by Pennington School and would like to know if that is still in the R-80 zone. (The current tax map shows that it is R-80.) Ms. Chandler confirmed that there are no undeveloped lots remaining within the new town center, and Mr. Kyle concurred. The Toll Gate House in front of the African Cemetery is included in the historic district and should be noted.

Dan Pace, Pennington Borough resident, stated the Pennington School property that Ms. Chandler mentioned should be zoned E-1 or E-2. The African Cemetery should be reflective of Park and Recreation Zone (PR) Zone and just south of Pennington Cemetery is a part of land that the Borough owns that is part of the Recreation Open Space inventory and should be shown as the PR zone.

Eric Holtermann, Pennington Borough resident, stated the Historic Preservation aspects of the plan is positive. The increase in density and accommodation to affordable housing is consistent with the historic district.

The public hearing for this portion of the agenda was closed.

MOTIONED TO CONDITIONALLY ADOPT THE LAND USE PLAN: Mr. Jackson
SECONDED: Mr. Caminiti

ROLL CALL:

AYES: Mr. Blackwell, Mr. Caminiti, Mr. Davy, Mr. Jackson, Ms. O’Neill, Ms. Kassler-Taub, Ms. Tracy, Mr. Jacobs and Mr. Reilly

NAYS: None.

ABSTAIN: None.

MOTION PASSED

Framing Plan

Mr. Jackson introduced the framing plan that can be found on the Pennington Borough website: <https://www.penningtonboro.org/DocumentCenter/View/2003/Framing-Plan-Final>.

MOTIONED TO CONDITIONALLY ADOPT THE FRAMING PLAN: Mr. Jackson

SECONDED: Ms. Kassler-Taub

ROLL CALL:

AYES: Mr. Blackwell, Mr. Caminiti, Mr. Davy, Mr. Jackson, Ms. O’Neill, Ms. Kassler-Taub, Ms. Tracy, Mr. Jacobs and Mr. Reilly

NAYS: None.

ABSTAIN: None.

MOTION PASSED

Conditional Readoption of: Mobility Plan, Open Space and Recreation Plan, Utility Services Plan, Community Facilities and Services Plan, and GBES Plan

Mr. Jackson reviewed five (5) Master Plan elements: Mobility Plan, Open Space and Recreation Plan, Utility Services Plan, Community Facilities and Services Plan, and GBES Plan which can be found on the Pennington Borough website:

<https://www.penningtonboro.org/1260/Master-Plan-Under-Development>.

MOTIONED TO CONDITIONALLY READOPT THE MOBILITY PLAN, OPEN SPACE AND RECREATION PLAN, UTILITY SERVICES PLAN, COMMUNITY FACILITIES AND SERVICES PLAN, AND GBES PLAN: Mr. Jackson

SECONDED: Ms. O’Neill

ROLL CALL:

AYES: Mr. Blackwell, Mr. Caminiti, Mr. Davy, Mr. Jackson, Ms. O’Neill, Ms. Kassler-Taub, Ms. Tracy, Mr. Jacobs and Mr. Reilly

NAYS: None.

ABSTAIN: None.

MOTION PASSED

Mobility Plan

Mr. Jackson reviewed the Mobility Plan that can be found on the Pennington Borough website: <https://www.penningtonboro.org/DocumentCenter/View/1982/Mobility-Plan-Final?bidId=>.

MOTIONED TO CONDITIONALLY ADOPT THE MOBILITY PLAN: Mr. Jackson

SECONDED: Ms. Kassler-Taub

ROLL CALL:

AYES: Mr. Blackwell, Mr. Caminiti, Mr. Davy, Mr. Jackson, Ms. O’Neill, Ms. Kassler-Taub, Ms. Tracy, Mr. Jacobs and Mr. Reilly

NAYS: None.

ABSTAIN: None.

MOTION PASSED

Open Space and Recreation Plan

Mr. Jackson advised of amendments to the Open Space and Recreation Plan which can be found on the Pennington Borough website:

<https://www.penningtonboro.org/DocumentCenter/View/1983/Open-Space-and-Recreation--Final?bidId=>.

Chair Reilly opened the meeting to the public.

Dan Pace, a Pennington resident, stated that page 11 of the Open Space and Recreation Plan, second bullet, indicates there is no sidewalk; however, there is a sidewalk between Woolsey Court and Heritage.

MOTIONED TO CONDITIONALLY ADOPT THE OPEN SPACE AND RECREATION PLAN: Mr. Jackson

SECONDED: Mr. Caminiti

ROLL CALL:

AYES: Mr. Blackwell, Mr. Caminiti, Mr. Davy, Mr. Jackson, Ms. O’Neill, Ms. Kassler-Taub, Ms. Tracy, Mr. Jacobs and Mr. Reilly

NAYS: None.

ABSTAIN: None.

MOTION PASSED

OLD BUSINESS

Fourth Round Fair Share Plan Consent Order

Mr. Schmierer explained that the fourth round has been wrapped up and the court order for the fourth round plan that was put together was acceptable to the court and to the Fair Share Housing Center.

Borough Engineer

Mayor Davy advised that on April 6, 2026, the council adopted a resolution appointing Colliers Engineering to serve as the Borough Engineer as well as the Planning Board Engineer.

MINUTES

February 11, 2026

Upon a motion from Ms. O’Neill and Mr. Jackson offering a second, the February 11, 2026 minutes were unanimously approved with amendments by those eligible to vote.

ADJOURNMENT OF MEETING

There being no further business, Mr. Caminiti made a motion to adjourn the meeting with Mr. Blackwell offering a second. By unanimous vote, the meeting was thereupon adjourned at 9:35 p.m.

CERTIFICATE OF SECRETARY

I, the undersigned, do at this moment certify;

That I am the duly elected secretary of the Pennington Borough Planning/Zoning Board and that the minutes of the Planning Board, held on April 8, 2026, consisting of five (5) pages, constitute a true and correct copy of the minutes of the said meeting.

IN WITNESS of which, I have hereunto subscribed my name to said Planning Board Meeting this May 14, 2026.

Robin Tillou

Robin Tillou, Land Use Administrator