



# TOWN OF BETHLEHEM COMPREHENSIVE PLAN UPDATE

2022



ADOPTED JUNE 22, 2022

# Acknowledgements

The Town of Bethlehem wishes to acknowledge the effort of all members of the Comprehensive Update Committee (CPUC). Each and every member has selflessly contributed their time, expertise, knowledge and passion for their neighbors and this community.

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Bill Ketzer  
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Town staff have guided this Comprehensive Plan Update process for many years leading up to the preparation of this plan.

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## A Note from Town Supervisor David VanLuven

Bethlehem is a dynamic community that is growing and will continue to grow because people want to live and work here. This Comprehensive Plan Update provides a new vision for how we can guide this growth to support the elements that make our town strong today, and to make it stronger and more sustainable in the future.

The plan is the culmination of two years of collaborative work between community members, business leaders, and town staff. I am so grateful to the hundreds of residents who participated in the planning process through surveys, dozens of community meetings, and more – all during the worst pandemic in a century.

This process was led by the Town's outstanding Planning Department, particularly Planning Director Rob Leslie, Deputy Town Planner Leslie Lombardo, and Senior Planner Nate Owens. And it was guided by an incredible volunteer advisory committee who represented all seven hamlets and brought a wide range of technical expertise to the Bethlehem Forward effort:

*Rad Anderson  
Anne Benware  
Paul Beyer*

*Tom Coffey  
Dania Flores  
Jim Grady*

*Brian Gyory  
Bill Ketzer  
Ed Kleinke*

*Kathleen Mannix  
Jeremy Snyder*

*Kelly Vadney  
Giles Wagoner*

I also want to thank our Town Board members who showed great vision and consistent leadership throughout the planning process:

*Joyce Becker*

*Dan Coffey*

*Maureen Cunningham*

*David DeCancio*

*Jim Foster*

This plan is called an update because it builds upon the 2005 Comprehensive Plan, but it is also a wholly new plan that draws on 15 years of experience implementing that earlier plan. Its principles, goals, and recommendations stem from core community values and a vision that recognizes the many challenges we're facing now and the growing challenges we will face for many years to come.

A Bethlehem resident who works on community planning with municipalities across New York State recently told me that this plan is a model for what an effective Comprehensive Plan should be: ambitious and bold, while also pragmatic and focused on results.

I've often said that in Bethlehem, we get things done, and this plan gives us a dynamic roadmap to continue working successfully to support our town – together – well into the future.



**David VanLuven**  
Bethlehem Town Supervisor

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- A: Stakeholder Engagement
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# Executive Summary

## Introduction

The 2005 Comprehensive Plan, the Town's first, provided a vision for the Town's future through the year 2020. For more than fifteen years, the 2005 Comprehensive Plan has guided Town policies and procedures that are related to land use, as well as informing capital improvement budgets, transportation investment, annual operations and maintenance spending. Consistent with NYS Town Law 272-a, this Plan is an update to the 2005 Comprehensive Plan. The Plan is branded "Bethlehem Forward" in an effort to engage the public and advance a thoughtful conversation to define a future for the community in 2035.

Bethlehem is situated towards the southern end of the Capital District, just to the south of Albany and its employment, cultural, and entertainment resources.

Bethlehem has beautiful suburban neighborhoods with towering trees, quality and variety in its building architecture, and small and unique local businesses found within the seven hamlets across the Town (Delmar, Elsmere, Glenmont, North Bethlehem, Selkirk, Slingerlands, South Bethlehem).

It also has scenic areas with streams and forests, and agricultural fields that provide a rural feeling and way of life. Bethlehem is growing and will continue to grow as people are attracted to our wonderful neighborhoods, strong schools, amazing library, vibrant commercial areas, and welcoming town character.

While Bethlehem in many ways is seen as a model or success story in the region, it is not without challenges ahead. Bethlehem, like many other communities, is in a position where it wishes to retain the qualities and characteristics that make the town what it is today, while also integrating new sustainability policies and guiding inevitable growth to achieve desired outcomes in the future.



**Bethlehem is growing and will continue to grow as people are attracted to our wonderful neighborhoods, strong schools, amazing library, vibrant commercial areas, and welcoming town character.**





In recent years, many have expressed concern about the consequences of growth. Over time, development pressure has led to the development of agricultural and forested lands. Some residents have experienced this change as a sad loss of green space, others have expressed dismay at continued residential building and its environmental implications, while others are concerned about changes to the Town's appearance and feel. Some have suggested that the appropriate response to these and related concerns is for the Town to simply stop allowing new residential developments. This is not within the Town's power and also does not respect the property rights of those who own undeveloped land, particularly large parcels. The Town does, however, have the authority to guide growth – and this plan includes a variety of goals and recommendations to address anticipated growth, support and enhance neighborhoods, conserve agricultural and open spaces, promote sustainability, and protect ecological integrity.

The Town has a large network of sidewalks, and many enjoy playing, walking, or exercising on their local neighborhood streets or on local trails. Speeding and cut-through traffic are a frequent concern of residents, as are the condition of the sidewalks. Large truck traffic also has pronounced negative and quality of life impacts on residential neighborhoods. Careful and thorough consideration of these problems has resulted in a number of creative strategies that prioritize the safety and positive health of residents.



Despite the recent national trends towards polarization, the planning process achieved broad community consensus on the key values that define the Town of Bethlehem.

While there are significant local issues to address, Bethlehem must also respond to worldwide, national, and regional shifts in social, environmental, and economic conditions which influence the lives of Bethlehem residents and business owners. The climate crisis has important implications for the security and quality of life for current and future generations. Overall, the population in the United States is aging quickly, and the Town is no exception, which means shifting needs for housing, transportation, and services for residents. The international movements for social equity have spurred changes across disciplines and also have significance for Bethlehem's housing, transportation, and services. These large-scale challenges and others are addressed in the plan.

Despite the recent trend towards a highly-polarized society across the United States, the planning process strived for broad community consensus on the key values that define the Town of Bethlehem and balance in the goals and recommendations included in the plan. This plan was prepared with public engagement during the heart of the COVID-19 pandemic, which forced new ways of accessing citizen input. The dedicated work of the Comprehensive Plan Update Committee and all the passionate residents who provided their input will position Bethlehem well for achieving its vision in the years ahead.

This is a great place to live, and people want to live here. Like many other communities, the opportunity lies in harnessing the power of growth in a manner that maintains and enhances the quality of life that Town residents have come to know and enjoy. Consistent with the 2005 Comprehensive Plan, this update "has been crafted with the intent of achieving balance – balance between urban, suburban, and rural perspectives; balance between the need and desire for economic growth, for tax-base expansion and diversification, and for the stewardship of finite land and environmental resources; and balance between the short-term and long-term health, safety, and welfare of the community."

## Background and Approach

For more than fifteen years, the Town's Comprehensive Plan has provided a blueprint for the creation of policies that have guided development. Under New York State Law (section 272-a), the Bethlehem Town Board is responsible for updating and adopting the Comprehensive Plan. This Comprehensive Plan Update is consistent with that obligation.



Since the 2005 Comprehensive Plan, much has been accomplished and much has changed. The Town has amended zoning laws and subdivision regulations to incorporate recommendations to achieve the goals of the 2005 Comprehensive

Plan. Many of the recommended plans and studies have been completed and are now used routinely to inform public policy and investment.

To name a few, these plans / studies include:

- Stormwater Management Program (2007)
- Route 9W Corridor Study (2008)
- Agriculture and Farmland Protection Plan (2009)
- Delaware Avenue Studies (2010 and 2017)
- Citizen's Guide to Land Use, Planning and Development (2013)
- Parks and Recreation Master Plan (2015)
- Open Space Plan: Conservation Criteria (2017)
- Street Tree Inventory, Analysis and Management Plan (2020)
- Local Waterfront Revitalization Plan (LWRP) (2021)

This Plan is organized into a framework of six principles presented by the American Planning Association's (APA) Sustaining Places, Best Practices for Comprehensive Plans, (PAS Report 578, 2015). The principles have been tailored to the Town's specific vision and to the community's values. Goals and recommendations have been developed in accordance with these principles to achieve the Town's vision. The recommendations are organized in an implementation matrix by specific actions and present entities to champion the tasks, time frames to commence, qualitative costs, and local and state agencies that offer resources to each effort.

**Since the 2005 Comprehensive Plan, much has been accomplished, including amended zoning laws and subdivision regulations, a full-time stormwater management program, a street-tree inventory and management plan, and a Local Waterfront Revitalization Plan.**

## Public Engagement

Public engagement has been an important focus for the Town of Bethlehem even prior to commencing the preparation of this plan update. The Town appointed residents to the Comprehensive Plan Update Committee (Advisory Committee), pursuant to NYS Town Law 272-a, representing all geographic areas of town and offering their expertise and interest in essential topics. Several members sit on regulatory boards and advisory committees in the Town. The Advisory Committee prepared a Draft Comprehensive Plan for the Town Board's consideration.

In late 2018 and early 2019, recognizing the approaching 2020 vision, the Town conducted a series of Community Forums in each hamlet (Delmar, Elsmere, Glenmont, North Bethlehem, Selkirk, Slingerlands, South Bethlehem). These forums offered residents and business owners the opportunity to state what they liked about their hamlet and town and what changes they would like to see in the future.

Following the community forums and establishment of the Advisory Committee, public engagement efforts were conducted in accordance with COVID-19 safety guidance applicable at the time events were held. Early on in the process Advisory Committee members held their monthly meetings remotely via web video conferencing, and when meetings were held in-person, a hybrid meeting

format was conducted with both in-person attendee and remote attendee options. All meetings were video recorded and open to the public. The Bethlehem Forward brand was supported by the project website [www.BethlehemForward.com](http://www.BethlehemForward.com) and the public could contact the Advisory Committee at a designated email address. Further, Town vehicles displayed Bethlehem Forward logos and Advisory Committee members distributed lawn signs to promote the planning process and increase participation. During the summer of 2021, pop-up tent events were held across the Town (e.g., Delmar Farmers Market, Bethlehem Grange, Bethlehem Library, Elm Avenue Town Park, Walk and Roll Fest) so residents could learn about the Plan and engage with Advisory Committee members directly and conveniently.



## Community Profile

Envisioning where a community wants to be in the future requires understanding of where they are today. This update explored the natural, physical, demographic, economic and regulatory systems within the town. The following describe each of the inventory sections.

### Natural Environment

A variety of natural systems provide vital benefits to Town residents. The Vloman Kill, Normans Kill, and Onesquethaw-Coeymans Creek are primary active tributaries to the Hudson River. These ecosystems, including forests, wetlands, and streams, keep the drinking water supply and air clean, moderate temperature, filter pollutants, and absorb floodwater. They also contribute to the sense of place that is distinctive to the Town of Bethlehem. The Plan's Harmony with Nature principle provides strategies to maintain the health of the Town's natural systems based on documentation in the "Natural Areas and Wildlife in Your Community: A Habitat Summary Prepared for the Town of Bethlehem" (NYSDEC - 2017), the Town of Bethlehem Open Space Plan: Conservation Criteria Implementation (2017), the Local Waterfront Revitalization Program (LWRP - 2021), and NYSDOS Model Local Laws to Increase Resilience.



The plan includes strategies to maintain the health of the Town's natural systems.

### Historic Preservation

The Town of Bethlehem has a rich history and significant historic structures, sites and archaeologically sensitive areas. The Bethlehem Historical Association, Town Historian, and passionate residents work hard to protect and showcase historic resources throughout the Town. The Plan recognizes the value of the Town's significant cultural and historic resources and within the Livable Built Environment principle provides strategies for their preservation including the preparation of a town-wide inventory of cultural resources and establishment of a Historic Preservation Advisory Committee, both of which would assist the Town with implementation and education.







Bethlehem has a rich history and significant historic structures, sites, and archaeologically sensitive areas.

## Protecting Farms and Forests

Open space conservation planning has been a topic of discussion in Bethlehem for well over two decades. In those years, the Town's efforts have culminated in the Farms and Forests Conservation Program providing open space and agricultural conservation tools (through financial incentives) for interested landowners. Preparation of this plan update has underscored the significance of these lands across town for their ecosystem benefits, climate change resilience, as well as their scenic value. Equally important is their place in the Town's agricultural economy and significance to landowners who choose a rural lifestyle. The Plan's Harmony with Nature principle identifies actions to enhance resilience and adaptation to climate change, and conservation of agricultural soils through financial incentives and expanding permitted agricultural uses and support businesses.

## Land Use, Zoning and Housing

Virtually all residents of a community, the Town of Bethlehem included, think about land use and the guiding regulatory policies (zoning) whether they realize it or not. We all make decisions about where to live, accept a job, start a business, and shop, as well as how we intend to travel to these various destinations. As a result of the 2005 Comprehensive Plan, the town's land use pattern was guided towards traditional design elements focusing on diversifying the mix of uses, density or concentration, and multimodal (walk, bike,



transit) transportation – and this Plan continues to promote such a pattern.

The housing community profile reveals that Bethlehem's higher rates of single family and owner-occupied units and lesser amount of multifamily and rental units indicates a limited supply of attainable and affordable housing in the Town. Although Bethlehem's median income is considered high (\$97,867 household), nearly 32% of households in town have an income less than \$60,000 per year and families in this situation would be considered low income or below. Approximately 12% of Bethlehem households have an annual income less than \$30,000 and these families would be considered extremely low income. The Plan's Livable Built Environmental principle provides strategies to diversify housing types such as allowing the integration of two and three family units, permitting accessory dwelling units, and providing density incentives for residential developments that provide affordable housing based on income thresholds. The Plan's Resilient Economy principle promotes limitations on the extension of utility



The plan strategies ensure all elements of the built environment work together to provide a high quality of life and sustainable places for living, working, and recreation.

infrastructure (sanitary sewer and water) in undeveloped areas of the Town to focus development where infrastructure is already in place.

The Future Land Use Map also follows smart growth principles in focusing development where infrastructure exists, opportunities for a mix of uses within hamlet areas, and transportation improvements to accommodate various modes of travel (bicycle, pedestrian, motor vehicle, and transit). Mixed industry areas (commercial and industrial) are also identified to minimize impacts to residential neighborhoods.

## Demographics

Bethlehem is a community of approximately 35,000 residents with large percentages of residents having higher educational attainment levels and average or above average income levels compared to the Capital Region. Approximately 90% of resident's self-report as White, Non-Hispanic though the Town has seen gradually increasing racial and ethnic diversity over the past few decades. About three quarters of residents own their homes, which is above average compared to the Capital Region. Bethlehem is on average a middle age to older community, with a median age of 43.5 years, but there's a growing senior population and a significant number of families with school age children living in town – indicating a growing dependent population. By 2030, an additional 1,176 residents are projected to reside in the Town. The Plan's Livable Built Environment principle provides strategies that could help ensure that all elements of the built environment, including land use, transportation, housing, energy and infrastructure work together to provide sustainable places for living, working and recreation, with a high quality of life.

## Economic Development



**Bethlehem has a diverse business sector that includes small businesses and restaurants, and also long standing and new large industrial facilities.**

In Bethlehem health care, social assistance, retail, and educational services are some of the Town's prominent industry sectors, but the Town also has a variety of small businesses and restaurants. It is also home to long standing larger manufacturing businesses such as SABIC and Owens Corning, and most recently (under construction at the time of this writing) Plug Power's hydrogen fuel cell manufacturing facility at Vista Technology Park and Marmen-Welcon's offshore wind tower manufacturing facility at the Port of Albany expansion site. Bethlehem's economic development programs continually strive to support local businesses. The Plan's Resilient Economy principle provides strategies to support expansion of existing businesses and to attract new businesses in an effort to expand the non-residential tax base. The Plan also identifies strategies to optimize a mix of uses in the hamlet areas since the economic benefits of these hamlets extends far beyond the tax revenue collected from the commercial establishments and affects the continuity of households in the Town and the desire of business to locate here.

## Transportation Network

In Bethlehem, transportation networks include vehicular, transit, bicycle, sidewalks/multi-use paths, rail and water freight. The majority of the large roadways in the Town, such as Delaware Avenue, Elsmere Avenue, New Scotland Road, US Route 9W – which connect our neighborhoods to destinations – are maintained by NYS DOT. As such, overall transportation improvements will require strong partnerships with the State on sidewalk maintenance, roadway capacity improvements,

and Complete Streets implementation. The Plan's Livable Built Environment principle provides strategies for accommodating all modes of travel and abilities.

## Infrastructure Capabilities

Utility infrastructure in the Town includes water, sanitary sewer and stormwater management along with private electric, natural gas and telecommunications systems. Public water demand is approximately two-thirds below the capacity of water sources and water treatment. Such excess capacity provides the potential for future growth through infill development in areas with existing infrastructure. The Town's available sanitary sewer capacity has remained steady for the past 15 years and there is available capacity for future population growth. The Town implements a successful stormwater management program and participates in the Stormwater Coalition of Albany County, to comply with New York State permit requirements to improve water quality. The Plan's Livable Built Environment and Resilient



Economy principles provide strategies to maintain infrastructure capacity in line with growth demand. Expanding broadband (internet) services across the entire town, so all residents and businesses have access to quality broadband service will help to ensure that this infrastructure is not a barrier to economic development.

## Recreation



The Town doesn't deliver services, people do, so future growth will need to be balanced by increased town staffing, equipment, and technology to maintain the high quality of Town services.



Bethlehem owns and operates 465 acres of parkland at the time of this writing. The ratio of parkland per 1,000 residents (13.29 acres) exceeds national standards (10 acres). Town facilities and programs are supplemented by the three school districts (Bethlehem Central, Guiderland Central, and Ravena-Coeymans-Selkirk), private preserve lands and commercial recreation businesses. The 2015 Parks and Recreation Master Plan continues to serve as a blueprint for parks improvements and recreation programming. The Plan’s Healthy Community principle provides strategies for expanding parks and recreation facilities with diverse activities and programs for all age groups and abilities.

### Community Services

Future growth of the town will need to be accommodated by town department operations, staffing resources and equipment and technology tools to assist in the delivery of services. The Plan’s Responsible Governance and Regionalism principle provides strategies to continue the coordination of shared services with other governmental entities, partner with regional agencies, and explore ways to better inform residents about town services.

**In 2022, Bethlehem owned and operated 465 acres of parkland. The ratio of 13.29 acres of parkland for every 1,000 residents exceeds the national standard of 19 acres for every 1,000 residents.**

## Community Values

Based on the public survey responses and public meetings, it was clear that town residents and business owners are passionate about the Bethlehem community and desire policies that will sustain and enhance the town's most positive attributes. The attributes defined by the community are documented in value statements, organized along the following themes: Community, Public Services, Environment & Sustainability, Land Use and Transportation.



Residents and business owners are passionate about the Bethlehem community and desire policies that will sustain and enhance the Town's most positive attributes.

### Community

1. We value our sense of community with socially conscious citizens and business owners who engage in improving the quality of life.
2. We value our diverse age cohorts, diverse family structures and multiple generations of families that choose to live in the town.
3. We value the qualities of rural land, supporting the landowners' ability to access its economic value in a manner compatible with sustaining a rural-agricultural livelihood.
4. We value racial, ethnic, economic, gender, and disability inclusion and diversity throughout the Town for all who want to live, work and visit.
5. We value small / locally owned businesses and desire to create the conditions that encourage more business enterprises.
6. We value preservation of our historic architecture, cultural sites, neighborhoods and districts.
7. We value and respect of property owners' rights and recognize that Bethlehem is a diverse community that includes both densely developed areas as well as expanses of relatively undeveloped rural lands. While this plan is not a source of legally protected property rights, the Town recognizes and respects that property owners have rights regarding their property. The Town has, and will continue to consider the rights of all landowners in meeting its obligations to all residents as the Town implements the recommendations of this plan.

## Public Services

1. We value our public-school districts that strive to provide the highest level of education, athletics, arts and cultural programs.
2. We value public services provided by the dedicated employees of the town.
3. We value public safety and emergency response services provided by dedicated Town employees and volunteer first responders.
4. We value active adult service programs that enable residents to live in their homes and remain active community members.
5. We value our park system and recreation programs, private preserves and seek to expand facilities with diverse activities and programs for all age groups and abilities.

## Environment / Sustainability

1. We value our vast natural resource systems and open spaces that provide benefits, including wildlife habitat, ecosystem services that provide clean air and water, and inherent natural beauty and scenic value within our community.
2. We value being on the forefront of sustainability by addressing climate change through renewable energy, energy efficiency, a just transition off fossil fuels, electrification, waste reduction and prevention of greenhouse gas emissions.
3. We value active agricultural businesses and farmland supplying local food and products.
4. We value a resilient natural, built, and economic environment that can endure, adapt, and rebound from catastrophic natural and other events.

## Land Uses

1. We value a diversity of land uses to balance the tax base, provide jobs, complement our hamlets and residential zoning districts and sustain fiscal policy objectives.
2. We value a variety of housing options, which meet the needs of different lifestyles, and a range of income levels, allowing residents to age in place.
3. We value affordable rental and ownership housing for those representing seniors, low to moderate income, and disabled families and individuals.

## Transportation

1. We value the transportation infrastructure which safely accommodates all modes of travel (pedestrian, bicycles, transit and vehicles).
2. We value the walkable areas of the town and desire to expand sidewalks and trails across the town to schools, neighborhoods, recreation facilities and commercial districts.
3. We value the interconnected street network of our hamlets and desire to connect neighborhood streets, which offer alternative routes of travel, and reduce trip lengths and intersection congestion, where appropriate.



## Community Vision

The Advisory Committee used the value statements and public input to craft the following Vision Statement which will serve as the foundation for goals, recommendations and implementation strategies in the updated plan. The vision is framed in the future (2035) and looks back at the successes and accomplishments this plan hopes to bring about. The progress towards a higher quality of life for all residents, and the conservation of our natural environment, is described in this statement.

The Town of Bethlehem is a safe, friendly, welcoming, vibrant, economically strong, and interconnected community, with a racially, ethnically, and culturally diverse population throughout our town.

We have made significant strides in preserving and celebrating our historic, cultural and natural resources, including our agricultural and native origins. Density and diversity of land uses and services within the core of each hamlet have resulted in conveniences for residents and visitors while enlivening streets and public spaces. A rural-agricultural livelihood is respected and contributes to the overall quality of life and character of our town.

Our sustainability practices and development policies have resulted in clean water and air; protections of wildlife habitat, natural resource systems, and other open spaces; measurable reductions in greenhouse gas emissions; and improved resiliency to the effects of climate change.

The diversification of housing types and ownership models has enabled young, old and workforce residents, to live and age in our town.

Pedestrian, bicycle, and public transit opportunities and facilities have been greatly expanded to accommodate residents and visitors of all abilities.

Residents have access to increased job opportunities through new and expanded local business enterprises and emerging business sectors. Intergovernmental and interagency cooperation have enhanced efficiency and helped to contain the cost of the delivery of services in the town. A sustainable and resilient community has led to an improved tax base, which has provided the resources to support needed programs, services, infrastructure, and public health and safety.

*We continue to move Bethlehem Forward.*



## Principles

'Bethlehem Forward' represents a response to the Community Profile, Value Statements and the Vision for Tomorrow, and is based on six overarching Principles. Each principle represents a group of closely interrelated topics and supported by transformational goals, recommendations, and implementation strategies. This is how we achieve the community we want.

### Interwoven Equity

Ensure fairness and equity in providing for the housing, services, health, safety and livelihood needs of all citizens and groups.

### Livable Built Environment

Ensure that all elements of the built environment, including land use, transportation, housing, energy and infrastructure work together to provide sustainable, green places for living, working and recreation, with a high quality of life. Recognize that historic buildings and structures provide character assets to the built environment.

### Harmony with Nature

Ensure that the contributions of natural resources to human well-being are explicitly recognized and valued and that maintaining their health is a primary objective

### Resilient Economy

Ensure that the community is prepared to deal with both positive and negative changes in its economic health and to initiate sustainable urban development and redevelopment strategies that foster green business growth and build reliance on local assets.

### Healthy Community

Ensure that public health needs are recognized and addressed through provisions for healthy foods, physical activity with access to recreation and social interaction, physical and emotional health care, environmental justice and safe neighborhoods.

### Responsible Governance and Regionalism

Ensure continued efficiencies in the delivery of public services through collaborative governance and that all local proposals account for, connect with and support the mutually beneficial plans of adjacent jurisdictions and the surrounding region.

## Goals & Recommendations

The goals and recommendations are organized by the each of the six principles. The following sections summarize more detailed recommendations presented throughout this plan. This plan assumes that interwoven equity is not a stand-alone principle, rather that equity is integrated into all goals and recommendations for a sustainable community.

### Interwoven Equity

- Promote equity for all population groups.
- Reduce impacts to vulnerable or historically disempowered population groups.
- Expand range of housing types and affordability.
- Achieve jobs/housing balance of residents who live and work in town.
- Expand 'universal design' standards to public streets network and spaces (parks).
- Inclusive communication policies to engage all residents in planning and decision-making processes.

### Livable Built Environment

#### Historic Preservation

- Conserve and reuse existing resources including those with historic value, agricultural landscapes and cultural institutions.
- Prepare a town-wide historic and cultural resource survey.
- Establish a historic preservation committee, adaptive reuse of historic structures and sites, and community education.
- Connect residents and property owners to the vast resources available on preservation, regulations, tax incentive programs and funding sources.

#### Housing

- Undertake a housing needs study; identify ways to increase affordable and inclusive housing choices.
- Increase density, diversity, and add new models of housing to achieve greater levels of senior and affordable housing. Incorporate design guidelines and other measures into code to address neighborhood context and transition from single family to multifamily.
- Strengthen and simplify conservation subdivision regulations to conserve more open space with achieving permitted densities.



## Transportation

- Align complete streets and land use policies.
- Expand safe active transportation network and recreation options through a variety of means, including preparation of an active transportation plan, modifications to incentive zoning to recognize complete streets improvements as a benefit, and employing traffic calming measures, where necessary.
- Optimize mixed land use density and diversity on primary roads where utility infrastructure and transit exist.
- Support the Bicycle and Pedestrian Committee and the Town's internal working group.
- Assess benefits and impacts of collector roads (i.e., Selkirk By-Pass, Kimmey Drive and Elsmere Ave. Extension).

## Harmony with Nature

- Conserve and enhance biodiversity systems and wildlife habitats.
- Assess use of Environmental Protection Overlay Districts (EPOD's), critical environmental areas, and resource specific regulations.
- Protect and conserve agricultural soils using Farms & Forest Conservation programs for easements and acquisitions; establish an Agricultural Advisory Committee.
- Support agricultural businesses and owners of vacant open parcels via advocacy for tax credits and exemptions.
- Decarbonize the energy system by use of renewable resources, electrification, energy efficiency and carbon sequestration.
- Expand electric charging infrastructure (public and private), transition off fossil fuels, expand all scales of solar energy use and apply NYS 'Stretch' energy code.
- Reduce solid waste stream by expanding Town recycling and composting programs.
- Continue to update the Comprehensive Emergency Management Plan to mitigate and respond to increasing threats from climate change.

- Support Town staff positions of Open Space / Sustainability Coordinator, Stormwater Management Coordinator, Recycling Coordinator, Emergency Management Director.

## Resilient Economy

- Attract desired mix of uses in Mixed Economic Development (MED) districts; Prepare market study of industrial trends (including tech hub, health care); streamline review procedures for projects in the MED district.
- Expand ways to attract mix of uses to hamlet districts; increase density, diversity of use, right-size dimensional and parking requirements.
- Expand rural and agriculture opportunities, and expand permitted by-right uses.
- Use the Farms and Forests Fund and advocate for tax credits and exemptions to support agriculture businesses and owners of vacant open parcels.
- Limit extension of utility infrastructure districts in undeveloped areas of town.
- Monitor utility systems condition and capacity to ensure infrastructure is not a barrier to economic development.
- Continue to focus programs on small (locally-owned) business retention and attraction.
- Advance industrial and technology business in MED and industrial districts.



- Mitigate transportation conflicts between industrial employment centers and residential / hamlet areas.
- Advance affordable and workforce housing as primary component of economic development strategy.
- Continue collaboration with local, county and state agencies involved with economic development, workforce training and emergency preparedness.

## Healthy Community

- Promote general public safety and reduce resident, workforce and visitor exposure to toxins and pollutants in the natural and built environment.
- Design, construct, and maintain public realm improvements to reduce and avoid personal injury.
- Expand and improve opportunities for physical activity, emotional wellbeing and healthy lifestyle for residents by advancing Bicycle and Pedestrian Committee recommendations, adding connections to the Rail Trail, ensuring Town resources to maintain active transportation infrastructure.
- Expand provision of programs, activities and services for the Town's aging population demographic.
- Assess the feasibility of a community and recreation center for community and senior services/programs.
- Provide equitable access to parks and recreation facilities near all neighborhoods and to Town events, arts and cultural facilities.
- Assess land use provisions that can expand access to child care.

## Responsible Governance & Regionalism

- Coordinate local planning initiatives with regional plans including transportation and infrastructure investment.
- Support future regional housing plans and 'fair share' distribution of affordable housing units.
- Leverage local organizations that support open space, historic and culture resource conservation.
- Improve Town communication channels and feedback mechanisms for all residents including people with disabilities and limited English language skills.
- Employ smart governance (technology) best practices.
- Continue collaboration between Town departments, the school districts, county and state to enhance efficiency and contain the costs for delivery of all public services in Town.

**Bethlehem is a great place to live and people want to live here. The key to this plan update is to harness the power of growth in a manner that maintains and enhances the quality of life that residents have come to know and enjoy.**

## Review this comprehensive plan within five to ten years

As the community changes and grows, its needs and desires change. The comprehensive plan should be a flexible and adaptable document that reflects such changes. Therefore, it is strongly recommended that the Town of Bethlehem review and update, if necessary, the comprehensive plan. An assessment of the progress achieved on the implementation actions would also be beneficial.



IF NOW  
THEN  
WHEN?



# Introduction

## Purpose of a Plan

While Bethlehem in many ways is seen as a model or success story in the region, it is not without challenges ahead. Bethlehem, like many other communities, is in a position where it wishes to retain the qualities and characteristics that make the town what it is today, while also integrating new sustainability policies and guiding inevitable growth to achieve desired outcomes for the future.

In recent years, many have expressed concern about the unplanned consequences of growth. Over time, development pressure has led to the development of agricultural or vacant lands. Some residents have experienced this change as a sad loss of open space or agricultural lands, others have expressed dismay at continued residential building and its environmental implications, while others are concerned about changes to the Town's appearance and feeling. Some residents have suggested that the appropriate response to these and related concerns is for the Town to simply stop allowing new residential developments. This is not within the Town's power and also does not respect the property rights of those who own undeveloped land, particularly large parcels. The

Town does, however, have the authority to guide growth – and this plan includes a variety of goals and recommendations to address anticipated growth, support and enhance neighborhoods, conserve agricultural and open spaces, promote sustainability, and protect ecological integrity.

The Town has a large network of sidewalks, and many enjoy playing, walking, or exercising on their local neighborhood streets or on local trails. Speeding and cut-through traffic are a frequent concern of residents, as are the condition of the sidewalks. Large truck traffic also has pronounced negative and quality of life impacts on residential neighborhoods. Careful and thorough consideration of these problems has resulted in a number of creative strategies that prioritize

the safety and positive health of residents.

While there are significant local issues to address, Bethlehem must also respond to worldwide, national, and regional shifts in social, environmental, and economic conditions, which influence the lives of Bethlehem residents and business owners. The climate crisis has important implications for the security and quality of life for current and future generations. Overall, the population in the United States is aging quickly, and the Town is no exception, which means shifting needs for housing, transportation, and services for residents. The international movements for social equity have spurred changes across disciplines and also have significance for Bethlehem's housing, transportation,

and services. Each of these large-scale challenges and others are also addressed in the plan.

Despite the recent trend towards a highly-polarized society across the United States, the planning process strived for broad community consensus on the key values that define the Town of Bethlehem and balance in the goals and recommendations included in the plan. This plan was prepared with public engagement during the heart of the COVID-19 pandemic, which forced new ways of accessing citizen input. The dedicated work of the Comprehensive Plan Update Committee and all the passionate residents who provided their input will position Bethlehem well for achieving its vision in the years ahead.

This is a great place to live, and people want to live here. Like many other communities, the opportunity lies in harnessing the power of growth in a manner that maintains and enhances the quality of life that Town residents have come to know and enjoy. Consistent with the 2005 Comprehensive Plan, this update "has been crafted with the intent of achieving balance – balance between urban, suburban, and rural perspectives; balance between the need and desire for economic growth, for tax- base expansion and diversification, and for the stewardship of finite land and environmental resources; and balance between the short-term and long-term health, safety, and welfare of the community."

**Bethlehem is growing and will continue to grow as people are attracted to our wonderful neighborhoods, strong schools, amazing library, vibrant commercial areas, and welcoming town character.**



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**Section 1**

# Background & Approach

# 01

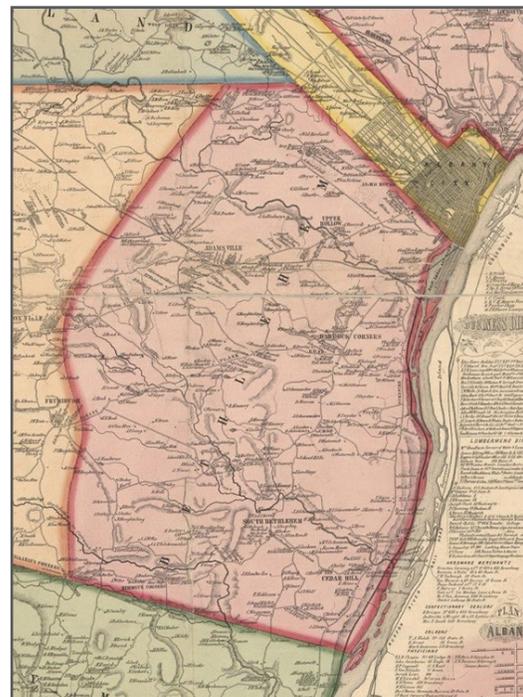
# Background & Approach

## The Town of Bethlehem

The Town of Bethlehem is located on the western banks of the Hudson River in Albany County, New York. Conveniently situated just south of the City of Albany, Bethlehem has been facing increasing growth pressure as a result of its quality of life, significant natural resources, working agricultural landscapes, quality schools, and the emerging technology industry in the region. This community of approximately 35,000 residents is characterized by the diversity of its land uses and built form. Some areas of the community have a suburban, auto-oriented feel and contain large-scale commercial developments and residential subdivisions. Other areas contain historic hamlets with tree-lined residential streets, sidewalks and small-scale commercial services. In addition, a good portion of the community is rural with scattered residential, industrial, agricultural and commercial uses.



Location within New York State



Historic Boundaries Before Annexation

The area now known as the Town of Bethlehem in the Hudson Valley is the ancestral homeland of Mohican Indians, who were removed from the area in the decades following European colonization and now primarily reside on a reservation in northeastern Wisconsin. Henry Hudson explored the Hudson River valley in 1609 for the Dutch East India Company. He traveled perhaps as far north as Bethlehem's Henry Hudson Park. By the 1660s, Killen Van Rensselaer had established a large feudal land holding, or manor, known as Rensselaerwyck. Bethlehem was part of the West Manor of Rensselaerwyck. The future City of Albany grew as a settlement around Fort Orange, which was located near Broadway and Frontage Street downtown.

The Town of Bethlehem was officially incorporated in 1793. At the time, it was roughly twice as large as it is now including all of the town of New Scotland and parts of the City of Albany. Bethlehem focused on agriculture crops of wheat, oats, hay and apples, with dairy becoming the focus in the 1800s. Services to support Bethlehem's agriculture expanded along the Normans Kill with the growth of grist mills, saw mills, fulling mills, lumber processing and tool manufacturing. Transportation to market of farmer's cash crops, like wheat and hay, was provided by an extensive network of wharfs, warehouses and ice houses located along Bethlehem's Hudson River shoreline. Villages and hamlets began to grow at various crossroads in town, often named after the prominent families who lived there. Rail service through Adamsville (the original name of Delmar) and Slingerlands began in 1863 via the

Albany & Susquehanna Railroad which changed how people and goods were moved and operated for almost 100 years. The Westshore rail commenced in the 1880's and was ultimately purchased by the NY Central Railroad. Together, these rail services allowed Bethlehem residents to live in their rural settings and work in the City of Albany. The Industrial Age was in full swing in America during the early 20th Century, and with it came the ability to decouple manufacturing from water as a primary source of power. Much of the area's industry became clustered in Albany and northeast Bethlehem at the Port of Albany, most of which was eventually annexed by the city in 1926.

Bethlehem saw its first major suburban growth spurt around the late 1920's with the coming of the automobile and convenient access to its rural areas. Following World War II, several hamlets in town experienced significant population growth. In 1967 the hamlets of Hurstville (Whitehall Road/New Scotland Road) and Karlsfeld were annexed into the City of Albany, a contentious process that established the town boundaries as legally recognize today.

In the decades to follow, a confluence of factors created significant development pressure, and with it the loss of many historic preservation opportunities. In the decade between 1980 and 1990 alone, housing development increased over 20%, and an additional 16% rise occurred between 1990 and 2000. While this upward growth trend has slowed in recent years, there is no shortage

of development projects in the pipeline.

In September 2020, the Town of Bethlehem began the Comprehensive Plan Update process to develop a plan that will guide development, municipal services and community-related decisions toward the community's vision through 2035. The Town's current Comprehensive Plan, adopted in 2005, has provided the Town's elected and appointed officials with valuable context and guidance for development-related decisions and capital investment. It established a vision for the community's future, articulated guiding principles and goals, and recommended specific actions or strategies that would move the Town toward the community vision through 2020. Updating the comprehensive plan requires a thorough and inclusive community discussion about the current state of the town, the community's values and aspirations for the future, and the strategies that should be used or actions that should be taken to achieve the community's vision for the future.

## What is Planning?

City planning and community design has occurred formally and informally throughout time. Prior to the industrial revolution, most business, in America and Europe, occurred in the home. The industrial revolution started in the late 1700's with vast expansion between the 1850's and 1920's. To support this industrial movement, migration from rural areas to urban center of opportunity peaked between the 1890's and 1920's. Much of the conditions of overcrowding, poor housing and

sanitary conditions occurred during this time period. There were several major planning concepts prepared for cities in America and Europe as a response to the poor living and working conditions including;

- The City Beautiful Movement (1893) by Danial Burnham & Frederick Law Olmsted
- Garden City Movement by Ebenezer Howard (1898)
- Radiant City by Le Corbusier (1920)
- Broadacre City by Frank Lloyd Wright (1932)

Each of these plans considered spreading people away from the urban centers where there was enough land for agriculture to support the community and interconnecting the city and villages with rail and highways. Several of these plans proposed that people

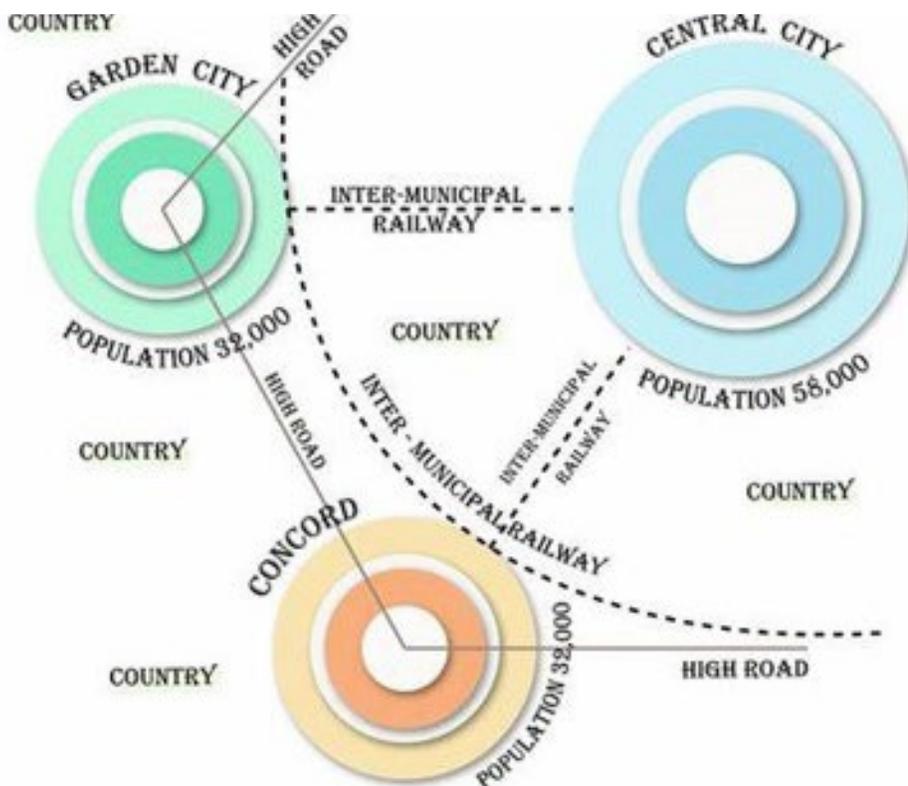
live in dense high-rise structures (Le Corbusier and Wright) leaving the ground plan available for streets and parks. The top-down planning of the mid-20th century focused on these idealized city concepts and their implementation led to displacement of urban residents (many immigrants and communities of color) in low to moderately dense neighborhoods for the construction of high-rise developments, massive expansion of the national highway system, and popularization of suburban patterns of development. With these large-scale changes to communities, concerns about community participation in planning and environmental impacts emerged and changed the practice of planning. Specific topic areas such as growth management, economic development, and housing (among other social topics) also emerged within the profession as important around this time.

From late in the 20th century to the present, demographic, economic, technological, and environmental changes have increased the awareness and importance of topics such as residential sprawl, smart growth, hazard mitigation, active transportation, environmental justice, and economic, climatic, and social resilience.

Today, the professional planning practice involves working with residents and elected officials of a municipality to create a future vision for their community and craft goals and strategies to achieve that vision. Planning involves analysis and strategizing for how to provide community services, attract and retain business, achieve a high standard of living, transport people and goods, provide recreation opportunities, conserve natural resources, and more.

## Town Comprehensive Planning

The comprehensive plan is a tool a community can use to address a broad range of issues and topics in a unified manner. Through a comprehensive plan, a community can identify and analyze the relationships between many important inter-related components (e.g. transportation, housing, parks and open space, commercial and retail development, municipal and government services, etc.). It does this on a community wide basis using a collaborative process that involves a broad cross-section of stakeholders. The comprehensive plan addresses the long-range future of the community sometimes



up to a 20-year horizon. The primary purpose of the plan is to provide guidance to those in both the private and public sectors when making decisions that affect the future, including a focus on land use and policy. It is not a detailed plan but rather a conceptual road map stating the community’s goals with actions that must be taken to achieve them.

This 2022 Comprehensive Plan Update is an update of the 2005 Comprehensive Plan prepared by a Comprehensive Plan Update Committee, the Town of Bethlehem, and the citizens of the Town. Elements of the Plan that remained relevant, have been retained. Many elements have been modified to reflect current conditions. Some new elements have been added to best communicate the new vision and land use strategy.

Under New York State Town Law (Section 272-a), the Town Board is responsible for adopting or accepting - and maintaining - the Comprehensive Plan as a guide to the community’s development. It serves as a basis for the control of land uses and accountability of

decisions by the various boards and agencies and for directing public improvements to help achieve a desired pattern of land use as well as making decisions regarding public investment.

The adoption of this comprehensive plan exemplifies the commitment by the Town to maintain and improve the quality of life for its residents.

Through the process of preparing the plan, Town officials gain an understanding of the vision citizens have for the town and what steps need to be taken to implement that vision. Town boards and committees should use this Plan to help them make informed decisions regarding development and zoning applications and how they relate to the goals and objectives stated in the Plan. Citizens can also use this plan to better understand their community and evaluate the effectiveness of local government."

The adoption of a comprehensive plan is considered a Type I action under New York State Environmental Quality Review Act (SEQRA) regulations.

**A Comprehensive Plan:**

- Creates a shared vision for the future of a community
- Serves as a decision-making guide for development, land use, and zoning
- Forms a basis for future policies
- Is flexible and adaptive to serve the community’s needs as they change

**Bethlehem’s Planning Process**

The Town of Bethlehem considered the 2005 Comprehensive Plan as a “living” document. It guides the majority of town policies and procedures that are related to land use, zoning, regulations and compliance as well as informing capital budget spending and annual operations and maintenance. The role and functions of Town services and programs rely on projections for growth and the Towns’ ability to meet the needs of all demographic groups. The comprehensive plan is revisited and updated periodically as social and economic conditions change influencing the Town “vision”



and the means to achieve that vision.

Since 2005, the Town made significant advances in implementing the recommendations of the original comprehensive plan by completing many of the studies and plans identified; making appropriate changes to the zoning code and establishing staff responsibilities and programs aimed at balancing economic development and conserving undeveloped land while implementing quality of life initiatives.

In 2007 and 2013, the Town prepared assessments of the Comprehensive Plan with guidance from citizen advisory committees, where the priority recommendations were reviewed and reconfirmed or modified due to demographic or economic factors.

In 2018, the Town prepared a strategy to reach out to residents in all hamlets of the Town, to engage them in discussing the topics and issues significant to individual geographic areas of Town. The seven Community Forums were held in each hamlet through the Fall of

2018 and Spring of 2019. Assessing the comments heard in the forums, the Town detailed the primary issues into the following themes. (Refer to Comprehensive Plan Update Community Forum Summary July 2019).

- Neighborhoods
- Aging and Housing
- Transportation
- Environment
- Parks and Recreation
- Economic Development

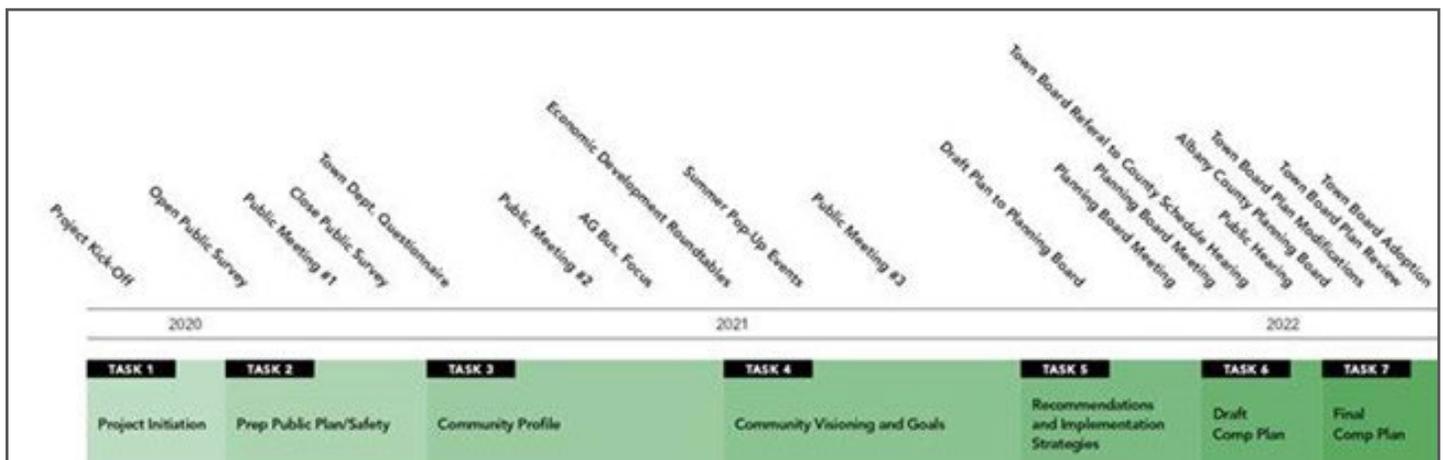
The 2005 Comprehensive Plan specifically anticipated an update would be performed in the year 2020. The “Vision Statement” was written in the past tense looking at what had been achieved in the Town since 2005. The Community Forums were also held as a prelude to the 2020 update. The summary and findings of the forums informed the Towns approach to the update process. The first task was to appoint residents of the Town to the Comprehensive Plan Update Committee (CPUC). Residents represent geographic areas (hamlets) of the Town and offered

expertise and interest in essential topics areas; historic preservation, environmental, transportation, senior services, and development/ business. Several members appointed to the committee are members of regulatory boards for the Town and have experience with implementation of code regulations.

The Committee held 28 meetings to discuss all aspects of the Plan. All meetings were promoted on the Town website, project website ([www.bethlehemforward.com](http://www.bethlehemforward.com)), and were open to the public.

Town staff from the Department of Economic Development and Planning, along with the CPUC members, outlined the detailed tasks of the plan update.

- Task 1 Project Initiation
- Task 2 Public Engagement Plan
- Task 3 Community Assessment
- Task 4 Programming
- Task 5 Goals and Recommendations
- Task 6 Draft Comprehensive Plan
- Task 7 Final Comprehensive Plan



Planning Process Diagram

The Comprehensive Plan Update formally began with consultant assistance in September of 2020 with the project initiation and development of a detailed public engagement plan and writing a public survey. A summary of the public engagement process and efforts is presented further in this section.

The public survey was open for public comment from mid-October through January 1, 2021. During that same period the inventory and analysis of existing conditions (community profile) in the Town was performed. With the community profile data collected, along with a summary of the public survey, the Town and CPUC members looked at the most appropriate way to organize and format the plan. The procedures presented in the American Planning Association (APA) PAS Report 578 - Sustaining Places: Best Practices for Comprehensive Plans, by Godschalk and Rouse, January 2015 - provided the framework to organize the Plan. From the survey and public meetings (see Appendix) it was clear that residents are passionate about the Bethlehem community; physically, socially, economically and desire policies that will sustain the town's most positive attributes. These attributes were memorialized in a series of community value statements, which are organized in the following themes;

- Community
- Public Services
- Environment / Sustainability
- Land Use
- Transportation

From these value statements, the CPUC (with public input) crafted a vision statement, which presents the anticipated achievements by the year 2035. Using the planning "principles" set forth in the APA document, the Town and CPUC defined specific goals to achieve the "principles" along with a series of recommendations and actions to accomplish each goal. This plan includes an implementation matrix (see Section 5) that identifies the actions to implement each recommendation; the party responsible to champion each action; the time frame (short term, mid-term, long term, or ongoing) anticipated to accomplish and the potential costs.

The plan was reviewed in "draft format" by the Town Planning Board, whose comments were submitted to the CPUC. A final draft recommended by the CPUC was advanced to the Bethlehem Town Board by Resolution on April 4, 2022. The Town Board held a public hearing on May 11, 2022 and referred the document to the Albany County Planning Board for comment prior to environmental review and adoption.

## Community Engagement

As a key element of the Comprehensive Plan Update, a process was developed to engage the community for their valuable input.

A team comprised of Town staff, CPU committee members, and project consultants from

SWBR, Highland Planning, and Fisher Associates led the public engagement, which consisted of:

- More than 30 one-on-one interviews with key stakeholders as well as small group meetings with key stakeholder groups
- A project website hosted on publicinput.com at [www.bethlehemforward.com](http://www.bethlehemforward.com)
- Social media pages on Instagram and Facebook
- One public survey
- Two (2) virtual public meetings
- One in-person public meeting

Before conducting outreach, Highland Planning developed a public engagement plan to define key stakeholders, engagement activities, and a schedule to engage a wide variety of stakeholders. The plan included a decision statement for the project to help the public and stakeholders understand how their input would be used:

### Stakeholder Interviews

To inform the development of the public engagement plan and ongoing comprehensive plan development, one-on-one interviews with key stakeholders were conducted in September and October 2020. Interviewed stakeholders included:

- Cindy Ferrari, Bethlehem Opportunities Unlimited
- Donna McMullen, McMullen Trucking
- Lou Picarazzi, Selkirk resident
- Mark Kelly, Town resident
- Mike Waldenmaier, Town resident

- Pattie Beeler, Bethlehem Tomorrow
- Susan Leath, Preserve Historic Bethlehem group
- Will Vail, Town of Bethlehem Senior Services Department

In addition, members of the CPUC talked and/or emailed with other key stakeholders throughout the Bethlehem community to get their initial input during this period. The results of the pre-engagement interviews were used to develop specific objectives and techniques for engagement. Key themes that emerged were:

Stakeholders noted that the Town is well-situated near Albany and has one of New York State’s top school districts. Other assets include:

- Parks and open spaces for recreational purposes
- Public services such as police and fire department
- Senior services
- Rural and historic character
- Socially conscious people

**Concerns in the community include:**

- Unequal resource/infrastructure between Delmar and the rest of the Town, including shopping opportunities, parks, schools, transportation, and crosswalks, and the perceived disenfranchisement of non-Delmar residents
- Lack of racial diversity and racism in the community
- Motorized traffic (trucks, tankers, etc.) passing through the Town
- Barriers to business expansion
- Development of former farms and rural lands
- Preservation of historic sites, buildings, and the rural character of the area
- Type of housing to be built in the Town (e.g., affordable, multi-family housing vs. single family homes)
- Town financial resources, particularly in the wake of the COVID pandemic
- Neighborhood connectivity as new neighborhoods are built
- Reassessment of land value for tax purposes

**Project Website and Social Media**

The project website, [www.bethlehemforward.com](http://www.bethlehemforward.com), was created using the PublicInput.com platform. This website contains a project timeline, links to social media feeds, key documents from the process, meeting notices, and opportunities for users to provide comments. Facebook and Instagram social media pages for Bethlehem Forward were established too.

**Survey**

A survey was posted at [www.bethlehemforward.com](http://www.bethlehemforward.com) and on the Town’s website to gather feedback from the community about challenges, opportunities and preferences related to the overall quality of life in the town. Paper copies of the survey were mailed to approximately 250 large landowners in the town. Paper copies were also made available upon request. The survey was available for eight weeks. It was launched on Monday, November 9, 2020 and was open to all members of the public until the close of business on Thursday, December 31, 2020.

The survey was promoted using a variety of methods, including:



**What do you want Bethlehem to look like 15 years from now? Take the survey!**  
[www.BethlehemForward.com](http://www.BethlehemForward.com)

**Join us!**  
 Public Meeting #1  
 (online via Zoom)  
 Tuesday, December 8  
 at 6:00 pm

**YOUR TOWN**  
**BETHLEHEM FORWARD**  
**YOUR VOICE**

@BethlehemForward   

**Bethlehem’s Comprehensive Plan Update is underway!**

- Postcard mailer
- Press release to local newspapers
- Project website (www.BethlehemForward.com)
- Social media posts (via project pages on Facebook and Instagram)
- Virtual public meeting on December 8, 2020
- Virtual Comprehensive Plan Update Committee (CPUC) meetings
- Email blasts to multiple stakeholders list serves
- Lawn signs
- Decals on Town vehicles
- Door-to-door outreach by CPUC members
- Mailed to large landowners (5+ acres)
- Bethlehem Public Library and Ravena Coeymans Selkirk Community Library display boards

**The survey received nearly 1,800 responses.**

### Virtual Public Meetings

Two (2) public meetings were held virtually using Zoom:

Tuesday, December 8, 2020 at 6 pm  
 Tuesday, March 23, 2021 at 6 pm

The December meeting served as an introduction to the project, providing an opportunity to:

1. Share information about the project scope, schedule, and engagement opportunities
2. Summarize feedback received to date
3. Solicit feedback from participants about issues and opportunities

155 people attended the December virtual public meeting, including 15 participants who joined via Facebook Live. The meeting recording is accessible at <https://youtu.be/1Kty3GxB96E>.

The purpose of the March meeting was to review the project scope, summarize work to date, provide a high-level overview of existing conditions and survey responses, and conduct visioning exercises. 128 people attended the virtual public meeting, in addition to 25 participants who watched the livestream via Facebook and project website. The meeting recording is accessible at <https://fb.watch/4rIKtFf2UM/>.

### In-Person Public Meeting

A public meeting was held on: Thursday, November 18, 2021, at 6 pm at the Town Hall

The purpose of the meeting was to inform and engage members of the public in the development of the Comprehensive Plan Update, providing an opportunity to:

1. Share project updates and upcoming engagement opportunities
2. Summarize feedback received to date
3. Solicit feedback from participants about key principles and recommendations

In addition to the project team members, the in-person meeting had more than 85 community members in attendance. The meeting began with an overview presentation, after which participants divided into groups and rotated through five stations to talk about each of the five principles covered by the plan.

Detailed summaries of the survey and public meetings are included in the Appendix of this Plan.



Top Survey Responses





**Section 2**

# Vision for Tomorrow

# 02

# Vision for Tomorrow

Based on the responses received from the public survey and public meetings (#1 & #2) it was clear that town residents and business owners are passionate about the Bethlehem community; physically, socially, emotionally and economically and desire policies that will sustain and enhance the town's most positive attributes. The attributes defined by the community are documented in a series of community value statement, organized in the following themes;

- Community
- Public Services
- Environment / Sustainability
- Land Use
- Transportation

## Value Statements

### Community

**C1:** We value our sense of community with socially conscious citizens and business owners who engage in improving the quality of life.

**C2:** We value our diverse age cohorts, diverse family structures and multiple generations of families that choose to live in the town.

**C3:** We value the qualities of rural land, supporting the landowners' ability to access its economic value in a manner compatible with sustaining a rural-agricultural livelihood.

**C4:** We value racial, ethnic, economic, gender, and disability inclusion and diversity throughout the Town for all who want to live, work and visit.

**C5:** We value small / locally owned businesses and desire to create the conditions that encourage more business enterprises.

**C6:** We value preservation of our historic architecture, cultural sites, neighborhoods and districts.

**C7:** We value a respect of property owners' rights and recognize that Bethlehem is a diverse community that includes both densely developed areas as well as expanses of relatively undeveloped rural lands. While this plan is not a source of legally protected property rights, the Town recognizes and respects that property owners have rights regarding their property. The Town has, and will continue to consider the rights of all landowners in meeting its obligations to all residents as the Town implements the recommendations of this plan.

### Public Services

**P1:** We value our public-school districts that strive to provide the highest level of education, athletics, arts and cultural programs.

**P2:** We value public services provided by the dedicated employees of the town.

**P3:** We value public safety and emergency response services provided by dedicated town employees and volunteer first responders.

**P4:** We value active adult service programs that enable residents to live in their homes and remain active community members.

**P5:** We value our park system and recreation programs, private preserves and trails, and seek to expand facilities with diverse activities and programs for all age groups and abilities.

### Environment / Sustainability

**E1:** We value our vast natural resource systems and open spaces that provide benefits, including wildlife habitat, ecosystem services that provide clean air and water, and inherent natural beauty and scenic value within our community.

**E2:** We value being on the forefront of sustainability by addressing climate change through renewable energy, energy efficiency, a just transition off fossil fuels, electrification, waste reduction and prevention of greenhouse gas emissions.

**E3:** We value active agricultural businesses and farmland supplying local food and products.

**E4:** We value a resilient natural, built, and economic environment that can endure, adapt, and rebound from catastrophic natural and other events.

### Land Uses

**L1:** We value a diversity of land uses to balance the tax base, provide jobs, complement our hamlets and residential zoning districts and sustain fiscal policy objectives.

**L2:** We value a variety of housing options, which meet the needs of different lifestyles, and a range of income levels, allowing residents to age in place.

**L3:** We value affordable rental and ownership housing for those representing elderly, low to moderate income, and disabled families and individuals.

### Transportation

**T1:** We value the transportation infrastructure which safely accommodates all modes of travel (pedestrian, bicycles, transit and vehicles).

**T2:** We value the walkable areas of the town and desire to expand sidewalks and trails across the town to schools, neighborhoods, recreation facilities and commercial districts.

**T3:** We value the interconnected street network of our hamlets and desire to connect neighborhood streets, which offer alternative routes of travel, better choices of travel modes, and reduced trip lengths and intersection congestions, where appropriate.

## Vision Statement

From the Value Statements the CPUC, along with public input, crafted the following Vision Statement which will serve as the foundation for goals, recommendations and implementation strategies. The vision is framed some 15 years in the future (2035), and represents a look back at the successes and accomplishments of the past fifteen (15) years. The progress towards a higher quality of life for all residents, and for the natural environment, is described in this statement.

The Town of Bethlehem is a safe, friendly, welcoming, vibrant, economically strong, and interconnected community, with a racially, ethnically, and culturally diverse population throughout our town.

We have made significant strides in preserving and celebrating our vast historic, cultural and natural resources, including our agricultural and native origins. Density and diversity of land uses and services within the core of each hamlet have resulted in conveniences for residents and visitors while enlivening streets and public spaces. A rural-agricultural livelihood is respected and contributes to the overall quality of life and character of our town.

Our sustainability practices and development policies have resulted in clean water and air; protections of wildlife habitat, natural resource systems, and other open spaces; measurable reductions in greenhouse gas emissions; and improved resiliency to the effects of climate change.

The diversification of housing types and ownership models has enabled young, old and workforce residents, to live and age in our town.

Pedestrian, bicycle, and public transit opportunities and facilities have been greatly expanded to accommodate residents and visitors of all abilities.

Residents have access to increased job opportunities through new and expanded local business enterprises and emerging business sectors. Intergovernmental and interagency cooperation have enhanced efficiency and helped to contain the cost of the delivery of services in the town. A sustainable and resilient community has led to an improved tax base, which has provided the resources to support needed programs, services, infrastructure, and public health and safety.

*We continue to move Bethlehem Forward.*

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**Section 3**

# A Plan for 2035

# 03

# A Plan for 2035

'Bethlehem Forward' represents a response to the town's Community Profile, Value Statements and the Vision for Tomorrow, which is based on six overarching Principles, with each Principle being supported by transformational goals, recommendations, and implementation strategies. This is how we achieve the community we want.

## Interwoven Equity

Ensure fairness and equity in providing for the housing, services, health, safety and livelihood needs of all citizens and groups.

## Livable Built Environment

Ensure that all elements of the built environment, including land use, transportation, housing, energy and infrastructure work together to provide sustainable, green places for living, working and recreation, with a high quality of life. Recognize that historic buildings and structures provide character assets to the built environment.

## Harmony with Nature

Ensure that the contributions of natural resources to human well-being are explicitly recognized and valued and that maintaining their health is a primary objective.

## Resilient Economy

Ensure that the community is prepared to deal with both positive and negative changes in its economic health and to initiate sustainable urban development and redevelopment strategies that foster green business growth and build reliance on local assets.

## Healthy Community

Ensure that public health needs are recognized and addressed through provisions for healthy foods, physical activity with access to recreation and social interaction, physical and emotional health care, environmental justice and safe neighborhoods.

## Responsible Governance and Regionalism

Ensure continued efficiencies in the delivery of public services through collaborative governance and that all local proposals account for, connect with and support the mutually beneficial plans of adjacent jurisdictions and the surrounding Capital Region.

## Interwoven Equity

The principle of Interwoven Equity endeavors to “Ensure fairness and equity in providing for the housing, services, health, safety and livelihood needs of all citizens and groups.

This comprehensive plan update seeks to ensure fairness and equity for all residents and groups and approaches the goals and recommendations for the growth, health (of residents and the natural environment), safety, and economic sustainability of Bethlehem through the lens of five principles;

- Livable Built Environment
- Harmony with Nature
- Resilient Economy
- Healthy Community
- Responsible Governance and Regionalism

The Value Statement defined by the community related to equity reads:

***‘We value racial, ethnic, economic, gender and disability inclusion and diversity throughout the Town for all who want to live, work and visit’.***  
(C4, see section 2)

Equity for all populations groups is interwoven throughout all goals presented in this document and specifically seek to reduce impacts on vulnerable or historically disempowered population groups. Vulnerable or at-risk members of our community may include our seniors, children, low-income

families, residents with limited transportation choices, people with disabilities, and those who are not proficient in the English language. Disempowered communities experience discrimination and exclusion and can include peoples of color, peoples with disabilities, low-income residents, LGBTQ groups, immigrant communities, and native peoples.

When integrating equity into the plan goals, there are multiple factors to consider. The range of housing types and affordability (rental and ownership) are addressed in the value statements and goals



Despite the recent national trend towards polarization, the planning process achieved broad community consensus on the key values that define the Town of Bethlehem.

under each principle. Housing is addressed in the Livable Built Environment principle and is a key factor in the Town’s goals for a resilient economy. Housing is also considered a part of Responsible Governance and Regionalism. Bethlehem should contribute to the broader Albany County and Capital Region fair housing stock.

The goal to achieve a jobs / housing balance looks to establish an equilibrium of residents who live and work within the town. Currently, that balance is skewed to commuters leaving the town for jobs in Albany or other areas of the Capital District and fewer employees commuting into Bethlehem’s employment centers for work. Ultimately, inclusive housing alternatives will make it possible for many of those inbound commuters to live in the town and new job growth will allow many existing residents to stay in town to work. This balance has multiple economic and environmental benefits. Workforce diversity and development is

presented in the goals of the Resilient Economy principle.

Improving the health and safety of our at-risk neighbors includes maintaining and expanding the already robust public services offered by town employees. Specific goals for expansion of the safe pedestrian network system using universal design standards, park and public spaces, and protection from both man-made and natural hazards are addressed in the Harmony with Natural Environment and Healthy Community principles.

Promoting environmental justice is included in multiple goals presented with the Harmony with Nature and Healthy Community principles. Primary among the stated goals is the Town’s commitment to communications and inclusive policies for all residents to be informed and to engage in processes that affect the quality of life in the town.



## Livable Built Environment

Ensure that all elements of the built environment, including land use, transportation, housing, energy and infrastructure work together to provide sustainable, green places for living, working and recreation, with a high quality of life. Recognize that historic buildings and structures provide character assets to the built environment.

### Value Statement C6

We value preservation of our historic architecture, cultural sites, neighborhoods and districts.

### Value Statement L2

We value a variety of housing options which meet the needs of different lifestyles, and a range of income levels, allowing residents to age in place.

### Value Statement L3

We value affordable rental and ownership housing for those representing elderly, low to moderate income, and disabled families and individuals.

### Value Statement T1

We value the transportation infrastructure which safely accommodates all modes of travel (pedestrian, bicycles, transit and vehicle).

### Value Statement T2

We value the walkable areas of the town and desire to expand sidewalks and trails across the town to schools, neighborhoods, recreation facilities and commercial districts.

### Value Statement T3

We value the interconnected street network of our hamlets and desire to connect neighborhood streets which offer alternative routes of travel, better choices of travel modes, and reduced trip lengths and intersection congestions.

## Historic Preservation

### Goal 1

Conserve and reuse existing resources, especially those with historic value.

#### Recommendation LBE 1a

*Prepare a reconnaissance level survey to identify and understand our historic resources.*

Prepare a reconnaissance level survey to define and identify all historic resources of Bethlehem; structures (homes, buildings, bridges, barns / silos, markers, etc.) sites, cultural / archaeological, neighborhoods and districts. In addition to the inventory and mapping of historic features the



recommendations of the survey should outline the strategies for the further identification and management of these town wide assets, the range of governance strategies, and benefits of tax credits and funding alternatives.

The recent efforts of the Town and Bethlehem Historical Association in compiling a town wide inventory of Bethlehem homes built prior to 1950 should be utilized in the survey.

The survey could result in the preparation of 'design guidelines' to inform the planning, design (architectural and site), and engineering approvals for projects within or adjacent to historic structures, sites and districts. There is a range of approaches to governing the preservation of the town's historic assets, from a local advisory authority informed by design guidelines to establishing a commission to enforce the guidelines established by the NYS Historic Preservation Office and

the US Department of the Interior, National Park Service <sup>1</sup>. Once the Town has settled on the best approach to meet both preservation and economic development goals, the level of design guidelines and who regulates can be prepared and codified. Guidelines can further give clear, objective criteria for the Planning Board and Zoning Board of Appeals when considering an application.

<sup>1</sup> See p. 18-22 [https://www.nps.gov/subjects/nationalregister/upload/NRB24-Complete\\_Part1t.pdf](https://www.nps.gov/subjects/nationalregister/upload/NRB24-Complete_Part1t.pdf) and NY SHPO (<https://parks.ny.gov/shpo/survey-evaluation/>).

Residents and property owners of the Town should be directed to the vast resources available on preservation, regulations, tax incentive programs and funding

sources. These resources start with the Town Historian and further include NYS OPRHP, NYS Historic Preservation Office, the US Department of the Interior and many local and regional not-for-profit agencies.

The reconnaissance level survey should also recognize, identify and map the Town's cultural institutions (i.e., Library, Historic society, Churches, Cemeteries, Arboretum, Rail Trail, Rogers Rock, Grange, etc.).

**Recommendation LBE 1b**  
***Establish a Historic Preservation Advisory Committee to assist Town Boards (Planning, ZBA) and Departments with identification and protective strategies for the Town's historic resources.***

The committee could be led by the Town Historian, with members representing the Bethlehem Historical Association, and others from the community and act in an advisory capacity on matters

**Bethlehem has a rich history and significant historic structures, sites, and archaeologically sensitive areas.**



affecting historic resources (i.e., Planning Board and ZBA approvals, demolition applications, potential acquisitions, etc.). The committee can offer guidance to the review boards on the structures / sites significant ‘contributing features’ that define its historic value. The committee should assist with defining the scope and deliverables of the reconnaissance level survey and prioritizing implementation recommendations.

The Committee could be a resource for historic property owners as well as town boards. They could provide resources if a historic structure needs to be demolished, including ways and places available to repurpose parts of the structure.

**Recommendation LBE 1c**  
*Consider enacting demolition delay in order to review proposals for the full or partial removal of historic structures (individually or with a registered district).*

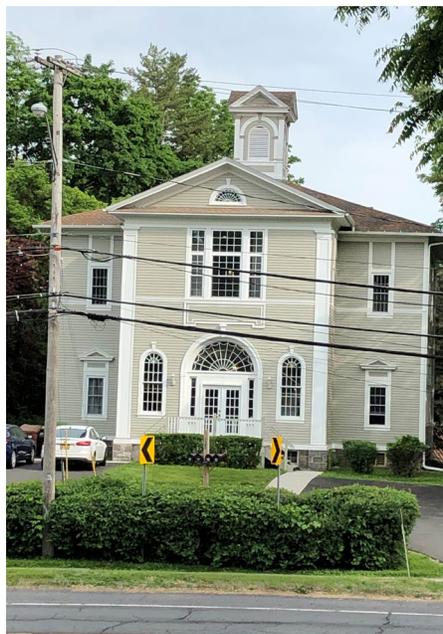
Many in the town concerned with historic preservation understand that there is ‘demolition by neglect’. However, the intent of this recommendation is to pause demolition of a historic or potentially historic structure until the Town has had time to assess the validity of the request. Assessment may include; the structural integrity of the structure, whether demolition is proposed because it is not suitable for the use proposed, or the proposed use is not permitted by code. Saving historic assets and adaptive reuse accomplish many preservation objectives; land use diversity, economic development and sustainability goals. Time should be given to adequately review a demolition application and assess alternatives or regulatory remedies. The demolition delay should be considered for all properties in preservation districts, and structures and sites identified in the forthcoming reconnaissance level survey.

**Recommendation LBE 1d**  
*Consider Zoning Code amendments such as setbacks, scale, building design, and density for projects within or adjacent to registered or eligible historic structures, sites or districts.*

Historic resources are found in all zoning districts across the Town of Bethlehem. The reconnaissance level survey will map these properties. Density of development adjacent to these structures and sites should be sensitive to their context (setting), character and scale. Although each zoning district has prescriptive standards for density and area, guidelines can help property owners, developers and town boards ensure the compatible scale that enhances preservation while meeting economic and land use diversity goals.

**Recommendation LBE 1e**  
*Consider Zoning Code amendments to align specific land uses which may occupy a historic / cultural structure or property within zoning districts, eliminating the requirement for a ‘Use Variance’ and allowing for an expedited review of use and site plan.*

Adaptive reuse of historic structures benefits the town’s preservation, diversity of land use and economic development goals. The intent of this recommendation is to consider uses (other than the structure’s original use) that can occupy a structure and fill a town wide or local neighborhood need. The intent is also to reduce or eliminate the need for a use variance (ZBA) or Special Use Permit (Planning Board). Day care centers, physicians’ offices and multi-family units are



recent examples of use variances that have been awarded to two historic churches (Slingerlands and North Bethlehem areas) representing adaptive reuse. Site plan approval and SEQRA impact assessment by the Planning Board would still be required. This recommendation would be well served by the completion of the of the reconnaissance level survey.

**Goal 2**

Conservation of the Town’s agriculture landscapes including fields, farmsteads, barns and contributing structures.

**Recommendation LBE 2a**  
*Agricultural landscapes are ‘cultural’ and should be included in the reconnaissance level survey.*

The Town of Bethlehem’s historic roots were founded on agriculture and the businesses that supported agriculture and farming. The Bethlehem community has consistently stated (forums, surveys, policies for preservation) that agriculture is both a significant contributor to the economy, local

food supply and overall character of the Town and Capital District. Farms should be considered a ‘cultural resource’ and identified in the reconnaissance level survey, along with their contributing structures and uses.

**Recommendation LBE 2b**  
*Consider amending the official zoning map to expand the Rural Zoning District to areas identified on the future land use map as rural multi-use.*

Expand the Rural zoning district based on the future land use map to allow for a flexibility in land uses that are permitted by-right. According to the Zoning Law §128-24, the Rural zoning district “comprises areas where resource based economic activities have flourished and they have less demand for public services. The purpose of the district is to encourage a variety of uses, including agriculture, forestry, mining, small scale commercial and light industrial activity and development using traditional farmstead designs where appropriate.” The agriculture/

agricultural use definition would be expanded to match and broaden the definitions supported by the NYS Department of Agriculture & Markets. This would result in the flexibility of uses to help retain the economic value of rural land.

Historically, the allowable residential density is lower in these areas compared to the more developed areas of the Town due to lack of access to infrastructure. Major residential subdivisions are permitted based on a density of 1 dwelling unit per 2-acres unconstrained land, while minor residential subdivisions (4 or fewer lots) allow for smaller lot sizes. The density allowance of multifamily should be reconsidered as it may not be compatible with surrounding uses.

Also, consider establishing a minimum lot size for residential uses based on design standards where on-site water supply and sewage disposal systems are required by Albany County Department of Health. Provide clear language in the Zoning Law so the minimum lot size and density for residential



uses with on-site sanitary sewer and water and public sanitary sewer and water in rural areas is easily understood.

For major residential subdivisions, cluster/conservation layouts are preferred and can also help to prevent fragmentation of existing agriculture lands by nonagricultural development.

**Recommendation LBE 2c**  
*Consider the preparation of a 'viewshed analysis report and mapping'*

In the 2013 Open Space survey, Town residents identified the road corridors and sites that they believe strongly contributed to the Town's character and quality of life. Viewshed analysis and scenic value rankings (quantitative and qualitative) can be used to identify highly valued scenic resources for road and trail corridors and sites accessible to the public (parks, preserves, etc.). Viewshed analysis can also be used for assessing impacts of development proposal on historic and culturally significant structures and sites. Guidance resources include; National Park Service, National Register Bulletin 15; US Forest Service "Landscape Aesthetics, A Manual for Scenery Management", Agriculture

Handbook Number 701, December 1995. This adds significant viewsheds and scenic resources to the Town existing criteria for land conservation policies. Further, Section 103-18, Conservation Subdivision, F (5) states Conservation Subdivisions are encouraged when "Identified scenic views / scenic vista exist". §128-51, F (2) also uses the term 'scenic resource value'.

**Goal 3**

Recognize and support cultural institutions and attract new organizations to the Town. Ensure equal access to all of the Town's cultural institutions.

**Recommendation LBE 3a**  
*Historic Reconnaissance level survey should recognize, identify and map the Town's cultural institutions (i.e., Library, Historic society, Churches, Cemeteries, Arboretum, Rail Trail, Rogers Rock, Grange). See recommendation LBE 1a.*

**Housing**

**Goal 4**

Establish flexibility for a mix and diversity of housing types, ownership options, rental options and price points.

**Recommendation LBE 4a**  
*Explore modifications to the zoning code to allow 2 and 3 family units (duplex & triplex) in the Core Residential, and Residential A and B districts, including the conversion of a single-family unit to a duplex (2 family unit).*

It is critical that this action is paired with design guidelines within these districts to include design criteria (scale, materials, roof lines, setback or freestanding garages, front porches, driveway location and landscaping) in addition to typical area metrics (setbacks, heights, lot coverage).

The duplex and triplex units shall be designed to fit neighborhood context, allow more residential units with minimal visual impacts by remaining consistent with setbacks, building height and massing. Maintaining neighborhood character and architectural design compatibility could be addressed by preparing (and codifying) a Form-Based Code or Design Guidelines for infill development.

Options to consider may include allowing 2 and 3 family units on both vacant and developed parcels (conversion/tear down) or vacant

The plan includes strategies that ensure all elements of the built environment – including land use, transportation, housing, energy, and infrastructure – work together to provide a high quality of life and sustainable places for living, working, and recreation.



parcels only, including along specific roadway corridors.

This potential code update should carefully consider the ownership and rental alternatives. Examples;

- one of the units (duplex or triplex) remains owner occupied and the other (s) are rented to tenants;
- all units are owner occupied (subdivision required for separate tax parcels)
- all units are rented

In section §128-73, (Accessory Apartments) of the current code, the owner is required to reside in either the single family home or the accessory apartment. The owner is required to file a deed amendment stating the property includes a Town approved accessory apartment. Similar consideration of owner occupancy should be given to duplex and triplex ownership alternatives.

**Recommendation LBE 4b**  
*Consider zoning amendment to permit Accessory Apartments (Accessory Dwelling Units – ADU’s) ‘by-right’ with administrative review by Planning, Building, and Engineering Departments.*

Accessory apartments can provide additional housing opportunities for those of moderate-income levels, especially the young and elderly residents wishing to age in place. A streamlined review process subject to administrative review only and allowance for both attached and detached units (i.e., above detached garage) would help to provide more opportunities for a diversity of housing types. Design guidelines applicable to attached and detached units would be appropriate. The special use permit review requirements could be eliminated with Town staff implementing the requirements of the Zoning Law §128-73 Accessory Apartments, and other applicable zoning and building requirements through administrative approval. A public notice letter similar to the land division notification could be added to the administrative review. The current code addresses ownership of the single-family owner-occupied residence and requirement to file a deed amendment with the County.

**Recommendation LBE 4c**  
*Consider the development of a Form-Based Code or Design Guidelines for Mixed-Use and Residential Infill development.*

Form Based Codes can help to illustrate to the community and developers/builders the intended appearance and outcome of new development. This can be applied to 2 and 3 family units in the traditionally single family home Residential A, Residential B, and Core Residential zoning districts. It can also be applied to multi-family units in residential areas and mixed-use developments within the hamlet areas and commercial corridors. Examples of mixed-use areas include portions of Delaware Avenue and New Scotland Road. The current Planned Hamlet District provisions in Zoning Law §128-41 is a resource that describes the intended appearance and layout of development within this district but does not provided illustrations as you would find in a Form Based Code.

Form-Based Codes differ from the traditional Euclidian zoning because they focus on design and not land use. There are hybrid form-based codes which look at both the land use and design elements. Form-based codes or design guidelines can be written for specific areas, corridors or districts of the Town or address design factors for the entire Town, covering all districts. The intent of a form-based code or design guidelines is to ensure



predictability in the outcomes of development projects, provide assurances to neighbors there will be compatibility with no adverse impacts and to encourage creativity while reducing discretion of review staff / boards.

For 'infill' development the code (form-based or guidelines) should consider the following factors;

- Existing road and utility infrastructure
- New building, renovation / expansion
- Land use context and density (single lot, entire block, district)
- Transportation network connectivity
- Streetscape / public open spaces
- Parking / Transportation demand management
- Architecture
  - Human scale at street level
  - Compatibility with context / adjacent structures
  - Building location (build to lines), orientation, massing, height, facades
  - Building entrances, awnings, canopies, balconies, porches
  - Colors, materials, finishes, mechanical equipment
  - Landscape, lighting and signage

**Recommendation LBE 4d**  
**Evaluate increased density and transition of housing between existing multifamily to single family in the Core Residential, Residential B and Residential C zoning districts.**

There are multiple areas of the Town where multi-family residential is not permitted such as the Residential C (RC) and Core Residential (CR) zoning districts. However, multi-family buildings exist in these districts. Further, there are situations where single family zoned properties exist across from or adjacent to existing multi-family properties. Examples include the Orchard Street/Cherry Avenue, and Kenwood Avenue area of the Town. Evaluating the transitions from single family to multi-family would look to structures and unit density that could provide the desired 'missing middle market' housing (2-10 units) that are contextually sensitive.

**Recommendation LBE 4e**  
**Consider aligning land uses with zoning designation. Endeavor to make all parcels conforming with the Zoning Map.**

There are multiple areas in the town (typically older neighborhoods) where there are 2 or more units of multi-family housing that is not permitted in the current zoning districts. This situation can cause issues with permitting desired improvements to challenging and time-consuming administrative requirements. The issue can be addressed by modifying the permitted uses within the existing districts or change the district to one that permits the existing uses. The proposed land use plan of this update may extend districts with the intent to increase housing options and diversity of land uses.

**Recommendation LBE 4f**  
**Evaluate density (i.e., Units per acre) as the standard metric vs. lot size requirement in all residential and mixed-use districts.**

Within residential and mixed-use (Hamlets) districts, density could be used (units and/or square footage per acre) as the standard metric in lieu of mandated lot sizes, area coverage and setbacks. The current lot size standards have led to cookie cutter subdivision layouts across town. Allowing a variety of lot sizes will permit a property owner / developer to achieve the density, avoid or limit impacts to environmentally sensitive lands and potentially make a project more 'affordable' due to a variety of price points resulting from range of lot sizes. This approach would have to include regulations that require a range of lot sizes so that the resulting layout is not a cookie cutter subdivision with smaller lot sizes.

Emphasizing the concept of density (units per acre) instead of 'lot size' was a recommendation in the 2005 Comprehensive Plan as well.

*If you own 100 acres of perfectly buildable land and you wish to maximize your development value of this land, you would therefore divide the entire 100 acres into 100, 1-acre building lots (note: this example is simplified for illustrative purposes). Without changing the number of homes that could be built, we could instead say that the permitted density cannot exceed 1 home per 1 acre, but the minimum lot size can be much smaller as conditions allow. Using the simplified example above, you*

*could still create no more than 100 building lots on the 100 acres. However, the lots could vary in size as conditions and imagination allow.*

The utilization of density as a key factor in the number of lots created should also be paired with requirements for homes that meet affordable housing thresholds, type/style of homes such as single floor ranch, single family attached units, and increased environmental resource protection measures (setbacks to streams, preservation of forested areas, wetland buffers, etc.).

Subdivision Regulations 103-30, Average Density Subdivision was included in the Town Code as a result of the 2005 Comprehensive Plan as a way to address lot size variety but has not been utilized by developers/builders. Applicants should be encouraged to utilize the Average Density Subdivision. Essentially, the Average Density Subdivision regulations allow subdivision of the land into lots so that the mean, or average, lot area throughout the subdivision meets or exceeds the minimum lot area requirement for the zoning district. The layout shall support the protection of natural resources and open lands. For example, a 10-lot subdivision in the Residential

A zoning district could include lot sizes ranging from 0.25 acres to 0.90 acres, so long as the average lot size of the subdivision meets or exceeds the 1/3 (.33) acre minimum lot size.

**Recommendation LBE 4g**  
***Evaluate and as appropriate permit/ implement, new models of housing not identified in the current code. Examples include work/live, micro units, tiny homes, co-housing, cottage homes, green houses.***

Across New York State and the country, there is a shortage of affordable housing as well as housing options that allow our senior citizens to remain in their community. There are new types of housing (ownership and rental) being conceived and built to help fill the growing need. Each requires consideration for shared open space, parking, utility infrastructure along with legal and regulatory considerations.

**Recommendation LBE 4h**  
***Consider simplifying the base density process for Conservation Subdivision applications (§103-18, G. Required Plans, F. Maximum Density Unit Calculation).***

The Conservation Subdivision permits a desired diversity of housing types, including single family attached / townhomes and multi-family. The current code requires that the applicant prepare a complete conventional subdivision plan (lot layout, road layout, stormwater management, etc.) in order to calculate base density or buildable yield. This process is time consuming for both the Town and applicant. The formula for calculating buildable yield (BY) should be reduced to a simple mathematical formula based on acreage minus constrained areas, a percentage for roads and utility infrastructure, stormwater management x permitted density (units per acre).

The requirement to prepare a complete subdivision plan with requisite lot areas and dimensions should be eliminated. With a more efficient formula, the Planning Board and developer can focus their time and efforts on evaluating the open space and conservation benefits provided by the conservation subdivision layout. The applicant could be given the option to use the simplified calculation method or prepare the conventional subdivision plan at their discretion.



### **Recommendation LBE 4i**

***Consider modifications to §128-51 Incentive Zoning to clarify the value of incentives (additional units) and identified benefits.***

This section of the code offers density units incentives for conservation of Open Space (Tier 1: 40% or 50%) proposed in conservation subdivisions. Additional density incentives (Tier 2) are offered for dedication of land for public use. Inclusion of affordable housing can achieve additional density. To arrive at the total permitted density the Planning Board analyzes the proposed project against the Findings, §128-51, F (1-6). The value of the additional units allowed vs. the benefit (historic, natural resource, recreation, etc.) offered is a discretionary consideration by the Planning Board. The Planning Board would be well served with guidelines that assign density incentives according to the relevant value of anticipated benefits (recreational, historic, ecological, agricultural, etc.).

### **Recommendation LBE 4j**

***Consider modifying all major subdivisions be submitted as Conservation Subdivision.***

Single family detached subdivisions built to a density of 3 units per acre with a standard minimum lot size and requiring dedicated public infrastructure (streets and utilities) offer no economic benefit (tax revenue) to the town. As documented, single family housing costs more in public services than the tax revenues collected (source; Albany County Farm & Open Space Plan).

The current conservation subdivision regulations are applied to lands currently zoned to allow 3 dwelling units per acre. As a result, the conservation layout is not widely different than what is achieved through a conventional layout. Conservation subdivisions work best when applied to lands with low density zoning such as 1 to 5 acre minimum lot size. Once applied, an alternate conservation layout protects significant environmental resources and provide open space, while clustering development to a portion of the site. Under the current base zoning density, the cluster areas are not significantly highlighted on the parcel.

A modification to the RA district density would be consistent with goals of this plan primarily focused on achieving more affordable housing, limiting the extension of utility infrastructure and a balanced tax base. This modification would be paired with changes to incentive zoning provisions, perhaps allowing increased density based on a range of conservation values provided (historic, recreation, natural resource, ecological, etc.) and affordable housing thresholds. A provision for a waiver to a conservation subdivision would be appropriate should a site be unable to accommodate a conservation layout.

### **Recommendation LBE 4k**

***Apply a ratio of unconstrained lands and constrained lands within the conservation subdivision open space areas.***

Recent experiences with the required open space in conservation subdivisions has identified a trend in

applicants focusing the open space on constrained lands, which are considered unbuildable. To achieve the expectations of the conservation subdivision in providing useful undeveloped land for open space preservation, recreation, or agricultural purposes allowing up to 20% (for example) constrained lands within the open space. This would be paired with recommendation 4h above. See similar recommendation to be found in Harmony with Nature section.

## **Goal 5**

Facilitate a range of housing types that are affordable to a diverse (including seniors) residential population throughout the town.

### **Recommendation LBE 5a**

***Modify current Incentivize Zoning (voluntary) language §128-51 E(2) (b) regarding median income to be based on Albany MSA area median income (AMI) rather than Town of Bethlehem AMI.***

Bethlehem Zoning Law 128-51 E(2) provides a density unit incentive applied to multifamily developments should a developer propose units to meet affordable housing thresholds. It defines affordable housing to mean a household income which is 80% of the median income of the Town. This 80% threshold is too high to accommodate low to moderate income families to afford to live in the town. The housing community profile identified that current market rate rents are already accommodating households earning 80% of Town median income. Options to address this include applying a lower median income threshold such as those making

less than 60% of the Town median income, or utilizing the Albany MSA Area Median Income at a 60% - 80% threshold. The 60% - 80% threshold level is consistent with other municipalities in the Hudson Valley and would achieve affordable need. Whether single family or multi-family, the relationship (percentage) of affordable units to market rate density within a project should be considered in the context of current market conditions. For example, the current incentive zoning code requires 50% of units to be affordable in order to receive a 20% density increase. This should be studied more closely to understand if this is economically realistic to secure private lending (for example: the 50% of units may be too high to attract a developer to request this incentive). Perhaps an increase to the density unit incentive would also make this option more attractive to developers.

**Recommendation LBE 5b**  
*Undertake a housing needs study to identify strategies to increase the range of housing prices (sale and rental) and affordability for the community to inform an inclusionary housing program.*

This study would seek to:

- establish the base threshold for applicability of requiring affordable housing units (example, 10 or more units)
- establish the density incentives based on affordable units provided
- establish the percentage (%) of AMI standard for residents of affordable units
- establish thresholds and policies for 'inclusionary housing'

**Recommendation LBE 5c**  
*Ensure (via Incentive Zoning) that affordable residential units (including senior housing) are integrated with market rate and encourage the distribution of units within all hamlets of the town to create inclusionary neighborhoods.*

Consider incentives for rehabilitation of existing (historic, vacant and/or non-residential) buildings for affordable housing. Incentivize infill development to provide a mix of housing units by modifying flexibility in lot size and unit size as recommended above. Balance housing diversity with appropriate consideration of adjacent neighborhood context for scale and mass.

Further, the use of Planned Development District and Planned Hamlet Districts could serve as a tool to achieve affordable units since these development projects request zone changes from the Town Board. A percentage of units could be required to meet affordable housing thresholds, potentially with the use of incentives.



# Transportation / Infrastructure

## Goal 6

Align complete street and land use policies to accommodate all modes of travel comfortably throughout the town.

### Recommendation LBE 6a

#### *Update the Town Complete Streets Resolution.*

The Town’s Complete Streets Resolution was adopted in 2009 to provide guidance on pedestrian, bicyclist, and transit improvements in the Town. Since that time, the NYSDOT has prepared model complete streets guidance that should be used to update the Town’s resolution. This plan presents goals of increasing land use density and diversity within the established hamlet areas of the town. The goals of the complete street resolution remain relevant. Several of the Towns’ hamlet areas are located along Albany County

(AC) and NY State routes (NYSDOT). The town should continue their efforts of working with AC and NYSDOT to communicate the areas of town where complete street improvements are anticipated and identified in the capital improvement program (CIP). Complete streets improvements should also be applied to Town roads during annual maintenance.

Additional complete streets guidance is provided by NACTO (National Association of City Transportation Officials), ITE (Institute of Transportation Engineers, and ULI (Urban Land Institute). (See also, CDTC Complete Streets Resources: [www.cdcmpo.org](http://www.cdcmpo.org)) These resources provide multimodal and active transportation alternatives for various street types (urban, suburban, and rural) found in the Town.

### Recommendation LBE 6b

#### *Consider modifications to the Incentive Zoning section to recognize complete streets improvements as a public benefit.*

The hamlet areas of the Town are best supported by land use density and diversity. To achieve a functional and efficient, and less car dependent transportation system within the hamlet areas complete streets improvements are needed. Further evaluate incentives (density) within the hamlet areas offered for complete streets improvements (benefit), in the form of financial contributions or actual construction of improvements.

It has been stated previously that the ‘value’ of incentives and benefits outlined in Incentive Zoning (§128-51) should be defined to ensure clarity and consistency of outcomes. Incentives do apply to multi-family projects; however, the provision does not currently address mixed-use diversity (vertical). Complete street improvement (construction or contribution toward) should be considered a public benefit.



### Goal 7

Continue increasing active transportation and recreation options in town by expanding the sidewalk and trail infrastructure to provide a complete, safe active transportation network, prioritizing connections from residential areas to local destinations for pedestrians and cyclists.

#### Recommendation LBE 7a

*Prepare an 'active transportation plan' building on the Town's recently updated Bicycle and Pedestrian Priority Network, the ADA Transition Plan and related documents.*

An active transportation plan (ATP) will examine all modes of travel across the town and within individual hamlets. Funding for an

ATP is typically available through the local MPO (CDTC). The plan will;

- Define comfort hierarchy (cyclists and pedestrians)
- Curb lane management
- Include universal design standards to promote accessibility for users of all abilities
- Define key origins and destinations and connect comfortably
- Examine human scale design factors that contribute to walkable environment
- Review the land uses that contribute to street activity
- Identify streets for Complete Street improvements

- Identify corridors / districts where right-of-way acquisition is needed to implement improvements.
- Identify areas to construct new sidewalks, trails, bike facilities
- Inform maintenance of existing sidewalks and trails
- Plan recommendations shall be used as criteria in site plan / subdivision review of proposed projects.
- Identify funding sources and prioritize improvement recommendations

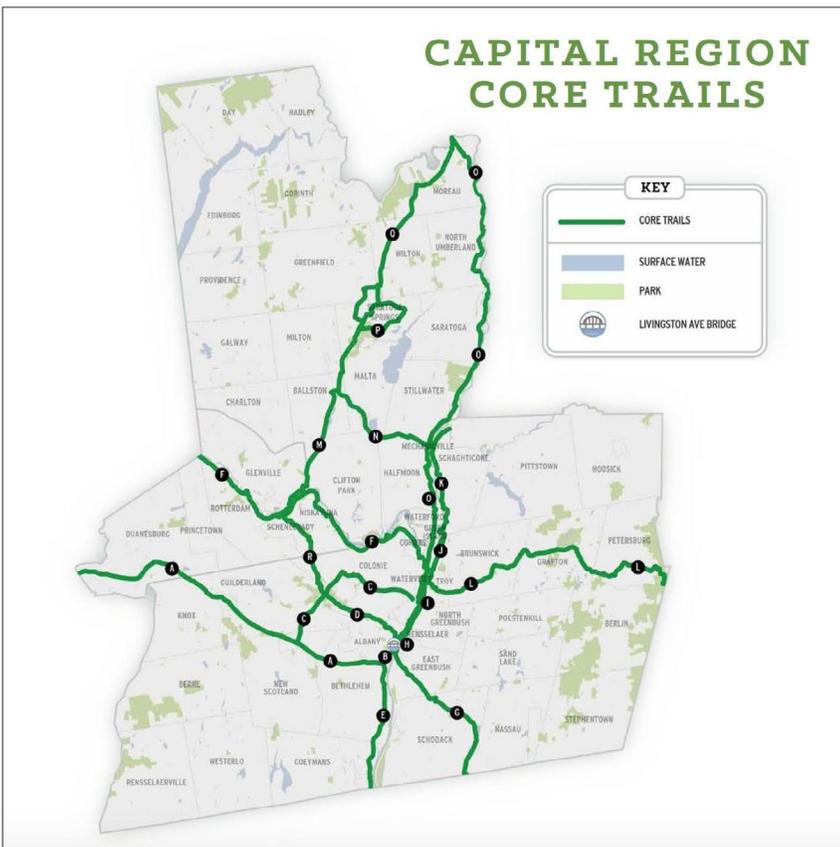
The ATP could include parking analysis (code requirements, capacity and utilization rates, dimensional requirements) and outline Transportation Demand Management (TDM) strategies. This type of study is referred to as a Mobility and Parking Study or Access, Parking & Mobility.

An ATP should include the resources in the 'Evaluation Process to New Pathway Investment; Procedures Manual / Users Guide (October 2010) as well as the ADA Transition Plan (May 2018)

#### Recommendation LBE 7b

*Map connections from Bethlehem to regional active transportation networks (streets and trails) in an effort to encourage commuting (inbound & outbound) and recreation travel.*

Many Bethlehem residents currently commute out of Town to the City of Albany and other adjacent communities. This plan advocates for more active transportation by bike and walking which includes



mapping and sharing multimodal routes and trail connections to adjacent communities. One mechanism is to collaborate with the CDTC (MPO) Capital District Trails Plan to ensure all Bethlehem routes are mapped.

### **Recommendation LBE 7c**

***Explore and employ traffic calming measures along town streets to reduce vehicular speeds and improve public safety.***

Residents noted the concern of vehicle speeding in neighborhoods and across the town. There are different traffic calming and intersection safety improvements based on the street hierarchy. In addition to the use of speed radar signs as a traffic calming tool, currently used, the Town should implement an approach to employ physical traffic calming measures, such as dips, raised speed tables, pavement murals, chicanes, curbing, street trees, and neighborhood traffic circles, etc., where applicable. Pilot projects on Town roads may be useful to evaluate the performance of these traffic calming tools before



their use is widely applied across the Town.

Consider education and outreach strategies (social media, public service announcements, etc.) to address driver behaviors. These strategies should recognize the importance of slower travel speeds for the safety of all user (drivers, bicyclists, pedestrians, and transit).

### **Recommendation LBE 7d**

***Continue to use the 'Evaluation Process for New Pathway Investment; Procedures Manual / Users Guide.***

The evaluation process provides a cost to benefit analysis that helps provide a ranking of multiple new pathway projects. The continued use of the evaluation process serves as an information tool for the Town when considering the construction of new sidewalks and paths.

## **Goal 8**

Optimize building density within hamlets and along the Town's principal roadways, where utility infrastructure exists and that have or could support public transit bus routes.

### **Recommendation LBE 8a**

***Increase land use diversity and density in the hamlet areas that are currently served by public utilities, on current CDTA transit route and / or have sidewalks.***

The town of Bethlehem, like all communities in America, has experienced the social and economic shifts resulting from the Covid-19 pandemic. Prior to that, the nation experienced

demographic shifts to urban areas (cities, villages and hamlets). Today's economy is based on placemaking and the overall experience of working, living, shopping, leisure activities and finding services (i.e., education and health care) all in close proximity. People are seeking the locations that offer the concentrations of all daily activities. People are seeking to live where human diversity exists including race, gender identity, economic status, and diverse abilities.

The current hamlet areas in the town allow a maximum density of 8 units per acre. Consideration should be given to a density increase of up to 15 units per acre, and tied to a minimum required commercial space. An example of these regulations are found in the Planned Hamlet District standards, which seeks to provide for mixed residential and commercial uses in a compact hamlet-like setting that encourages pedestrian activity using traditional hamlet design principals. The incentive zoning provisions could be applied to the hamlet areas to achieve additional benefits such as affordable housing. Buildings in hamlets could be built to several stories in order to achieve a mix of uses including residential above commercial as well as density and affordability.

Town residents have expressed the need for public transit to underserved areas of the town. The CDTA has been deliberate in identifying the criteria for ridership volumes required to expand the system to include new routes or to add frequency of service along existing routes. This plan's goals of increase land use diversity

and density within hamlet areas, specifically located along existing transit routes, will help ensure improved transit service in town.

This could be applied to the Delaware Avenue, New Scotland Road, and Route 9W corridors of the Town.

A form-based code with design guidelines will offer strategies to balance density, a concentration of diverse land uses and neighborhood scale and character.

**Recommendation LBE 8b**  
*Evaluate the potential for an intra-town transit between all hamlets, serving the transportation needs of underserved residents and businesses.*

The CDTA transit service does not reach significant portions of the town. The Town (Planning and Highway Departments) should remain in routine contact with the CDTA as they expand their Flex Transportation Program in an effort to attract the service to Bethlehem. The Flex Transportation Program

provides customers with on-demand pickup at their home to specific destinations in the Region. Bethlehem is currently not in the service zones but residents would benefit from CDTA’s expansion of the service zone within the Town.

Further, the Town should explore the feasibility of expanding the Town’s senior transportation service to provide intra-town mobility. The current senior transportation service is staffed by volunteers. The assessment will need to consider the resource (staffing and funding) implications as part of a cost – benefit analysis. The assessment should further consider strategies for autonomous vehicle transportation as part of intra-town and regional transportation network in the near future.

**Goal 9**

Endeavor to shift away from the car culture and shorten total vehicle miles traveled (VMT) by residents and visitors for work, education, shopping and leisure activities.

**Recommendation LBE 9a**  
*Commit financial resources and formalize capital planning for transportation infrastructure improvements and maintenance programs including those for alternative modes of transportation / travel.*

To shift away from ‘car culture’ provide residents the facilities to use as alternatives to driving, such as new and improved sidewalks, multi-use paths, bicycle lanes, and connections to bus stops. Align maintenance practices including sidewalk plowing and clearing snow from bus stops to keep the route to transit stops accessible.

The assessment of the opportunities and challenge associated with a park and ride lot in Selkirk or South Bethlehem should be conducted in cooperation with CDTA. This effort could reduce vehicle miles traveled for those working outside of Bethlehem.

**Recommendation LBE 9b**  
*Continue to support and formally institutionalize the Town’s internal working group that focuses on transportation planning, implementation, operations and maintenance.*

The Town’s inter-departmental working group include representatives from Public Works, Engineering, Police, Highway, and Planning departments. This multi-disciplinary working group provides various skill sets and approaches to addressing traffic and pedestrian safety issues. Participation by a member of the Bicycle and Pedestrian Committee is valuable to address and understand these issues.



**Recommendation LBE 9c**

***Continue to support the efforts of the Bicycle and Pedestrian Committee.***

The Bicycle and Pedestrian Committee has been the longest standing Committee in the Town since its establishment in 2009, and committed to advancing bicycle and pedestrian mobility for residents. Committee members offer a broad range of mobility backgrounds, experience, and expertise and they should be involved in the Plan's recommendations for advancing mobility and accessibility for users of all abilities.

**Goal 10**

Provide and maintain infrastructure capacity in line with growth demand (streets, sanitary sewer, water, power capacity, broadband).

**Recommendation LBE 10a**

***Ensure the sustainability of the infrastructure systems by continuing to provide adequate financial resources to investigate and document public utility capacity and reliability issues to inform land use planning, economic development, resiliency and emergency preparedness.***

This plan promotes higher density and land use diversity in the areas of Town that are currently supported by public and private utility infrastructure. Understanding and communicating the systems capacities and potential deficiencies to support increased growth is critical to these land use, housing, transportation and economic development goals (tax revenue per

acre increase). Continuous system assessment and interdepartmental communication is critical to achieving these goals.

Additionally, updated infrastructure conditions should be shared with and communicated to the Emergency Management Director to make first responders aware of critical facilities and limit the adverse impacts of cascading system failures during an event(s).

**Recommendation LBE 10b**

***Endeavor to secure documentation (location, capacity, condition and reliability assessment) of private utility infrastructure systems (electric, natural gas, cable, tele-data, fiber optics).***

Private utility systems can be the difference in a community's economic development strategies, emergency management response and even equity and inclusion goals. Like all towns and counties, Bethlehem is crisscrossed with utility transmission corridors (water, gas, fiber, electric) as well as rights-of-way and easements with utilities serving local residents and businesses. The private utility companies have long presented challenges in sharing accurate data on facilities to assist with town planning (land use, operations and emergency management). Town departments, along with colleagues from Albany County and adjacent towns should endeavor to obtain private utility data. Economic development planning also relies on knowing the existing capacity of private utilities when negotiating business opportunities.

**Recommendation LBE 10c**

***Maintain the street width standards for new residential developments and pursue a connected street network with existing streets and to adjacent parcels (developed or undeveloped) for all modes of travel.***

The current 24-ft. wide street width standard is a best practice to influence slower vehicle speeds within neighborhoods. Pursuing connections to existing streets and adjacent parcels provides for adequate circulation, connectivity, emergency access and convenience of movement within and between neighborhoods. Street connections best serve traffic by reducing vehicle concentration on particular neighborhood streets, and dispersing traffic at lower volumes over the entire street network. Roadway connections with existing local residential streets should be assessed based on the context of "livability/community quality" metrics. Transportation guidance metrics can be found in Residential Streets (published by the Urban Land Institute, National Association of Home Builders, American Society of Civil Engineers, and ITE) and ITE's Neighborhood Street Design Guidelines. Impacts to environmental resources could also influence street connections. In certain cases, impacts to environmental resources may be minimized by utilizing pathway connections for pedestrians and bicyclists only where appropriate. Based on the assessment of "livability/community quality" metrics and magnitude of environmental impacts the Planning Board during site plan and/or subdivision review should have the discretionary

authority to determine when a street connection is appropriate.

### **Recommendation LBE 10d**

***Continue assessing the advisability of the collector road extensions, which were noted in the 2005 Comprehensive Plan, when and where development occurs.***

This plan upholds the principles of smart growth and open space protection, and recognizes that additional new road collector extensions and improvements may be needed when and where development occurs. These possible future roads include:

- Selkirk Bypass (Route 9W to NYS Thruway)
- Fisher Blvd. (Delaware Avenue to the Delmar By-Pass Ext.)
- Kimmy Drive (Wemple Road to Elm Avenue)
- Elsmere Avenue Ext. (Feura Bush Road to Kimmy Drive)
- Connector road parallel to the NYS Thruway (Glenmont Road to Wemple Road to Clapper Road)

With residential growth occurring in the Glenmont Area around Feura Bush Road, Wemple Road, and Elm Avenue, and industrial growth occurring along Creble Road transportation planning efforts have focused on evaluating the need for Kimmy Drive, Elsmere Ave. Ext. and Selkirk Bypass collector roads.

### **Selkirk Bypass**

Truck traffic through residential neighborhoods in Selkirk has been a known issue for many years, as noted in public meetings for decades. Planning efforts have

identified a need for a Selkirk Bypass route that would provide a transportation route for truck traffic traveling east-west from the NYS Thruway to Route 9W and Creble Road. This route would relocate truck traffic from Maple Avenue (NYS Rt. 396) in Selkirk to address the quality of life issues experienced by those living along Maple Avenue (addressing a residential – transportation conflict). Balancing the quality of life for residents with the economic development interests (i.e., job creation and tax base diversification) associated with the Selkirk Yards and other industrial areas in the southern part of the Town still requires a resolution, but is an important issue and planning efforts should continue to identify possible pathways and funding sources for such a bypass.

### **Fisher Boulevard and Connector road parallel to the Thruway**

Limited development pressure in the western area of the Town around Fisher Blvd./Delaware Avenue and along the lands bordering the NYS Thruway corridor have not necessitated the need for further study of these collector roads. However, should development pressure increase in these areas of the Town, these collector roads should continue to be considered during the development review process and incorporated into site layout plans.

### **Kimmy Drive**

The Town has been planning for future transportation network additions since the 1990's through different long range planning initiatives as a result of already-occurring and/or anticipated population growth and new development. The Land Use

Management Advisory Committee Study (LUMAC 1994) report identified the need for an additional east west collector road to alleviate future anticipated congestion in Glenmont on Feura Bush Road if there is build out of the area of Town south of Feura Bush Road between Wemple Road and Elm Avenue. A possible new collector road would be called Kimmy Drive and would connect Wemple Road to Elm Avenue. The 2005 Comprehensive Plan recommended the construction of Kimmy Drive if development occurred. The Town should continue to consider the advisability of constructing Kimmy Drive as development pressure occurs in this part of the Town.

### **Elsmere Ave Ext.**

Another possible future roadway is Elsmere Avenue Extension, which would be a north-south collector commencing from the present southern end of Elsmere Avenue at



Feura Bush Road and intersecting with a new Kimmey Drive. The purpose of such an added roadway would be to disperse traffic across a wider network and provide for more neighborhood interconnection in this area of the Town. Kimmey Drive and Elsmere Avenue Extension would help alleviate future capacity limitations on Feura Bush Road, Elsmere Avenue, and Wemple Road, should the presently-undeveloped areas nearby become developed. The construction of Kimmey Drive and Elsmere Avenue Extension would be an alternative to expanding Feura Bush Road, Elsmere Avenue and Wemple Road with additional travel lanes or turn lanes, which could alter their existing character. As with any collector road, planning should not only look at the benefits of connectivity, but also the quantitative and qualitative traffic impacts to the surrounding area.

The Town will conduct or require a traffic analysis of the impact on neighborhood roads before collector roads are approved. The design of collector roads should follow a complete streets approach, including traffic calming elements.

**Recommendation LBE 10e**  
*Evaluate parking regulations in an effort to right size parking requirements in the code for all zoning districts.*

Surface parking limits the developable area of a project and contributes substantially to the heat island affect and the adverse impacts of stormwater runoff. Modifications to off-street parking thresholds (max or min) for various land uses should be based on nationally recognized

standard developed by the Urban Land Institute [ULI] and Institute of Transportation Engineers [ITE]. The town should modify the off-street parking dimensions in the code, as well as the landscaping island requirements for parking fields (islands 15' wide x 20' deep). Parking requirements and dimensional standards could be included in the ATP and Parking & Mobility Plan previously presented.

**Recommendation LBE 10f**  
*Present, explain, promote benefits of Transportation Demand Management (TDM).*

In a car-culture, most trips for work, shopping, services, education and leisure activities use personal vehicles. These vehicles require parking spaces at their destination. Surface parking consumes property that could be devoted to building and amenities. Transportation demand management looks at methods to reduce the number of personal vehicles used and associated parking requirements. Walking, cycling, transit, shuttles, ride share, and various forms of micro-mobility (scooters) are alternatives to using personal vehicles. Even combining trips to accomplish multiple tasks can reduce the need for surface parking. TDM does rely on public transportation as means of reducing personal vehicle use and need for surface parking. This is another reason for concentrating land uses in hamlets of the town where transit service exists or could be expanded with higher concentrations of riders. TDM policies and practices should be coordinated with the CDTA and CDTC.

## Community Character

Community character refers to the distinct identity of a place; what gives a place its character and how can the town discuss character when analyzing potential changes to the physical, natural, and visual environment.

People choose the places to live, start a business and spend their leisure time based, in part, on their perceptions of community character. However, most residents find it challenging to explain specifically which attributes are essential to their understanding of 'sense of place'. Most talk about character in relation to a neighborhood or district. Identifying qualities that contribute to community character can provide Bethlehem town planners, elected officials and boards (i.e., Planning Board, Zoning Board of Appeals) with a common language to understand and analyze the physical, natural and visual characteristics of a corridor, neighborhood or district during the development review process (housing, commercial, infrastructure). While community change is inevitable, not all changes may negatively impact character. Some may enhance or complement the existing character. For those changes that have the potential to affect character, it is important to minimize any negative impacts and enhance character where possible.

Design professionals (planners, landscape architects, engineers and architects) present the concepts of community character in terms of the natural environment and the physical built form of a community including land use patterns, style of buildings, streets and infrastructure. A person's overall perception of the surrounding environment includes their sensory experience (appearance, smell, feeling, hearing) as well as an emotional response or attachment to certain elements or to the whole. People may associate a "sense of place," which can be thought of as the spirit or personality of a place, with a particular locations based on the unique combination of physical, natural, and visual elements and the overall sensory and emotional experience they produce.

The average citizen may attribute demographics (age, sex, race) and economic status (education, income) as traits of community character, sometimes on an intuitive level. During the discussion of community character, design professionals usually don't evaluate these traits because of their potential discriminatory nature. Demographics and economic status

are less meaningful in determining the character of a place. This Comprehensive Plan's vision for the Town reflects the community's value of diversity.

Generally, the objective characteristics that contribute to the perception of community character can be grouped into the following categories; built form (physical), natural systems (environmental) and visual environment.

### Built Form

The built form of the Town refers to the attributes of development typically considered by the Town Planning Board and Zoning Board of Appeals for subdivision and site plan approval. Understanding the neighborhood or district context to which development or infrastructure projects are proposed is essential. Attributes considered include uses, street hierarchy, block lengths, lot sizes, buildings and related man-made features. The attributes of the built environment tell us intuitively if places are public or private, intended for large numbers of people (residents, workers and visitors) or

just a few, whether it is comfortable and convenient to walk between destinations or if it requires a vehicle and whether there are spaces for people to gather and socialize.

From the standpoint of the built form the key attributes to people’s perception of community character include:

- Type of land use
- Heights and widths of buildings in proportion to street width (distance between facing buildings)
- Architectural features
- The distance from building front to the street edge
- The distance between buildings on the same side of the street
- The distance between parallel and intersecting streets (block length, size)
- Variation in height, massing and configuration
- Connectivity to overall infrastructure system

### Natural Features

The community places significant value on the range and variety of landscapes found across Bethlehem, from urban corridors, to residential neighborhoods to the rural countryside. As presented in the Community Profile and in the context of community character, natural features (or systems) refer to:

- topography
- vegetation (farms, fields, forests)
- water bodies and water courses
- wildlife habitat

### Visual Environment

Peoples understanding of the different places or areas in Town is largely based on the physical and natural elements present along public streets and trail corridors. The order and type of elements provide cognitive clues to where one is at a given point in time and help set a person’s expectations about that area. The environment

changes as you move through and across the town; from corridors (streets) with curbs, sidewalks, street trees, lighting, a variety of buildings and uses (i.e., Route 9W and Delaware Avenue) to residential neighborhoods and farmland to natural, undeveloped areas. The Town of Bethlehem has a vast diversity of landscapes and place experiences; attributes noted by many town residents and business owners.

The presence (or absence) of certain features or elements of the visual environment can influence people’s perceptions or feelings of the area: comfort, excitement, safety, etc. Typical elements of the built environment that influence peoples

**People choose the places to live, start a business and spend their leisure time based, in part, on their perceptions of community character.**



understanding of where they are and the quality of their experience include (no particular order):

- Sidewalks
- Street trees
- Light poles
- Signage
- Building location, order and orientation
- Building size, bulk, age, maintenance and style
- Architectural features
- Parking location and quantity
- Outside storage
- Landscape plantings, furniture and fencing
- Repetition of features along a corridor or over a particular area
- Range of variation in features within a corridor or area (homogeneity vs heterogeneity)

In hamlets and urban corridors, all of these elements (and more) contribute to a strong “sense of place” in environment. As we move toward rural and undeveloped areas, fewer of these elements may be present and spread further apart as farms, fields and forest patches are more abundant. In those areas, those elements contribute to a strong “sense of place.”

As development projects are considered, a viewshed analysis accompanied by a visual impact assessment could be prepared. As a highly visual culture, the visual aspects of a neighborhood or district are more commonly discussed than other sensory aspects. A viewshed analysis defines the area a project can be seen from. Typically, the

area a project can be seen from is determined by topography, vegetation and other built and natural features. A visual impact assessment analyzes the positive and negative attributes of a project as seen (experienced) from street and trail corridors, neighborhoods, public parks and waterways. The Planning Board can seek ways to mitigate negative elements of a project through improved design configuration and potentially buffering. Typical features to be mitigated include (but is not limited to);

- Parking (locate in side and rear yards)
- Loading areas
- Dumpsters and utility equipment
- Roof top utilities
- Outside storage of vehicles, equipment and materials
- Excessive and out of scale signage.

## Summary

The measure of built form, natural features and visual environmental presented here are those which typically exert objective influence over perception of community character. Through the value statements the community has identified the attributes to retain and those that should change in the coming years. Change is not inherently negative and multiple changes have been presented as desired to achieve the Vision of this Plan. When considering new development proposals and infrastructure projects, a desired outcome should be to retain neighborhood character features

while integrating new development related to the other desired outcomes of the Plan. Land use boards should rely upon appropriate mitigation measures reflecting on character to accommodate the integration of new development. The boards should keep in mind existing variation in neighborhood physical, natural and visual features and use discretion when applying mitigation as necessary (some change may not rise to the level of needing mitigation).

## Harmony with Nature

Ensure that the contributions of natural resources to human well-being are explicitly recognized and valued and that maintaining their health is a primary objective.

### Value Statement E1

We value our vast natural resource systems and open spaces that provide benefits including wildlife habitat, ecosystem services that provide clean air and water, and inherent natural beauty and scenic value within our community.

### Value Statement E2

We value being on the forefront of sustainability by addressing climate change through renewable energy, energy efficiency, a just transition off fossil fuels, electrification, waste reduction and prevention of greenhouse gas emissions.

### Value Statement E3

We value active agricultural businesses and farmland supplying local food and products.

### Value Statement E4

We value a resilient natural, built, and economic environment that can endure, adapt, and rebound from catastrophic natural and other events.

### Goal 1

Maintain and enhance biodiversity and wildlife habitat.

**Recommendation HWN 1a**  
*Continue to support the position of Open Space Coordinator in the Department of Economic Development & Planning.*

This position has led to the development and implementation of many successful conservation programs for the Town of Bethlehem. The position has led to greater understanding of the towns' natural systems and agricultural businesses. Further, this position is responsible for collaboration with a wide range of organizations and agencies involved in the management and education of best practices for agriculture (as lifestyle and business), and critical natural environmental systems. There are clear synergies and overlapping aspects of open space conservation and sustainability. As the state and local environmental groups focus on long term sustainability and resiliency plans, there may be an opportunity to expand the part-time position to full-time with the addition of sustainability initiatives.

### Recommendation HWN 1b

*Develop a strategic approach to further the conservation of natural resources, wildlife and habitats by utilizing the NYSDEC Habitat Summary, Bethlehem Open Space Plan Conservation Criteria, the Town Local Waterfront Revitalization Program (LWRP), and this plan's Community Profile natural environment information.*

The four documents listed above provide a wealth of information to help inform and support the conservation of natural resources and habitat found within the Town. Three significant climate hazards are expected to affect residents now and in the future: increasing temperatures, rising sea level, and changing precipitation patterns. Conservation of natural resources will help to mitigate impacts from these hazards.

Consider a multi-pronged approach that could include evaluating:

1. Freshwater wetlands regulations found in Town Code Chapter 72. Town regulations currently apply to mapped wetlands designated on the NYS Freshwater Wetlands Maps pursuant to the NYS Environmental

Conservation Law, which haven't been updated since 1980. Expanding local regulations to be applicable to include all wetland complexes greater than 12.4 acres, wetland buffers for all NYSDEC and federal jurisdictional wetlands, and/ or isolated wetlands (including vernal pools) are options to be considered. The Town should evaluate and consider adopting regulations for wetlands 12.4 acres and smaller.

Wetlands and their buffers help to mitigate flooding during storm events. The function and quality (value) of the wetland is an important element in determining the allowance and extent of impacts and appropriate mitigation. Regulations to conserve wetlands could focus on their value.

- 2. Regulations associated with the development and land disturbance associated with lots bordering streams. Zoning Law 128-52 currently restricts the issuance of a building permit within 100-feet of the bank or one-hundred-year

flood zone of the Normans, Vloman, Onesquethaw, Phillipin, and Dowers Kill (portion) streams. Further, Zoning Law 128-49 requires a grading, erosion and sediment control permit for certain land disturbances of these same streams.

Modifications could apply to all NYSDEC classified streams and buffer regulations could be dependent on the stream classification (AA, A, B, C) and standard (T, TS). Examples to determine buffer distance could include topography, vegetation, soil characteristics, etc. rather than a fixed distance. Extended buffers provide a variety of wildlife habitat (include wildlife corridors) in addition to their role in filtering contaminants from runoff, holding floodwaters, and/or reducing the potential for erosion or landslides.

Land disturbances associated with agricultural activity are currently exempt from a grading permit, and should continue to be exempt. However, further refinement of activities

classified as agriculture and prohibited activities should be considered.

- 3. Regulations associated with tree removal along streams, rivers and on steep slopes. The Town's current regulations address erosion and sediment control associated with tree removal in an effort to avoid sediment spreading to streams, slope failure, and flood control but does not consider the wildlife habitat benefits and carbon sequestration trees provide to the community. Limiting tree removal along streams (slopes and non-slopes) also protects water quality, limits downstream flooding, and provides greater variety of habitats and thus the biodiversity of aquatic and riparian wildlife. Regulations to consider, but not limited to, include definition of tree removal, quantity, area of disturbance, and tree species and condition/health.
- 4. The NYSDEC Habitat Summary for Bethlehem and the Town Local Waterfront Revitalization Program identify significant



ecological features and biodiversity areas located in the Town, such as the Hudson Valley Limestone and Shale area and Upper Hudson River area, as well as important areas for rare plants and animals. Potential impacts to these areas should be evaluated during the development review process (site plan and subdivision). Additionally, the Town should implement habitat protective measures and restoration activities identified in the LWRP, including the Binnen Kill shallow water habitat. Likewise, the Town should take actions to protect the two State-designated "Significant Coastal Fish and Wildlife Habitats" along Bethlehem's Hudson River waterfront: the lower Normanskill Creek and Shad and Schermerhorn Islands.

5. Incentives associated with maintaining trees on private property, which would help to prevent habitat loss and erosion, stabilization of soils, stormwater management, temperature moderation, CO2 sequestration, and air quality benefits.



Available Town staffing resources and expertise (i.e., wetland biologist) should be considered in the implementation of new regulations that would result in permitting/waiver process, administration, and enforcement for wetlands and watercourse protection measures. This position could be combined with the Open Space Coordinator role presented in HWN 1a.

**Additional Resources:**

*Conservation & Land Use Program for the Hudson River Estuary Watershed* <https://www.dec.ny.gov/lands/5094.html>

*Conservation Planning in the Hudson River Estuary Watershed* <https://hudson.dnr.cals.cornell.edu/>

*NYS DOS Model Local Laws to Increase Resilience* <https://dos.ny.gov/model-local-laws-increase-resilience>

**Recommendation HWN 1c**  
**Assess the use of Environmental Protection Overlay Districts, Critical Environmental Areas, and resource specific regulations.**

Each of these three regulatory tools offer their own application and administration measures, which should be evaluated when considering recommendation HWN 1b.



Environmental Protection Overlay Districts (EPODs) are designed to protect environmentally sensitive areas and resources such as wetlands, threatened or endangered vegetation or wildlife habitats, farmland/agriculture soils, significant trees or vegetation, and areas of steep slope. These districts are further intended to ensure that new development does not result in the destruction of those resources during site preparation and the development process.

Critical Environmental Areas (CEAs) are areas in the State which have been designated by a local or state agency as having one or more of the following characteristics:

- A feature that is a benefit or threat to human health;
- An exceptional or unique natural setting;
- An exceptional or unique social, historic, archaeological, recreational, or educational value; or
- An inherent ecological, geological, or hydrological sensitivity to change that maybe adversely affected by any physical disturbance.

Once a CEA has been designated, potential impacts on the characteristics of that CEA become relevant areas of concern that warrant specific, articulated consideration under the State's SEQRA process for determining the significance of any Type I or Unlisted actions that may affect the CEA.

### **Recommendations HWN 1d**

#### ***Apply greater focus on the conservation of natural resources during the development review process through use of the Open Space Plan's Conservation Criteria.***

The Town should consider establishing a Conservation Advisory Council (CAC), per NYS General Municipal Law, similar to many communities in the Hudson River Valley.

Current conservation programs administered by the Town and other regional conservation organizations are continuously working to preserve natural resources deemed critical to the town and broader community within the Hudson River watershed. The Open Space Plan's Conservation Criteria have defined those areas of town most critical for conservation.

Use of the conservation criteria could be applied to the review of development applications to highlight natural resources found on proposed development parcels. An applicant's initial submittal to the Planning Board could include a presentation of the existing conditions found on the property (focusing on natural resources) prior to undertaking a detailed site layout plan. The presentation could discuss the proposed land use desired (residential, commercial, industrial) as well as desired outcomes for the project including areas on the property where development should be avoided and applicable development options (incentives, clustering, etc). This presentation of existing conditions could also be initiated during the Development Planning Committee meeting

(Zoning Law 128-70 A Pre-Application Conference). A desired outcome would be the preservation of contiguous areas of open space (fields, forest lands, waterbodies, streams, wetlands, etc.) for wildlife habitat.

An alternative implementation approach could be the adoption of the NYSDEC Habitat Summary, Bethlehem Open Space Plan Conservation Criteria, and this plan's Community Profile natural environment as the Town's Natural Resource Inventory (NRI). The NRI could be integrated into the Town's decision-making procedures, such as during the development review process.

Site design associated with land disturbance should be sensitive to the existing site characteristics. Retention of trees during site design is important.

### **Recommendation HWN 1e**

#### ***Apply the State sea-level rise predictions developed through the NYS Community Risk and Resiliency Act for proposed developments and infrastructure along the Hudson River and its tributaries. Site Plan and Subdivision regulations can address resiliency to sea level rise during the review process.***

The 100-year floodplain along the Hudson River shoreline, including its tributaries are projected to be impacted by the effects of climate change, particularly sea level rise. According to New York State Department of Environmental Conservation sea-level rise projections; by 2050 (less than 30 years away) river levels are likely to rise between 5" and 27". At 32"

of sea level rise by the end of the century (or event up to 71 inches) according to the official projections. According to the Bethlehem LWRP, the southeastern portion of the Town adjacent to the Hudson are vulnerable to projected sea level rise, including the Binnen Kill area, Henry Hudson Park, Town's wastewater treatment plant, and production wells along the Hudson River.

Elsewhere in Town, climate change is expected to affect precipitation events and result in higher temperatures, impacting drainage and other infrastructure. According to the Bethlehem LWRP, in the northeastern area adjacent to the Hudson, land along the Cabbage Island shoreline (both Normans Kill and Hudson River), Beacon Harbor shoreline and a substantial portion of the industrial property are vulnerable to the projected sea level rise. Comparatively, the NYSDOS Risk Assessment Tool utilizing floodplain boundaries identified a land area of greater extent vulnerable to flooding. For example, the land area bounded by Smultz Road, River Road, the Town boundary, and Hudson River are vulnerable to flooding based on the Risk Assessment Tool, while most of this entire area is not vulnerable to the projected sea level rise.



An update to the Town Site Plan and Subdivision regulations would address resiliency to sea level rise during the review process. The Town should review the State's flood risk management guidance developed as a result of the State Community Risk and Resiliency Act (CRRA) and implement relevant aspects in Town code. Also, the Town should review model local laws, including the Wetland and Watercourse Protection Measures, developed by the New York State Department of State to enhance natural resiliency and implement relevant aspects in Town code.

#### **Recommendation HWN 1f**

***Assess the various sustainability programs offered by New York State for funding opportunities to reduce greenhouse gas emission and adapt to climate change.***

The Town is signatory to the NYSDEC Climate Smart Communities and a NYSERDA certified Clean Energy Community. These State programs offer funding for planning and projects that reduce municipal greenhouse gas emissions and address climate change adaptation.

#### **Recommendation HWN 1g**

***Continue to support the position and responsibilities of the Storm Water Management Coordinator to help ensure water quality protection of Town's watershed areas. Encourage use of green infrastructure practices in both municipal construction and private development projects.***

Stormwater management addresses stormwater runoff, which is water from rain or melting snow that

doesn't soak into the ground, but runs off into waterways picking up pollutants as it flows from rooftops, over paved areas, through sloped lawns, and over bare soil. The 2005 Comprehensive Plan recommended the development of a stormwater management program to implement requirements of the Federal Clean Water Act. Over 15 years later, the Town's program is well established in addressing stormwater quality and quantity control. These measures help to mitigate flooding potential and contamination of critical habitat from runoff.

Green infrastructure practices should be the Town's preferred approach. Green infrastructure consists of stormwater management practices that result in stormwater runoff reduction and or establishment of habitat areas with significant utilization of soils, vegetation, and engineered media rather than traditional hardscape collection, conveyance and storage structures. Some examples include green roofs, trees and tree boxes, pervious pavement, rain gardens, vegetated swales, planters, reforestation, and protection and enhancement of riparian buffers and floodplains.

#### **Recommendation HWN 1h**

***Continue to participate as member of Albany County Stormwater Coalition to locally collaborate on stormwater management best practices.***

The Stormwater Coalition of Albany County is comprised of 11 municipalities and the University at Albany with each Coalition member providing mutual support and assistance in implementing

stormwater management (MS4 Permit) requirements. The coalition members work to implement Clean Water mandates collaboratively, and the Town's membership has proven valuable during federal and state audits of the Town's stormwater management program.

## **Goal 2**

Protect and conserve agricultural soils for current and future food production and agriculture business opportunities.

For the purposes of this plan agricultural soils referred to herein are 'prime soils' and 'soils of statewide importance' as defined by the US Department of Agriculture (USDA) Natural Resource Conservation Service, <https://websoilsurvey.nrcs.usda.gov/app/>

#### **Recommendation HWN 2a**

***Encourage the conservation of agricultural soils by promoting participation in the Farms and Forests Conservation Program***



The Farms and Forests Conservation Program utilizes the Conservation Easement Exemption, and Farms and Forests Fund as financial tools for the conservation of farms and forests, fields on a voluntary basis with landowners.

The Conservation Easement Exemption Program provides financial incentives for interested landowners through a property exemption of 50% to 90% based on the conservation time commitment (15years +). The tax exemption currently applies to Town and Albany County taxes, as well as Bethlehem Central School District taxes. The Town should support the Town of Guilderland’s recent efforts for participation by the Guilderland School District since only a small portion of Bethlehem is located in the Guilderland School District. Further, the Town should engage the Ravena Coeymans Selkirk (RCS) school district to participate in the program so property tax reduction would be realized by landowners in the RCS school district. The majority

of undeveloped land in the Town is located in the south, within the RCS school district.

The Farms and Forests Fund is a monetary account established by the Town for use in the purchase of development rights (PDR) or land acquisition. These funds are expected to be used in partnership from local land conservancies and other state and federal funds. Development rights can be purchased and separated from a landowner’s property (voluntary), while the land remains in private ownership and the landowner is free to use the money as they choose. With the development rights sold, the land can no longer be developed, which allows new farmers (younger generation) to be able to afford the purchase of agricultural lands for a new or expansion agricultural business.

**Recommendation HWN 2b**  
**Consider requiring the use of Conservation Subdivision or Average Density Subdivision**

**provisions when prime farmland soil and soils of statewide importance lands are proposed for conversion to residential use.**

For all major subdivision applications, the town should consider requiring the application of the Conservation Subdivision or Average Density Subdivision. Conventional subdivision may only apply to previously disturbed sites. Determination of the appropriate subdivision type could occur at the Pre-Application Conference.

**Recommendation HWN 2c**  
**Consider amending the code to expand the permitted agricultural uses and agricultural support uses.**

Recommendation 2b of Livable Built Environment considers an amendment to the zoning map which broadens the areas zoned Rural and opportunity for by-right uses. This recommendation considers expanding the specific agricultural use definitions supported by the NYS Department



of Agriculture & Markets. Refer also to Goal 3 and recommendation 3a in Resilient Economy principle. (See Potential Agriculture Uses at end of this section.)

**Recommendation HWN 2d**  
***Support agricultural businesses and owners of vacant open parcels via advocacy for property tax credits and exemptions.***

The Agriculture Business Focus Group discussion identified two limitations of state agricultural tax incentive programs: the Farmer's School Property Tax Credit and Agricultural Assessment Exemption. The Town should work with The Farmer's School Property Tax Credit enables farmers to receive a tax credit from the state personal income tax or the corporation franchise tax to reimburse farmers of some or all of the school district property taxes they pay. However, current Town farmers are not eligible since they don't earn 2/3 of their income from agriculture. Farm families in the Town include a spouse working full-time for health insurance benefits, where this income effects the threshold income criteria. Lowering the 2/3 income level would also help Albany County farmers.

The NYS Agricultural Assessment provides reduced property tax bills for land in agricultural production by limiting the property tax assessment of such land to its prescribed agricultural assessment value. Farmers in town have difficulty achieving the required annual agricultural product gross sales of \$10,000 or more. The gross sales need to be achieved for a period of 2 years for the land to be eligible.

Reducing the timeframe may also reach a greater number of farms meeting eligibility for the agricultural assessment exemption.

The Town should work with farm advocacy organizations, such as NY Farm Bureau, and local State elected officials in the Senate and House to support lowering the 2/3 income level and annual gross sales limits.

**Recommendation HWN 2e**  
***Consider establishing an Agricultural Advisory Committee.***

An Agriculture Advisory Committee could provide guidance to town boards regarding agriculture and agri-business issues. The Committee could also assist in educating new generations of farming as a career path, attract ag-entrepreneurs to Bethlehem through farmer/landowner match programs, and provide assistance with creating Community Supported Agriculture (CSAs), agri-hoods, and other initiatives that support agriculture in the Town.

**Recommendation HWN 2f**  
***Continue to support the weekly farmers markets in the Town.***

The farmer's markets in the Town (First United Methodists Church Farmers Market - Tuesdays, and Delmar Farmers Market - Saturdays) are an economic benefit to the local economy, provides direct-to-consumer sales, and ensures the viability of local food farming. The markets help serve as an incubator to test new products grown and raised locally. Town facilities such as Elm Avenue Town Park should be considered a viable location for a farmers market during times

of emergency (e.g. when school property is not available).

## Goal 3

Decarbonize our energy system by means of; Renewable Sources, Electrification, Energy Efficiency (reduce consumption) and Carbon Sequestration.

### Implementation

**Recommendation HWN 3a**  
***Establish a Sustainability Committee and Coordinator to focus on climate change mitigation and sustainability.***

A sustainability committee could comprise of Town officials, staff and residents in reviewing and considering local climate change mitigation measures and seeking funding opportunities. The Committee can also conduct education and outreach on various sustainability measures such as avoiding pesticide use, encouraging use of electric power outdoor equipment, encourage reduced plug loads, and encourage reduced vehicle miles traveled. The committee should periodically conduct a new greenhouse gas emissions (GHG) inventory and identify new significant sources of carbon emissions and techniques for reducing these emissions. A comparative example is the Bicycle and Pedestrian Committee's efforts on pedestrian safety and complete streets projects.

A Sustainability Coordinator staff position could also serve as the Town staff liaison to the Committee and coordinate efforts with other Town departments. This could

be achieved by creating a new position or expanding the role and responsibilities of the Open Space Coordinator.

## Electrification

### **Recommendation HWN 3b** *Transition from fossil fuels to electrification in the building sector.*

Heating, ventilation, and air conditioning (HVAC) accounts for 56% of residential energy end use in New York State and 32% of greenhouse gas emissions. Changing over to the use of all electric appliances and services, including HVAC and cooking in new building will reduce and eventually eliminate carbon emissions. Electrification is being planned across New York State through the Climate Leadership and Community Protection Act. Electrification should initially apply to new building construction, with subsequent phasing-in to renovations, and existing buildings.



Prohibiting the extension of natural gas utility to new residential and commercial developments and utility hookups and/or storage of natural gas, propane, and oil is an effective way to decarbonize New York buildings by requiring the use of all electric appliances and services, including HVAC and cooking, at new buildings.

Heat pumps are a replacement for standard HVAC equipment, and can, on average, reduce GHG emissions in New York by 17% with current energy sources. Once electricity is produced entirely from renewable sources, heat pumps will reduce HVAC GHG emissions in New York by 84% compared to today's emissions.

### **Recommendation HWN 3c** *Provide electric vehicle charging capability at residential properties and encourage adoption of electric vehicles.*

The recent NYS Law (Chapter 423 of 2021) requires the sale of new passenger vehicles to be zero emission by 2035, which will lead to a greater purchase of electric vehicles in the region. The inclusion of electric vehicle (EV) charging infrastructure within single- and multifamily residential construction will lower the barrier to owning an electric vehicle for Town residents. Currently, 80% of all EV's are charged at home but EV charging does not exist at the majority of residential and multifamily properties and retrofitting properties is more expensive than incorporating EV readiness into the initial design and construction.

The Sustainability Committee could serve as an advisory body on education and outreach for the promotion of electric vehicles.

### **Recommendation HWN 3d** *Provide electric vehicle charging stations at public facilities.*

Future vehicle trends include a more significant presence of electric vehicles (EV) especially after the recent NYS approved Law (Chapter 423 of 2021) that requires passenger vehicles to be zero emission by 2035. Further, Charge NY a program administered by NYSERDA encourages the use of more electric cars and trucks through rebates, incentives, tax credits and assistance with infrastructure installation. As a result, it is expected that the demand for EV charging stations will grow and the Town should continue to support and encourage private charging station installations at publicly accessible business locations such as restaurants and shopping centers, and provide charging stations at municipal facilities. Charge ports are currently located at Town Hall, Elm Ave Town Park, and Adams Street municipal parking lot. In the future, the Town should consider providing new or upgrading existing charging stations to DC fast charging stations as demand increases.

### **Recommendation HWN 3e** *Commit to transition the Town's light-duty vehicle fleet to electric vehicles (EV's) by 2030. Also consider conversion of the heavy duty fleet, where possible.*

The Town's vehicle fleet includes: passenger vehicles, light and heavy-duty trucks as well as heavy

equipment for use by the Police Department, Parks Department, Highway Department, and Public Works. As these vehicles are in need of replacement, the purchase of an electric vehicle rather than a gas-powered vehicle should be considered a priority.

For light-duty fleet, the Town should transition to electric by 2030.

For the heavy duty fleet, consideration should be given for these vehicles to meet the various use and intended operations for each Department. Charging infrastructure capabilities will also need to be considered.

**Recommendation HWN 3f**

***Prohibit new or expanded fossil fuel (e.g. gasoline and diesel) dispensing and plan for conversion to electric.***

With the transition to electric vehicles (EV) the need for gas and diesel pumps at gas stations and other retail locations will be reduced, so the construction of new pumps (beyond the repair or upkeep of existing pumps)



will be avoided. Gas stations and other retailers should install fast EV charging stations in place of and/or in addition to existing gas pumps at the time of reconstruction or modification. Other retailers are encouraged to install fast EV charging stations too.

**Renewable Energy Sources**

**Recommendation HWN 3g**

***Advance solar energy with photovoltaics, passive solar energy, and building orientation.***

The site plan and subdivision review process should promote the design and orientation of new buildings to use active and passive solar energy. Neighborhood development design (as permitted by parcel configuration, topography) with the long axis of the rooftop running east-west maximizes solar energy for passive heating and electricity generation. South facing solar panels produce approx. 20% more electricity than east or west facing panels.



New buildings should be designed and constructed for solar photovoltaic panels. Initially, new buildings should, include the conduit for electrical lines from attic to the electrical panel, and roof structure supporting load of solar panels. After that, new buildings should include solar photovoltaic panels and possibly energy storage devices.

Innovations in site layout, building materials, construction practices and sustainable design offer new opportunities to improve the performance of our built environment through passive solar energy design. New homes and commercial buildings can be built that consume far fewer resources, increase productivity for solar energy, and improve human health.

**Recommendation HWN 3h**

***Zone suitable locations for grid-scale renewables (PV solar) and electricity storage***

The Town zoning law currently identifies specific zoning districts where large scale PV solar installations are permitted subject to a set of design standards. An alternative approach is to identify suitable sites for PV solar energy generation and storage based on access, capacity and proximity to transmission lines, while avoiding important natural and historic resources, and focusing on previously-disturbed land first.

**Recommendation HWN 3j**

***Streamline the application review process for rooftop PV solar installations.***

Rooftop PV solar applications should follow NYSERDA's Unified Solar Permit threshold of 25kW system size. After 5 years of Planning Board experience reviewing rooftop PV solar applications it appears these installations have no identified impact on surrounding properties. Streamlining the application review process by following NYSERDA's Unified Solar Permit threshold of 25kW for rooftop installations would remove unnecessary applications to the Planning Board and provide for a more efficient and predictable approval process for owners and the solar installers (administrative review by the Building Dept. only).

### **Recommendation HWN 3i**

#### ***Source renewable electricity for residents.***

In New York, electricity production is responsible for 13% of Greenhouse Gas (GHG) emissions. Replacing the standard utility electricity with renewable energy would eliminate these emissions. Municipalities can source electricity, including renewable electricity, for their residents through a few mechanisms, such as forming a municipal utility, entering into a power purchase agreement (PPA), or entering into a community choice aggregation program (CCA).

For example, according to the USEPA, community choice aggregation, also known as municipal aggregation, are programs that allow local governments to procure power on behalf of their residents, businesses, and municipal accounts from an alternative supplier while still receiving transmission and distribution service from their existing utility provider.

CCAs are an attractive option for communities that want more local control over their electricity sources, more green power than is offered by the default utility, and/or lower electricity prices. By aggregating demand, communities gain leverage to negotiate better rates with competitive suppliers and choose greener power sources.

### **Recommendation HWN 3k**

#### ***Consider incentives for renewable energy use in Town Code.***

The Town Code should be reviewed for incentive opportunities that attract the use of renewable energy sources. Examples may include density bonuses through the Zoning Law and Subdivision Regulations, and reduction of building permit fees through the Building Code.

## **Energy Efficiency**

### **Recommendation HWN 3l**

#### ***Update Building Code to reflect a more stringent energy code.***

The Town should update the Building Code to supplement the New York State Energy Conservation Construction Code with a more stringent energy code. Implementation could occur through amending Town Code Chapter 53, Building Construction and Fire Prevention Administration and it is critical that Town Building Division staff are trained and provided with the resources needed to implement a supplemental code. Community education on the benefits of the new measures will be needed, as well.

Initially, the Town should update the Building Code to reflect energy efficiency standards found in the latest NYStretch Energy Code, and ensure that staff are trained and supported to fully implement. The NYStretch Energy Code, prepared by NYSERDA, is a supplement to the NY State Energy Code (Energy Conservation Construction Code of NYS) and intended to assist in reducing the greenhouse gas emissions in New York. Much of Bethlehem's greenhouse gas emissions are from residential and commercial buildings. The NYStretch code is available for voluntary adoption by local governments as a more stringent local energy code. Efficiencies are achieved by applying tighter building envelopes, better window performance, mandatory air barriers, commissioning and air leakage testing, more efficient lighting and controls to new construction and major renovation projects. NYSERDA offers guidebooks, community presentations, and sample implementation documents.

Following or in conjunction with the implementation of the NYStretch code, the Town should consider additional stringent energy codes, such as NYSERDA's Stretch to Zero pilot code; the Home Energy Rating



System (HERS) Index, which requires a building’s energy efficiency obtain a certain index or better; or a Zero Net Energy code.

The exploration of applying a more stringent energy code should recognize that for implementation to be successful locally available professional installers of new equipment and certified raters (Home Energy Rating System (HERS), for example) will be needed in the region.

**Recommendation HWN 3m**  
*Improve energy efficiency in existing buildings and strongly consider an energy score for buildings.*

Energy efficiency in buildings applies to using less energy to heat and cool buildings and power lighting fixtures and electric appliances. Energy efficiency is the most cost-effective strategy for reducing energy use.

Through education and outreach, the Town can encourage existing building owners to get energy audits to identify opportunities for energy efficiency and calculate their household carbon footprint. Other options include use of building performance ratings, such as the



Home Energy Rating System (HERS) Index. This system uses a certified home energy rater to measure the energy performance of a building. The Town could require a HERS rating at the time of sale, for example. Requirements could be phased in over time, such as initially only requiring that the HERS index be reported to the municipality for the purpose of creating a benchmark, and eventually requiring that buildings achieve a certain HERS index at the time of sale. The benefits of more efficient buildings include lower energy costs, more comfortable buildings, and decreased GHG emissions.

**Recommendation HWN 3n**  
*Convert outdoor lighting to energy efficient LED technology.*

By replacing conventional outdoor (street and site) lights with energy efficient LED technology, the Town and school districts could reduce light energy use, emissions for energy production and save costs. LED lights last much longer and require less maintenance than conventional lighting sources. Initial assessment of the Town taking on ownership and maintenance responsibility of street lights proved costly and Town maintenance responsibility is not recommended. However, efficiencies would be still achieved in annual energy bill savings.

In addition to changing light source, outdoor lighting levels should be evaluated to balance performance (including safety) with energy conservation. Lighting controls that can dim or turn off outdoor lighting when not needed (such as when

an area is not occupied) should be installed.

**Recommendation HWN 3o**  
*Utilize the Sustainable Bethlehem Plan to inform replacement, investment, and improvements in municipal assets and facilities.*

Continue to advance and complete the recommendations of the Sustainable Bethlehem Plan related to all municipal facilities and assets. The Plan conducted a 2010 greenhouse gas emissions (GHG) inventory – an analysis of energy use, costs, and GHG emissions for municipal operations. The GHG inventory provides a baseline against which reduction targets can be set and future progress towards achieving those targets can be measured. The Plan also identified energy efficiency projects, based on a walk-through energy audit.

**Carbon Sequestration and Prevention**

**Recommendation HWN 3p**  
*Utilize the Farms and Forests Program to purchase land for open space preservation to support carbon sequestration.*



Maintaining undeveloped land in its natural state will help to provide available land in the Town for soil and natural vegetation to sequester carbon. In 2017 the Town developed a set of conservation value maps and criteria to help inform open space conservation. The Town should prioritize its resources on preserving the land identified on the Open Space Plan Priority Conservation Areas Map consistent with Town Board Resolution 2017-050. The Resolution states "the Town Board shall utilize the conservation values maps, conservation criteria and conservation analysis tool to inform the conservation benefits of the land when purchase of development rights or the purchase of land opportunities arise. The Priority Conservation Areas Map identifies that the consultation of this map and its background conservation criteria is only utilized when there is an expressed landowner interest in pursuing a conservation action in partnership with the Town.

**Recommendation HWN 3q**  
***Offset Greenhouse Gas (GHG) emissions from the development of new buildings.***



Assess and prepare standards that require developers to minimize the extent of tree removal and to mitigate the loss of vegetation. Tree removal could be replaced in-kind on the existing site, in close proximity to site, or contribute to tree replacement fund. Further, options to offset greenhouse gas emissions attributed to the embodied energy of the building being constructed should be explored. The embodied energy of the building is the energy needed to fabricate materials and construct the building (resulting in GHG emissions).

**Recommendation HWN 3r**  
***Maintain existing forests and reforest open space, and implement Street Tree Management Plan.***

According to the National Forest Foundation, trees offset 10-20% of annual U.S. carbon emissions. Small cities can cut their carbon footprint by up to 25% with reforestation efforts. There are several efforts the Town can undertake to increase the growth of trees within the Town to sequester greater amounts of CO<sub>2</sub>. These efforts include the implementation of the Street Tree Inventory Analysis and Management Plan. The Street Tree Inventory Analysis and Management Plan addresses short-term and long-term maintenance needs for inventoried public street trees. The Plan also identifies a recommended street tree planting list that should be followed for trees planted along streets. Also included are recommended locations for street tree planting locations that provides balance between creating a street tree canopy/quality of life benefits and

maintenance of underground utility infrastructure.

Additional Town efforts could include a community forest master plan; educating the community on the local tree inventory, the benefits trees provide, and encourage tree planting; offer free or low-cost trees and planting service, and identify planting opportunity locations on Town lands.

Further, establishing an Urban Forestry Committee could be an extension of the Street Tree Advisory Committee to guide the implementation of the street tree management program and to advocate for and educate the public on the establishment and management of urban forests.

**Recommendation HWN 3s**  
***Support Albany County Soil and Water Conservation, Cornell Cooperative Extension, the NYS Farm Bureau and related agencies efforts to communicate current best practices for agricultural lands (i.e., grazing, crop rotation, no till planting, etc.).***

## **Goal 4**

Provide for solid waste reduction.

**Recommendation HWN 4a**  
***Continue to support the composting efforts of the Town, including diversion of food waste from landfills.***

The Town's composting facility has recently been improved to expanding composting demand and food scraps to meet the Town's and State's recycling/composting and waste diversion goals. Composting

of food scraps is a significant measure in reducing greenhouse gas emissions since it avoids the release of methane when placed in a landfill. The NYS Food Donation and Food Scrap Recycling Law, effective January 1, 2022, will require large generators (more than 2 tons of food scraps per week such as grocery stores, colleges, malls, etc.) of food scraps to separate and recycle food scraps if within 25 miles of an organics recycler. Bethlehem's compost facility is identified on NYSDEC's list of food scraps recyclers.

The New York Climate Action Council Waste Advisory Panel has listed reducing food waste that is landfilled as among the top five strategies to reduce current GHG emissions in New York State. The NYS law currently excludes the food waste generated by households, yet strategies to encourage food diversion from the trash at the household scale can make a significant contribution to the reduction of methane emissions. Household options include backyard composting, drop-off at community sites such as community gardens or farmers markets for collection and reuse and/or private hauler pickup.

**Recommendation HWN 4b**  
*Continue to support the Town Recycling Program.*

The Town Recycling Coordinator manages the Recycling Program, which diverts electronics, hazardous waste, textiles/clothing, pharmaceuticals, and books from landfills. Various locations around the Town including the bins at CDTA Park and Ride lot, Kenwood Avenue Public Parking lot, and the Rupert

Road Transfer Station accept this solid waste for recycling.

**Recommendation 4c**  
*Consider and encourage reclamation, material recycling and source reduction of demolition materials and building construction materials.*

The US Green Building Councils; Leadership in Energy and Environmental Design (LEED) offers best practices in material reclamation and waste disposal to minimize energy consumption. Some of these criteria would be useful in plan review and building permit issuance. The Town should consider staff certification.

**Goal 5**

Identify actions to enhance resilience and adaptation to climate change, minimizing impacts to economy, public health, environment and strengthening our ability to quickly recover from extreme weather events.

**Recommendation HWN 5a**  
*Continue to maintain and update the Bethlehem Comprehensive Emergency Management (BCEM) Plan to address emergency situations caused by climate change.*

Air temperature, sea level, and the frequency and intensity of extreme precipitation events are projected to increase through 2100. For example, New York's annual average temperature has risen nearly two degrees Fahrenheit and winter temperature almost 5 degrees since 1970. Sea level, which influences the Hudson River, has risen 15 inches

in New York Harbor over the last 150 years. The Northeast has also experienced a 74% increase in the amount of precipitation occurring in heavy rainfall events. These factors combine to create more frequent and severe heat waves, short term drought, and flooding. The comprehensive emergency management plan is updated on an annual basis and addresses flooding, landslides, ice storms and extreme heat and cold temperatures. It serves as a useful resource for emergency response during extreme weather events.

**Recommendation HWN 5b**  
*Educate and engage residents and businesses in addressing climate change by reducing greenhouse gas emissions.*

**Recommendation HWN 5c**  
*Continue to support the Senior Services Department / Volunteers as they assist with public outreach and warnings to at risk populations.*

**Recommendation HWN 5d**  
*Continue to follow the progress and potential regulatory guidelines in the forthcoming NYS Climate Action Council Scoping Plan.*

The Climate Leadership and Community Protection Act (Climate Act) was signed into NYS Law in 2019 as one of the most ambitious climate laws in the world. The law created the Climate Action Council, which is tasked with developing a Draft Scoping Plan that serves as an initial framework for how the State will reduce greenhouse gas emissions and achieve net-zero emissions, increase renewable energy usage, and ensure climate justice. The Town should monitor

the recommendations, guidelines, and best practices identified in the Scoping Plan once approved by NY State.

## Potential Agricultural Uses

List of potential agricultural land uses to consider as part of Recommendation 2c, evaluating Zoning Law to expand permitted agricultural uses and agricultural support uses.

### Crops, livestock and livestock products

- Field crops, including corn, wheat, oats, rye, barley, hay, potatoes and dry beans.
- Fruits, including apples, peaches, grapes, cherries, and berries.
- Vegetables, including tomatoes, snap beans, cabbage, carrots, beets and onions.
- Horticultural specialties, including nursery stock, ornamental shrubs, ornamental trees and flowers.
- Orchards and vineyards
- Maple sap
- Hops
- Christmas trees derived from a managed Evergreen tree operation whether dug for transplanting or cut from the stump
- Industrial hemp
- Actively managed log-grown woodland mushrooms
- Livestock and livestock products, including cattle, sheep, hogs, goats, horses, poultry, ratites, such as ostriches, emus, rheas and kiwis, farmed deer, farmed buffalo, fur bearing animals, wool bearing animals, such as

alpacas and llamas, milk, eggs and furs

- Aquaculture products, including fish, fish products, water plants and shellfish
- Woody biomass, which means short rotation woody crops raised for bioenergy (different from "farm woodland," see below)
- Apiary products, including honey, beeswax, royal jelly, bee pollen, propolis, package bees, nucs (small honey bee colonies created from larger colonies) and queens
- Wood Products
- Farm woodland (production of woodland products intended for sale, including but not limited to logs, lumber, posts and firewood)
- Forestry and forestry management
- Timber operation
- Silvopasturing (the intentional combination of trees, forages and livestock managed as a single integrated practice for the collective benefit of each, including the planting of appropriate grasses and legume forages among trees for sound grazing and livestock husbandry)

### Animal Products

- Dairy Products including milk processing and cheese-making
- USDA certified slaughterhouses, butcher and/or meat production
- Game farms, fish hatcheries and fishing reserves

### Plants Products and Services

- Lawn/landscape services

- Prepared feeds for animals & fowl

### Food Processing and Sales

- Farmers' market
- Roadside stand
- Flour & Other Grain Mill Products
- Bakery selling baked goods, grown on the farm and/or baked on site.
- Cold storage facility for agricultural products.
- Agricultural product distribution center (wholesale)
- Packaged Frozen Foods
- Commercial kitchens (for processing and packaging value added products)
- Land used by a not-for-profit institution for the purposes of agricultural research that is intended to improve the quality or quantity of crops, livestock or livestock products

### Farm Support/Accessory Livelihoods

- Land set aside through participation in a federal conservation program established for the purposes of replenishing highly erodible land which has been depleted by continuous tilling or reducing national surpluses of agricultural commodities
- Compost, mulch or other organic biomass crops. (i.e., manure, hay, leaves, yard waste, silage, organic farm waste, vegetation, wood biomass or by-products of agricultural products that have been processed on such farm operation)

- Farm equipment repair
- Farm Products Warehousing & Storage (barns, silos)
- Farm equipment storage

#### **Animal Care Services**

- Commercial horse boarding operation
- Commercial equine operation (i.e riding lessons, trail riding activities or training of horses)
- Veterinary office and animal hospital
- Commercial boarding and/or breeding kennel

#### **Agritourism/Hospitality**

- Agricultural tourism (activities which primarily promote the sale, marketing, production, harvesting or use of the products of the farm and enhance the public's understanding and awareness of farming and farm life)
- Seasonal U-pick operation
- Winery, distillery, brewery and cider mill (subject to state liquor permits)
- Bed-and-breakfast establishment
- Petting zoo, animal display and pony rides
- Wagon, sleigh and hay rides
- Seasonal outdoor crop maze
- Family-oriented animated barn (e.g., fun houses, haunted houses).
- Organized meeting space for use by weddings and corporate picnics
- Museum and/or agricultural learning institution
- Historical agricultural exhibit

- Harvest festival and barn dance
- Educational experiences such as farm tours, day camps, farming and food preserving classes, cooking classes, nature hikes

#### **Temporary Events:**

- Carnival, fair, circus, flea market or similar event
- Private garage or yard sale
- Small-scale entertainment (e.g., music concert, car show, art fair) which does not require a large assemblies permit
- Large-scale entertainment (e.g., music concert, car show, art fair) which requires a large assemblies permit

#### **Public Access/Recreation**

- Open-air or covered picnic area with rest rooms
- Conservation use, including but not limited to nature trails
- Public park and/or trail system
- Hunting and/or fishing club
- Outdoor recreation facility, (may include tents, cabins, recreation vehicles, pop-ups etc.)
- Golf course

#### **Residences**

- Single-family dwelling
- Two-family dwelling (conversion)
- Two-family dwelling (new construction)
- Cottage
- Farm labor housing

#### **Boarding or lodging house**

- Accessory apartment within existing single-family dwellings, within new single-family

dwellings, and through adaptive reuse of non-dwelling structures  
Home occupation

#### **Other Uses**

- Companion animal or livestock show
- Food truck
- Restaurant
- Wind turbines, energy storage, and solar generation facilities
- Commercial communications receiving and/or transmitting facilities; telecommunications towers
- Contractor's yard
- Private airstrip and heliport
- Cemetery, including mausoleum
- Conference Centers and Retreats
- Sawmill

## Resilient Economy

Ensure that the community is prepared to deal with both positive and negative changes in its economic health and to initiate sustainable urban development and redevelopment strategies that foster green business growth and build reliance on local assets.

### Value Statement L1

We value a diversity of land uses to balance the tax base, provide jobs, complement our hamlets and residential zoning districts and sustain fiscal policy objectives.

### Value Statement L2

We value a variety of housing options which meet the needs of different lifestyles, and the range of income levels, allowing our residents to age in place.

### Value Statement C3

We value the qualities of rural land, supporting landowner’s ability to access its economic value in a manner compatible with sustaining a rural-agricultural livelihood.

### Value Statement C5

We value small, locally owned businesses and desire to create the conditions that encourage more business enterprises.

### Goal 1

Attract the mix of uses desired in Mixed-Economic Development zoning districts (Clean/Green LI, Office, Commercial, Residential).

#### Recommendation RE 1a

**Analyze the market potential for Bethlehem to serve as a clean tech hub by analyzing the industry trends.**

A market study would analyze and assess the viable uses and potential tenants for the Vista Technology Campus and all Mixed Economic Development (MED) districts as well as the Rural Light Industrial (RLI) districts town wide. These areas have been approved or zoned to generate non-residential tax revenue and facilitate job growth in the Town.

Plug Power received approval from both the Town of Bethlehem and Town of New Scotland in 2022 for the development of a 350,000 square foot manufacturing facility to produce their GenDrive hydrogen fuel cell that is used to power material handling equipment such as a forklift. The development will utilize approximately 26 acres of

the Vista Technology Campus. Plug Power serves as a useful example of a technology based business (primary use) that was expected to locate at Vista since its inception in 2007. The addition of Plug Power to the Vista Tech Campus should serve as a catalyst for additional expansion by Plug Power or other technology based businesses, especially since there remains additional acreage

**Bethlehem has a diverse business sector that includes small businesses and restaurants, and also long-standing and new large industrial facilities.**



available for development in both the Town of Bethlehem and New Scotland. The Town should continue to foster this new relationship with Plug Power with the intention to generate non-residential tax revenue and job growth in the Town.

The new wind tower manufacturing facility at the Port of Albany's expansion site in Bethlehem, within the waterfront revitalization area (LWRP), could be leveraged to attract other businesses in the wind energy supply chain. These businesses could locate at Vista, or light industrial and mixed-economic development districts along River Road. The Center for Economic Growth (CEG) has initiated an analysis to identify existing strengths and capabilities related to offshore wind industry and support efforts to attract and grow the sector's supply chain in the Capital Region. Bethlehem could utilize this analysis to position itself for attracting wind energy supply chain businesses to locate in the Town. The Towns' Local Waterfront Revitalization Plan (LWRP) recommends preparation of a market study to attract uses to property zoned Rural Light Industrial (RLI) and Mixed Economic Development (MED).

**Recommendation RE 1b**  
*Attract Healthcare organizations to locate in Mixed-Economic Development districts.*

Bethlehem's level of growth in healthcare sector jobs located in the Town since 2007 has considerably outpaced the growth rates for healthcare in the Capital Region. The Town should continue to nourish this sector and find more avenues for helping healthcare organizations locate and expand at the Town's underutilized sites.

**Recommendation RE 1c**  
*Consider modifications to the Zoning Code that streamline the site plan and subdivision procedures for individual projects within the Mixed Economic Development (MED).*

The Mixed Economic Development district was created as an opportunity for generating non-residential tax revenue that would diversify the Town's fiscal base. Current regulations for approval of projects within the MED districts require development of a master plan, which must be approved by the Town Board prior to review

and approval by the Planning Board (subdivision and site plan). Once the master plan is accepted, significant modifications require approval by the Town Board as well. The code further requires the initial development of specific primary land uses (technology, office, light industrial) before development of secondary supportive land uses (commercial, retail, residential), can be constructed. Consideration should be given to modify or eliminate the requirements for a master plan and eliminate the Town Board from the approval process. The time involved under current regulations adds considerable 'risk' which business owners and developers seek to minimize.

The modifications to the MED regulations could consider expanding the permitted uses and flexibility in timing of when primary and secondary uses may be approved and constructed. Keeping in mind that changes to permitted uses may undermine the MED district's objective to diversify the Town's fiscal base and support job growth, should residential uses be allowed as new primary uses. Further, proposals to introduce a mixed-use environment along with



more retail could siphon activity away from the Town’s hamlet areas, where infrastructure is in place to serve both residential and commercial uses.

**Recommendation RE 1d**

*Collaborate and partner with Advance Albany Alliance (Albany County Local Development Corporation) to market and promote sites within the Town of Bethlehem.*

The Advance Albany Alliance is focused on job growth across Albany County and maintains a database of available parcels for consideration by potential tenants and/or other economic development agencies looking to place tenants. The Town Economic Development Coordinator should act as the point of contact with the Alliance and assist in maintaining the database of available properties in the Town.

As a Local Development Corporation (LDC), the Alliance should be considered as a partner with the Town for the acquisition of properties that further the goals of

both Albany County and Bethlehem. The Alliance’s acquisition of vacant and underutilized properties could ready them for redevelopment and increase tax revenue to both the County and Town. Specific properties include those at Vista Tech and the vacant Picotte building on New Scotland Road.

**Recommendation RE 1e**

*Consider reestablishing the Economic Development sub-committee.*

In 2011, the Town’s Economic Development Sub-committee of the 20/20 Advisory Committee drafted an Economic Development Strategy with the purpose of fostering economic development and diversification of the Town’s tax base. Much of the Strategy remains relevant today and the Committee could work with the Economic Development Coordinator and Bethlehem Industrial Development Agency to implement the economic development recommendations in this Plan.

**Goal 2**

Attract the residential and commercial / service mixed-uses in the hamlet districts necessary for a vibrant street life throughout the day and evening.

**Recommendation RE 2a**

*Examine land use regulations that are most likely to attract a broad diversity of businesses in the commercial hamlet and hamlet districts of town.*

Bethlehem residents strongly value the hamlet areas in the Town and especially the Four Corners in Delmar. The hamlets give Town residents a sense of identity and sharpen the sense of community. The economic ramification of these hamlets extends far beyond the tax revenue collected from the commercial establishments and affects the continuity of households in the Town and the desire of business to locate in the Town. As has been consistently emphasized since the last plan, the preservation of the hamlet’s along with their beautification and expansion should be understood as core elements of



the Town's economic development policy. Ensuring walkability of the hamlets and pedestrian improvements more generally, including continuing improvement and access to the Rail Trail, will further bolster Bethlehem's market potential for new development and business activity.

Updates to the current code could include permitted uses, density, setback, area and height modifications and updates to access and parking requirements. These code updates could be supported by enhanced design guidelines to address both site plan and architectural design features. A form-based code could be prepared for specific areas and / or corridors of the town. The purpose of a form-based code is to allow a variety of land uses to coexist adjacent to one another based on specific design characteristics which look to enliven an active street and neighborhood district while managing negative impacts. Form based codes encourage desired diversity of land uses where traditional Euclidian zoning sought to separate land uses into districts of low density with all the same use.

The diversity of the hamlet areas in the Town such as the commercial hamlets along Delaware Avenue and New Scotland Road compared to the more rural hamlet areas in South Bethlehem and Selkirk is recognized. While both areas represent hamlets to their respective residents different density limitations and uses and design guidelines may be appropriate for these areas.

### Goal 3

Sustain, enhance and expand rural and agricultural business opportunities as a vital component of the town's economy.

#### **Recommendation RE 3a** ***Update the definition of agricultural uses in the Town Zoning code.***

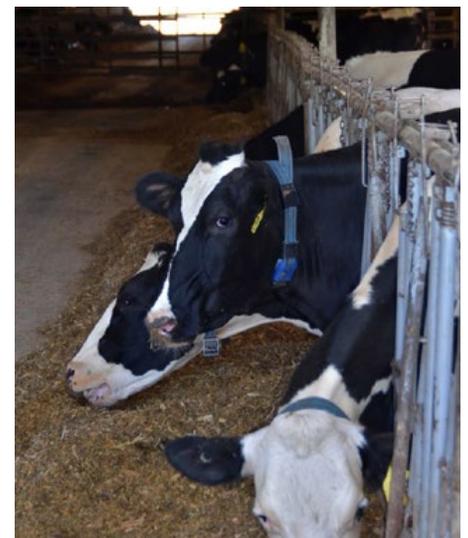
The definition of agriculture and the means for sustaining it are always evolving. Take for example the recent popularity of farm brewery/cidery and agritourism attractions throughout the Capital Region. The Town should review its current definition of agriculture for consistency with NYS Department of Agriculture and Markets definitions and the current agriculture/farming environment, and for clarity so that should a landowner pursue an agricultural business operation (e.g., equine veterinary practice) the review and approval process is clear and predictable.

This should include an evaluation of by-right agricultural uses, and complementary business that would support farms and help

diversify farm income. By-right non-agricultural rural uses should also be evaluated. Understanding and recognizing the social (lifestyle) and economic contribution of rural and agricultural land, owners should have the ability to monetize the value of land in multitude of ways and not just rely on conversion to single family homes. Further, the town could incentivize and support low density development of rural and agricultural lands that do not fiscally constrain town resources. (See list of Potential Agriculture Uses at the end of the Harmony with Nature 3.3 section)

#### **Recommendation RE 3b** ***Support the retention and expansion of agricultural businesses through use of the Farms and Forests Conservation Program.***

The Farms and Forests Conservation Program provide financial incentives to property owners in exchange for limiting development of their property (agricultural uses are permitted). Due to the cost of land, the tax burden, physical limitations (soil quality, topography, water



supply) and aging land owners, it has become increasingly difficult for farm businesses to thrive in Bethlehem. Much of the agricultural land in Bethlehem supports field crops and is leased by other farmers in the County. The potential programs available to conserve these rural and agricultural lands include:

- Bethlehem’s Conservation Easement Exemption (CEE) program
- Bethlehem’s Farms & Forests Conservation program (F&F Fund)

The F&F Fund can be used to purchase development rights (PDR). Other organizations including the Mohawk Hudson Land Conservancy and Scenic Hudson have the capacity to purchase development rights. Once purchased, the rights are typically extinguished. An alternative is a quasi-PDR program (similar to a transfer of development rights) where the development rights are used to increase density (transferred) to areas of Bethlehem where density is desired (e.g. hamlet areas – receiving areas). The development rights that are purchased could be “banked”, converted to dwelling units and sold to developers. This approach could create a revolving fund to support additional development right purchases. A formal framework for determining development units and application to incentive zoning would need to be established within a Purchase of Development Rights local law.

The benefits of a coordinated PDR program can allow rural and agricultural land owners the flexibility to sell development rights; all or partial and over time. As the next generation determines the best situation for their lifestyle, they know there are options to raise funds that can be reinvested to support agriculture and farming operations.

Once the land owner has received the financial benefit of development rights or the sale of property, the land (or remaining lands) can be assessed for the agricultural value (non-developable) of the property, shifting land value based on residential use to agriculture use, allowing greater accessibility and affordability to the next generation of family members and/or new farmers who desire to be in the Bethlehem market.

**Recommendation RE 3c**  
***Support agricultural businesses via advocacy for property tax credits and exemptions.***

Property taxes continue to place a burden on agricultural businesses and large landowners, further



increasing pressure to sell land for conversion to non-farm uses. The Agriculture Business Focus Group discussion identified two limitations of state agricultural tax incentive programs: the Farmer’s School Property Tax Credit and Agricultural Assessment Exemption. The Town should work with The Farmer’s School Property Tax Credit enables farmers to receive a tax credit from the state personal income tax or the corporation franchise tax to reimburse farmers of some or all of the school district property taxes they pay. However, current Town farmers are not eligible since they don’t earn 2/3 of their income from agriculture. Farm families in the Town include a spouse working full-time for health insurance benefits, where this income effects the threshold income criteria. Lowering the 2/3 income level would also help Albany County farmers.

The NYS Agricultural Assessment provides reduced property tax bills for land in agricultural production by limiting the property tax assessment of such land to its prescribed agricultural assessment value. Farmers in town have difficulty achieving the required annual agricultural product gross sales of \$10,000 or more. The gross sales need to be achieved for a period of 2 years for the land to be eligible. Reducing the timeframe may also reach a greater number of farms meeting eligibility for the agricultural assessment exemption.

The Town should work with farm advocacy organizations, such as NY Farm Bureau, and local State elected officials in the Senate and House to support lowering the 2/3 income level and annual gross sales limits.

The plan includes strategies to maintain infrastructure capacity in line with growth.

### **Recommendation RE 3d**

***Limit the extension of utility (sanitary sewer and water) infrastructure in undeveloped areas of the town.***

Utility infrastructure extension is typically constructed by private developers to serve residential, commercial or industrial projects. As the town considers ways of densifying hamlets and limiting sprawl to undeveloped areas of the town, available infrastructure will play a substantial role in achieving these goals. Increased residential density and diversity of land uses should be proposed where utilities currently exist. The extension of or improvements to the sanitary sewer system should be limited to within the current (2021) district boundary. Any consideration of an extension beyond the existing border should be based on a 'compelling need'. Compelling need shall be defined and determined by the Planning Board that a project substantively meets or exceeds the goals of this plan by providing; an affordable and diverse housing mix, significantly broadens the non-residential tax base, or results in the conservation of valued historic, natural and agricultural resources, while avoiding or mitigating conflicts with any adjacent farming operations and rural lifestyle of residents. Planned extension of water and sanitary sewer infrastructure outside the boundary of the current districts (2021) delineated should be considered based on the benefits offered in achieving the goals of this plan. (Refer to Goal 8 of this principle.)

### **Recommendation RE 3e**

***Strengthen and Promote the Right-to-Farm policy in the Town Code.***

Town Zoning Law §128-43 Agriculture Use and Right to Farm identifies the Town's support for farm protection policies set forth in NYS Agriculture & Markets Law §308. Right to farm laws are established to address private nuisance law suits brought by non-agricultural users that have located adjacent to farming and agricultural operations. Town right-to-farm laws indicate the importance of farming to a town and alert non-farm rural residents of generally accepted agricultural practices that are expected to occur in farming areas.

Other measures the Town can apply in daily operations include: using less salt on agricultural area roads, paving rural roads outside the farm market time period (before July/ after October), and enforcement of weight and speed limits on roads in farming areas.

### **Recommendation RE 3f**

***Limit road maintenance impacts on agricultural businesses.***

Town road maintenance operations on roadways with agricultural businesses should minimize impacts to their operations. Best practice examples include applying less salt on agricultural area roads, paving roads outside of farm market time period (before July/after October), enforcing posted weight limits and posted speed limits on roads in farming areas.

### **Goal 4**

Advance industrial development in the Industrial, Rural Light Industrial and Mixed Economic Development zoned districts.

### **Recommendation RE 4a**

***Collaborate with the Port of Albany and Selkirk Rail Yard properties to retain and expand existing businesses and attract new business ventures that can benefit from water and rail transportation access.***

Access to water and rail provide the Town a unique opportunity to expand its tax base with industrial development that can take





economic growth and tax base diversification.

The Center for Economic Growth (CEG) is assessing the potential supply chain market and businesses to support the wind energy industries located at the Port. These supply chain businesses could be located across the Town in the Mixed Economic Development, Industrial and Rural Light Industrial districts. Warehousing and transloading are growing businesses potentially located in these same zoning districts that would benefit from proximity to rail lines.

advantage of these transportation assets. The Port of Albany site in Bethlehem will include a wind tower manufacturing facility that could spur wind energy supply chain businesses in Bethlehem. CSX has made a long-term commitment to rail operations at the Selkirk Yards. These locations combined with the close proximity to the NYS Thruway, offer a niche transportation infrastructure (water, rail and highway), which can support

Many of the town’s largest employers are located in the industrial districts surrounding the CSX rail yards. The Town could facilitate a Selkirk Yards Industrial District Focus Group (a group was formed in 2010) to help ensure the long-term viability and competitiveness of this area.

**Recommendation RE 4b**  
*Endeavor to mitigate (or resolve) transportation conflicts of established industrial employment centers on residential and hamlet areas.*

Rail traffic and truck traffic on State roads (east-west) within residential and hamlet areas have been issues identified by residents for many years. While the presence of an active rail freight corridor operated by CSX offer positive economic benefits to the town and region, truck traffic on State roads has been an issue identified by residents for many years.

The Town’s 2008 Route 9W Corridor Study identified the Selkirk Bypass central alignment as an alternative route for truck traffic from the industrial area of the Selkirk Rail yards to the east to access the NYS Thruway. The study assumed a new roadway on a new alignment, with a new Thruway interchange. Two options were presented. The first option, estimated at \$24.7 million (in



2007 dollars) would connect US 9W to the Thruway, with the Thruway serving as the termination point for the road. The second option, which would add \$11.1 million to the cost would connect US 9W to NYS 144. In an effort to potentially reduce costs, the Town Engineering Division investigated the feasibility of utilizing and making improvements to segments of existing Clapper Road as an alternative to constructing a new road on a new alignment. The study, concluded that reconstruction of Clapper Road in conjunction with interchange development was a feasible option for the area. The study estimated the cost (in 2008 dollars) of Clapper Road reconstruction in conjunction with an EZ Pass only interchange at \$16.7 million. This route would connect Creble Road to Clapper Road, utilizing improvements to Clapper Road to create the Selkirk Bypass Truck route.

Utilization of Clapper Road would necessitate zone changes along Clapper Road from residential to

industrial, so as not to recreate the residential-truck route conflict that already existing along Route 396 in Selkirk. The 2005 Comprehensive Plan viewed the Bypass as essential for solving the quality-of-life issues for Selkirk and also as a potential opportunity to facilitate economic development in the Route 9W Corridor.

The Town should assess the viability of this previous transportation connection that was proposed to divert truck traffic from Maple Avenue in Selkirk. This new route may also address recent truck traffic concerns from residents along Glenmont Road. Further, other options such as roadway improvements to Route 396 should be explored that could include realignment, traffic calming, etc. to better manage the speed of traffic and improve quality of life. The Town of Coeymans recent Comprehensive Plan Update also identifies truck traffic issues in their community related to trucks accessing the Thruway through

their main street area. There may be an opportunity for Bethlehem and Coeymans to collaborate on a truck route that addresses both communities' issues. Finally, the Town could cooperatively work with businesses to encourage truck traffic to voluntarily use alternate routes such as the Delmar By-Pass to access the Thruway.

Overall, addressing this issue will help to advance economic development goals of the Town in realizing additional industrial development and avoiding public opposition to proposed industrial development due to quality-of-life concerns.

**Recommendation RE 4c**  
*Enhance interaction with regional economic development partners to attract new businesses and increase local jobs.*

The Town's capacity to attract new businesses and increase local jobs depends in part on its ability to work collaboratively and strategically



with other economic development agencies, including Albany County, Center for Economic Growth (CEG), Empire State Development, and the Capital Regional Economic Development Council.

Recently Albany County has embarked upon a new commitment to advancing economic development throughout the County as shown by its recent production of a formal economic development strategy as well as its formation of a new Local Development Corporation (LDC), the Advance Albany County Alliance (AACAA). The new strategy identifies new growth sectors such as cybersecurity and green energy as opportunities along with enduring strong sectors like government and healthcare.

The Center for Economic Growth (CEG) plays an active role in growing different sectors in the Capital Region. The organization has been especially dedicated to providing consulting services, technical guidance, and coaching to small and medium size manufacturing companies. CEG generates robust analytics that

makes the business case for development and demonstrates the value that new development and infrastructure initiatives bring to the region in terms of jobs and economic productivity. CEG has close relationships with the business community and so is aware of their spatial needs. To that end, CEG’s awareness of the development sites in Bethlehem can help place them on the radar of companies seeking a foothold in the Capital Region or expansion of an existing operation.

The Capital Region Economic Development Council (CREDC) establishes long-term economic development policies for the Capital Region and helps manage the awarding of state grants through the Consolidated Funding Application (CFA) process as well as the Downtown Revitalization Initiative. Bethlehem’s more active participation within the CREDC would not only help the Town better align its local economic development policy with the priorities of the region but help make the business case for applications submitted for state funding through the CFA process.

**Goal 5**

Support and encourage agencies and organization that perform workforce training programs.

**Recommendation RE 5a**

***Recognize the value of workforce training opportunities in achieving economic development goals by attracting jobs in multiple sectors.***

Promote workforce development, vocational training, and entrepreneurship for the Town’s lower-income households by working in lock-step with regional economic development agencies and other partners such as Bethlehem Chamber of Commerce, Center for Economic Growth, Hudson Valley Community College and Glenmont Job Corps Center. The Center for Economic Growth (CEG) is a good implementation partner with the Town, especially given the organization’s track record with workforce development and apprenticeship programs. Another potential partner on workforce development could be the Chamber of Commerce, which has recently created a new foundation focused on vocational training and workforce development to address the needs of residents seeking employment but not holding a college degree. The Chamber has been attempting to coordinate its efforts with Bethlehem’s school districts. As with CEG, the Chamber of Commerce could be a good partner for Bethlehem to pursue workforce development and entrepreneurship programs specifically aimed at creating pathways of economic mobility for Bethlehem’s most socio-economically disadvantaged households.



## Goal 6

Attract, retain and support diverse local owned businesses, which support the principles and goals of this plan.

### Recommendation RE 6a

***Review the permitted uses in the hamlet districts and modify as needed to ensure diversity of uses that attract users throughout the day and week.***

A diversity of uses offer convenience to residents and visitors, accomplishing multiple tasks in a single trip. More people on the street can help ensure that businesses can rely on a customer base throughout the day, compared to trying to generate revenues during short, peak periods (morning and evening commute and lunch hour). Expanded uses should focus on filling voids that attract users and visitors not offered by existing uses.

The diversity of the hamlet areas in the Town such as the commercial hamlets along Delaware Avenue and New Scotland Road compared to the more rural hamlet areas in South Bethlehem and Selkirk is recognized. While both areas represent hamlets to their respective resident's different density limitations and uses and design guidelines may be appropriate for these areas.

### Recommendation RE 6b

***Support small business retention and attraction with facilitation of grant funding opportunities.***

One of Bethlehem's greatest assets is its network of small businesses, many of which

are owned by residents of the Town. Recent grant programs facilitated by the Town include the Microenterprise Grant program and the COVID-19 pandemic relief program (administered by the IDA for PPE). These programs have been widely successful in assisting small businesses and should continue. The Town has also facilitated Small Business Assistance grants in cooperation with NYS Office of Community Renewal.

One of the best ways the town can continue to support its local businesses is to continue ensuring high quality of life in the Town and messaging the value of local businesses to residents. Considering the success of the Microenterprise program (about \$600,000 in small grants to close to 30 businesses), a branding logo of the program would help to promote the Town's support for small businesses.

### Recommendation RE 6c

***Encourage and stimulate workforce (affordable) housing goals.***

Bethlehem has an imbalance of jobs and housing. More residents commute out of Bethlehem to job centers than those who commute into the town for employment. The high cost of housing (rental and purchase) is a primary factor. Allowing for a mix of housing types could make it possible for business owners to attract their workforce and create an environment for employees to live and work in Bethlehem.

## Goal 7

Plan for post disaster (natural, man-made, pandemic) economic recovery.

### Recommendation RE 7a

***Annually collaborate with Emergency Management organizations to plan for post disaster economic recovery.***

Each year the Town's Emergency Management Director updates the Comprehensive Emergency Management Plan (CEMP). That plan is prepared with input from local police, fire and EMS (emergency medical services) and the Albany County Coordinator. From Albany County the CEMP is forwarded to the NYS Division of Homeland Security & Emergency Services and the Federal Emergency Management Agency (FEMA). Annual updates should include Bethlehem resident and business stakeholders, specifically including residents with disabilities and seniors, cohorts that are at greatest risk during emergencies.



### Goal 8

Ensure that infrastructure (sanitary sewer, transportation, water, electricity) is not a barrier to economic development.

#### Recommendation RE 8a

*Focus development where infrastructure currently exists and expansion is appropriate to meet economic development goals. (Refer to Recommendation 8a and Goal 10 of Livable Built Environment, and Recommendation 3d in Resilient Economy”).*

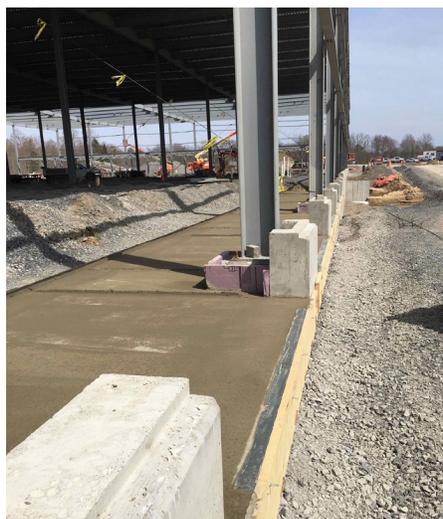
Limiting the extension of infrastructure (sewer and water) to current (2021) district boundaries is key to avoiding a sprawling development pattern throughout the Town. This policy needs to be balanced with economic development goals of job creation and expanding the tax base, and addressing quality of life issues. Appropriate areas for utility extension, such as along Creble Road and River Road to support these industrial areas should be evaluated and meet the threshold

of ‘compelling need’ with an understanding of the potential impacts from induced growth that could occur from these extensions. Similarly, the Selkirk By-pass initiative will need to evaluate the potential conversion of the Clapper Road area from a rural area to commercial/industrial in nature.

#### Recommendation RE 8b

*Continue to collaborate with electric energy providers (supply and distribution) in order to ensure adequate supply and reliability of electric and broadband service.*

The availability, cost and reliability of the electric energy supply system has been a noted concern across the Town of Bethlehem. This plan looks to concentrate mixed-use development in the hamlet areas of the town, expand clean/green industrial manufacturing and supply chain business and ensure our resiliency and ability to quickly recover from natural disasters. Further, electrification is the backbone of the sustainability principles of this plan.



## Healthy Community

Ensure that public health needs are recognized and addressed through provisions for healthy foods, physical activity with access to recreation and social interaction, physical and emotional health care, environmental justice and safe neighborhoods.

### Value Statement C1

We value our sense of community with socially conscious citizens and business owners who engage in improving the quality of life.

### Value Statement C2

We value our diverse age cohorts and multiple generations of families that choose to live in the town.

### Value Statement P1

We value our public-school districts that strive to provide the highest level of education, athletics, arts and cultural programs.

### Value Statement P2

We value the public services provided by the dedicated employees of the town.

### Value Statement P3

We value public safety and emergency response services provided by dedicated town employees and volunteer first responders.

### Value Statement P4

We value the Senior (active adult) service programs that enable residents to live in their homes and remain active community members.

### Value Statement P5

We value our park system and recreation programs, private preserves and seek to expand facilities with diverse activities and programs for all age groups and abilities.

### Goal 1

Reduce exposure to toxins and pollutants in the natural and built environment.

#### Recommendation HC 1a

*Continue to advance emergency preparedness, risk awareness and communications to residents, business operators and visitors to Bethlehem.*

Exposure to toxic materials and pollutants may originate from several sources; transportation via rail and/or truck; industrial manufacturing and storage, subsurface utility infrastructure

runoff to local and regional water systems, and airborne transmission. The Bethlehem Comprehensive Emergency Management Plan (CEMP) administered by the Emergency Management Office identifies hazardous materials, both fixed site and in-transit, and oil spills as the highest rated hazards in the Town. Risk areas include CSX rail lines, the NYS Thruway, Port of Albany, industrial manufacturing and petroleum / chemical storage facilities along the Hudson River. The CEMP identified the use of



chemicals at industries within the Town, specifically SABIC (formerly GE Plastics) and Owens Corning. The CSX rail yard regularly has tank cars with large amounts of hazardous materials on their property that are moved and switched within the yards. The River Road corridor has numerous fixed hazardous material sites, including fuel storage facilities, and Selkirk is home of a gas terminal (Enterprise Products).

Extreme weather events were ranked second as moderately high hazards. Based on the assessment of potential hazards that could affect the Town, the CEMP identifies risk reduction through prevention and mitigation measures, including public notification communications. The plan is updated on an annual basis.

#### **Recommendation HC 1b**

***Educate residents, property owners, homeowners associations, and business operators on the best practices for reduction or***



#### ***elimination of pesticide and herbicide use.***

Toxins and pollutants are generated by pesticides and herbicides used on residential, commercial, and institutional properties as well as agriculture and farmland in order to manage and control invasive or undesirable vegetation and insects. The impacts of pesticide and herbicide use on critical pollinator species, flora/fauna, our water supply, as well as humans has been long understood and well documented. The Town is a member of the Albany County Stormwater Coalition and together with the Open Space Coordinator and Stormwater Coordinator should continue to educate and promote alternatives to the use of pesticides and herbicides. Best practices for agriculture and farming should be led by Albany County Soil and Water Conservation as well as Cornell Cooperative Extension service. This plan encourages the expansion of buffer areas along local streams and



waterbodies as a means to further mitigate the runoff to streams.

#### **Recommendation HC 1c**

***Recognize the transportation system's significant role in the local and regional economy, while also having the potential to impact public health and equity.***

There are no 'environmental justice' areas in the Town of Bethlehem as defined and delineated by the NYS Department of Environmental Conservation. Environmental justice areas are those areas (primarily low income and minority communities) that have been disproportionately impacted by pollution. Nearby, in the City of Albany, the NYS DEC has identified an area of South Albany as an environmental justice area. While Bethlehem has no environmental justice areas, certain residential areas have experienced the impacts of truck traffic (noise, particulate matter, etc.). In Bethlehem, those areas include roadways owned and maintained by NYS with residential land uses along the corridor, including Rt. 396 (Maple Avenue and Bridge Street), Rt. 910A (Glenmont Road), and Rt. 32 (Corning Hill Road). Trucks entering and leaving the Port of Albany, Port of Coeymans, the Selkirk Rail Yards/Creble Road, and destined for highway corridors such as the NYS Thruway produce particulate matter affecting nearby homes while traveling through the Town. Residents of neighboring communities (Albany and Coeymans) have similar experiences.

Regional solutions should continue to be explored with Town, the Capital District Transportation Committee (CDTC), Capital District

Regional Planning Commission (CDRPC), Albany County, and NYS Department of Transportation. While truck transportation serves the local and regional economy, potential impacts to quality of life, equity, and public health should be considered by the Town.

**Recommendation HC 1d**  
*Evaluate 'context sensitive' modifications to the permitted residential uses (location and density) in zoning districts abutting the Selkirk Yards, Port of Albany, and Industrial Districts.*

Areas of potential risk for exposure to toxins and pollutants are located adjacent to the Selkirk Rail Yards, Port of Albany, industrial business as well as rail and NYS Thruway corridors. Consideration should be given to the residential uses and densities permitted within the Rural (R), Rural Light Industrial (RLI), and Hamlet (H) zones, as these districts are found around these potential hazard areas. All of these districts permit multifamily residential, with density based on availability of public utility infrastructure.

**Goal 2**

Promote general public safety

**Recommendation HC 2a**  
*Design, construct and maintain public realm improvements to reduce and avoid personal injury.*

Town standards for design and engineering should include best practices for safe streets and public spaces including: complete streets improvements, traffic calming measures to reduce vehicle speeding in neighborhoods;

interconnected streets between neighborhoods and reduced block lengths in new neighborhoods; and environmental design elements such as appropriate lighting, and minimal visual screening. The town should investigate and stay apprised of additional effective methods of reducing speeding and other dangerous driving practices on neighborhood roads and work to implement these methods where appropriate.

The inclusion of public safety enhancements, such as design improvements; commonly referred to as Crime Prevention through Environmental Design (CPTED) can help to ensure that businesses, residents, employees and customers feel secure when traveling around the Town. CPTED design elements can increase public safety and they can be included in zoning and site plan review regulations, especially those that achieve multiple objectives.

Multiple departments of the Town involved in the design, maintenance, and enforcement over the public realm infrastructure (roadways, utilities, neighborhoods) can help to influence public safety. Continued enforcement of traffic laws can aid in public safety along with consideration for reducing posted speed limits in know 'high speed' areas (i.e., River Road). Further, adequate maintenance of streets and sidewalks are critical to encouraging residents to use alternative modes of travel and can be a 'cost avoidance' measure.

**Recommendation HC 2b**  
*Educate the public about potential landslide areas in the Town to avoid injury and/or property damage caused by these events.*

Several areas in Bethlehem are susceptible to landslides and erosion events and the Town code discourages development on steep slopes. The Comprehensive Emergency Management Plan identifies landslides as a moderately high hazard. Past and recent landslide events have occurred along the slopes of the Normans Kill and its tributaries, including at Delaware Avenue, Normanside Golf Course, and the Groesbeck Avenue neighborhood. The Town (via Emergency Management Office) could develop education and outreach programs to targeted neighborhoods about landslides. This education should discuss the impacts of vegetation clearing, dumping of yard debris and loading areas at the top of slopes. This program could be prepared with assistance from the Albany County Soil and Water Conservation District.

**Recommendation HC 2c**  
*Support the Police Reform and Reinvention Collaborative.*



As part of the Bethlehem Police Reform and Reinvention Collaborative, the Town formed an Advisory Committee to help ensure the Collaborative successfully improves trust, fairness, equity, and justice within the community and police department and addresses any racial bias, discrimination, and disproportionate policing of communities of color. The Advisory Committee completed a Plan in March 2021, which identifies community interaction and transparency; consistent data collection procedures, traffic enforcement, amongst other recommendations to address police reform in the Town. As the Police Reform Advisory Committee continues their work in the future, they might consider how social behaviors are influenced by the built environment and vice versa. The Town Planning and Engineering staff should consider collaboration with the Advisory Committee to consider any recommendations to land use regulations, which could positively influence social activity.

**Goal 3**

Continue to expand and improve opportunities for physical activity, emotional wellbeing and healthy lifestyles.

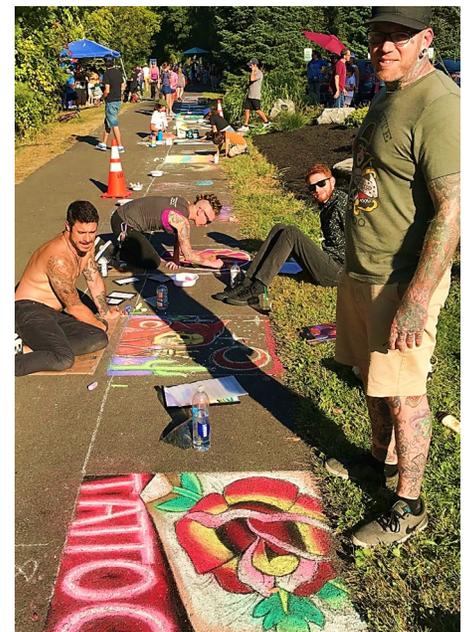
**Recommendation HC 3a**  
*Advance the recommendations of the Town’s Bicycle and Pedestrian Committee (and Priority Network improvements) and the Town’s Street Tree Management Plan.*

This plan strongly recommends the preparation of an Active Transportation Plan (Refer to Livable Built Environment Transportation recommendations) that examines the safe and healthy alternatives to vehicular travel. The Bicycle and Pedestrian Committee’s Priority Network will inform and influence that study; as will the Street Tree Management Plan. These two initiatives work together to create the attractive and comfortable public realm which encourages residents and visitors to use active transportation modes.

**Recommendation HC 3b**  
*Support connections to and expansion of the Albany County Rail Trail, as both a recreational and economic asset.*

The Albany County Rail Trail has been viewed successful recreational asset in the Town. Opportunities for trail connections exist, including the Albany Water Line right-of-way, extending north and south, which could support opportunities for physical activity by residents living in the southern part of the Town. Also, the existing abandoned rail corridor, owned by the Town, in South Bethlehem near Rupert Road, could also support physical activity for South Bethlehem residents.

**Recommendation HC 3c**  
*Ensure funding and staffing resources for the Highway Department to provide adequate, year-round and ADA compliant maintenance and improvements to the town sidewalks, trails, curb ramps, crosswalks, signs, and signals.*



The Bicycle and Pedestrian Committee in collaboration with the Highway Superintendent have identified a need for the funding of annual sidewalk maintenance. These needs are based on sidewalk maintenance assessment mapping prepared by the Highway Department. A condition ranking assessment (1 -10) has rated the condition of all sidewalks in the Town. Currently, \$50,000 is typically allocated annually to sidewalk maintenance projects in the Town. Doubling this amount would help to advance the sidewalk maintenance program in support of advancing physical activity, healthy lifestyles and ensuring compliance with Americans with Disabilities Act (ADA) requirements as presented in the Town’s ADA Transition Plan (dated May 2018)

**Recommendation HC 3d**  
*Assess the feasibility of a community and recreation center in the Town.*

Many town services and programs for residents are currently housed in Town Hall. Several of these programs are for senior citizens. During the Comprehensive Plan Update process, residents have stated there is a lack of meeting space available in the town. Further, the Parks and Recreation Master Plan (Parks Master Plan) identified multiple improvements needed to the current Elm Avenue Town Park bathhouse facilities and utility infrastructure. Consideration for a single structure to house multigenerational programs, Parks Department offices and new bathing / changing facilities for the pool complex could be combined into a consolidated community and recreation center at the Elm Avenue Town Park.

**Goal 4**

Support the aging population with programs, activities and services that allow residents to age in place.

**Recommendation HC 4a**  
*Continue to support resources for the Senior Services Department that provide an expanded range of services as this demographic grows.*

Seniors are a significant demographic cohort in the Town of Bethlehem and this population is expected to grow in the coming decades. An attribute of life in Bethlehem stated by residents is how families stay together and great value is placed on Bethlehem’s attraction and retention of multiple generations. Providing the housing options, senior services, and leisure activities and programs were identified as a high priority by residents. Seniors desire an active (physically) lifestyle and demonstrate an interest in life-long learning.

**Recommendation HC 4b**  
*Consider development of a Community and Recreation Center to accommodate senior programs and activities.*

(Refer to Recommendation HC 3d)



**Recommendation HC 4c**

*Continue the collaboration with the Senior Services Department and Bethlehem Senior Project, Inc. to provide activities and services to Town seniors.*

As the Town’s demographics continue to reflect an aging population, collaborative efforts of the Senior Services Department and Bethlehem Senior Project, Inc. become increasingly important. The Bethlehem Senior Project, Inc. has been established as a not-for-profit to raise funds that will support and expand services and programs offered to Town seniors. Many of the members are volunteers staffing current Town programs.

This collaborative follows smart growth best practices that focus resources towards aging in place outcomes. Resources include transportation services, social events, information assistance with health care, food pantry, housing information and much more.

**Goal 5**

Provide accessible parks, recreation facilities, greenways and open space near all neighborhoods.

**Recommendation HC 5a**

*Continue to support the Parks and Recreation Department with resources and funding for the services, programs and facilities provided to Town residents including pocket parks.*

Maintenance operations of Town park facilities are performed collaboratively between the Parks Department and Highway Department. Capabilities are stressed to perform any tasks beyond

basic maintenance and critical repairs. To operate Town parks and recreation programs and services in a proactive way will require additional resources.

Further, the Town of Bethlehem Parks and Recreation Master Plan (2015) provides improvement recommendations for all parks across the town including accessibility improvements and disability inclusion related to all programming and facility upgrades. The Plan recommends an accessibility (ADA) audit of park assets with a ‘transition plan’ that would bring facilities, programs and equipment into compliance with accessibility standards. The Plan further addresses connectivity to neighborhoods via an improved and expanded bike and pedestrian priority network and new shared use paths.

The Town’s Farms and Forests program should continue to be used for the purchase of additional parks and preserves, and improvements to existing parks including requisite design and engineering studies

recommended in the Parks and Recreation Master Plan.

**Goal 6**

Ensure equitable access to town functions (events), programs and facilities; arts and cultural facilities (Library, Historical Society), and childcare.

**Recommendation HC 6a**

*Ensure that town services, events and facilities are disability inclusive and reachable by all persons regardless of social or economic background.*

The Town offers a range of programmed activities throughout the year. Several may be sponsored by local business and not-for-profit organizations. Some of these events include Chalk-the-Walk (Art on the

In 2022, Bethlehem owned and operated 465 acres of parkland. The ratio of 13.29 acres of parkland for every 1,000 residents exceeds the national standard of 10 acres for every 1,000 residents.



Rail Trail Committee – HMLC), First Night Bethlehem, and Fall Fest. To ensure that all persons are welcome to attend, the Town should consider a staff position of ADA Coordinator or Accessibility Compliance Manager to facilitate Town policies in the area of ADA compliance, identify a grievance process, advise all town departments on best practices and respond to residents' concerns.

**Recommendation HC 6b**  
*Assess the zoning law for opportunities to facilitate access to child care.*

Child care is a critical component of livable communities for many families in the town. Providing opportunities for child care locations in the Town contributes to the local economy by supporting parents and local employers. A preliminary review of the zoning districts that allow child care facilities shows they are permitted in all zoning districts except in General Commercial, Residential A, and Core Residential. The remaining zoning district locations where child care is permitted offer few

locations of undeveloped land with access to green space. Most districts are also located away from residential neighborhoods where families needing services are located. Conflicts with concentrated drop-off and pick-up times are often cited as reasons for locating facilities outside of residential districts. The Residential A zoning district provides the greatest amount of undeveloped land, and there remains undeveloped land in the General Commercial district, where child care facilities can compatibly operate with commercial and office spaces, and provide green space for activity.

An assessment of the zoning law should be performed in consideration of expanding the districts where child care is permitted, as well as identifying specific design guidelines to limit potential impacts.

**Recommendation HC 6c**  
*Collaborate and network with library services available to Town residents, on outreach and*

**engagement of desired programs and services.**

Libraries have gradually taken on other functions beyond lending out books. They have become known as "third places", which refers to places where people spend time between home and work. They are locations where residents exchange ideas, recreate, and build relationships. Their programs and services span from technology to parenting to health care information and much more in between. Bethlehem residents contribute to library services in each of the three respective school districts based on school district residency. Libraries should be supported as a local educational and community resource.

**Bethlehem is a great place to live and people want to live here. The key to this plan update is to harness the power of growth in a manner that maintains and enhances the quality of life that residents have come to know and enjoy.**



## Responsible Governance and Regionalism

Ensure continued efficiencies in the delivery of public services through collaborative governance and that all local proposals account for, connect with and support the mutually beneficial plans of adjacent jurisdictions and the surrounding Capital Region.

### Value Statement C1

We value our sense of community with socially conscious citizens and business owners who engage in improving the quality of life.

### Value Statement C4

We value racial, ethnic, economic, gender, and disability inclusion and diversity throughout the Town for all who want to live, work and visit.

### Value Statement P1

We value our public-school districts that strive to provide the highest level of education, athletics, arts and cultural programs.

### Value Statement P2

We value public services provided by the dedicated employees of the town.

### Value Statement P3

We value public safety and emergency response services provided by dedicated town employees and volunteer first responders.

### Goal 1

Coordinate local planning efforts with regional development plans, transportation and infrastructure investment.

### Recommendation RGR 1a

*The Town should engage and align with regional economic development agencies to advance the interests of the town within a regional context.*

The primary agencies involved with economic development within the Capital Region and Albany County include;

- Empire State Development Corporation (ESD)
- Capital Region Economic Development Council (CREDC)
- Center for Economic Growth (CEG)
- Advance Albany County Alliance (Local Development Corporation)

One example of an economic development collaboration is the Center for Economic Growth recently issuing an RFP for market assessment of ancillary and supply chain business potential in Bethlehem and the Capital



Region to support the wind energy businesses located at the Port of Albany and Port of Coeymans. The Port of Albany is making significant infrastructure investment in the Town of Bethlehem and will be a significant factor in the local and regional economy. Success of the Port and wind energy will rely on workforce and reliable supply chain. The Town of Bethlehem has land appropriately zoned (Mixed Economic Development, Rural Light Industrial, Industrial and Commercial) for supply chain and distribution business.

#### **Recommendation RGR 1b**

***Town staff to continue participation in coordination meetings with regional agencies to stay abreast of plans and initiatives that affect the town and to share town planning efforts.***

The purpose of working with regional organizations is to inform them of issues significant to the town and work to collaborate on mutual topics such as transportation improvements and stormwater management compliance in order to support sustainable growth. The principles set forth in this plan significantly and substantially align with national trends; developing density of land use along existing multimodal corridors (TOD – transit-oriented development), expanding

‘complete streets’, promoting green infrastructure practices, reduction in fossil fuel consumption and stronger conservation of natural resources.

Town staff currently attend regular meetings with the Capital District Transportation Committee (CDTC, the Metropolitan Planning Organization for transportation), including Planning Committee, Bicycle and Pedestrian Advisory Committee, the Complete Streets Committee, and ADA working group. Town staff also work as liaison to the Bethlehem Bicycle and Pedestrian Committee. The CDTC created the New Visions 2050 to review existing conditions of infrastructure (road pavement, bridges, bike/ped priority networks, intersection safety and ADA compliance). New Visions also looks at regional transit opportunities, including extension of the Bus Rapid Transit network. Additionally, federal funding applications are submitted to the CDTC for inclusion in the Transportation Improvement Program (TIP). The TIP is funded through the Department of Transportation, Federal Highway Administration under current funding authorizations.

The Town is a member of the Stormwater Coalition of Albany County and represented on their Board of Directors by the position of Deputy Commissioner of Public Works as well as the organizations Working Group by the position of Stormwater Program Coordinator. The Coalition works to ensure compliance with the Clean Water Act and SPDES permits. Some of the services it provides include a Coalition Work Plan, coordinated educational training programs

for town staff, encouraging best practices and filing a MS4 Permit Joint Annual Report to the State on behalf of its members.

#### **Recommendation RGR 1c**

***Enhance connections between Town activity centers and regional destinations.***

The Town of Bethlehem is part of the broader Capital District and Hudson River Valley. The town offers several regional destinations for employment, recreation and tourism. The town also serves as the point of origin for residents and businesses that use, benefit from and enjoy the resources of other towns in the region. Understanding and enhancing the connections to these locations will help attract visitors from outside the town supporting the local economy.

## **Goal 2**

Support a future regional housing plan or initiative that identifies ‘fair share’ distribution of affordable housing units.

#### **Recommendation RGR 2a**

***Prepare a local housing needs analysis to better position the Town in any future regional or state housing initiative.***

With this goal, the Town acknowledges that there is currently no regional housing plan that identifies the principles and policies of a ‘fair share’ program. New York State does not have a ‘fair share’ mandate. This will require action by the NYS Legislature. Surrounding states of New Jersey, Massachusetts and Connecticut have passed legislation related to



**Sustainable Bethlehem**

the allocation of affordable housing. A consolidated housing plan which assesses the regional need would allow towns and villages to know the percentage of affordable housing they are striving to achieve. The Town can better position itself for any future regional or state housing initiatives by moving forward with a local housing needs analysis. (See “Livable Built Environment” Goal 5 Recommendation 5b.) Other NY municipalities have taken active approaches to solve their local housing needs in order to create an economically viable community. A needs analysis is the starting point for policy decisions.

**Goal 3**

Leverage local capacity by working with not-for-profits, agencies and organizations that support local open space as well as historic and cultural resource conservation opportunities.

**Recommendation RGR 3a**  
*Collaborate with conservation organizations and agencies to advance the conservation of open space acquisition opportunities.*

The Town of Bethlehem has successfully collaborated with several local organizations on the acquisition of parcels identified for conservation, public parks, and preserves. These organizations and examples include:

- Mohawk Hudson Land Conservancy (Normans Kill Ravines, Bio-reserve on Old Corning Hill Road)
- Scenic Hudson (additional lands adjacent to Henry Hudson Park)

- Albany County Land Bank (land near corner of Route 9W and Wemple Road)

This collaboration has developed innovative ways to secure acquisition funding and grants, as well as closing costs, transfer taxes and filing fees. The Town has long been supportive of these acquisition efforts.

**Recommendation RGR 3a (i)**  
*Collaborate with local organizations and state agencies to advance historic and cultural resource preservation and management strategies.*

Organizations focused on historic and cultural resource preservation include;

- NYS Historic Preservation Office (SHPO)
- NYS Office of Parks, Recreation & Historic Preservation
- Preservation League of New York State
- Albany County History Collaborative
- Bethlehem Historical Association
- Ravena Coeymans Historic Society

Refer to the Livable Built Environment Principle; Goal 1, Recommendations 1a and 1b, as they relate to actions to identify and manage historic resources.

**Recommendation RGR 3b**  
*Leverage local capacity to educate and inform property owners, organizations and adjacent municipalities to understand the various tools available for*

**conservation and management of open space.**

Continuing to educate the broader Bethlehem community on the value of conservation of the historic and cultural resources, natural systems, farming and agriculture is a fundamental goal of this plan. Many town residents are active in local and regional organizations (MHLC, Scenic Hudson, NY Farm Bureau) as well as individual preserves (Pine Hollow Arboretum, Five Rivers Environmental Education Center). These non-profit organizations offer a network of connections that can be tapped to assist the Open Space Coordinator to inform other town residents about the conservation programs available which are administered by the Town and other organizations. The Town will continue to work with organizations that offer technical assistance including Scenic Hudson Land Trust, NYS DEC Hudson River Estuary Program, and Mohawk Hudson Land Conservancy.



The Open Space Coordinator could coordinate/consult with the appropriate non-profit organizations to provide advice on management strategies and education during the site plan/subdivision approval process and to homeowner’s associations (HOA) and other management organizations.

The Town can also support adjacent communities as they explore, develop and adopt their own open space conservation measures. Many properties with farms, forest patches and open fields cross municipal boundaries. Much of Bethlehem’s farmed land is leased to farmers who don’t live in town, but have their main farm operation in an adjacent community. The business of agriculture operates and functions economically outside the confines of individual municipal borders, similar to most business and industries.

The Albany County Agriculture & Farmland Protection Plan (2018) can serve as the foundational

document to guide inter-municipal support of programs and policies. The intent being a broader protection of significant soils, long term sustainability of the local food supply and helping to ensure continued viability of agricultural resources as part of the town and region’s economy.

**Goal 4**

Improve town communications channels and feedback mechanisms.

**Recommendation RGR 4a**  
*Strive to inventory and coordinate a consistent communication format and messaging and humanize the provision of services.*

Electronic communication has become a vast and relied upon source of information to residents, business and visitors to the town. It is both a means of disseminating and gathering information. The town should endeavor to inventory the various communication platforms being used by town departments as

well as the messaging presented by each. There are many independent web pages and social media accounts that are updated and managed by various town staff. The process of posting information and gathering feedback should be more streamlined and consistent. Consideration should be given to Communications being a dedicated department of town government. This position or department could address public engagement and help address complicated and sensitive issues.

A goal of the Town administration is present the faces of those who provide town services away from the vague and generic ‘town’ moniker. It is residents, neighbors and friends who are working on behalf of residents and business who maintain the streets and parks, staff Town departments and provide police, EMS and fire response. The communication strategy should continue to humanize the people



The Town doesn’t deliver services, people do, so future growth will need to be balanced by increased town staffing, equipment, and technology to maintain the high quality of Town services.

and departments that work on behalf of the community.

The physical infrastructure to support and deliver electronic communications (broadband internet) should be placed across the entire town, so all residents have access to quality broadband service. Refer to Livable Built Environment Goal 10 and Resilient Economy Goal 8.

**Recommendation RGR 4b**  
*Explore smart governance best practices to better inform residents about Town services.*

Smart governance practices consider the use of technology in outreach and engagement in the decision-making process and ways that public services are delivered resulting in greater efficiency, community leadership, and continuous improvement. The purpose of smart governance is to make citizens more informed and information is accessible to all. Providing more interactive and engaging content in



communications will help residents understand the programs and services offered by the Town and the resources required to provide them. The primary intent is to broaden the spectrum of residents engaged in the process of town governance.

**Recommendation RGR 4c**  
*Prepare communication strategies to ensure that people with disabilities (physical, sight, hearing and cognitive) and limited English language skills receive the same level of services.*

As the smart governance and communication strategies are integrated, the town needs to consider the physical, language, sight, hearing and cognitive conditions of Town residents, business owners and their employees. Communications strategies should address how to engage people of all abilities. Regarding translation of communication information into other languages, the town should collaborate with the school districts and related agencies that know specific demographic groups that reside in the town.

**Recommendation RGR 4d**  
*Review town communications materials to identify words and terms that are technical and complex.*

Review town communications materials to identify words and terms used by all departments that are technical and complex. Simplifying jargon and making terms understandable will lead to better participation and engagement in town governance.

**Goal 5**

Continue to engage in intragovernmental (town departments) and inter-agency (schools, county, state) cooperation to enhance efficiency and contain the cost of delivery of all services in the town.

**Recommendation RGR 5a**  
*Pursue opportunities for consolidation of services and sharing of resources.*

This plan acknowledges the benefits and efficiencies achieved by Town employees to deliver services with confined financial and staff resources. With the intent of understanding the critical role taxes play on the town’s competitiveness in the regional economy, this plan acknowledges the value offered by continued sharing of equipment and staff resources for infrastructure maintenance and emergency response coordination. Cost sharing and savings can continue to be intragovernmental as well as interagency (adjacent towns, Albany



County and New York State). Town departments should also work with the three school districts on ways to share resources of programs and facilities. School district buildings can be considered for meetings and events by a variety of local groups and organizations.

#### **Recommendation RGR 5b**

***Continue to encourage residents to actively engage in the town governance process.***

Bethlehem residents can become or remain engaged in the efforts of governing the municipality. The town has established review boards and committees as well as some committees that work at different times on short term, specific projects. Established review boards include:

- Town Board
- Planning Board
- Zoning Board of Appeals
- Industrial development Agency
- Board of Ambulance and EMS Commissioners
- Board of Assessment Review
- Conservation Easement Review Board
- Ethics Board
- Currently the established committees are:
- Comprehensive Plan Update Committee
- Bicycle & Pedestrian Committee

Upon adoption, the Town Board should consider creating an assessment or implementation committee to continue the public engagement efforts in order to

allow more people a voice in town government.

#### **Recommendation RGR 5c**

***Support the Rail Trail Ambassador Program and use it as a model that could be applied to other Town parks, properties, and public facilities.***

The Rail Trail Ambassador Program is managed by the Mohawk Hudson Land Conservancy and has been in operation for about five years. Volunteers visit sections of the trail once a week to monitor conditions, perform minor maintenance such as picking up trash, and “meet and greet” visitors to the trail.

#### **Recommendation RGR 5d**

***Develop partnerships with not-for-profit and community organizations to help implement seasonal beautification and routine seasonal maintenance (watering, weeding).***

Foster partnerships with the local garden club (s), neighborhood associations, Bethlehem Chamber,

schools near particular sites (intersection or roundabout) with designed floral displays, work programs and internships with the Job Corps, Hudson Community College. The state and county typically have adopt-a-highway programs that should continue to be implemented within Bethlehem where local businesses offer to do debris clean up along a specific highway or road segment. Also, a town wide (all residents are invited) spring or fall clean-up campaign can be a way to activate residents’ energy to help clean up their neighborhood area.





Section 3

# Land Use Plan

# 03

# Land Use Plan

The future land use map is intended to serve as a land use guide towards achieving the community vision. The future land use map is based on CPUC workshop meetings in July/August 2021 including public comments received during CPUC meetings and public meetings.

## Category Descriptions

### Neighborhood Residential (NR)

Predominately single family residential dwellings with or without accessory apartments and some two family dwellings. Three family units and low-scale multifamily buildings are not dominant but permitted when following design guidelines so that they are of a size and design that is compatible with the other residential uses in these areas. Infrastructure, such as sanitary sewer, water, and road access are available.

### Mixed Residential (MR)

Mix of single family, two-family, three family, and multifamily uses both existing now and in the future. A balanced mix of different residential uses should be found in new developments providing a diversity of housing types. Infrastructure, such as sanitary sewer, water, and road access are available. Design guidelines provide for transition areas that border to existing residential neighborhoods. Compatibility and consistency with surrounding residential scale and architecture is important.

### Multifamily (MF)

Predominately multifamily residential uses, but some two-family and three-family dwellings. Single family residences and other residences may be present, but are likely found near adjacent Neighborhood Residential areas. Infrastructure, such as sanitary sewer, water, and road access are available.

### Rural Multi-Use (RMU)

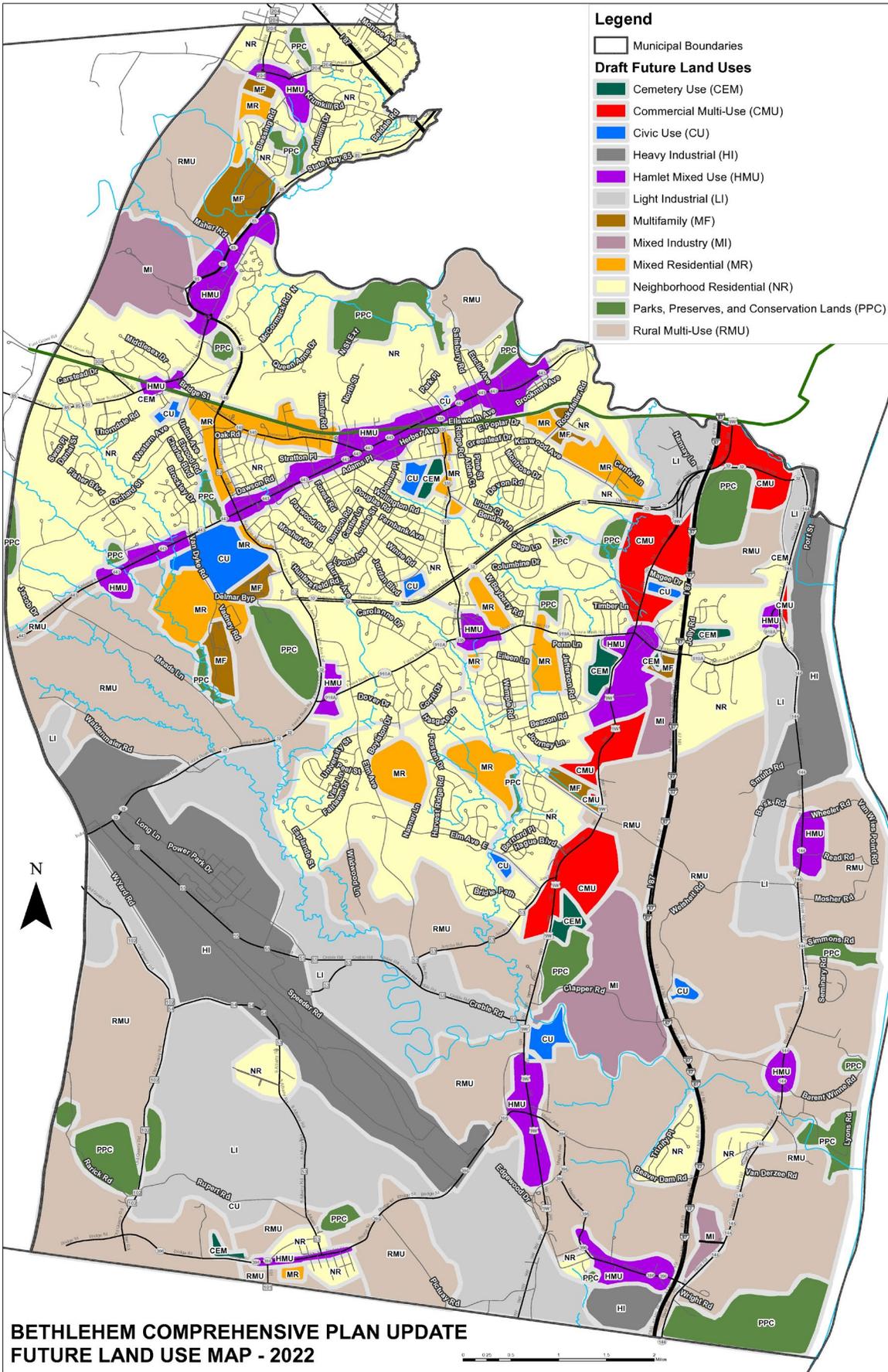
Low density residential and commercial uses due to limited infrastructure available. Multiple uses on a single parcel may be found to maintain a rural livelihood and support agriculture/farming activities. Multiple uses differs from mixed-use in that multiple uses typically are not found in the same building, although they can exist. Agriculture is present or the land contains prime farmland or farmland of statewide importance soils.

### Commercial Multi-Use (CMU)

Predominately commercial business (retail, restaurant, service business, shopping plazas, etc.) in separate buildings with some mixed-use or multifamily buildings and these areas are easily accessible by major roads. Infrastructure is available or located nearby. These areas are more auto-oriented; however, pedestrian accommodations should be provided when the surrounding area supports multi-modes of travel (e.g. sidewalks, bus stops) or making connections to neighborhoods.

### Hamlet Mixed Use (HMU)

Mix of residential and commercial uses of varying sizes, with mixed-use buildings common (commercial and residential in the same building). Commercial use may also include former residences that have been converted into office or service businesses. Design guidelines and/or form-based zoning are encouraged. A transit-oriented development approach is encouraged in these areas to allow for a mix of uses that emphasize pedestrian-oriented environments and encourage the use of public transportation.



Some areas may not be suited for a pedestrian environment but the scale of hamlet uses remain appropriate and can be accessed via automobile.

**Heavy Industrial (HI)**

Predominately industrial uses such as manufacturing or assembly with significant external impacts; or warehousing, bulk storage, and trans-loading facilities involving hazardous or commonly recognized offensive conditions.

**Light Industrial (LI)**

Includes light industrial and commercial uses such as light manufacturing, research and development, assembly, processing, warehousing, bulk storage, and trans-loading facilities. These uses are capable of operation in such a manner as to control the external effects of the activity, such as smoke, noise, soot, dirt, vibration, odor, etc.

**Mixed Industry (MI)**

This area includes research and development, testing and light manufacturing, technology based businesses, and offices. Multi-family residential development and businesses that support employees and residents are also found.

**Civic Use (CU)**

Uses such as schools, libraries, or government facilities.

**Parks, Preserves, and Conserved Lands (PPC)**

Existing Town parks, preserves as well as private preserves and conservation easements.

**Cemetery Use (CEM)**

Land used or dedicated to the burial and internment of the dead, which may include associated houses of worship, mortuaries, and cemetery maintenance facilities.

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Section 4

# Implementation Matrix

# 04

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# Implementation Matrix

A series of recommendations have been proposed within this Bethlehem Forward Comprehensive Plan Update to address the needs, concerns, challenges, and opportunities of Bethlehem. These have been based on an analysis of existing conditions, progress made since the previous comprehensive plan, and discussions with the community and stakeholders within the Town.

The recommendations have been organized in the following Implementation Framework Matrix to help focus efforts towards achieving the vision of Bethlehem over the next fifteen years. The matrix is organized around a series of action items. The associated recommendations identify the Plan principles, the entities involved, a time frame within which the recommendation should be initiated, an indication of the qualitative cost, and possible funding or technical assistance sources. When necessary, guidance statements are provided to inform the implementation process. Since Bethlehem’s Comprehensive Plan is a living document, the matrix may evolve over time as new challenges or opportunities arise within the community. The charts below help to explain what the time frame and cost indicators mean within the Implementation Framework Matrix.

## Time Frame Initiation Definitions

- Following Adoption (1-2 years)
- Short Term (3-5 years)
- Mid Term (5-10 years)
- Long Term (10+ years) or Market Driven
- Opportunity Driven
- On-going / Continual Operations / Procedures

## Cost Definitions

<b>Cost</b>	<b>Description</b>
\$	Can accomplish substantially with current operating and/or capital budgets
\$\$	Some new or increased funding required for implementation with or without minor grant funding support
\$\$\$	Significant new Town funding or major grant support needed

## Key

<b>Abbreviation</b>	<b>Full Name</b>
Rec.	Recommendation
LBE	Livable Built Environment
HWN	Harmony with Nature
RE	Resilient Economy
HC	Healthy Community
RGR	Responsible Governance and Regionalism

## Implementation Framework Matrix

Action	Recommendation	Related Recommendations and Principles	Responsibility	Time Frame	Cost	Potential Funding Source / Technical Assistance
	LBE 2b – Expand the Rural zoning district (based on the future land use map) to allow for a flexibility in land uses that are permitted by-right, including allowing multiple primary uses on one lot	Principle 4.4				
	LBE 2b – Expand the agriculture and agricultural use definitions to match those supported by the NYS Department of Agriculture and Markets	Rec. RE 3a; Principles 4.3, 4.4				
	LBE 4b – code update to allow attached ADU's by right, enhance design guidelines, and update approval procedure to incorporate abutter notice	Principles 4.1, 4.3, 4.5				
	LBE 4b – code update to allow detached ADU's by right, enhance design guidelines, and update approval procedure to incorporate abutter notice	Principles 4.1, 4.3, 4.5				
	LBE 4e – align land use and zoning designation	Principles 4.3, 4.4, 4.5				
	LBE 4f – Encourage developers to use the average density subdivision when appropriate	Rec. LBE 4j; Principles 4.3, 4.4				
	LBE 4h – Conservation Subdivision base density calculation simplification and removal of conventional plan requirement	Rec. LBE 4k, LBE 4i; Principles 4.3, 4.5				
<b>Phase 1 Revisions to Zoning Law and Subdivision Regulations</b>	LBE 4i – Clarify value of incentive and benefits (amenities) through guidelines for the Planning Board	Rec. LBE 4h; Principle 4.3, 4.5	Economic Development & Planning	Following Adoption	\$\$	Town
	LBE 4k – Apply a ratio of unconstrained lands set aside with conservation subdivision	Rec. LBE 4h; Principles 4.3, 4.5				
	LBE 5a – Incentive zoning incentives based on AMI of Albany MSA	Rec. LBE 5b; Principles 4.1, 4.4, 4.5, 4.6				
	LBE 10c - Maintain the street width standards for new residential developments to slow vehicle speeds within neighborhoods	Rec. LBE 7c; Principle 4.5				
	LBE 10c - Pursue a connected street network with existing streets and to adjacent parcels (developed or undeveloped) for all modes of travel to reduce vehicle concentration on neighborhood streets and disperse traffic at lower volumes over the entire street network	Recs. LBE 7a LBE 10d, HC 3b, HC 6a; Principles 4.1, 4.5,				
	HWN 1b (i) – Consider expanding local regulations to be applicable to include all wetland complexes greater than 12.4 acres, wetland buffers for all NYSDEC and federal jurisdictional wetlands, and/or isolated wetlands (including vernal pools) are options to be considered.	Recs. HWN 1c, HWN 1d; Principles 4.2, 4.5, 4.6				
	HWN 1b (ii)- Modifications could apply to all NYSDEC classified streams and buffer regulations could be dependent on the stream classification (AA, A, B, C) and standard (T, TS).	Recs. HWN 1c, HWN 1d; Principles 4.2, 4.5, 4.6				
	HWN 1b (ii)- Land disturbances associated with agricultural activity should continue to be exempt, but further refinement of activities classified as agriculture and prohibited activities should be considered.	Recs. HWN 1c, HWN 1d; Principles 4.2, 4.5, 4.6				
	HWN 1b (iii) - iii. Consider regulations associated with tree removal along streams, rivers and on steep slopes. These include, but are not limited to: a definition of tree removal, quantity, area of disturbance, and tree species and condition/health.	Recs. HWN 1c, HWN 1d, HWN 1g, HWN 3q, HWN 3r; Principles 4.2, 4.5, 4.6				
	HWN 1d – Require development applicants to engage in discussion of existing natural resources prior to a detailed site plan layout	Recs. LBE 4f, HWN 1b; Principles 4.2, 4.5				
	HC 1d – Evaluate “context sensitive” modifications to the permitted residential uses (location and density) in zoning districts abutting the Selkirk yards, Port of Albany, and Industrial Districts.	Rec. HC 1a; Principles 4.4, 4.5				
	HWN 1e – Apply the State sea-level rise predictions developed through the NYS Community Risk and Resiliency Act for proposed development via Site Plan requirements and Subdivision Regulations utilizing appropriate guidance and model local laws.	Principles 4.2, 4.5				
	HWN 2c – Amend code to expand permitted agricultural uses and support uses	Recs. LBE 2b, RE 3a; Principle 4.4				
	HWN 3f – Prohibit new or expanded fossil fuel (e.g., gasoline and diesel) dispensing and plan for conversion to electric.	Recs. HWN 1f, HWN 5e; Principle 4.5				
	RE 3a – Update the definition of agricultural uses in the Town Zoning Code.	Rec. LBE 2b; Principle 4.5				
	RE 3a - evaluate and increase the number of by-right agricultural uses and complementary business that would support farms and help diversity farm income	Rec. LBE 2b; Principle 4.5				

**Implementation Framework Matrix**

Action	Recommendation	Related Recommendations and Principles	Responsibility	Time Frame	Cost	Potential Funding Source / Technical Assistance
<b>Phase 1 Revisions to Zoning Law and Subdivision Regulations</b>	LBE 2b – Expand the Rural zoning district (based on the future land use map) to allow for a flexibility in land uses that are permitted by-right, including allowing multiple primary uses on one lot	Principle RE	Economic Development & Planning	Following Adoption	\$\$	Town
	LBE 2b – Expand the agriculture and agricultural use definitions to match those supported by the NYS Department of Agriculture and Markets	Rec. RE 3a; Principles HWN, RE				
	LBE 2b - Consider establishing a minimum lot size for residential uses based on design standards where on-site water supply and sewage disposal systems are required by ACDOH. Provide clear language in the Zoning Law so the minimum lot size and density for residential uses with on-site sanitary sewer and water and public sanitary sewer and water is easily understood.	Rec. RE 3a; Principles HWN, RE				
	LBE 4b – Code update to allow attached ADU’s by right, enhance design guidelines, and update approval procedure to incorporate abutter notice	Principles IE, HWN, HC				
	LBE 4b – Code update to allow detached ADU’s by right, enhance design guidelines, and update approval procedure to incorporate abutter notice	Principles IE, HWN, HC				
	LBE 4e – Align land use and zoning designation	Principles HWN, RE, HC				
	LBE 4f – Encourage developers to use the average density subdivision when appropriate	Rec. LBE 4j; Principles HWN, RE				
	LBE 4h – Conservation Subdivision base density calculation simplification and removal of conventional plan requirement	Rec. LBE 4k, LBE 4i; Principles RE, HC				
	LBE 4i – Clarify value of incentive and benefits (amenities) through guidelines for the Planning Board	Rec. LBE 4h; Principle RE, HC				
	LBE 4k – Apply a ratio of unconstrained lands set aside with conservation subdivision	Rec. LBE 4h; Principles HWN, HC				
	LBE 5a – Incentive zoning incentives based on AMI of Albany MSA	Rec. LBE 5b; Principles IE, RE, HC, RGR				
	LBE 10c - Maintain the street width standards for new residential developments to slow vehicle speeds within neighborhoods	Rec. LBE 7c; Principle HC				
	LBE 10c - Pursue a connected street network with existing streets and to adjacent parcels (developed or undeveloped) for all modes of travel to reduce vehicle concentration on neighborhood streets and disperse traffic at lower volumes over the entire street network	Recs. LBE 7a LBE 10d, HC 3b, HC 6a; Principles IE, HWN, RE, HC				
	HWN 1b (i) – Evaluate and consider local regulations to be applicable to include all wetland complexes smaller than 12.4 acres, wetland buffers for all NYSDEC and federal jurisdictional wetlands, and/or isolated wetlands (including vernal pools) are options to be considered.	Recs. HWN 1c, HWN 1d; Principles LBE, HC, RGR				
	HWN 1b (ii)- Modifications could apply to all NYSDEC classified streams and buffer regulations could be dependent on the stream classification (AA, A, B, C) and standard (T, TS).	Recs. HWN 1c, HWN 1d; Principles LBE, HC, RGR				
	HWN 1b (ii)- Land disturbances associated with agricultural activity should continue to be exempt, but further refinement of activities classified as agriculture and prohibited activities should be considered.	Recs. HWN 1c, HWN 1d; Principles LBE, HC, RGR				
HWN 1b (iii) - iii. Consider regulations associated with tree removal along streams, rivers and on steep slopes. These include, but are not limited to: a definition of tree removal, quantity, area of disturbance, and tree species and condition/health.	Recs. HWN 1c, HWN 1d, HWN 1g, HWN 3q, HWN 3r; Principles LBE, HC, RGR					
HWN 1d – Require development applicants to engage in discussion of existing natural resources prior to a detailed site plan layout	Recs. LBE 4f, HWN 1b; Principles LBE, HC					
HC 1d – Evaluate “context sensitive” modifications to the permitted residential uses (location and density) in zoning districts abutting the Selkirk yards, Port of Albany, and Industrial Districts.	Rec. HC 1a; Principles RE, HC					
HWN 1e – Apply the State sea-level rise predictions developed through the NYS Community Risk and Resiliency Act for proposed development via Site Plan requirements and Subdivision Regulations utilizing appropriate guidance and model local laws.	Principles LBE, RE, HC					
HWN 2c – Amend code to expand permitted agricultural uses and support uses	Recs. LBE 2b, RE 3a; Principle RE					
HWN 3f – Prohibit new or expanded fossil fuel (e.g., gasoline and diesel) dispensing and plan for conversion to electric.	Recs. HWN 1f, HWN 5d; Principle HC					

	HWN 3j – Streamline the application review process for rooftop PV solar installations.	Recs. HWN 3b, HWN 3c, HWN 3g, HWN 3k; Principles LBE, HC			
	RE 3a – Update the definition of agricultural uses in the Town Zoning Code.	Rec. LBE 2b; Principle HC			
	RE 3a - Evaluate and increase the number of by-right agricultural uses and complementary business that would support farms and help diversify farm income. By-right non-agricultural rural uses should also be evaluated.	Rec. LBE 2b; Principle HC			
	RE 3d – Limit the extension of utility (sanitary sewer and water) infrastructure in undeveloped areas of the town.	Rec. RE 8a; Principles HWN, RGR			
	RE 8a – Focus development where infrastructure currently exists to meet economic development goals.	Recs. LBE 8a, RE 3d; Principles IE, LBE, HWN, HC, RGR			
	HC 6b – Asses the zoning law to facilitate access to child care by evaluating zoning districts where child care could be permitted and considering specific design guidelines to limit potential impacts	Principles IE; RE, HC			

**Guidance**

Zoning Law and Subdivision Regulation (code) changes have been organized into two phases. Some zoning and subdivision regulation changes can be accomplished by Town staff with other professional assistance and these would be accomplished during Phase 1 (above). Phase 2 Zoning Law and Subdivision Regulation changes are dependent on the recommendations of future reports and studies that may involve the assistance of new committees. During code updates, Staff should ensure there is consistency between all areas of the code that relate to the specific topics to be revised, as it is common for multiple parts of the code to work together to produce an intended outcome. This will strengthen the code and help avoid the need to unnecessarily divert an applicant to the ZBA or make further code revisions to correct issues.

<b>Conduct Historic and Cultural Resource Survey and Implement Recommendations</b>	LBE 1b- Establish a historic preservation committee	LBE 1a, LBE 1c, LBE 1d, LBE 2c; Principle RE	Town Board, Town Historian	Following Adoption	\$	Town / Advisory Council on Historic Preservation; NYS Office of Parks, Recreation, and Historic Preservation; Preservation League of New York State; Advisory Council on Historic Preservation
	LBE 1b - The historic preservation committee should assist with defining the scope and deliverables of the reconnaissance level survey and prioritizing implementation recommendations.	LBE 1a, LBE 1c, LBE 1d, LBE 2c; Principle RE	Historic Preservation Committee, Town Historian	Following Adoption	\$	
	LBE 1a - Prepare historic reconnaissance survey including structures (buildings, bridges, barns, silos, markers, etc.), sites, cultural/archeological, neighborhoods, and districts.	Recs. LBE 1a, LBE 2a, LBE 3a, LBE 4c; Principle RE	Town Historian / Economic Development and Planning	Following Adoption	\$\$	
	LBE 1a – Outline strategies for the further identification and management of these town-wide assets, the range of governance strategies, and benefits of tax credits and funding alternatives.	Rec. LBE 1a, LBE 2a; Principle RE	Town Historian / Economic Development and Planning	Short	\$	
	LBE 1a – Prepare design guidelines to inform planning, design, and engineering for projects within or adjacent to historic structures, sites, and districts.	Recs. LBE 1a, LBE 2a, LBE 4c; Principle 4.4; Principle RE	Economic Development and Planning	Short	\$\$	
	LBE 2a - Agricultural landscapes are ‘cultural’ and should be included in the reconnaissance level survey.	Recs. LBE 1a, LBE 1b	Historic Preservation Committee, Town Historian	Following Adoption	\$	
	LBE 2c – Prepare viewshed analysis / scenic quality study	Rec. LBE 1a, LBE 1b; Principle RE	Town Historian, Economic Development and Planning	Short	\$\$	
	LBE 3a - Recognize, identify and map the Town’s cultural institutions	Rec. LBE 1a, LBE 1b; Principle RE	Town Historian / Economic Development and Planning	Short	\$	
	LBE 1a – Connect residents and property owners to the vast resources available on preservation, regulations, tax incentive programs and funding sources	Rec. RGR 3b	Town Historian	Ongoing	\$	
	RGR 3a (i) - Collaborate with local organizations and state agencies to advance historic and cultural resource preservation and management strategies	Rec. LBE 1a; Principle 4.2	Town Historian	Ongoing	\$	
	RGR 3b – Leverage local capacity to educate and inform property owners, organizations, and adjacent municipalities to understand the various tools available for conservation and management of historic and cultural resources, natural systems, and farming and agriculture.	Rec. LBE 1a, RE 3e; Principles 4.2, 4.3, 4.4	Open Space Coordinator, Town Historian, Historic Preservation Committee, Sustainability Committee	Ongoing	\$	

**Guidance**  
 A historic preservation committee would serve as a valuable body to guide the historic preservation efforts. Should a consultant be utilized, the consultant should specialize in historic and cultural resource surveys as this may avail the Town to additional funding opportunities.

<b>Develop and Implement an Active Transportation Plan</b>	LBE 7a – Prepare Active Transportation Plan	Recs. LBE 7a, LBE 7b, LBE 7c, LBE 8a, LBE 9a, LBE 10c, HC 3c; Principle IE, HWN, RE, HC	Economic Development and Planning, Bicycle and Pedestrian Committee, Highway Department	Following Adoption	\$	Town / Capital District Transportation Committee, NYSDOT
	LBE 7b - Map connections from Bethlehem to regional active transportation networks (streets and trails) in an effort to encourage commuting (inbound & outbound) and recreation travel	Rec. LBE 7a; Principle RE, HC	Economic Development and Planning	Short	\$	
	LBE 7c – Explore traffic calming measures with pilot projects	Rec. LBE 7a; Principle HC	Traffic Pedestrian Management Committee, Highway Department	Short	\$	
	LBE 7c – Deploy traffic calming measures to address safety issues	Rec. LBE 7a; Principle HC	Traffic Pedestrian Management Committee, Highway Department	Mid-Term, Ongoing	\$	
	LBE 7c - Consider education and outreach strategies (social media, public service announcements, etc.) to address driver behaviors	Rec. LBE 7a, RGR 4a; Principle HC	Bicycle and Pedestrian Committee, Police Department, Town Communications	Ongoing	\$	
	LBE 8b - Evaluate the potential for an intra-town transit between all hamlets, serving the transportation needs of underserved residents and businesses.	Recs. LBE 4d, LBE 10f, LBE 9a; Principle IE	Economic Development and Planning	Mid-term	\$	
	LBE 9a - Assess the opportunity for a park and ride lot in Selkirk or South Bethlehem in cooperation with CDTA	Principle IE, HWN, RE	Economic Development and Planning	Mid-term		
	LBE 9c – The Bicycle and Pedestrian Committee should be involved in the Plan’s recommendations for advancing mobility and accessibility for users of all abilities.	Recs. LBE 7a, LBE 7b, LBE 7c, LBE 8a, LBE 9a, LBE 10c, HC 3b, HC 3c; Principle IE, HWN, HC	Economic Development and Planning, Bicycle and Pedestrian Committee	Following Adoption	\$	
	LBE 10f - Present, explain, promote benefits of Transportation Demand Management (TDM)	Rec. LBE 10f; Principle RE	Economic Development and Planning	Mid-term	\$	
	HC 3b – Support connections to and expansion of the Albany County Rail Trail, as both a recreational and economic asset.	Recs. LBE 7a, LBE 7b; Principles HWN, RE, HC	Economic Development and Planning, Highway Department	Ongoing	\$	
	HC 6a – Ensure that town services and facilities are disability inclusive and reachable by all persons regardless of social or economic background.	Principle IE	Town Board, Department of Public Works, Parks and Recreation Department	Ongoing	\$	

**Guidance**  
 The development of an active transportation plan will require a scoping process that should involve the Town’s Bicycle and Pedestrian Committee and the Traffic Pedestrian Management Committee. These entities should also be involved throughout the process to guide a consultant and staff.

<b>Support Aging in Place</b>	LBE 5c - Ensure senior housing is integrated with market rate units through incentives	Recs. LBE 4b, LBE 4d, LBE 5b, LBE 8a; Principles IE, HC	Economic Development and Planning	Short	\$	Town
	LBE 7a - Include universal design standards to promote accessibility for users of all abilities	Principles IE, HC	Parks and Recreation Department	Short	\$	Town
	LBE 8b - Explore the feasibility of expanding the Town’s senior transportation service to provide intra-town mobility	Principles IE, HC	Economic Development and Planning, Senior Services	Mid-term	\$	Town
	HWN 5c – Continue to support the Senior Services Department and Volunteers with warnings to at risk populations	Principle IE	Town Board,	Ongoing	\$	Town

	HC 4b – Consider development of a Community and Recreation Center to accommodate senior programs and activities.	Principles IE, HC	Parks & Recreation Department, Economic Development and Planning Department	Mid-term	\$\$	Town
	HC 4c - Continue the collaboration with the Senior Services Department and Bethlehem Senior Project, Inc. to provide activities and services to Town seniors	Rec. HC 4b; Principle IE	Senior Services Department	Ongoing	\$	Town

<b>Other Pre- Code Update Research and Analysis</b>	LBE 5b – Undertake housing needs study to inform an inclusionary housing program	Recs. LBE 7b, LBE 5c, LBE 8b; Principles IE, HC	Economic Development and Planning	Short	\$\$	Town /
	HWN 1b –Use NYSDEC Habitat Summary, Conservation Criteria, LWRP, and community profile to develop strategic approach to further conservation of natural resources: conduct research	Recs. HWN 1c, 1d; Principles LBE, HWN	Economic Development and Planning, Open Space Coordinator	Following Adoption / Short / Ongoing	\$	Town / NY Department of Environmental Conservation
	RE 1a – Analyze the market potential for Bethlehem to serve as a clean tech hub by analyzing viable uses and potential tenants for properties in the MED and RLI zoning districts	Rec. LBE 10a, LBE 10b; Principle HWN	Economic Development	Short	\$	Town / Bethlehem Chamber of Commerce
	RE 3b –Develop a framework for a purchase of development rights (PDR) program or a quasi-Transfer of Development Rights (TDR)/PDR program.	Rec. HWN 2a, HWN 3p; Principle HWN	Economic Development and Planning	Short	\$	Town / NYS Agriculture and Markets
	RGR 2a – Prepare a local housing needs analysis to better position the Town in any future regional or state housing initiatives.	Principle IE	Planning	Opportunity-Driven	\$\$	Town / Capital District Regional Planning Commission

**Guidance**

The housing study and the establishment of a Purchase of Development Rights program will likely require the assistance of a consultant. If a housing committee is established, they should be involved in the scoping and assist the Town and any consultant hired. Analysis and research can be conducted by Town Staff with the assistance of existing committees and organizational stakeholders.

	LBE 1c – Consider enacting a demolition delay requirement to review proposals for the full or partial removal of historic structures	Recs. LBE 1a, LBE 1b; Principle RE				
	LBE 1d – Code update to address properties adjacent to historic structures / sites / districts	Rec. LBE 1a; Principle RE				
	LBE 1e – Code update for uses permitted in historic / cultural structures	Rec. LBE 1a; Principle RE				
	LBE 4a – Code update to allow 2-3 family units in CR, RA, RB districts.	Rec. LBE 4c; Principle IE				
	LBE 4a – Consider ownership and rental requirements for 2/3 family units in CR, RA, RB districts.	Principle IE				
	LBE 4c – Consider form-based code / infill design guidelines	Recs. LBE 1a, LBE 8a; Principle RE				
<b>Zoning Law and Subdivision Regulations Revisions Phase 2</b>	LBE 4d – Evaluate context-sensitive density transitions between SF and MF housing	Recs. LBE 4c, LBE 4g	Economic Development & Planning	Short	\$\$	Town
	LBE 4f – Density metric units / acre vs. lot size requirements: make follow-up adjustments if necessary	Principles IE, HWN				
	LBE 4g – Evaluate and as appropriate permit/implement, new models of housing not identified in the current code.	Principles IE, HWN				
	LBE 4j – Consider whether all major subdivisions be submitted as Conservation subdivisions (as long as site accommodates a conservation layout).	Rec. LBE 4k; Principles HWN, HC				
	LBE 4j – Consider modifications to RA district base density and conservation subdivision density bonuses permitted under incentive zoning	Rec. LBE 4h, LBE 4i; Principle IE, HWN				
	LBE 5c – Ensure that affordable housing units are integrated with market rate units through incentives	Recs. RE 6c, LBE 8a; Principle IE				
	LBE 5c – Update PUD regulations to address affordable housing	Rec. RE 6c; Principle IE				
	LBE 6b – Consider modifications to the Incentive Zoning section to recognize complete streets improvements as a public benefit and define value of different types of improvements.	Rec. LBE 6a, LBE 7a, HC 2a; Principles 4.3, 4.5				
	LBE 6b - Evaluate and consider incentives for constructing complete streets improvements or financial contributions towards complete streets improvements	Rec. LBE 6a				
	LBE 7a – Implement recommendations or strategies that are identified in the Active Transportation Plan	Rec. LBE 8a, LBE 10c, LBE 10f; Principles IE, HWN, RE, HC				
LBE 10e - Evaluate parking regulations in an effort to right size parking requirements in the code for all zoning districts	Principle RE					

	LBE 8a – increase land use diversity & density in areas served by ex. Infrastructure	Recs. LBE 4c, LBE 7a, RE 6a, RE 8a; Principle IE; HWN, RE, HC, RGR				
	HWN 1b (i) –Evaluate and consider expanding local regulations to be applicable to include all wetland complexes smaller than 12.4 acres, wetland buffers for all NYSDEC and federal jurisdictional wetlands, and/or isolated wetlands (including vernal pools) are options to be considered.	Rec. HWN 1c, HWN 1d; Principles LBE, HC				
	HWN 1b (ii)- Modifications could apply to all NYSDEC classified streams and buffer regulations could be dependent on the stream classification (AA, A, B, C) and standard (T, TS).	Rec. HWN 1c, HWN 1d; Principles LBE, HC				
	HWN 1b (iii) - iii. Consider regulations associated with tree removal along streams, rivers and on steep slopes. These include, but are not limited to: a definition of tree removal, quantity, area of disturbance, and tree species and condition/health.	Rec. HWN 1c, HWN 1d; Principles LBE, HC				
	HWN 1b (iv) - Consider implementing habitat protective measures and restoration activities identified in the LWRP, including the BinnenKill shallow water habitat. Also consider taking actions to protect the two State-designated “Significant Coastal Fish and Wildlife Habitats”	Rec. HWN 1c, HWN 1d; Principles LBE, HC				
	HWN 1d – Apply greater focus on natural resource conservation by using the Open Space Plan’s conservation criteria during the review of development applications	Rec. HWN 1c, HWN 1d; Principles LBE, HC				
	HWN 1d – Consider formal adoption of Natural Resource Inventory and integration of the inventory into decision making procedures	Recs. HWN 1b, HWN 1c; Principles LBE, HC				
	HWN 1c – Assess the use of Environmental Protection Overlay Districts, Critical Environmental Areas, and resource specific regulations. Site design associated with land disturbance should be sensitive to the existing site characteristics. Retention of trees during site design is important.	Rec. HWN 1b; Principles, LBE, HC				
	HWN 2b – Consider requiring Conservation Subdivision or Average Density Subdivision provisions when prime farmland soil and soils	Rec. LBE 4j; Principle RE				
	HWN 3c – Provide electric vehicle charging capability at residential properties and encourage adoption of electric vehicles.	Recs. HWN 3b, HWN 3i, HWN 3k				
<b>Zoning Law and Subdivision Regulations Revisions Phase 2</b>	HWN 3g – Advance solar energy with photovoltaics, passive solar energy, and building orientation.	Rec. HWN 3l	Economic Development & Planning	Short	\$\$	Town
	HWN 3h – Zone suitable locations for grid-scale renewables (PV solar) and electricity storage	Rec. HWN 3b				
	HWN 3k – Consider incentives for renewable energy use in the Town Code, such as density bonuses through the Zoning Law and Subdivision Regulations, or reduction of building permit fees through the Building Code.	Rec. HWN 3c				
	HWN 3q – Offset GHG emissions from the development of new buildings.	Principles RE, HC				
	HWN 4c – Consider and encourage reclamation, material recycling, and source reduction of demolition materials and building construction materials.	Rec. 1e; Principle 4.2; Principle HC				
	RE 1c – Consider modifications to Mixed Economic Development (MED) district regulations: streamline the approval process	Rec. RE 1a, RE 1b, RE 1d				
	RE 1c - Consider modifications to Mixed Economic Development (MED) district regulations: expand the permitted uses and add flexibility to when primary and secondary uses may be approved or constructed	Rec. RE 1a, RE 1b, RE 1d; Principle LBE				
	RE 2a – Examine land use regulations to attract businesses in the commercial hamlet and hamlet districts of town: enhance, expand, and beautify public spaces to activate main street environments	Rec. LBE 4c; Principle LBE, HWN, HC				
	RE 2a – Examine land use regulations to attract businesses in the commercial hamlet and hamlet districts of town: update permitted uses, density, setback requirements, area and height requirements, and access and parking requirements	Rec. LBE 8a; Principle LBE				
	RE 2a – Examine land use regulations to attract businesses in the commercial hamlet and hamlet districts of town: Support code updates with design guidelines and/or form-based code	Rec. LBE 4c, LBE 8a, RE 6a; Principles LBE, HWN, HC				
	RE 3b – Establish a formal framework for determining development units and application to incentive zoning within a Purchase of Development Rights local law.	Rec. HWN 2a, HWN 3p; Principle HWN				
	RE 6a – Review the permitted uses in the hamlet districts and adjust to achieve a diversity of uses that generate activity throughout the day and week	Rec. LBE 4c, LBE 8a, RE 2a; Principles LBE, HWN, HC				
HC 2a – Design, construct, and maintain public realm improvements to reduce and avoid personal injury: include best practice design standards for safe streets and public spaces in Zoning Law and Subdivision Regulations	Recs. LBE 6a, LBE 6b, RE 2a; Principle IE, LBE, RE, HC					

**Guidance**

The Town should hire a consultant with significant experience with zoning code updates related to the following topics:

- Form-based code / in-fill development design guidelines
- Purchase of development rights and transfer of development rights programs
- Environmental conservation
- Affordable housing

<b>Conduct Infrastructure and Asset Inventories and Studies</b>	LBE 7d – Use Evaluation Process for New Pathway Investment	Rec. HC 2a; Principles HWN, HC, RGR	Bicycle and Pedestrian Committee / Economic Development and Planning	Ongoing	\$	Town
	LBE 10a - Investigate and document public utility capacity and reliability issues in support of land use planning, economic development, resiliency, and emergency preparedness	Recs. LBE 10b, RE 1a; Principles HWN, HC, RE	Department of Public Works	Short	\$	Town
	LBE 10b - Endeavor to secure documentation (location, capacity, condition and reliability assessment) of private utility infrastructure systems	Recs. LBE 10a, RE 1a; Principles IE, HWN, RE, HC	Department of Public Works	Short	\$	Town
	LBE 10d - Continue assessing the advisability of the collector road extensions, which were noted in the 2005 Comprehensive Plan, when and when development occurs, including conducting traffic analyses of the impact to neighborhood roads prior to their approval.	Recs. LBE 7a, HC 6a; HWN, RE, HC	Economic Development and Planning, Department of Public Works	Ongoing	\$	Town / Capital District Transportation Committee, NYSDOT
	LBE 10d - The design of collector roads should follow a complete streets approach, including traffic calming elements along these collector roadways and on neighborhood roadways in the vicinity when appropriate.	Recs. LBE 7a, HC 6a; Principles HWN, RE, HC	Economic Development and Planning, Department of Public Works	Ongoing	\$	Town / Capital District Transportation Committee, NYSDOT
	HC 3d – Assess the feasibility of a community and recreation center in the Town.	Rec. HC 4b; Principle RE	Parks & Rec.	Short	\$\$	Town

**Guidance**

For assessing the feasibility of a Town community and recreation center, the Town should evaluate the existing capacity of facilities, demographic changes anticipated, and community recreation needs when determining the feasibility of a community and recreation center.

<b>Establish and Maintain Key Town Positions, Roles, or Committees</b>	LBE 5b – Consider establishing a committee or staff working group to guide the housing needs study	Recs. LBE 4d, LBE 4f, LBE 4g, LBE 4i, LBE 5c, LBE 8a; Principles IE, RE, HC	Town Board	Following Adoption	\$	NA
	LBE 9b – Continue to support and formally institutionalize the Town’s internal working group that focuses on transportation planning, implementation, operations and maintenance	Principle HWN		Ongoing		
	LBE 9c – Continue to support the efforts of the Bicycle and Pedestrian Committee	Principle HWN		Ongoing		
	HWN 1a – Continue to support the position of Open Space Coordinator	Rec. HWN 3s; Principles LBE, HC		Ongoing		
	HWN 1g – Continue to support the position and responsibilities of the Storm Water Management Coordinator to help ensure water quality protection of Town’s watershed areas. Encourage use of green infrastructure practices in both municipal construction and private development projects.	Recs. HC 1b, HWN 1h; Principles LBE, HC		Ongoing		
	HWN 2e – Consider establishing an Agricultural Advisory Committee	Principles RE		Short		
	HWN 3a – Establish a Sustainability Committee and Sustainability Coordinator to focus on climate change mitigation and sustainability.	Principle HC		Short		
	HWN 3r - Consider an Urban Forestry Committee, which could be an extension of the Street Tree Advisory Committee, to guide implementation of the street tree management program and advocate for and educate on urban forests.	Principles LBE, HWN, RE, HC		Short		
	RE 1e – Consider reestablishing the Economic Development sub-committee.			Short		
RGR 4a – Inventory and coordinate a consistent communication format and messaging and humanize the provision of services: Consider whether Town Communications should be a dedicated department of town government	Rec. RGR 4c		Short	\$\$	Town	

	RGR 5b - The Town Board should consider creating an assessment or implementation committee to continue the public engagement efforts			Short	\$	Town
<b>Guidance</b>						
The establishment of new Committees should be informed with an understanding of their ability to work independently or for current Town staff to provide support while recognizing staff resources may be limited.						
<b>Resolve Transportation Conflicts of Industrial Centers and Residential or Hamlet Areas</b>	RE 4b – Endeavor to resolve transportation conflicts of industrial centers and residential / hamlet areas: assess options for transportation connections to Thruway	Rec. HC 1c; Principles LBE, HC	Economic Development and Planning, Engineering	Mid-Term	\$\$	Town / Capital District Transportation Committee, NYSDOT
	RE 4b - Endeavor to resolve transportation conflicts of industrial centers and residential / hamlet areas: explore roadway improvements to Route 396 such as realignment, traffic calming, etc. to better manage the speed of traffic and improve quality of life	Rec. HC 1c; Principles LBE, HC	Economic Development and Planning, Engineering	Long-term	\$\$	Town / Capital District Transportation Committee, NYSDOT
	RE 4b - Endeavor to resolve transportation conflicts of industrial centers and residential / hamlet areas: explore collaboration with Town of Coeymans on a truck route that addresses both communities’ issues	Rec. HC 1c; Principles LBE, HC	Economic Development and Planning	Mid-term	\$\$	Town / Capital District Transportation Committee, NYSDOT
	HC 1c – Recognize the transportation system’s significant role in the local and regional economy, while also having the potential to impact public health and equity.	Rec. RE 4b; Principle IE	Economic Development and Planning /	Ongoing	\$	Town
<b>Guidance</b>						
To advance the Selkirk Bypass, the Town should reengage industrial businesses and residents in the southern part of town, update the previous related studies, and engage NYSDOT and the Thruway Authority, and neighboring communities.						
<b>Enhance and Maintain the Active Transportation Network</b>	LBE 9a – Commit financial resources and formalize capital planning for transportation infrastructure improvements and maintenance programs including those for alternative modes of transportation / travel	Recs. LBE 6a, LBE 7a, HC 2a, HC 3a; Principles HWN, HC; RE	Highway Department	Short, Ongoing	\$\$	Town / Capital District Transportation Committee, NYSDOT
	LBE 9a - Align maintenance practices including sidewalk plowing and clearing snow from bus stops to keep the route to transit stops accessible	Recs. LBE 6a, LBE 7a, HC 2a, HC 3a; Principles HWN, HC; RE	Highway Department	Short	\$	Town / Capital District Transportation Committee, NYSDOT
	HC 2a – Design, construct, and maintain public realm improvements to reduce and avoid personal injury: continue enforcement for speeding and lower speed limits where appropriate	Recs. LBE 6a, LBE 6b; Principles IE, HWN, HC	Police Department, , Economic Development and Planning	Ongoing	\$	Town / Capital District Transportation Committee, NYSDOT
	HC 2a – Design, construct, and maintain public realm improvements to reduce and avoid personal injury: perform regular sidewalk maintenance	Recs. LBE 6a, LBE 6; Principles IE, HWN, HC	Highway Department	Ongoing	\$\$	Town / Capital District Transportation Committee, NYSDOT
	HC 2a - Design, construct, and maintain public realm improvements to reduce and avoid personal injury: investigate and stay apprised of additional effective methods of reducing speeding and other dangerous driving practices on neighborhood roads and work to implement these methods where appropriate.	Recs. LBE 6a, LBE 6; Principle IE, HC	Economic Development and Planning, Highway Department	Ongoing	\$	Town / Capital District Transportation Committee, NYSDOT
	HC 3a – Advance the recommendations of the Town’s Bicycle and Pedestrian Committee (and Priority Network improvements) and the Town’s Street Tree Management Plan.	Recs. LBE 7a, LBE 7b	Town Board, Town Departments	Ongoing	\$	Town
	HC 3b – Support connections to and expansion of the Albany County Rail Trail, as both a recreational and economic asset.	Principles LBE, HWN, RE	Economic Development and Planning / Highway Department	Ongoing	\$	Town / Capital District Transportation Committee, NYSDOT
	HC 3b – Explore use of Albany Water Line right of way and abandoned rail corridor for recreational use		Economic Development and Planning, Albany Water Board	Opportunity Driven	\$\$	Town / Capital District Transportation Committee
	RGR 1c – Enhance connections between Town activity centers and regional destinations.	Rec. LBE 7a; Principle RE	Planning & Engineering	On-going	\$\$	Town / Capital District Transportation Committee, NYSDOT

LBE 6a – Update Complete Streets Resolution	Recs. LBE 7a, LBE 9a, HC 2a; Principles HWN, HC, RE	Bicycle and Pedestrian Committee, Economic Development and Planning	Short	\$	Town
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**Guidance**

The Active Transportation Plan should help inform these recommendations.

<b>Tell the Town’s Story and Explore Additional Public Engagement Opportunities</b>	HC 2c – Support the Police Reform and Reinvention Collaborative.	Principles IE, HC	Police Reform Advisory Committee, Economic Development and Planning, Engineering	Ongoing	\$	Town
	RGR 4a – Inventory and coordinate a consistent communication format and messaging and humanize the provision of services: Inventory communications platforms used by Town Departments and typical messaging	Rec. RGR 4c	Town Communications / Town Departments	Short	\$	Town
	RGR 4a – Inventory and coordinate a consistent communication format and messaging and humanize the provision of services: streamline information dissemination and collection of feedback	Recs. RGR 4c, LBE 10b, RE 8b	Town Communications / Town Departments	Mid-term		
	RGR 4b - Explore smart governance best practices to better inform residents about Town services and broaden engagement	Recs. RGR 4a, RGR 4c	Town Communications / Town Departments	Mid-term		
	RGR 4c – Prepare communication strategies to ensure that people with disabilities (physical, sight, hearing and cognitive) and limited English language skills receive the same level of services.	Rec. RGR 4a; Principles IE, HC	Town Communications / Town Departments	Short		
	RGR 4d - Review Town communications materials to identify words and terms that are technical and complex.		Town Communications / Town Departments	Short		
	RGR 5b - Continue to encourage residents to actively engage in the Town governance process	Principles IE, LBE, HWN, RE, HC	All	Ongoing		

<b>Ensure Funding in Operating and Capital Improvement Budgets Align with Plan Goals and Recommendations</b>	HWN 3d – At public facilities, provide EV charging stations and upgrade them to fast-charging stations as demand increases	Recs. HWN 3e, HWN 3o	Department of Public Works, Highway Department	Opportunity Driven	\$\$	Town / NYS Energy Research and Development Authority
	HWN 3e – Commit to transition the Town’s light-duty vehicle fleet to electric vehicles (EV’s) by 2030. Also consider conversion of the heavy duty fleet, where possible.	Recs. HWN 3d, HWN 3o	Department Heads, Highway Department	Ongoing, Opportunity Driven	\$\$\$	Town / NYS Energy Research and Development Authority
	HWN 3r – Reforest and maintain forests by implementing the Street Tree Inventory Analysis and Management Plan	Rec. HC 3a; Principles LBE, HC	Economic Development and Planning, Highway Department	Ongoing, Opportunity Driven	\$-\$\$	Town / NYS Department of Environmental Conservation
	HWN 4a – Continue to support the composting efforts of the Town		Town Board, Highway Superintendent	Ongoing	\$	Town
	HWN 4b – Continue to support the Town Recycling Program.		Town Board, Highway Superintendent	Ongoing	\$	Town
	RE 3b – Support the retention and expansion of agricultural businesses through the use of the Farms and Forests Conservation Programs and a possible purchase of development rights program.	Rec. HWN 3p	Town Board / Highway Superintendent / Department Heads	Ongoing	\$\$	Town, Purchase of Development Rights Program
	HC 3c – Ensure funding and staffing resources for the Highway Department to provide adequate, year-round and ADA compliant maintenance and improvements to the town sidewalks, trails, curb ramps, crosswalks, signs, and signals.	Recs. LBE 6a, LBE 9a, HC 2a, HC 3a, RE 2a; Principle LBE, HWN, RE	Town Board	Ongoing	\$\$	Town, Capital District Transportation Committee, NYS Department of Transportation
	HC 4a – Continue to support resources for the Senior Services Department that provide and expanded range of services as this demographic grows.	Principle IE	Town Board	Ongoing	\$\$	Town
	HC 5a – continue to support the Parks and Recreation Department with resources and funding for the services, programs, and facilities provided to Town residents, including pocket parks.	Principle IE	Town Board	Ongoing	\$	Town
	RGR 5a – Pursue opportunities for consolidation of services and sharing of resources: continue interdepartmental, intergovernmental, and interagency sharing of resources	Principle RE	Department Heads	Ongoing	\$	NA

	RGR 5a - Pursue opportunities for consolidation of services and sharing of resources: work with the three school districts on ways to share resources of programs and facilities	Principle RE	Department Heads	Short-term	\$	NA
<b>Guidance</b>						
During the annual budgeting and capital planning processes, review recommendations of the Comprehensive Plan to help identify strategic investment in the Town organization, infrastructure, and facilities. Pursue outside funding for capital projects, while continuing to ensure local funding for ongoing maintenance, critical maintenance, and new projects. Prioritize capital investment for safety, code compliance, quality of life and economic development.						
<b>Collaborate with Organizations to Maintain High Quality of Services</b>	HWN 1h – Continue to participate as member of Albany County Stormwater Coalition to locally collaborate on stormwater management best practices.	Rec. HWN 1g	DPW			Town
	HC 6c – Collaborate and network with library services available to Town residents, on outreach and engagement of desired programs and services.	Recs. RGR 4a, RGR 4c; Principle IE	Town Communications, Library, Senior Services, School Districts	Ongoing	\$	Town
	RGR 1b – Town staff to continue participation in coordination meetings with regional agencies to stay abreast of plans and initiatives that affect the Town and to share town planning efforts.	Principles LBE, HWN, RE, HC	Economic Development and Planning	Mid-term	\$	Town
	RGR 5c - Support the Rail Trail Ambassador Program and use it as a model that could be applied to other Town parks, properties, and public facilities.	Principle HC	Economic Development and Planning, Highway Department, Police Department			
	RGR 5d - Develop partnerships with not-for-profit and community organizations to help implement seasonal beautification and routine seasonal maintenance (watering, weeding, fertilizing).	Principle LBE, RE	Highway Department	Mid-term	\$	Town
<b>Conserve Open Space</b>	HWN 3p – Utilize the Farms and Forests Program to purchase land for open space preservation to support carbon sequestration.	Rec. HWN 2a; Principles LBE, RE, HC	Open Space Coordinator, Town Board	Mid-term, Ongoing	\$\$\$	Town, Purchase of Development Rights Program, NYS Parks, Recreation and Historic Preservation, Albany County Land Conservancy, American Farmland Trust
	HWN 3r –Maintain existing forests and reforest open space, and implement the Street Tree Inventory Analysis and Management Plan	Rec. HWN 1b; Principles LBE, RE, HC	Highway Department, Economic Development and Planning	Ongoing	\$\$	Town, NYS Department of Environmental Conservation
	HWN 3r – Consider preparing a community forest master plan to reforest and maintain forests	Rec. HWN 1b; Principles LBE, RE, HC	Economic Development and Planning	Mid-term	\$\$	
	HWN 3r - Educate the community on local tree inventories, tree benefits, and tree planting	Rec. HWN 1b; Principles LBE, RE, HC	Sustainability Committee	Short	\$	
	HWN 3r - Continue to identify tree planting locations on Town lands and the planting of trees on Town lands	Rec. HWN 1b; Principles LBE, RE, HC	Economic Development and Planning, Highway Department	Ongoing	\$\$	
	HC 1b – Educate residents, property owners, homeowners associations, and business operators on the best practices for reduction or elimination of pesticide and herbicide use.	Rec. RGR 4a; Principle HWN	Sustainability Committee	Mid-term	\$	
	RGR 3a – Collaborate with conservation organizations and agencies to advance the conservation of open space acquisition opportunities.	Principle LBE	Open Space Coordinator	Short	\$	Town
	RGR 3b - coordinate/consult with the appropriate non-profit organizations to provide advice on management strategies and education during the site plan/subdivision approval process and to homeowner’s associations (HOA) and other management organizations.	Principle HWN, HC	Open Space Coordinator	Short	\$	Town
	HWN 3b – Transition from fossil fuels to electrification in the building sector	Recs. HWN 3l, HWN 3m, HWN 5d		Mid-term	\$	
	HWN 3b – Require electric for new building construction initially, with subsequent phasing to require electric for renovations and then later existing buildings	Recs. HWN 3l, HWN 3m, HWN 5d		Short	\$	
	HWN 3l – Updating Building Code to reflect a more stringent energy code.	Recs. HWN 3b		Mid-term	\$	

<b>Building Code Revisions Related to the Transition to Clean Energy</b>	HWN 3l – Town staff to attend or receive training and provided with the resources needed to implement a supplemental code	Recs. HWN 3b	Building Division	Mid-term	\$\$	Town, NYS Department of Environmental Conservation, NYS Energy Research and Development Authority, US Green Building Council
	HWN 3l – Consider adoption of additional stringent energy codes, such as NYSERDA Stretch to Zero pilot code, HERS, or Zero Net Energy code.	Rec. HWN 3m		Opportunity Driven	\$\$	
	HWN 3m – Improve energy efficiency in existing buildings through education and outreach	Rec. HWN 3l		Short	\$	
	HWN 3m – Improve energy efficiency in existing buildings through requirements that are phased-in over time	Rec. HWN 3b		Mid-term	\$	
	HWN 3m – Strongly consider an energy score for buildings					
	HWN 3n - Outdoor lighting levels should be evaluated to balance performance (including safety) with energy conservation	Rec. HWN 3l; Principles LBE, HC		Opportunity Driven	\$	

<b>Mitigate and Adapt to Climate Change</b>	HWN 1b (v) - Consider incentives associated with maintaining trees on private property, which would help to prevent habitat loss and erosion, stabilization of soils, stormwater management, temperature moderation, CO2 sequestration, and air quality benefits.	Principles LBE, HC	Town Board	Mid-term	\$	Town, NYSDEC
	HWN 1f – Assess the various sustainability programs offered by New York State for funding opportunities to reduce greenhouse gas emission and adapt to climate change.	Rec. HWN 5d	Sustainability Committee, Economic Development and Planning	Ongoing, Opportunity Driven	\$	NA
	HWN 3i – Source renewable electricity for residents.		Town Board	Mid-term	\$\$	Town, NYS Energy Research and Development Authority
	HWN 3n - Convert outdoor lighting to energy efficient LED technology		Town Board	Mid-term	\$\$	Town
	HWN 3o – Utilize the Sustainable Bethlehem Plan to inform replacement, investment, and improvements in municipal assets and facilities.	Recs. HWN 3e, HWN 3d	Department Heads, Town Board	Ongoing	\$	NA
	HWN 3s – Support Albany County Soil and Water Conservation, Cornell Cooperative Extension, the NYS Farm Bureau and related agencies’ efforts to communicate current best practices for agricultural lands (i.e., grazing, crop rotation, no till planting, etc.).	Recs. HWN 1a, HWN 3p, RE 3e; Principle RE	Open Space Coordinator	Ongoing	\$	NA
	HWN 5b – Educate and engage residents and businesses in addressing climate change by reducing greenhouse gas emissions.	Rec. RGR 4a; Principles LBE, RE, HC	Sustainability Committee, Building Division, Town Communications	On-going	\$	Town
	HWN 5d – Continue to follow the progress and potential regulatory guidelines in the forthcoming NYS Climate Action Council Scoping Plan	Rec. HWN 1f; Principles LBE, RE, HC	Sustainability Committee, Economic Development and Planning, Building Division, Engineering Division	Ongoing	\$	NA

<b>Continue Emergency Management Efforts</b>	HWN 5a – Continue to maintain and update the Bethlehem Comprehensive Emergency Management (BCEM) Plan to address emergency situations caused by climate change.	Principles RE, HC	Emergency Management	Ongoing	\$\$	Town, NYS Division of Homeland Security and Emergency Services
	RE 7a – Collaborate with emergency management organizations to plan for post disaster economic recovery	Principles RE, HC	Emergency Management		\$	
	HC 1a – Continue to advance emergency preparedness, risk awareness, and communications to residents, business operators and visitors to Bethlehem.	Rec. RGR 4a; Principle RE	Emergency Management, Town Communications		\$	
	HC 2b – Educate the public about potential landslide areas in the Town to avoid injury and/or property damage caused by these events	Rec. RGR 4a; Principle RE	Emergency Management Office, Town Communications, Engineering Division		\$	
	RE 8b – Continue to collaborate with electric energy providers (supply and distribution) in order to ensure adequate supply and reliability to electric and broadband service.	Rec. HWN 3b, HWN 3c, HWN 3d, HC 1a; Principles HWN, HC	Emergency Management		\$	

**Guidance**  
 As the BCEM is updated over time, it should incorporate considerations of post-disaster recovery as well as hazard mitigation planning.

Support Working Farms and Agricultural Businesses	HWN 2a – Encourage the conservation of agricultural soils by promoting participation in the Farms and Forests Conservation Program.	Rec. HWN 3p, RE 3b; Principle RE, HC	Open Space Coordinator	Ongoing	\$	Town, NYS Agriculture and Markets, Albany County Land Conservancy
	HWN 2a – Engage the Ravena Coeymans Selkirk (RCS) school district to participate in the Conservation Easement Exemption (CEE) program so property tax reduction would be realized by landowners in the RCS school district.	Principle RE, HC	Open Space Coordinator	Short	\$	Town
	HWN 2d – Support agricultural businesses and owners of vacant open parcels via advocacy for property tax credits and exemptions.	Rec. RE 3c; Principle RE	Assessor’s Office, Open Space Coordinator, Economic Development	Short	\$	Town
	HWN 2f – Continue to support the weekly farmers markets in the Town.			Ongoing	\$	Town
	RE 3b – Support the retention and expansion of agricultural businesses through the use of the Farms and Forests Conservation Program.	Rec. HWN 2a, HWN 3p; Principle RE, HC	Open Space Coordinator	Ongoing	\$\$	Town, NYS Agriculture and Markets
	RE 3c – Support agricultural businesses via advocacy for property tax credits and exemptions.	Rec. HWN 2d	Town Board, Open Space Coordinator, Assessor’s Office	Ongoing	\$	Town, NYS Agriculture and Markets
	RE 3e – Strengthen and Promote the Right-to-Farm policy in the Town Code.	Rec. RGR 3b; Principles 4.4, 4.5	Economic Development and Planning	Short	\$	Town, Albany County Land Conservancy
RE 3f – Limit road maintenance impacts on agricultural businesses	Rec. RGR 3b; Principles 4.4, 4.5	Highway Department, Police Department	Ongoing	\$	Town	
Attract and Retain Businesses and Support Workforce Development	RE 1a – Utilize the CEG offshore wind industry analysis to position Bethlehem for attracting wind energy supply businesses	Principle HWN	Economic Development and Planning, Bethlehem Industrial Development Agency	Mid-term	\$	Town, Bethlehem Chamber of Commerce, Bethlehem Industrial Development Agency (IDA)
	RE 1b – Attract Healthcare organization to located in Mixed-Economic Development districts.	Rec. RE 1c	Economic Development and Planning, Bethlehem Industrial Development Agency	Short	\$	
	RE 1d – Collaborate and partner with Advance Albany Alliance (Albany County Local Development Corporation) to market and promote sites within the Town of Bethlehem.		Economic Development	Ongoing	\$	Town
	RE 4a – Collaborate with the Port of Albany and Selkirk Rail Yard properties to retain and expand existing businesses and attract new business ventures that can benefit from water and rail transportation access.		Economic Development and Planning	Ongoing	\$	Town
	RE 4c – Enhance interaction with regional economic development partners to attract new businesses and increase local jobs.	Rec. RE 5a	Economic Development /	Ongoing	\$	Town
	RE 6b – Support small business retention and attraction with facilitation of grant funding opportunities.		Economic Development	Ongoing	\$	Town, NYS Homes and Community Renewal
	RE 6c – Encourage and stimulate workforce (affordable) housing goals.	Recs. LBE 4g, LBE 5c; Principle LBE	Economic Development and Planning	Short	\$	Town
	RE 5a – Recognize the value of workforce training opportunities in achieving economic development goals by attracting jobs in multiple sectors.	Rec. RE 4c	Economic Development	Short	\$	Bethlehem Chamber of Commerce, Bethlehem Industrial Development Agency (IDA)
	RGR 1a – The Town should engage and align with regional economic development agencies to advance the interests of the town within the regional context.		Economic Development	Ongoing	\$	Town

### Funding Sources

The Town frequently applies for grant funding to support Town initiatives and infrastructure projects. New York States Consolidated Funding Application (CFA) process allows a project application to be considered for multiple source of funding. The grant applications are typically noticed in the Spring (May), submitted in Summer (July), and awarded in the Winter (December). Similarly, CDTC solicits for transportation planning projects or technical assistance through their Linkage Program and Community Planning Technical Assistance Program. An understanding of the funding schedules is valuable in setting forth a path for completion of the recommendations above that may need funding assistance.



Section 5

# Community Profile

# 05

# Bethlehem Today Community Profile

A critical aspect to planning for the Town's future (where we want to go), is having a good understanding of the Town's current state (where we are today).

This Chapter examines the specific characteristics of the Town of Bethlehem today, including:

## Natural Environment

- Ecosystems
- Natural Resources Systems

## Historic Preservation

- Town History
- Preservation Jurisdiction and Terminology
- Archaeological Resources
- Cultural Institutions

## Forests, Fields, And Farmland

- Natural And Working Lands in Bethlehem
- Bethlehem's Conservation Programs

## Land Use, Zoning, And Housing

- Existing Land Use and Zoning
- Priority Issues: Specific Zoning Districts and Regulations
- Housing

## Demographics

- Population Characteristics

## Economic Development

- Regional Economic Development Context
- Local Economic Development and Market Trends
- Fiscal Conditions and Budgetary Allocations

## Transportation Network

- Vehicular
- Transit
- Sidewalks
- Bicycle
- Freight
- Completed Transportation Studies, Projects and Improvements
- Planned Improvements
- Future Improvements

## Infrastructure Capabilities

- Utility Infrastructure
- Water Infrastructure
- Sanitary Sewer Infrastructure
- Stormwater Management
- Natural Gas Service
- Electric Service
- Telecommunications

## Recreation

- Parkland Facilities and Level of Service
- Parks And Recreation Facility Users
- Operations

## Community Services

- Public Schools
- Town Services
- Town Budget
- Town Department Overview

## Natural Environment

In the 16 years since the 2005 Comprehensive Plan was adopted, Bethlehem has gone beyond looking at natural resources as “development constraints” and has taken a broader more inclusive approach to valuing and conserving natural resources.

### Ecosystems

The Town and other agencies (NYS Department of Environmental Conservation, Scenic Hudson and more) have prepared several studies that have identified and assessed local rivers and streams, their riparian areas and watersheds, important wildlife habitats, areas of biodiversity, forest patches, wetlands, grasslands, and unique Hudson River coastal ecosystems in the context of an ever-changing community. A list of the studies that map and document Bethlehem’s ecosystems and natural resources are presented at the end of this section.

### Hudson River Estuary

Town of Bethlehem is located on the west bank of the Hudson River, and the entire Town lies within the northern part of the Hudson River Estuary (see Figure 1.1). All water leaving the Town of Bethlehem flows to the Hudson River, much of it by way of the Vloman Kill, the Normans Kill and the Onesquethaw-Coeymans Creek (see Figure 1.2). The Upper Hudson Estuary region is biologically diverse, containing nearly 85% of the bird, mammal, reptile and amphibian species found in New York, and being identified as a Significant Biodiversity Area (SBA)

by the Department of Environmental Conservation (DEC) Hudson River Estuary Program (HREP). Bethlehem also contains a portion of another SBA, the Hudson Valley Limestone Shale Ridge, which is rich in diversity of plants, animals, and natural communities (see Figure 1.3).

### Jurisdiction/regulation of Significant Biodiversity Areas (SBAs):

SBAs are mapped areas that can be used to help to guide decision making for planning purposes. State agencies such as NYSDEC consider impacts to SBAs when issuing permits. NYSDEC

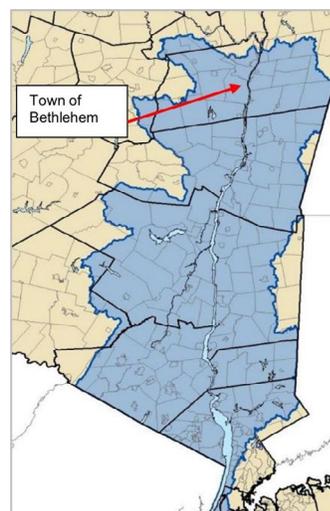


Figure 1.1  
Location of Bethlehem within the Hudson River Estuary. Source: NYS DEC

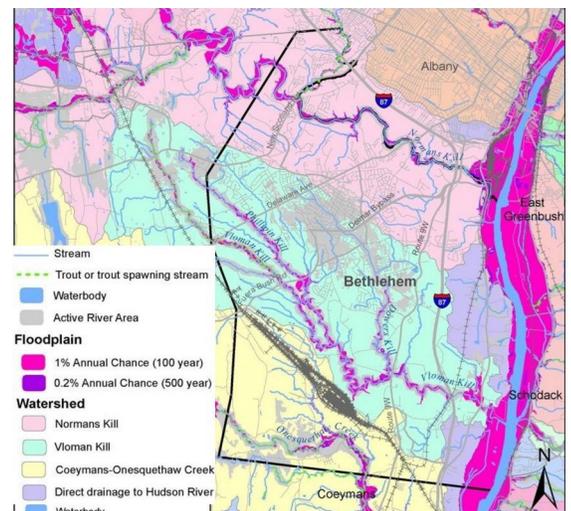


Figure 1.2:  
Regional Context, Subwatersheds, and Significant Biodiversity Areas (SBA's), Source, NYS DEC

considers impacts to Significant Coastal Fish and Wildlife Habitats during their consistency review process of direct federal actions, federal funding actions and federal permitting actions. DOS concurrence is required before federal permits can be issued.

The Hudson River Shoreline and adjacent tidal wetlands include many ecologically important habitats, such as significant coastal fish and wildlife habitats (particularly the Normans Kill and the Shad and Schermerhorn Islands), underwater subtidal habitats, tidal Hudson River Estuary wetlands, and tidal wetland pathways. Much of these habitats are areas of known importance for rare animals and plants (see Figure 1.3).

Of Bethlehem’s 7.1 miles of shoreline along the Hudson River, 4.6 miles (65%) are hard engineered

shoreline, including bulkhead, rip-rap revetment (stone or concrete armoring), and timber cribbing. The remaining 2.5 miles of shoreline is relatively natural with woodlands and sand or gravel deposits (See Figure 1.4).

**Jurisdiction/regulation of Hudson River Coastal and Shoreline Habitats:**

Information on the coastal and shoreline areas of the Hudson River can be found in the Town of Bethlehem’s Local Waterfront Revitalization Program (LWRP). Projects and actions proposed along the waterfront can fall under the jurisdiction of the Federal Army Corps of Engineers (ACOE) as well as other State agencies.

**Streams**

Bethlehem is home to three major streams, the Vroman Kill, the Normans Kill and the Onesquethaw-Coeymans Creek. These active

tributaries areas, their associated riparian (streamside) vegetated buffers, and floodplains (areas inundated with water during storms) clean water as it flows to the Hudson, mitigates flooding during storms, and provides recreational opportunities. They are also rich wildlife habitats for plants and animals. Many of the regulated streams in Bethlehem have experienced some form of impact to the health and functioning of their riparian buffers (see Figure 1.5) such as silt/sedimentation, nutrient pollution or streambank erosion. Portions of floodplains deemed at highest risk for flooding (1% or 2% in a given year) are mapped and regulated by the Federal Emergency Management Agency (FEMA). Another way of mapping streams, developed by The Nature Conservancy, is called “active river areas” (ARAs) and includes all the area alongside a stream that

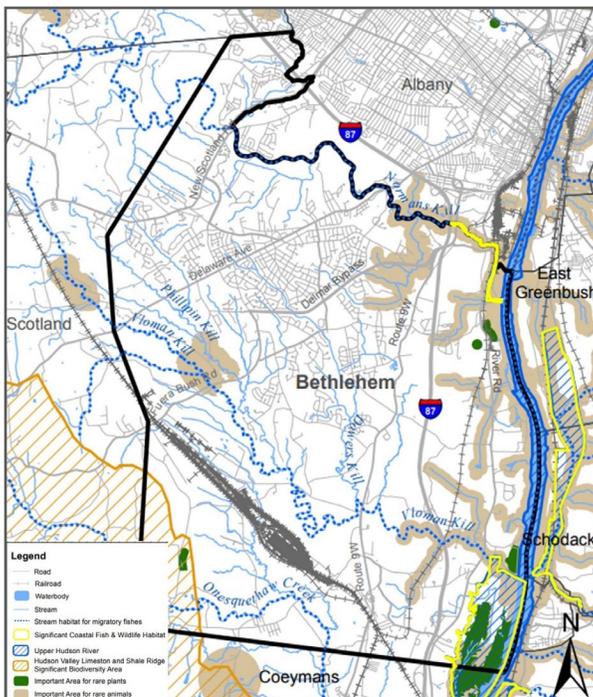


Figure 1.3: Significant Ecological Features in the Town of Bethlehem, Source: NYS DEC



Figure 1.4: Hudson River Shoreline and Tidal Wetlands, Source: NYS DEC

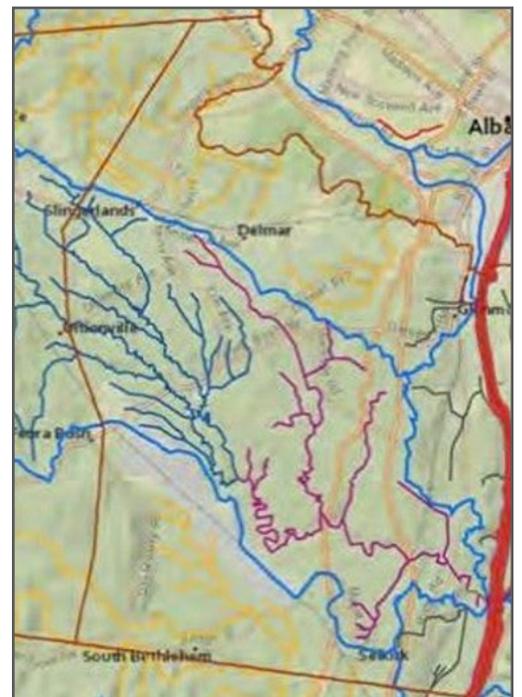


Figure 1.5: Conditions of Regulated Streams, Source: Hudson Valley Natural Resource Mapper

contribute to its major processes (hydrology, sediment and organic material transport, and habitat creation). ARAs include floodplains, which are inundated during heavy storms, former floodplains that may only flood during the largest storms, streamside wetlands and areas that contribute materials like sediment, water, and organic material like leaf litter (see Figure 1.6).

**Jurisdiction/regulation of Streams and Riparian Areas:** The NYS DEC regulates and monitors impacts to certain streams as shown in Figure 1.2. Stream buffer, or riparian lands, regulations pertaining to the 100-ft. buffer next to named streams in Bethlehem are found in the Town Zoning Law 128-53.

**Jurisdiction/regulation of Floodplains:** The Town regulates disturbance to floodplains and directs development away from

these areas. The Town restricts any building permits for the construction or installation of structures within 100-ft of the bank or 100-year flood zone of the following streams: Normans Kill, Vloman Kill, Onesquethaw, Phillipin Kill, and Dowers Kill (see Zoning Law 128-53). The Town currently requires a grading, erosion and sediment control permit for any land disturbance activities within 100-ft. of the bank or 100-year flood zone of the following streams, Normans Kill, Vloman Kill, Onesquethaw, Phillipin Kill, and Dowers Kill (see Zoning Law 128-49). The Town also requires a floodplain development permit for construction within floodplains based on Flood Insurance Rate maps prepared by FEMA. While the main purpose of the permit is to avoid potential damages from flooding and erosion to physical structures, it also seeks to control the alteration of natural

floodplains, stream channels and natural protective barriers which are involved in the accommodation of floodwaters (see Town Code Chapter 69 Flood Damage Prevention).

**Wetlands**

Bethlehem contains many freshwater wetland areas such as vernal pools, wet meadows, and forested swamps which are critical wildlife habitat, filter and clean water, recharge underground aquifers, and slow and store stormwater runoff. The New York State Department of Environmental Conservation (NYS DEC) and US Army Corps of Engineers (ACOE) regulate activities in and, in the case of NYS DEC, adjacent to wetlands. The NYS DEC regulates wetlands of 12.4 acres and greater and also regulates an adjacent buffer area (100-ft.). Many water bodies and wetlands in the nation are waters

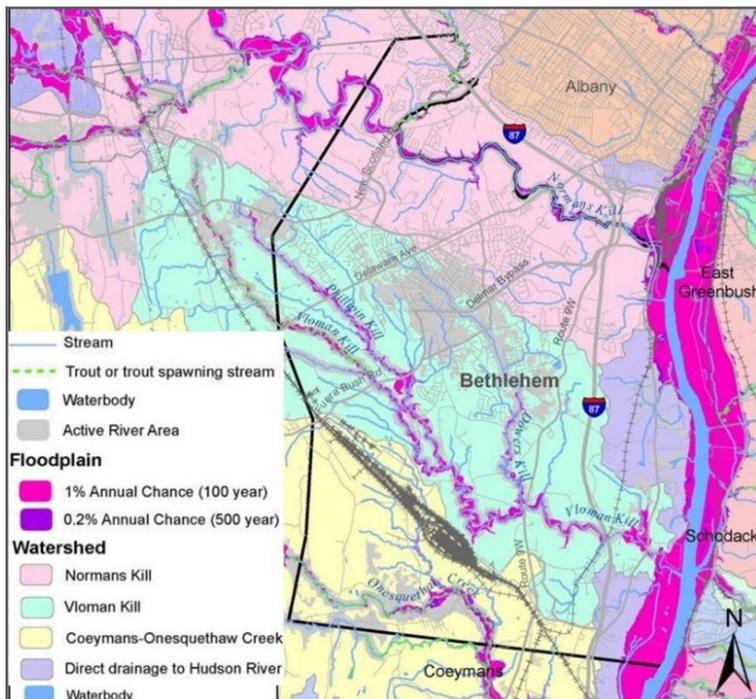


Figure 1.6: Watersheds, Streams, Riparian Buffers, Floodplains, and Active River Areas, Source: NYS DEC

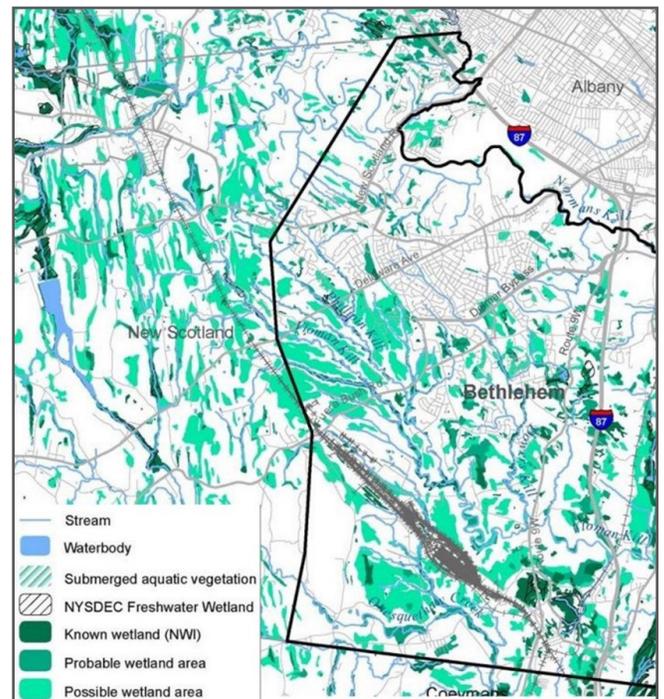


Figure 1.7: Wetlands in the Town of Bethlehem, Source: NYS DEC

of the United States and are subject to the Army Corps' regulatory authority. The National Wetland Inventory (NWI) maps were created several decades ago. Wetlands mapped on the NWI are numbered. Any proposed activities that include disturbance of state or federal wetlands require permit issuance. Over time, conditions change and Bethlehem recognizes that wetlands that are not mapped or formally regulated have developed. Figure 1.7 shows both mapped and possible/probable wetlands in town (mapped by interpreting soils maps that may indicate wetlands). "Probable" or "possible" wetland areas require field-verified by a wetland biologist to confirm criteria (i.e., intermittent standing water, vegetation, soils) and their boundaries. Knowing the potential locations of these local wetlands, especially isolated and probable/possible wetlands areas, enables the town to proactively

plan to conserve wetlands and their benefits.

**Jurisdiction/regulation of wetlands:**

Currently, disturbance to certain wetlands is regulated by NYS DEC based on size as described above. The Town's only wetland regulations pertain to State mapped wetlands, in which case a permit is required by the Town Planning Board. These regulations are found in Town Code Chapter 72 Freshwater Wetlands. Overall, in the last 20 years, all development projects have avoided impacts to mapped State wetlands and so no permits to disturb these wetlands have been issued. Note that the locations of State wetlands are limited to a few areas along Route 9W and River Road.

**Forests**

While Bethlehem is not as heavily forested as more rural parts of the Hudson Valley, there are still sizeable patches of forest along the

town's major stream corridors and in less developed areas (see Figure 1.8). Regardless of size, all forested areas in the town provide benefits to residents by helping to stabilize soils, manage stormwater, moderate temperature, and improve air quality. Maintaining forest patches is key for the healthy functioning of forest ecosystems.

Forest fragmentation (clearing) decreases forest habitat quality and forest health, disrupts wildlife movement, and may facilitate the spread of invasive species. Generally, 200 acres is considered the minimum threshold for intact forest ecosystems. Light green areas on Figure 1.8 show forests in Bethlehem between 200 – 2,000 acres, which are referred to as "stepping stone" forest patches, because they serve as corridors for wildlife movement and plant dispersal.

Bethlehem forests over time have become more fragmented, or disconnected, by roads, utility corridors, and other development. Forests along steep ravines and streambanks in Bethlehem are particularly important to prevent erosion and landslides, as soils along streambanks and steep slopes in town contain erosion-prone soils. Note that the largest, most intact forest in the town occurs in South Bethlehem in the area characterized by significant limestone and shale ridges. Caves in the karst terrain of neighboring New Scotland and Coeymans support federally threatened and endangered bat species, which are likely to use forests in Bethlehem for summer roosting and foraging.

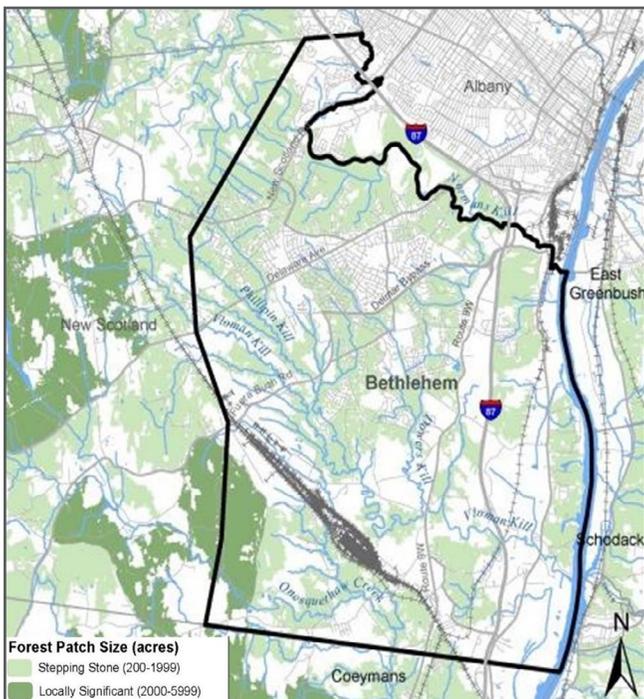


Figure 1.8: Large Forests in the Town of Bethlehem, Source: NYS DEC

### **Jurisdiction/regulation of large forests and trees:**

Large forests are mapped for resource planning purposes and no agency has regulatory jurisdiction. Currently, the Town has no regulations related to tree removal. Should tree stumps be removed resulting in a land disturbance greater than ¼ acre, this triggers a grading, erosion and sediment control permit to be applied for and reviewed by the Town Engineering Department. There are no restrictions from removing trees. The grading, erosion and sediment control permit focuses on addressing impacts to slopes, and soil erosion and sediment entering an adjacent stream. The permit does not regulate habitat loss and other benefits provided by large forests and trees.

### **Grasslands, Shrublands, and Young Forests**

These important habitats are characterized by a diverse mix of shrubs or tree saplings with open areas filled with grasses and wildflowers and few or no mature trees. Not only do these habitats support agricultural uses and offer scenic views, but they also support many species of plants and wildlife. Bethlehem has experienced a rapid loss in quantity and quality of shrublands and grasslands in the last century, like the entire Northeast region, driven by increased human development and changes in agricultural technology. Grasslands and shrublands will mature to forest if left unmanaged (mowing or managed grazing) or natural forest disturbance (fires) are suppressed. However, recently managed sites like hayfields, fallow farm fields and forest clearings do provide a habitat

“lifeline” for species that rely on grasslands or shrubland conditions. Past surveys of bird populations (for the NYS Breed Bird Atlas, and the Priority Birds identified by the Audubon Hudson River Valley Conservation Program) found that Bethlehem is home to several grassland dependent species, including some threatened species, indicating the presences of some decent grassland and shrubland habitat to support them.

### **Jurisdiction/regulation of grasslands, shrublands, and young forests:**

These resources are mapped for resource planning purposes and no agency has regulatory jurisdiction. Currently, the Town has no regulations related to tree removal. Should tree stumps be removed resulting in a land disturbance greater than ¼ acre, this triggers a grading, erosion and sediment control permit to be applied for and reviewed by the Town Engineering Department. There are no restrictions from removing trees. The grading, erosion and sediment control permit focuses on addressing impacts to slopes, and soil erosion and sediment entering an adjacent stream.

### **Species and Ecosystems of Conservation Concern**

The New York Natural Heritage Program (NYNHP) records species of conservation concern in biodiversity databases such as the New York Amphibian and Reptile Atlas (NYARA) and the New York State Breeding Bird Atlas (NYBBA). Bethlehem contains habitats for certain threatened, endangered, and special concern species that rely on terrestrial (forests and grasslands) and aquatic (rivers, wetlands, and

streams) ecosystems in town. Survival of these species depends on their habitats being protected. For a full listing of these species, including mammals, birds, reptiles, amphibians, fish, freshwater mussels, insects, and plants, refer to the Habitat Summary (2017) prepared by the Hudson River Estuary Program for greater detail about the natural environments and species found in Bethlehem, including a list of species and ecosystems of conservation concern that occur in the Town.

### **Jurisdiction/regulation of threatened and endangered species:**

NYS Threatened and Endangered Species are regulated by NYS DEC; Federally Threatened and Endangered Species are regulated by the US Fish and Wildlife Service and the National Marine Fisheries Service.

## **Natural Resources Systems**

### **Groundwater and other Drinking Water Sources**

In the Town of Bethlehem, the municipal drinking water supply comes from both surface and groundwater sources, from within and outside of the town. Four major water sources supply town residents with clean water to drink: the Vly Creek Reservoir and New Scotland Wellfield (both in the Town of New Scotland to the west), the Selkirk Wellfield near Henry Hudson Park, and finally, the town purchases drinking water from the City of Albany from the Alcove Reservoir located in the Town of Coeymans (which is treated prior to delivery to the Albany Aqueduct). The town water filtration plant treats this water before it enters resident’s faucets to the highest

standard, but also works to protect the natural resources areas that contribute to the overall health of the surface waters and ground water that feed our municipal water supply by protecting lands within the watershed surrounding the drinking water sources. For example, the Town has purchased some lands around the perimeter of the Vly Creek Reservoir, and has been awarded (2021) a state Water Quality Improvement Project grant (WQIP) to purchase more land adjacent to this water resource, as willing landowners are interested in selling land to the Town. In 2019, 6,400 acres of land and water owned by the Albany Water Board, including the Alcove Reservoir and much of its surrounding forested watershed, were permanently protected through a conservation easement with the Mohawk Hudson Land Conservancy. Additionally, much of the ground surface above

and around the Selkirk Wellfield are protected in open space with both the town’s Henry Hudson Park land as well as the Scenic Hudson Land Trust property (approximately 250 acres) that are permanently protected by conservation easements. It should also be noted that some of the town’s residents, particularly in the southern part of town, rely on private wells for their drinking water. Private wells tap into underground aquifers, often referred to as groundwater, that are fed by water that percolates through the ground.

**Soils**

Soils provide the foundation of our environment, both natural and built. Soils that support natural resource areas, such as forests, wetlands, and agricultural lands receive the cyclical health benefits of those ecosystems (nutrient cycling, water cycle, etc.). Soils that exist beneath

the built environment (below housing developments, roads, businesses, etc.) provide structural support, but receive and contribute very little to ecosystem health – as such, the ecosystem service benefits of these soil resources underneath the built or developed environment are essentially lost. The drainage class, or USDA hydrologic soils group shown in Figure 1.9 are useful indicators of wetland areas, as soils classified as poorly drained can often support wetland habitats (refer to Figure 1.7 showing these hydric soil areas as probable/possible wetland areas). Well-drained soils (USDA Hydrologic Soil Group A) indicate areas that may contribute to groundwater recharge. Also, well-drained soils within or adjacent to the built environment can be important in the siting of successful “green infrastructure” (bioswales, etc.) to help manage stormwater (through infiltration practices) and increase wildlife habitat within developed areas. The soil drainage class is also instructive when designing and engineering building and infrastructure projects, as well as evaluating areas for septic systems. The soil drainage map shows many areas in Bethlehem that tend toward soils with a high runoff potential, or poorly drained soils (USDA Hydrologic Soil Group C/D). Undeveloped land and farmland soils are critical to the current and future ability for people to grow food and food products in Bethlehem. The United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) classifies and maps soils for a variety of purposes including, but not limited to potential agricultural productivity, as shown in Figure 1.10.

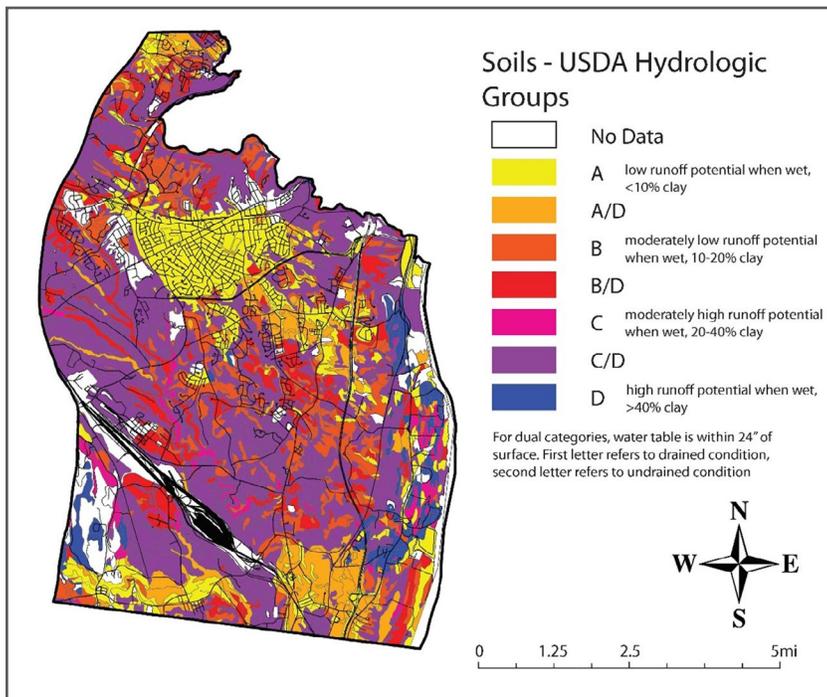


Figure 1.9: Drainage Classification of Soils in the Town of Bethlehem, Source: USDA, Town GIS data

**Jurisdiction/regulation of soils:**

soils are mapped for various planning and siting purposes and there is no agency with jurisdiction or regulations for soils. See local regulations related to soils with steep slopes.

Agricultural soils are classified as either Prime Farmland, Farmland of Statewide Importance, or Prime Farmland if Drained (see Figure 1.10). Prime Farmland is land having the best combinations of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops. These soils have the growing season, soil quality, and moisture supply needed to produce sustained high yields of crops. According to the 2005 Comprehensive Plan, approximately 20% (over 6,000 acres) of Bethlehem’s soil is consistent with this classification. Farmland of

Statewide Importance is land that is considered important in New York for the production of certain crops, but do not meet all of the criteria for Prime Farmland. These soils tend to produce fair to good yields when managed appropriately. In Bethlehem, about 8.2% (about 2,600 acres) of the total land area is considered Farmland of Statewide Importance. A third category of soils pertaining to agricultural suitability is called Prime Farmland if Drained. This classification of soils meets all the Prime Farmland criteria except for depth to seasonal high-water table; these soils may need to be appropriately drained in order to reach production capacity found in Section 2.

**Topography and Steep Slopes**

Steep slopes (with a grade/slope of 20% or greater) and highly erodible soils are generally found in the ravines and bluffs along the three

main streams in Bethlehem - the Normans Kill, Vloman Kill, and Onesquethaw Creek, and along stretches of the Hudson River (see Figure 1.11). This combination of slopes and soils creates high erosion and landslide potential in these areas. Maintaining natural vegetation, particularly forests, along these areas prone to erosion, helps to stabilize these vulnerable areas, prevent future erosion, and protect stream habitat.

**Jurisdiction/regulation:**

The Town currently requires a grading, erosion, and sediment control permit (Zoning Law 128-49) for any land disturbance activities within the angle of repose of 20% or greater and other slope thresholds. A geotechnical engineer certification is required confirming that any measures taken on the slope meet or exceed established factors of safety against slope failure (landslides, erosion) and would not result in undue risk of slope failure or danger to human health, welfare, or property.

**Wildlife Corridors and Greenways**

Natural resource areas that are contiguous and connected, and provide natural pathways through the landscape, are referred to as wildlife corridors or greenways. These greenways are not only important as travel paths for wildlife between certain habitat patches needed for life cycle completion, but also are important for people, as they provide opportunities for recreation and pedestrian travel for exercise, or between neighborhoods and community hubs. Greenways are not specifically mapped or prioritized locally, but a general “bird’s eye view” of existing

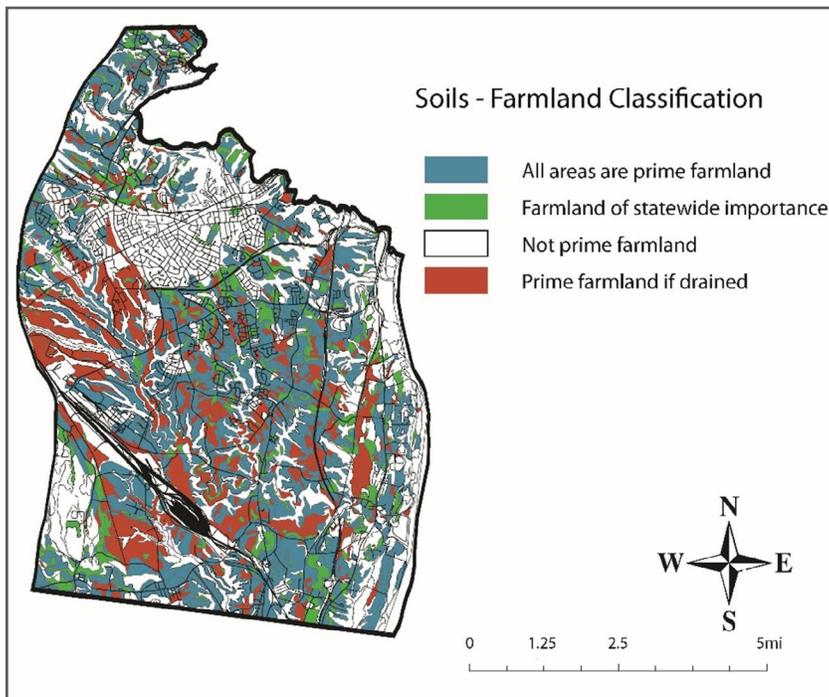


Figure 1.10 Farmland Soil Classification in the Town of Bethlehem, Source: USDA NRCS, Town GIS data.

greenway areas are shown on the 2017 Open Space Plan’s map called “Recreation and Greenways Open Space Conservation Values Map”. This map illustrates the interrelationship between recreation areas for people (preserves with hiking trails, bike paths, the YMCA, soccer fields, etc.) and how people and wildlife can move across the landscape of the town. Furthermore, the map shows how open spaces and connected pathways and greenways can facilitate that movement of people and wildlife. For humans, these pathways include roads, trails, bike paths, and walkable areas. These continuous and contiguous pathways can enhance opportunities for pedestrian travel, outdoor recreation, and healthy lifestyles. For wildlife, the map shows larger forest patches of five acres or more, as well as streams and waterbodies that serve as natural greenways and habitat connectors

for animals to move between habitat patches and to find water, shelter, nesting areas, and other habitat needs. Wildlife corridors between habitat patches also increases the biodiversity of the ecological community, which contributes to overall environmental health (example: larger, connected forests increase the viability of predator species of the white-footed mouse, which is a major carrier of Lyme disease). Greenways viewed from a community-wide perspective can help us to observe how natural areas and human spaces can be connected to mutually enhance each other and increase the town’s value for both people and wildlife.

**Jurisdiction/regulation:**

Greenways and wildlife corridors are not regulated by any agency or entity. Rather, these connected and contiguous natural areas, sometimes alongside or containing

pedestrian travel pathways, can be mapped to serve as a guiding tool for communities when looking at potential changes in the landscape may impact these greenways – either negatively or positively.

**Scenic Views and Viewshed Areas**

The Town Local Waterfront Revitalization Program (LWRP) identified scenic views in three different areas of the Waterfront Revitalization Area. The Open Space and Recreational Resources map in the LWRP shows the location of the scenic viewpoints. The locations are along the high points of Weisheit Road, Clapper Road and the southern end of River Road/SR 144. Policy 25 in Section III of the LWRP provides siting and design guidelines that will be used by the Town for proposed actions in the area.

In 2017, as part of the Open Space Plan process, the town conducted a public involvement exercise called the “Scenic Bethlehem Photo Survey”, where the public was invited to take photos of places in town they considered to have ‘scenic beauty’ or ‘visual interest’ and to share them (see page 29 of the Open Space Plan for a town map showing sample respondent locations). The purpose of the photo survey was not to formally map the scenic views in town, but rather to engage the public and evaluate what people may consider ‘scenic’ in the community. Looking at the Town’s Bicycle and Pedestrian Priority Network Map, as considered in the town’s Conservation Criteria Assessment, to indicate where in town people are likely to enjoy scenic views or viewsheds while walking, hiking, or riding their bicycles through town.

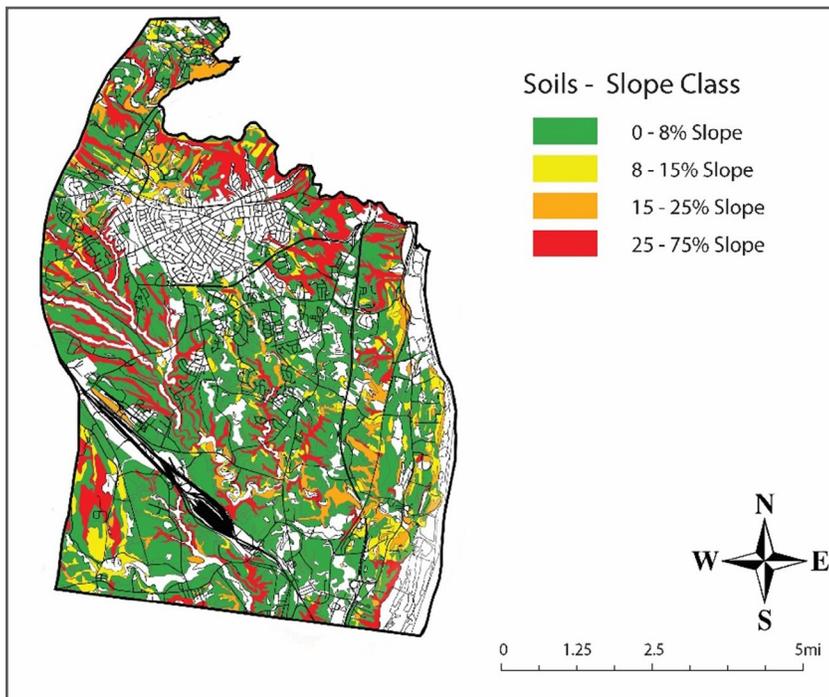


Figure 1.11: Steep Slopes in the Town of Bethlehem, Source: Town GIS data

The Hudson River Estuary Program has also created a “Scenic Resource Protection Guide for the Hudson River Valley”, which can help local communities better understand, locate, prioritize, and conserve scenic resources.

The Open Space Plan identifies twenty-five (25) objective conservation criteria. The other criteria established (potential 26th) is ‘scenic quality’. This topic is considered subjective and therefore was mentioned as additional criteria to be used in land use planning and proposed project impact analysis. The Town of Bethlehem has not prepared a scenic resources inventory. However, scenic resources (views or vistas) are mentioned in the Conservation Subdivision (§103-18, F(5) “the site contains identified scenic view or vistas”. Further, the State Environmental Quality

Review Act (SEQRA) Environmental Assessment Form (EAF) requires evaluation of visual impacts from Registered National Natural Landmarks. In the Capital Region there are two natural landmarks; the Albany Pine Bush and Bear Swamp. It is unlikely any development in the Town of Bethlehem would have visual impacts on these locations due to proximity. The EAF further requires scenic assessment (E.3) of ‘designated public resources on or near the project area’. These resources include; Agriculture districts, agriculturally productive soils, national natural landmarks, critical environmental areas (designated by NYSDEC) and national or state historic register buildings, sites, districts and sites in a Wild, Scenic and Recreational River (NYCRR 666).

There are well established national standards for viewshed analysis, scenic resource value rankings and visual impact assessment. Resources include:

**Figure 1.12:** The process flow chart from the ‘Visual Resource Inventory Handbook’ of the National Park Service. This is one methodology that could be used in preparing a viewshed analysis and scenic resource management plan. The US Forest Service (USFS) Visual Resource Inventory Scenery Management System (SMS) is documented in the USFS Agriculture Handbook 701, Landscape aesthetics: A Handbook for Scenery Management (1996).

**Jurisdiction/regulation:** Scenic Views and Viewshed Areas are not regulated by any agency or entity. Rather, these subjective places can be discussed during the planning

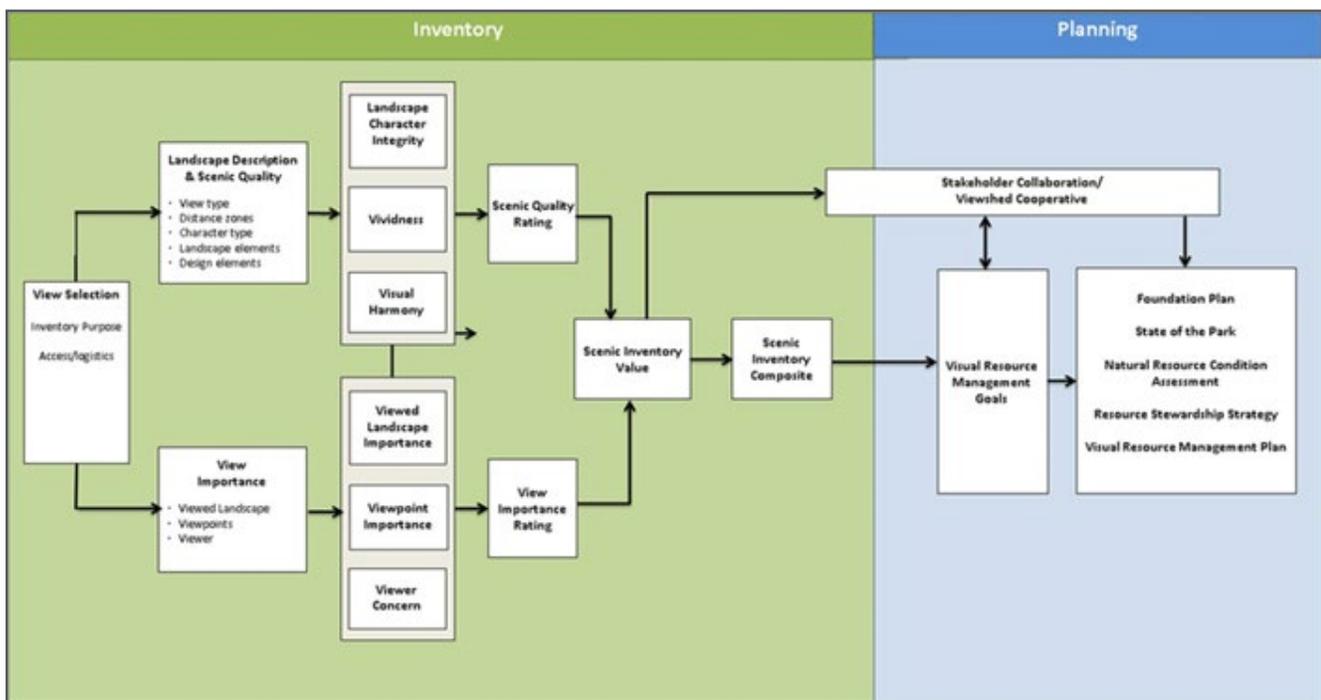


Figure 1.12: The process flow chart from the ‘Visual Resource Inventory Handbook’ of the National Park Service. This is one methodology that could be used in preparing a viewshed analysis and scenic resource management plan.

process at a broad scale or site-specific scale when appropriate to the project.

### Street Trees

Another important part of the Town's Forest ecosystem are street trees. Street trees are managed by the Town and grow along the Town's major streets within the public right of way. Street trees growing along public streets constitute a valuable community resource. When properly maintained, trees provide numerous environmental benefits including: temperature reduction, pollution control, carbon sequestration, stormwater management, and wildlife habitat. Street trees also provide social and health benefits, including educational, aesthetic, health and safety. Finally, street trees

provide economic benefits including higher property values and energy use reduction. In 2019, the Town inventoried street trees in the areas of the Town where development patterns historically included them (Figure 1.13). The inventory documented 4,849 trees and 1,657 new tree planting sites. Analysis of inventory data and information about the Town's existing program and vision for the street tree canopy were utilized to develop a Street Tree Inventory Analysis and Management Plan (2020) that includes recommendations for dead/diseased tree removal, pruning cycle, stump removal, and a street tree planting plan.

### Findings and Opportunities

- Ecosystems are diverse and abundant within the Town and provide many vital benefits to Town residents. These ecosystems keep the drinking water supply and air clean, moderate temperature, filter pollutants, and absorb floodwater. Ecosystems, especially connected greenways, maintain or create wildlife corridors, opportunity for outdoor recreation, scenic quality, and sense of place that is unique to the Town of Bethlehem.
- Healthy and abundant ecosystems are key to a resilient natural environment that can endure, adapt to, and rebound from the effects of climate change, and significant natural events.
- Natural resources in Bethlehem are well documented in the NYS DEC HREP "Natural Areas and Wildlife in Your Community: A Habitat Summary Prepared for the Town of Bethlehem" (2017), the Town of Bethlehem Open Space Plan: Conservation Criteria Implementation, and the Local Waterfront Revitalization Plan (LWRP).
- The Hudson River comprises the 7.1 mile eastern boundary of the Town of Bethlehem; all of Bethlehem's sub-watersheds flow into the Hudson River. Bethlehem is part of the Hudson River Estuary, which is a nationally significant ecosystem; the health of Bethlehem's streams, wetlands, riparian areas, forests, and fields all contribute to the health of this river ecosystem.
- Bethlehem's LWRP recommends opportunities to enhance portions of Bethlehem's Hudson River shoreline for public enjoyment/recreation and habitat improvement, as well as climate change resiliency.
- Conservation criteria are utilized by the Town to aid in evaluating and prioritizing open space and natural resource conservation opportunities, as well as by town staff and Planning Board review of development projects.
- During the development review process, protection of many natural resources relies on state and federal agencies under SEQRA, NEPA and other permitting processes. (NYS DEC, ACOE, etc.)
- State (NYS Departments of State and Environmental Conservation) and Federal (ACOE, FEMA) regulations and oversight manage many of the town's natural

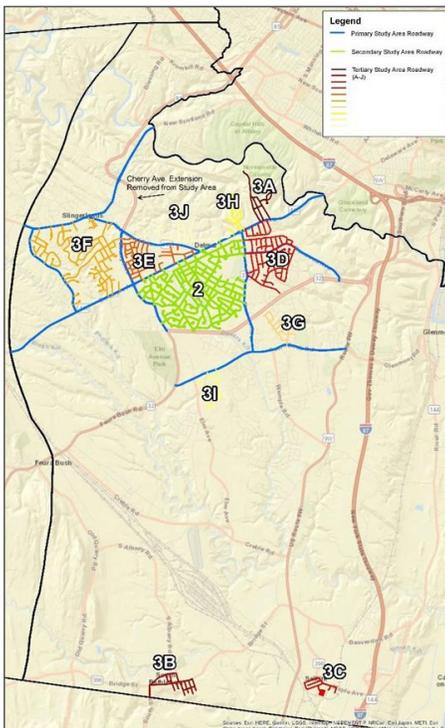


Figure 1.13: Areas of the 2019 Tree Inventory. Source: Bethlehem Street Tree Inventory Analysis and Management Plan, 2020

resources (wetlands, streams, floodplains). The town should explore opportunities for its own regulations to further conserve natural resources. These regulations could support and/or supplement current regulations by the state and federal agencies.

- Environmental protection overlay districts (EPODs) could be appropriate to expand protections.
- Town incentive options for private landowners to conserve natural resources, including farmland soils, can be explored further; the Town's Conservation Easement Exemption program and Farms & Forests Fund, both landowner conservation incentive programs that are operated under the broader Farms and Forests Conservation Program are useful tools to protect habitats, such as forests, floodplains, wetlands, and farmland significant soils.
- Town incentive options for land developers and builders can be strengthened so that the conservation of key natural resources is an attractive option for developers when considering between conservation subdivision regulation or Planned Development Districts (PDD's – a floating zoning district).
- The Town could consider convening a Conservation Advisory Council (CAC) to assist the Planning Board in the evaluation of environmental impacts to natural resources. This CAC would serve a different purpose than the existing

Conservation Easement Review Board (CERB).

- The Town might consider employing (staff or consultant) a wetland biologist to identify, delineate and document possible and probable wetlands not currently mapped on the National Wetland Inventory maps.
- Active River Areas (ARA's) can be considered as potentially more effective protection zones for riparian areas rather than distance-based buffer regulations, as they are more likely to encapsulate all of the stream or rivers' ecological functions within their limits.
- The Conservation Criteria in the Open Space Plan acknowledged scenic resources as a subjective criteria; however, scenic views and vistas should be considered when acquiring property (via easement or fee purchase) and visual impact assessment needs to be evaluated for projects proposed on or adjacent to natural and historic resources.
- The Town should consider preparation of a Scenic Resource Management Plan, which identifies viewsheds, scenic value rankings and impact assessment methodology.

### **Resources Documenting Natural Resources in the Town of Bethlehem:**

*Wildlife and Habitat Conservation Framework: An Approach for Conserving Biodiversity in the Hudson River Estuary Corridor. (2006) – Prepared by Penhollow, et al. New York Cooperative Fish and Wildlife Research Unit, Cornell University and NYS DEC Hudson River Estuary Program.*

*Normans Kill Riparian Corridor Study – Prepared for Audubon New York by the Albany County Department of Economic Development, Conservation and Planning (2007)*

*The Onesquethaw-Coeymans Watershed Study – Prepared by the Onesquethaw-Coeymans Watershed Council and the Capital District Regional Planning Commission (2008)*

*The Active River Area: A Conservation Framework for Protection of Rivers and Streams. (2008) –The Nature Conservancy, Boston, MA.*

*Town of Bethlehem Recommendations on Open Space Needs and Opportunities (2009)*

*Vlomankill Biological Stream Assessment. (2015) – Written by the New York Department of Environmental Conservation, Stream Biomonitoring Unit.*

*Protecting the Pathways: A Climate Change Adaptation Framework for Hudson River Estuary Tidal Wetlands. (2016) – Written by Scenic Hudson Land Trust.*

*"Natural Areas and Wildlife in Your Community: A Habitat Summary Prepared for the Town of Bethlehem" (2017)- Written by the New York State Department of Environmental Conservation Hudson River Estuary Program – NYS DEC HREP.*

*Town of Bethlehem Open Space Plan: Conservation Criteria Implementation (2017)*

*Town of Bethlehem "Open Space and Farmland Conservation Opinion Survey" (2018)*

*Bethlehem Street Tree Inventory Analysis and Management Plan (2020)*

*Hudson River Estuary Program Coordinator's Report, 2015-2020 (2020)*

*Scenic Resource Protection Guide for the Hudson River Valley – Hudson River Estuary Program (2021)*

*Local Waterfront Revitalization Program (LWRP) (2021)*

## Historic Preservation

This section examines the town history, historic preservation options and regulating agencies with jurisdiction regarding historic and cultural resources. This section also identifies the cultural institutions which are considered essential to community character and quality of life for residents and visitors. While such entities are typically not resources regulated by state or federal agencies, there are exceptions when a cultural institution is associated with a historic structure or site.

### Town History

The area now known as the Town of Bethlehem in the Hudson Valley is the ancestral homeland of Mohican Indians, who were removed from the area in the decades following European colonization and now primarily reside on a reservation in northeastern Wisconsin as the sovereign nation of the Stockbridge-Munsee Mohican Tribe. Before colonialization, the Mohicans called themselves the Muh-he-conneok, or the People of the Waters That are Never Still. They settled near the rivers and lived in both circular wik-wams (wigwams)

and long-houses. They thrived harvesting fish and oysters from the rivers, hunting game, harvesting wild berries and maple syrup, and cultivating vegetable gardens. There was overlap between the territories of the Mohicans and the Muncee tribes, and they shared similar language and lifestyle. After the arrival of Europeans, the traditional livelihood of the Mohicans changed greatly as they engaged in trade with the colonists. Over the decades, many Mohicans lost their lives from diseases brought by the colonists and involvement in the colonial wars between the Dutch, French, English, and Americans, and had

their lands taken when colonists claimed "right of discovery" over their territory. Many Mohicans were removed to Stockbridge, Massachusetts, a mission town founded with the purpose of converting indigenous people to Christianity. From there, the Mohicans and several other tribes were relocated to a reservation in Wisconsin. Archaeological surveys and digs have shown evidence of occupation by Indigenous Peoples dating back thousands of years including seasonal villages near the Hudson River. Artifacts such as stone tools and pot shards have been discovered across the



Figure 2.1 Traditional Mohican settlement, Source: Stockbridge Munsee Band website.



Figure 2.2: Painting of Fort Orange, Source: New York Museum

town, and sites have been deemed archaeologically sensitive by the New York State Historic Preservation Office (SHPO). The NYS Office of Parks and Recreation and Historic Preservation also maintains an online resource called the “NYS Cultural Resource Information Systems” (CRIS) which catalogs historic documents, properties, projects and surveys.

Henry Hudson explored the Hudson River Valley in 1609 for the Dutch East India Company. He traveled aboard the Half Moon, perhaps as far north as Bethlehem’s Henry Hudson Park. By the 1660s, Killaen Van Rensselaer, a diamond merchant from Amsterdam, had established a large feudal land holding, or manor, known as Rensselaerwyck. By the time the Van Rensselaers were done acquiring land from the native peoples, the size of the manor on both sides of the Hudson River was approximately 24 miles by 48 miles wide with

modern day Albany roughly located in the center. Bethlehem was part of the West Manor of Rensselaerwyck, and land holders continued to pay annual rent to the Patroon, or Lord of the Manor, well into the 19th century. The final patroon, Steven Van Rensselaer III, died in 1839, but the Van Rensselaer Manor House in Watervliet remained standing until the family eventually abandoned it, decades later, due to encroaching canal, railroad and factory construction.

The future City of Albany grew as a settlement around Fort Orange, which was located near Broadway and Frontage Street downtown. The site is currently occupied by the D&H Railroad Building (now State University of New York Administrative offices) and, sadly, the exit ramp infrastructure of Interstate 787. In their haste to complete the highway system to the new Empire State Plaza in the early 1970s, archaeological efforts were

rushed and very few artifacts were recovered.

The Town of Bethlehem was officially incorporated in 1793. At the time, it was roughly twice as large as it is now including all of the Town of New Scotland and parts of the City of Albany. Bethlehem continued to be focused on agriculture, raising crops of wheat, oats, hay and apples, with dairy becoming the focus in the 1800s. Services to support Bethlehem’s agriculture expanded along the Normans Kill with the growth of grist mills, saw mills, fulling mills, lumber processing and tool manufacturing. Transportation to market of farmer’s cash crops, like wheat and hay, was provided by an extensive network of wharfs, warehouses and ice houses located along Bethlehem’s Hudson River shoreline. One example was Winne’s dock at Cedar Hill which provided access to the New York City markets. While little evidence of the wharfs and warehouses in the area remain today, some piers and related structures can be seen along the river.

Villages and hamlets began to grow at various crossroads in town, often named after the prominent families who lived there. Examples include Becker’s Corners, Cedar Hill, Kimmey’s Corners (modern South Bethlehem), Kenwood, Normansville, Wemple (Glenmont), Houck’s Corners, Slingerlands, Selkirk, Spawn Hollow, and Adamsville (modern day Delmar). The villages were where one found the schoolhouse, tavern, blacksmith and wheelwright, general store and post office that characterized and supported rural life. It was this early era in Bethlehem’s history



Figure 2.3: Map of Delmar, Source: New York State Museum

that brought civic-minded public servants, entrepreneurs and innovators to bear on the town’s prosperity, many whose names we still recognize today including:

- Albert Bratt*
- Philip Van Rensselaer*
- Slingerland Family (Teunis, John I., William H., Albert I.)*
- Selkirk Family*
- Van Wie Family*
- Bender Family*
- Becker Family (Becker’s Corners)*
- Houck Family (Houck’s Corners)*
- Winne Family*
- Wemple Family*

Rail service through Adamsville (the original name of Delmar) and Slingerlands began in 1863 via the Albany & Susquehanna Railroad (soon to be purchased by the Delaware & Hudson Railroad) which changed how people and goods were moved and operated for almost 100 years. The Westshore rail commenced in the 1880’s and was ultimately purchased by the NY Central Railroad. Together, these rail services allowed Bethlehem residents to live in their rural settings and work in the City of Albany. The

Selkirk Railyards, currently owned by CSX Transportation, was completed in 1924 and remains a major classification yard and railroad hub. The Industrial Age was in full swing in America during the early 20th Century, and with it came the ability to decouple manufacturing from water as a primary source of power. Much of the area’s industry became clustered in Albany and northeast Bethlehem at the Port of Albany, most of which was eventually annexed by the city in 1926. It wasn’t until the 1960s and 70s that industry near the Selkirk Rails Yards near Feura Bush expanded with the opening G. E. Plastics (now Sabic) in 1965 and Owens Corning Fiberglas in 1973.

Bethlehem saw its first major suburban growth spurt around the late 1920’s, and soon after began the process of centralizing its 15 one-room schoolhouses. Bethlehem Central School District (BCSD) was created in 1930 and included the school houses in the northern and central parts of town. Ravena-Coeymans-Selkirk (RCS) Central School District covered the southern portion and did not complete

centralization until 1956. The Guilderland Central School District, where some students residing in North Bethlehem attend today, was formed in the same manner. In curious but typical Upstate New York fashion, school district boundaries do not align with municipal boundaries.

Following World War II, several hamlets in town witnessed significantly greater population growth, as did many communities across the state and country. In 1967 the hamlets of Hurstville (Whitehall Road/New Scotland Road) and Karlsfeld were annexed into the City of Albany, a contentious process that established the town boundaries as legally recognized today.

In the decades to follow a confluence of factors (top-rated schools, proximity to the state capital, decrease in land-intensive farming like dairy and generational transfer of farms, to name a few) created significant development pressure, and with it the loss of many historic preservation opportunities. In the decade



Figure 2.4: Houck’s Hall, Source: Historic American Buildings Survey [HABS NY-6000]. Photographed January 16, 1937 by Nelson E. Baldwin.



Figure 2.5: Houck’s Hall 2020, SE corner of Elm Avenue and Feura Bush Road

between 1980 and 1990 alone, housing development increased over 20%, and an additional 16% rise occurred between 1990 and 2000. While this upward trend has cooled in recent years, there is no shortage of development projects in the pipeline.

### Preservation Jurisdiction and Terminology

Terminology can be a difficult challenge in the world of historic preservation. Various governmental agencies like the NYS Historic Preservation Office (SHPO), the USDA National Resources Conservation Service (NRCS), the US Department of Interior – National

Park Service (NPS), and the Advisory Council on Historic Preservation (ACHP) have their own unique, and sometimes conflicting, use and definitions of terms like “historic preservation,” “cultural resources,” “historic place/property/resource,” “archeological site,” etc.

Given the Town’s intention to advance Historic Preservation and Cultural Resource documentation, it is important to highlight the policies and services provided by a few key agencies in the state.

NYS Historic Preservation Office (SHPO) administers programs authorized by both the National Historic Preservation Act of 1966 and the New York State Historic Preservation Act of 1980. These programs include;

- Statewide Historic Resources Survey
- New York State and National Registers of Historic Places
- State and federal historic rehabilitation tax credit
- Certified Local Government program
- State historic preservation grants program

Community benefits resulting from being a Certified Local Government by SHPO include technical resources, grant funding, and tax credit programs. Historic places are shared with the Federal Emergency Management Agency (FEMA) and are identified for immediate protection in the event of a natural disaster. It should be noted that the Town of Bethlehem is not in the Certified Local Government program,

however, Albany County is in this SHPO program.

From a town planning standpoint, the town has significant areas of archaeological sensitivity. All cultural resource surveys are registered with the Cultural Resource Information System (CRIS).

The Tribal Historic Preservation Office (THPO) overseeing the Bethlehem region is located in Williamstown MA for the Stockbridge-Munsee Community. The Mohican section of the Stockbridge Munsee tribe is extremely interested in this region as it is their ancestral homeland. Any projects that are funded by or sponsored by a federal agency, requiring NEPA review, will require consultation with the THPO.

The Town Local Waterfront Revitalization Program (LWRP) includes a historic resource policy (Section III, Policy 23) to protect, enhance and restore structures, districts, areas, or sites that are of significance in the history, architecture, archeology or culture of the State, its communities, or the Nation. The policy includes a list of the type of resources to be considered for protection and identifies a list of the types of adverse changes to those resources that should be avoided. The LWRP also includes a map in Section II called Historic, Cultural and Archeological Sites. It shows both National Register Historic Sites and Potentially Eligible properties within the Waterfront Revitalization Area.

The Town of Bethlehem is rich with historic and archaeological resources. There are currently 12



Figure 2.6 Cultural Resources in the Town of Bethlehem mapped by the Cultural Resource Information System (CRIS)

National Historic Register sites within the Town:

- Bethlehem House (Selkirk, Listed 1973)
- U.S. Post Office (Delmar, Listed 1988)
- Slingerlands House (Slingerlands, Listed 1997)
- Patterson Farmhouse (Delmar, 1997)
- District School No. 1 (Selkirk, Listed 1998)
- Van DerHeyden House (Delmar, Listed 2001)
- Schoonmaker House (Selkirk, Listed 2002)
- Bethlehem Grange No. 137 (Selkirk, Listed 2002)
- First Dutch Reformed Church (Selkirk, Listed 2002)
- Dr. John Babcock House (Selkirk, Listed 2003)
- Rowe Farm (South Bethlehem, Listed 2012)
- Slingerland-Sprong House (Slingerlands, Listed 2012)
- National Historic Register districts:
- Onesquethaw Valley Historic District (Listed 1974)

- Slingerland Historic District (Listed 2012)

In 1996, a survey of the town was completed by high school senior Emily McGrath as a thesis project under the guidance of Mark Peckham from the NYS Historic Preservation Field Services Bureau, which remains a useful resource. This project identified listed National Register Sites, properties or districts eligible for listing, or that may be eligible based on further investigation. While this survey was labeled a "reconnaissance-level survey", it would be more accurately characterized as a windshield survey, because it does not include the methodologies and information typically included in a professionally-executed reconnaissance survey (original owners, deed histories, builders, materials, architectural data). McGrath herself recommends the preparation of an extensive reconnaissance level survey under the guidance of the NYS Historic Preservation Field Bureau. Nevertheless, the McGrath survey does contain important information upon which to build, as it itemizes approximately 244 National Register-listed or eligible structures. In addition to buildings, the study noted bridges, cemeteries (Nicol-Sill)

and potential historic districts, which include:

- Adams Place / Adams Street Suburban District
- Burhans, Capital, Euclid, Salisbury Suburban District
- South Bethlehem Historic District
- Delsmere Suburban District
- Forest Rowland, Pinedale, Wellington District
- Retreat House Road District

The Slingerlands National Historic District includes 102 buildings and 1 contributing structure (railroad bridge). The district was designated in 2012. See Figure 2.7.

In 2017, the Friends of the Slingerlands Family Burial Vault was established to preserve and educate the public about the historically significant vault. This vault was constructed in 1852 to entomb John A. Slingerland, and descendants of the first members of the Slingerlands Family to settle in the area. John A. Slingerland's sons went on to have a large impact on the hamlet and community. The vault also contains several other members of John A. Slingerlands' family. In 2018, restoration of the vault began, and the site was rededicated in Sept 2021.

There is no local preservation district or oversight entity such as a historic preservation commission in Bethlehem.

The Town of Bethlehem owns two sites listed on the National Register of Historic Places. The District School No. 1 (also known as

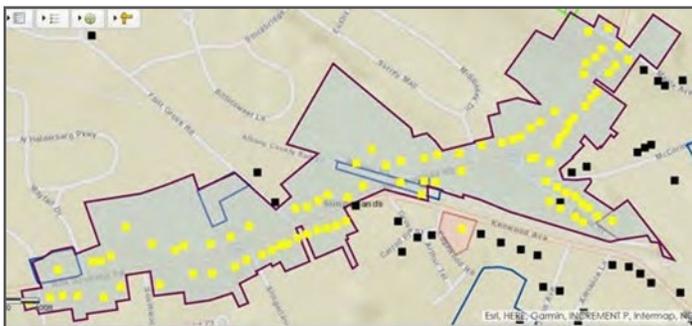


Figure 2.7: Slingerlands Historic District, Source: Cultural Resource Information Service (CRIS)

the Cedar Hill School House) and the Slingerland Family Burial Vault which is included in the Slingerlands Historic District. The Town also owns the former Delmar School (current location of Town Hall) built in 1926 which is potentially locally significant.

## Archaeological Resources

A review of the state Cultural Resource Information System (CRIS) indicates that the Town of Bethlehem has significant areas of archaeological sensitivity. As a result, many, if not all development

proposals have been required to prepare cultural resource surveys. The map (Figure 2.6 for CRIS) indicates individual parcels, residential subdivisions, large land areas, utility corridors and more. Notable studies on CRIS include;

- Selkirk By-pass
- Port of Albany
- First Reformed Dutch Church of Bethlehem
- Moh-he-conuck Nature Preserve

- Sandy Creek Dairy Farm (aka Newell Dairy Farm)
- Helderberg Hudson Rail Trail
- Onesquethaw Valley Historic District
- Broadcasting Solar Development
- Beacon Point Development

## Cultural Institutions

This community profile does not look in depth at cultural institutions. Some socially significant activities may take place within or on a historic place or site, which should be identified and noted for planning purposes.

Many of the Capital Region's cultural, educational, governmental and health care institutions are located in the City of Albany, Troy and other first tier communities (inner ring suburban towns) along the Hudson and Mohawk Rivers. Notable cultural facilities, institutions, and activities in the Town include:

- Bethlehem Public Library
- Bethlehem Historical Association Museum
- Delmar Farmer's Market (Saturday and Tuesday)
- Bethlehem Grange
- Spring Fest / Fall Fest
- Memorial Day Parade (annual)
- Bethlehem Walk & Roll Fest
- Chalk the Walk
- Thanksgiving Turkey Trot
- First Night – New Year's Eve

## Findings and Opportunities:

- Bethlehem's early European settlement and economic development began along the

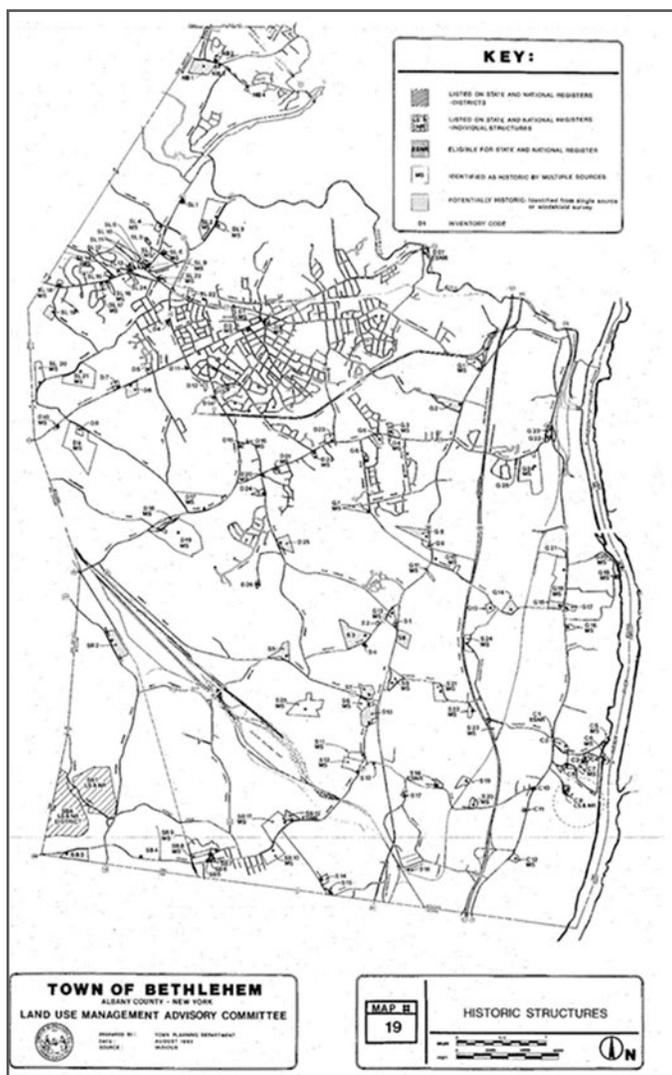


Figure 2.8: Historic Structures, Source: Bethlehem Land Use Management Advisory Committee Report

Hudson River and Normans Kill and was dominated by agriculture and industries directly supporting working farms (grain mills, textiles, coal dealers, blacksmiths, machine mechanics, etc.).

- As outlined in the McGrath Survey, SHPO records and Town Historian's records, the Town of Bethlehem has rich history and a significant inventory of historic structures, sites and archaeologically sensitive areas.
- The Town of Bethlehem must make historic preservation a priority, by reaffirming and committing to the stated goal from the 2005 Comprehensive Plan to "recognize the Town's significant cultural and historic resources and develop incentives for protecting and enhancing these for future generations."
- As stated in the 2005 plan and never completed, the first step is to "create a town-wide inventory of historic and cultural resources". The Town Board should initiate the inventory of historic and cultural resources. The inventory should identify significant historic properties and sites and should also identify sites that are eligible for listing on the National Register of Historic Places. Perhaps some sites might be nominated for listing on the National Register if the owners of such sites are interested in this option. The Town must commit to the completion of such a survey, since without one, the historical value of any structure or landmark cannot be truly assessed. Historic resources

should be evaluated for local historical significance.

- In order for the Town to keep historic preservation in the forefront of planning and zoning issues, an advisory committee must be established to explore, review and recommend solutions, including but not limited to, the need for an overarching authority – such as a historic preservation commission (HPC) that would guide historic preservation efforts, establish scope of powers and determine breadth of staffing resources. In peer communities there are some commissions that wield significant authority while others are more advisory in nature; some create and maintain local historic registries, others administer tax incentive programs.
- The advisory committee could evaluate the viability of Certified Local Government (CLG) status for the Town through the NYS Historic Preservation Office (SHPO), to obtain more focused support, technical preservation assistance and legal advice; training opportunities to increase the ability of communities to protect their historic resources and integrate them into short- and long-term planning initiatives and explore grants opportunities designated exclusively for CLG projects.
- Consider amending the Zoning Code to lower density threshold on all future development in and adjacent to listed and identified Historic Structures, Sites and Districts. Ensure that new development is compatible

with adjacent neighborhood character and context.

- Consider requiring the Zoning Board of Appeals (ZBA) to consider appropriate architectural design when applications involve historic properties to avoid waivers for projects that are not visually appropriate. Re-evaluate ZBA guidelines used to grant exceptions to the code.
- Consider a demolition delay requirement in order to review the proposal of a full or partial removal (as well as a relocation to an alternate site) of historic homes, buildings, structures, and cultural sites town-wide. This would include places of cultural, religious, or other significance.
- Develop a resident guide on Historic Preservation best practices guidebook on the proper treatment of historic homes, buildings, and structures, and promote long-term appreciation of unique and historic buildings for future generations to enjoy.
- Ensure that Town's conservation programs include the protection of historic and cultural resources and character of Bethlehem's neighborhoods that may be eligible for historic district designation (similar to Slingerlands Historic District).

## Forests, Fields, and Farmland

Open space conservation planning has been a topic of discussion in Bethlehem for well over two decades, and has been a focus of numerous committees, meetings, focus groups and written reports. In those years several programs have been developed to provide a set of flexible natural and agricultural conservation implementation tools that include a set of financial incentives for the Town to provide when conservation opportunities arise.

### Natural and Working Lands in Bethlehem

#### Background and Early Conservation Efforts

Over the years, the town has lost a good deal of its open space (or undeveloped lands) to the development of housing, industry, commerce, and other land uses, many of which support and add value to the community. At the same time, important open spaces that are kept in a natural, undeveloped state are also essential to conserve in town, not only because they serve as valuable recreational and scenic resources, and link us to our culture and history, but open spaces also provide “ecosystems services” that protect water and air quality, as well as wildlife habitat, biodiversity and public health.

The 2005 Comprehensive Plan presented goals and recommendations towards working with willing landowners to conserve significant open space throughout the town and create a network of open lands to provide wildlife

habitat and potential recreation trail corridors.

Early efforts established the Citizen’s Advisory Committee on Conservation (CACC) and Open Space Technical Advisory Working Group, which established a framework for the Town to move forward to implement a program that would conserve open space.

These included the:

- Open Space Protection Programs – Funding and Tools Report (2006)
- Recommendations on Open Space Needs and Opportunities Report (2009)
- Agricultural and Farmland Protection Plan (2009)
- Open Space Program resolution (2014)

In 2018 the town conducted a survey titled Open Space and Farmland Conservation Survey. The summary of findings indicates that the following topics and issues

are highly important or somewhat important to all respondents:

- water resources
- protection conservation of open space and farmland
- parkland and trails
- wildlife habitat
- benefits community character
- support active farming
- new development is causing loss of open space
- scenic views
- hunting and fishing

The 2018 Community Forums confirm the desire to protect agriculture open space and undeveloped land. Residents throughout Bethlehem like the proximity to the rural countryside farms, forests, parks and scenic areas. Residents are also concerned about the prospect of future development changing this rural, agrarian character, the irreversible impacts to the environment, habitat and see active farmland and agritourism as a part of the town’s

ideal future. Protection of small forest patches, rewarding property owners for conserving open space, purchase of development rights and identification and prioritization of open space are some of the strategies residents said were part of their vision for Bethlehem.

### Recent Efforts

With a framework for conservation in place, recent efforts have focused on implementation. These include the hiring of a part-time Open Space Coordinator to manage an open space program, titled the Farms and Forests Conservation Program.

The program includes the following accomplishments and resources:

- Conservation Easement Exemption (CEE) (2014)
- Open Space Plan: Conservation Criteria Implementation (2017)
- Scenic Bethlehem Photo Survey (2017)
- Open Space and Farmland Opinion Survey (2018)
- Farms and Forest Fund (2019)
- Parkland Set Aside Fund amendments

### The Business of Agriculture in Bethlehem

Since the 2005 Comprehensive Plan, the Town's (and region's) current farms and potential farmland, as well as the benefits of retaining and increasing farms in our community, have been researched and documented to a greater extent with various maps, public surveys, plans, focus groups, and studies.

In general, farm activity in Town mainly consists of feed crop (hay and corn), and there is also some production of vegetable, fruit and



*Beans growing in a Bethlehem farm field.  
Photo: Kleinke Farm*

flower crops, and greenhouse operations. Livestock currently raised on farms include dairy cattle, horses, beef cows, one dairy farm and other small livestock, such as sheep, pigs, and poultry such as chickens.

Farmland is property that is, or has the potential to be, actively managed by people for the purpose of producing food or other products. Farms are businesses, and for farmland to stay in farming, a current or aspiring farmer must be able to afford ownership of the land and maintain a successful business, otherwise there will be economic pressure to sell or convert the land to development.

According to American Farmland Trust, the national rate of agricultural land conversion to other land uses (residential developments, commercial land uses, etc.) has increased over time due to "development pressure, weakened farm viability, and the challenges of transferring land to a new generation" (Farms Under Threat: The State of the States, 2020).

As presented in the Economic Development section (see Section 6 of Community Profile) there is renewed interest in smaller scale farming typically ten (10) acres or less. One of the key factors individuals and families are advised to consider are the quality of soils. The NYS Department of Agriculture & Markets and Albany Cornell Cooperative Extension know Bethlehem to have substantial areas of 'prime' farmland and soils of statewide significance. The primary question is 'whether the soils accommodate profitability in farming and if not, activities need to be permitted that will allow farmers to supplement their income. With most new, smaller farms focusing on vegetables and livestock, a broader range of agricultural uses need to be identified in the Town Code, including:

- Horticulture
- Horse breeding
- High intensity greenhouses with Aquaponic and Hydroponics
- Cannabis
- Vineyards

These are just a few of the potential agriculture uses, but the end of this section has a complete list of agricultural uses and support uses that should be added to the permitted land uses under 'agriculture'.

The Town of Bethlehem Zoning Law provides a definition of 'Agritourism'. With the rapid growth in New York State of craft breweries and cideries, consideration should be given to broadening the definition of agritourism to include activities

which align with newer farming practices.

Below is the definition of agritourism from the Town of Duaneburg, New York, adopted 2017.

*“Agritourism, Activities on land used, or formerly used, for agriculture, which through promotion and advertising of facilities and activities seek to attract visitors, guests and vacationers. Agritourism includes the operation of a farm brewery, farm distillery, farm winery, or farm cidery provided the facility is located on a lot exceeding twenty-five (25) acres and on a state highway”*

Affordable and accessible farmland is also stated as a major impediment to new farmers in Bethlehem, the Capital Region and across the state. The American Farmland Trust report states that New York farmers cannot compete with the high prices and pace of the real estate sales market. Meanwhile, the cost of renting land is increasing, and thus, security for farmers on rented acres is tenuous and hopes of future ownership are limited. Between 1950 and 2012, according to data from the National Young Farmers Coalition (NYFC), New York lost more than half of its land in farms and nearly three-quarters of its family farms. And yet, in parallel to these threats to farms, there is an increased demand for locally grown food. Scenic Hudson’s 2019 study identifies farms in the Town of Bethlehem as a “highest priority” for farmland conservation for the Hudson Valley foodshed, as Bethlehem contains a combination of good farmland soils, farmland of a certain size, and farm density.

Farms are an important source of climate-change solutions. According to Cornell University’s College of Agriculture and Life Sciences (CALS), soils hold about three times as much organic carbon as the atmosphere, which means that farmland could play a major role in sequestering carbon and combating climate change. According to Scenic Hudson’s report “The Climate-Resilient Agriculture Initiative: Cultivating Climate Solutions in the Hudson Valley”, regenerative farming practices, such as no-till, diversifying crops, and rotating and planting cover crops, can help keep carbon in the ground and make farmland soils more productive and resilient to climate impacts (drought, etc.). Supporting the town’s existing farms and encouraging new farm businesses can be part of Bethlehem’s local initiatives to combat climate change.

Recently, there has been much discussion in the renewable energy and agricultural business intersection. Solar power will be important to New York communities achieving climate goals by 2030. Organizations that can assist with siting of “agrivoltaics” include NYS Farmland Protection Working Group, NYSERDA, Cornell University, Solargrazing.org and Scenic Hudson.

### **The Cost of Farmland Conversion**

The Town of Bethlehem Agricultural and Farmland Protection Plan (2009) presented several costs and consequences of the conversion of agricultural land to development. If farmland is converted to residential development, for example, this would impose costs to the community in the form of increased demand for schools, roads, water,

sewer, and other community services. The Town of Bethlehem “Cost of Community Services Study” conducted through the Albany County Agricultural and Farmland Protection Plan (2018) showed that in the Town of Bethlehem, agricultural and open space land cost \$0.16 in public services for every \$1.00 paid in taxes, whereas low density residential properties cost \$1.10 for every \$1.00 paid in taxes (commercial land cost \$0.13 and industrial land cost \$0.09 for every \$1.00 paid in taxes). To stem the decline of local farms and protect the community from increasing the costs of community services, land conversion pressure needs to be alleviated where possible.

Current farm businesses and rural lifestyle must continue to be supported. The town and Albany County will need strategies to make farmland accessible and affordable for a new generation of farmers who wish to continue or begin a local agricultural business. Farmland is valuable, both as a natural resource (e.g., soils) for growing food and products, but contributes to our community’s culture, character, and commerce, without disproportionately impacting public services in the way that low density residential land uses do (“cows don’t go to school”, “carrots don’t need snow plows”, etc.). Viewing farmland (and farmers) as an asset to protect and support is a positive economic development strategy for the future of Bethlehem.

### Current Agricultural Lands in Bethlehem

In Bethlehem, agriculture and farming properties are shown on Figure 3.1 in clusters. While quantifying land use in agriculture at the local scale is difficult, information from several sources can show a general picture of where agriculture is predominantly occurring in the Town. The parcels highlighted in solid orange reflect lands that are currently enrolled in the Albany County Agricultural District. Lands in the County Agricultural District have limited

zoning or land use regulatory restrictions related to agriculture; enrolling in the Ag District provides these landowners certain right to farm protections through the county and state law. The parcels with darker orange hatch marks show lands receiving a NYS Agricultural Assessment. Agricultural Assessment parcels are those receiving an exemption on their property taxes based on the property's agricultural activity. In 2021, seventy-five (75) parcels (owned by 30 individuals or families) were located in Albany County Agriculture District #3 and

received an Agricultural Assessment. Of the 75 parcels, about half of the parcels were leased to another farmer, who performed the agricultural activity on the parcel in exchange for paying rent to the landowner. The recent count of parcels show a large decrease since 2007, when 127 parcels received state agricultural assessment. Often the most reliable indicator of how much land is being farmed comes from agencies such as Cornell Cooperative Extension of Albany County, as farm activity changes over time and these on-the-ground organizations can have up-to-date knowledge of these changes.

The Town Local Waterfront Revitalization Program (LWRP) includes an Agricultural Lands Policy (Section III, Policy 26A) to conserve and protect land used in agricultural production in the portion of the Albany County Agricultural District #3 located in the Bethlehem Waterfront Revitalization Area. The policy includes guidance to be used by the Town to conserve and protect those lands. Guidance includes use of conservation subdivisions, coordination of efforts to secure funding for purchase of development rights, and using the Conservation Easement Program.

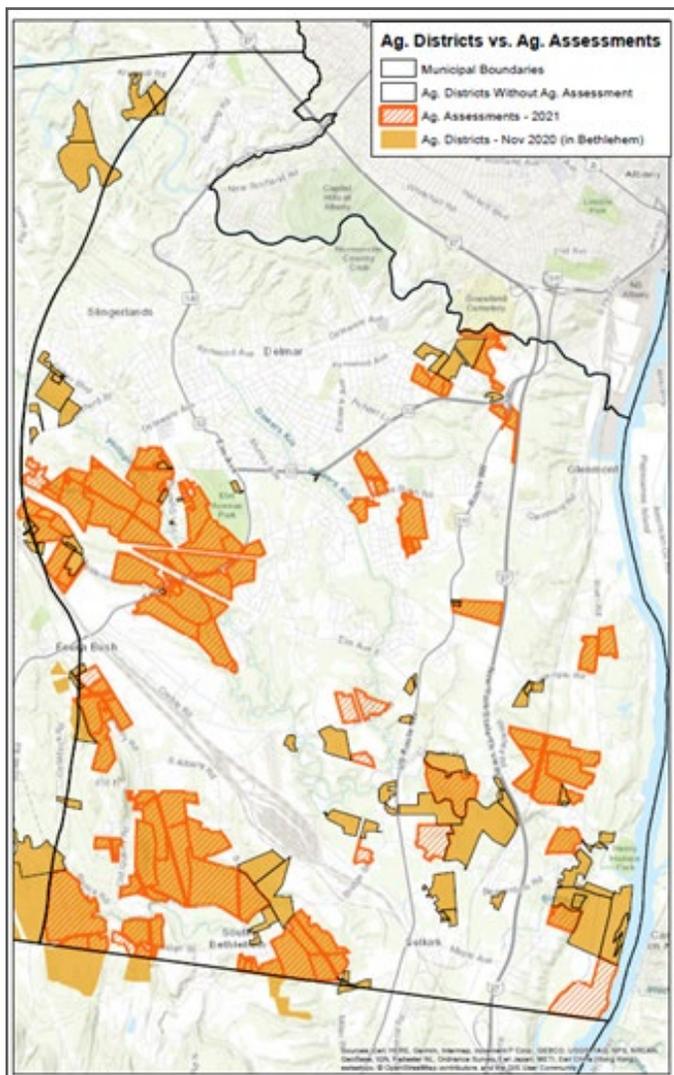


Figure 3.1: Agriculture activity in the Town of Bethlehem 2021

## Bethlehem's Conservation Programs

### The Conservation of Natural Resources, Ecosystems, and Farmland

Since the adoption of the 2005 Comprehensive Plan, the Town has completed many of the recommendations for open space and farmland conservation including adopting an Open Space Plan, developing Conservation Criteria Assessment procedures, adopting a local Conservation Easement Exemption (CEE) program, and a Farms and Forests Fund (F&F Fund). The CEE program and F&F Fund (together known as the Farms and Forest Conservation Program) provide conservation options and incentives for private landowners and farmers who agree to conserve their land for future generations. They are guided by the Conservation Easement Review Board (CERB) and staffed by both the Director of Planning and the Open Space Coordinator (a new position in 2016). The Town also has a Parkland Set Aside Fund that can conserve open space through the acquisition of new or expanded parkland. Finally, land can be conserved through two development options: the Conservation Subdivision (CS) or Planned Development District (PDD), which provide incentives for efficient land use and conserving important open spaces.

### Bethlehem's Open Space Plan: Conservation Criteria Implementation

Open space conservation planning had been a topic of discussion in Bethlehem for many years and had been a focus of numerous committees, meetings, focus groups, and written reports, which

consistently highlighted the need for an Open Space Plan to help evaluate and prioritize conservation opportunities as they arise. In 2017, the Town of Bethlehem Open Space Plan was published, which contained:

1. An updated, town-wide open space inventory and database of natural resources, as illustrated in a series of four Conservation Values Maps:
  - a. Community Character Open Space Conservation Values Map
  - b. Recreation and Greenways Open Space Conservation Values Map
  - c. Forests, Fields, and Wildlife Ecosystems Open Space Conservation Values Map
  - d. Natural Water Systems: Streams, Wetlands, and the Hudson River Open Space Conservation Values Map
2. A method of objectively assessing 25 Conservation Criteria (scientifically derived and locally relevant natural features and processes) within a parcel or site for its conservation value,
3. A flexible, data-driven Geographic Information Systems-based tool to evaluate, numerically score, and prioritize the conservation of open space land; this tool generated a Conservation Priorities Map. This rating system is used on separate parcels when projects are being assessed individually, but can be used for the entire town to get a "bird's eye view" of general areas of conservation priority.

The purpose of the Open Space Plan, the Conservation Values Map, and the Conservation Criteria & Analysis Tool was not to target any specific areas or parcels for conservation, but rather to effectively assess the conservation value of a property and guide town staff and CERB on how

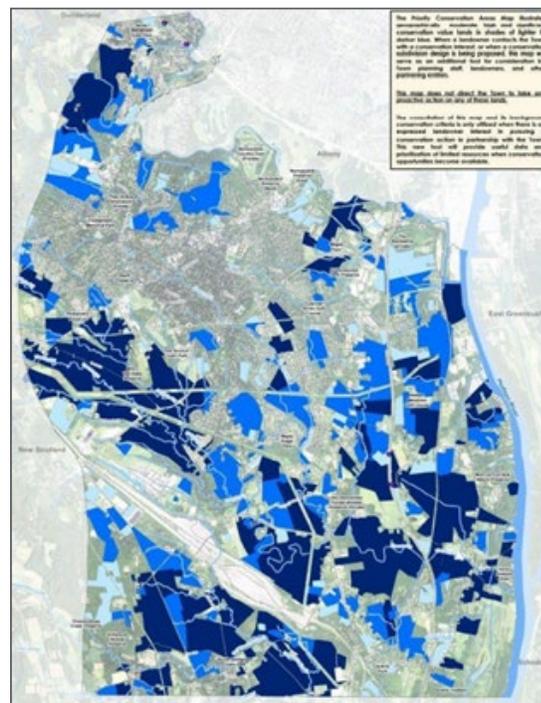


Figure 2.2: Conservation Priorities Areas Map.  
Source: Town of Bethlehem Open Space Plan (2017)

best to assist landowners and serve the community as a whole when a conservation interest arises. These tools can also be used by CERB for the evaluation of Conservation Easement Exemption (CEE) applications, by the Planning Board for reviewing Conservation Subdivision and Planned Development District (PPD) applications, and by the Town Board within reviewing Purchase of Development Rights or land acquisition.

The information and tools within the Open Space Plan also aid the town in working with our local conservation partners, including the Mohawk Hudson Land Conservancy and the Scenic Hudson Land Trust; two organizations that have assisted the town with numerous conservation projects, both with funding and with institutional and technical expertise. Since the adoption of the Open Space Plan in 2017, the conservation criteria assessment tool has been utilized for approximately 15 proposed conservation projects (including Conservation Easement Exemptions and parkland acquisition). Most of these have resulted in successful open space and farmland conservation in partnership with private landowners, totaling 307 acres of land that is now protected forever, either in private ownership or as new Town parkland.

### **Farms and Forests Conservation Program**

Bethlehem's Farms and Forests Conservation Program consists of two key incentive programs for interested landowners to voluntarily participate in the conservation of their land; the Conservation Easement Exemption Program (CEE)

and the Farms and Forests Fund (F&F Fund). The (CEE) program is a term conservation, or lease of development rights program, that is intended to serve as a financial incentive tool to help interested private landowners conserve their open space land (forests, fields, and farms) through a program that ultimately benefits both the landowner and the community as a whole by conserving natural resources and farmland and protecting community character and ecosystem services. Landowner participants in the CEE maintain private ownership and all other rights to their land, giving up only the right to develop non-agricultural structures on the conservation land (houses, commercial and industrial buildings, etc.). In exchange for conserving the agricultural use of their land for an agreed upon length of time, the landowner receives a percentage reduction on their property taxes (town, county, and Bethlehem Central School District (BCSD)) with higher percent reductions for longer conservation term lengths. To date, there are six (6) completed CEE projects totaling 153 acres of privately owned permanently protected land in Bethlehem, including the Bioreserve, Inc. property in Glenmont (60 acres), the Pine Hollow Arboretum (20 acres), Amsler Property (41 acres). All these CEE landowner participants have chosen perpetual conservation easements for their properties.

A Citizens Advisory Committee on Conservation (CACC) that was formed in 2006 based on a Comprehensive Plan recommendation, developed a report that advocated for creating a local fund to pay for the

conservation of open space and farmland through the purchase of development rights (PDR). This local conservation funding recommendation has since been implemented with the creation of Bethlehem's Farms and Forests Fund (F&F Fund), which supports a 'purchase of development rights' (PDR) or 'purchase of agricultural easement' program.

Bethlehem's Farms and Forests Fund (F&F Fund) is a purchase of agricultural easement (or purchase of development rights (PDR) program. The F&F Fund provides a local resource for farmers to voluntarily sell their development rights to the Town and receive a cash payment for the monetary value of those rights which can be reinvested into farm operation, purchase of additional property or any way they choose. The landowner retains title to the property and continue to receive tax abatements as long as the property is actively managed for agricultural purposes and not permitted to go fallow.

The value of development rights to be purchased is based on the following appraisal formula: highest and best use under the current zoning designation minus the value of the land as an agricultural use equals development rights value.

The F&F Funds can be used to purchase land or be used for to pay for other transaction costs associated with conservation projects such as land appraisals, title searches, and land surveys, to help reduce the cost burden on F&F Fund applicants. To date, there have been no formal applications

(although several discussions) for the F&F Fund. It is anticipated that through public education and awareness, landowner inquiries will increase, and the town will begin to see applications to the Fund. Partnerships with state agency and local conservation organization funding is expected to complete a PDR.

The Farms & Forests Fund will require a consistent funding source to be effective in preserving agricultural lands from development sprawl. Once the town acquires development rights from a landowner, those rights can simply be 'extinguished' (upon filing of the conservation easement) or the town could bank the development rights for sale to property owners or developers seeking to achieve higher densities of residential units in other areas of the Town. This 'revolving fund' mechanism would be intended to financially support the program after an initial source of funding is secured.

### **Parkland Set Aside Fund**

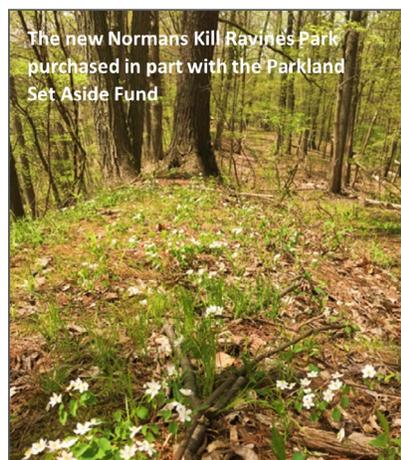
Another conservation tool available to the Town is the Parkland Set Aside Fund (PSAF). The PSAF was established in 2001 to facilitate purchasing land from interested landowners to create new public parkland expand existing parks, and funding park improvements and parkland studies. It cannot be used to purchase land that will be held privately. Real estate developers and applicants buy into the fund as a fee – in lieu of providing recreational amenities on their development projects. This program ensures that new parkland and recreational opportunities expands as new residential units are

built to accommodate a growing population. As of 2020, the Parkland Set Aside Fund (PSAF) has been used to acquired 21 acres of land adjacent to Henry Hudson Park. In 2020, three parcels totaling 90 acres of land were purchased with the town's PSAF (for a total of \$215,000 across the three parcels) to create a new park, the Normans Kill Ravines in Delmar, and to expand the existing Henry Hudson Park in Selkirk. To leverage the use of the PSAF, the town partnered with the Mohawk Hudson Land Conservancy and the Scenic Hudson Land Trust, which provided both grant dollars and staff time.

### **Conservation Subdivisions and Planned Development Districts**

If a natural resource or farmland conservation opportunity exists within a proposed development project there are conservation options that may incentivize a developer while providing benefits to the community.

Developers of major subdivisions have the option of proposing and designing a Conservation Subdivision plan, which allows



*The new Normans Kill Ravines Park purchased in part with the Parkland Set Aside Fund*

for development on a more concentrated portion of the land (compared to a conventional subdivision) leaving a significant portion of the property in its natural, undeveloped condition in perpetuity. (Refer to Existing Land Use & Zoning for future detail)

A Planned Development District (PDD) is a tool that allows for creative mixed-use developments, combining office, residential, and neighborhood services (including open space or farmland conservation). PDDs are "floating zones" which require rezoning (to PDD) that can be developed any place in town, in any zone. Some examples of PDDs in town include the Van Dyke Spinney PDD on Van Dyke Road and the Phillipin Kill Manor PDD on Fisher Boulevard.

### **State and Regional Partnerships**

The Farmland Protection Implementation Grant Program (FPIG), operated through NYS Department of Agriculture and Markets (NYSDAM), which was established to sustain New York's farm economy and the land base associated with it, has had a significant impact on conserving the most valuable and threatened farmland across the state in its more than twenty-year history. Since 1996, New York taxpayers have invested over \$145 million to protect 61,000-plus acres of viable agricultural land (Farmland for Farmers, 2020). Farms within the Town of Bethlehem have not yet accessed this state funding resource, but can be poised to do so, especially with the newly established Bethlehem Farms and Forests Fund to provide local match needed for these state grant awards to farms.

Bethlehem's Farms & Forest Funds may be used as local match to NYS Ag & Markets funds for the Purchase of Development Rights (PDR) or Agricultural Easements. These are highly competitive state-wide grants that have historically been offered biannually by the state. If approved for a PDR grant from the state, the landowner would still own the land with all rights except to develop (in perpetuity), as the land would have a permanent conservation or agricultural easement attached with the deed.

### Land Conservation Non-Profit Organizations and Other Governmental Agencies

The Town of Bethlehem coordinates with multiple local and regional partner organizations to assist with conservation program, funding, and resources (programs) to assist a generation of new farmers and as well as legacy families transitioning out of agriculture. These partnerships include;

*Mohawk Hudson Land Conservancy (www.mohawkhudson.org)*

*Farmland for Farmers (USDA programs)*

*Agriculture Stewardship Association (www.agstewardship.org)*

*Hudson Valley Agribusiness Development Corporation (www.hvadc.org)*

*National Young Farmers Coalition, Hudson, NY (www.youngfarmers.org)*

*Hudson Valley Farmlink Network (www.hudsonvalleyfarmfinder.org)*

*Albany County Land Bank (www.albanycountylandbank.org)*

*Scenic Hudson (www.scenichudson.org)*

*NYS Department of Agriculture & Markets (www.agriculture.ny.gov)*

*Albany County Cornell Cooperative Extension (www.albany.cce.cornell.edu)*

*Albany County Soil & Water Conservation District (www.albanycounty.com)*

*NYS Farm Bureau (www.nyfb.org)*

*Albany County Farm Bureau, local chapter (www.nyfb.org)*

*Albany County Agriculture & Farmland Protection Board (www.albanycounty.com)*

Whenever possible, The town partners with entities such as: the Mohawk Hudson Land Conservancy, the Scenic Hudson Land Trust, the Hudson River Estuary Program, the Hudson Valley Agribusiness Development Corporation, American Farmland Trust, Albany County, and New York State to combine and maximize collective resources and information, including grants, to assist Bethlehem landowners with conservation projects. The Town strives not only to assist landowners with conservation efforts, but also with making connections to other resources to help landowners keep their land in an undeveloped state. If the Town's programs are not appropriate for an interested landowner, Town staff will work to connect the landowner with other organizations or agencies that can assist them.

In 2021, the Mohawk Hudson Land Conservancy and the Scenic Hudson Land Trust contributed funding and resources to a project in which two private landowners sold their properties to the Town to expand Henry Hudson Park by 21 acres along the Vloman Kill as it enters the Hudson River, conserving key estuary shoreline and important tidal wetland pathways. This conservation partnership reduced the Town's costs by more than 50%, as well as provided institutional and technical expertise that enabled this multifaceted project to fulfill the wishes of both the landowners and the community, resulting in

the protection of a significant ecosystem in perpetuity.

### Findings and Opportunities:

- Farmland is at risk of continuing to be converted to other land uses (primarily residential) due to current zoning.
- Agricultural land use creates less need for costly community services than residential land uses, demonstrated in the 2018 Bethlehem Cost of Community Services Study.
- Agricultural land uses contribute to the town's culture, character, and economy; farms also can be a part of local climate change mitigation solutions;
- Landowners and farmers find it increasingly difficult for farm businesses to thrive in Bethlehem.
- Property taxes continue to place burden on agricultural businesses and large landowners, further increasing landowner pressure to sell land for conversion to non-farm uses.
- The Town Zoning Law definition of permitted 'agriculture and agriculture uses' needs to be expanded.
- Tax exemption programs for farmers (NYS Agricultural Assessment, NYS Farmer School Property Tax Credit, Town of Bethlehem Conservation Easement Exemption program) can help, but more tax relief for farmland owners is desired. The NYS Agricultural Assessment and the Farmers School Tax Credit program need modifications and political support. Currently,

the Bethlehem Central School District participates in the conservation easement exemption program; however, the Ravena Coeymans Selkirk School District does not participate.

- Access and affordability of farmland is a major barrier for new farmers who wish to start agricultural businesses in Bethlehem. The purchase of development rights (via F&F Fund) would offer landowners the opportunity to receive the economic value of their property and also sell to new farmers at a lower value (agricultural appraisal)
- The local food movement is generating new and increased interest in buying from local farmers and especially during the Covid-19 pandemic, saw an increase in demand and sales from local farms, farmers markets, and farm stands; Scenic Hudson's foodshed study (2019) shows that Bethlehem farms are among the highest priority for farmland conservation for food production in the Hudson Valley.
- Photovoltaics (solar) siting on farmland is an emerging issue; local guidance, regulations, and best practices should be based on scientific research and experience from other communities.
- Continue to appoint representatives of the Bethlehem agricultural community to committees and boards to see that their needs and perspectives are heard (specifically the Planning Board).
- Bethlehem farmers can collaborate to bolster local markets and supply chain services, increasing business coordination and limiting competition so all farms can thrive.
- Support economic development opportunities for farms and businesses that complement agriculture (agritourism, value-added products, supply chain businesses, etc.). Broaden the definition of Agritourism in the code.
- Farmland enrolled in the Albany County Agricultural District is granted a certain level of protection; however, the Town can consider other ways to buffer farmland from conflicting land uses that may cause problems for farm businesses so that agricultural businesses can thrive without undue threat from adjacent landowners.
- Consider adopting regulations that emphasize/encourage/incentivize traditional neighborhood development as a method of reducing development pressure on farmland. Compact, walkable places take up less land, tend to perform better economically, encourage active lifestyles, and conserve natural and agricultural land.
- Continue working with interested farmers and large landowners to assist with NYS farmland protection grants (FPIG) that can be matched with the Town's Farms and Forests Fund; education about these grants and funds so that farmers and landowners are aware of the benefits.
- The F&F Fund will require a consistent source of financial resources to promote and engender credibility of the Purchase Development Rights program. Local funding will help leverage PDR grants through the NYS Department of Agriculture and Markets Farmland Protection Implementation Grants program (see more about the NYS DAM FPIG grants above).
- Currently, there is no Albany County open space fund to help support Bethlehem's local fund. As an example, Saratoga County established an Open Space Fund in 2003 and within 15 years has helped to fund almost 5,000 acres of farmland land open space protection by contributing almost \$26 million to open space and farmland protection projects (2018 data). A similar fund in Albany County would be greatly beneficial.
- Improvements to the Conservation Subdivision regulations should be considered. Constrained lands which are already protected, can be limited in the calculation of open space conservation credited, as these constrained lands already cannot be developed. Bonus density units should not be awarded when associated with the conservation of constrained lands.
- The concept of conserving farmland soils for beginning or continuing active farming purposes can also be encouraged. A potential new approach would be to designate prime farmland soils as left open and designated as a farm

which, once established with a farmer and a business plan, would become an active and purposeful part of a residential subdivision (referred to as an “Agrihood”).

- Town administration and staff continuously seek collaboration with local and state agencies, as well as non-profit conservation organizations and citizen groups, engaged in open space, agriculture and farmland preservation.
- Residents would benefit from greater knowledge of farming and agricultural practice, and the cost of farming and owning large parcels of land in Bethlehem.
- Define ‘Incentives’ & ‘Amenities’ for incentive zoning, conservation subdivisions regulations, and Planned Development Districts so the developer and Town are clear on optimizing project benefits.
- Rural areas of the Town where agriculture and farmland are found would benefit from a flexibility of land uses that are considered by-right to help retain the economic value of rural land. This would be coupled with lower residential density in these areas.

### **Previous Studies / Committees**

The following presents a chronology of studies and citizen committees that have addressed the issues associated with open space conservation, agriculture and farmland protection.

*2005 – Town of Bethlehem Comprehensive Plan*

*2006 – Citizens Advisory Committee on Conservation (CACC)*

*2006 – Open Space: Protection, Programs, Funds and Tools Report (CACC)*

*2007 – Comprehensive Plan Oversight Committee (CPOC) – Report on Comprehensive Plan to Town Board*

*2009 – Recommendations on Open Space Needs & Opportunities Report*

*2009 – Agriculture and Farmland Protection Plan*

*2012 – Comprehensive Plan Assessment Committee (CPAC) 2013 – CPAC Report to the Town Board*

*2013 – Citizens Guide to Land Use, Planning & Development 2014 – Conservation Easement Exemption Program (CEE)*

*2017 – Town of Bethlehem Open Space Plan – Conservation Criteria Implementation*

*2018 – Albany County Agriculture & Farmland Protection Plan Update*

*2019 – Comprehensive Plan Update – Community Forums*

## Land Use, Zoning, and Housing

### Existing Land Use and Zoning

Virtually all residents of a community, the Town of Bethlehem included, think about land use and the guiding regulatory policies (zoning) whether they realize it or not. We all make decisions about where to live, accept a job, start a business, and shop, as well as how we intend to travel to these various destinations. In the past fifteen (15) years the nation and the Town of Bethlehem have experienced the Great Recession (2008-2010) and more recently the Covid-19 pandemic. The events have and will continue to affect how we live, work, shop and spend our leisure time. Social, economic and technology conditions are constantly changing, as are the characteristics of the Town including; demographics, work patterns, transportation, the desire for social and economic diversity, and an emphasis on historic preservation and environmental sustainability.

### Background and Terminology

Ironically, communities across the country are modifying zoning laws in an attempt to achieve a community character that existed before there was zoning. Since the end of WWII our communities saw rapid migration to the suburbs which was supported by both federal housing and highway policies and spending. Exclusionary zoning practices led to segregated low-density land uses, spread out requiring reliance on automobile travel. Our town roads were widened for higher speeds of commuters traveling to and from work, schools and shopping. By the early 1990's, land planning practices of traditional neighborhood design (TND) emerged with a renewed focus on a diversity of uses, density or concentration, and multimodal (walk, bike, transit) transportation. Many of these principles were well established by the 2005 Comprehensive Plan, which did recommend zoning amendments to encourage diversity of uses and density in hamlets across the entire town.

A comparison of the land uses across Bethlehem between 2007 and today (2020) the town is largely the same. There has been a reduction (loss) of agriculture and vacant (undeveloped) land, replaced primarily by residential subdivisions and commercial development. The 2005 Comprehensive Plan's Vision Statement presented the following attributes related to land use;

- attractive neighborhoods
- vibrant hamlets
- successful mixed-use commercial centers
- modern industrial facilities
- productive rural lands
- abundant recreational opportunities
- beautiful and healthy natural environment

Has this vision for the year 2020 been achieved? This section will present the definitions of land use and zoning, discuss community character and present a comparison of the changes (in area percentages)

in land uses and zoning from 2007 through 2020. This section also discusses why we (resident, business and land owners, elected officials) care about land use, community character and the regulations intended to achieve the community's vision.

Since 2005 there have been six (6) amendments to the zoning code; some specifically recommended in the 2005 Comprehensive Plan with others crafted to achieve desired outcomes that were influenced by economic or social shifts (i.e., Great Recession). Several specific zoning and land subdivision regulations which were intended to provide the mechanism to achieve the goals of the 2005 plan have yet to achieve the intended and desired outcomes. This section takes a closer look at the code language and procedures associated with four (4) sections of the code, including;

- Mixed Economic Development District (§128-37)
- Planned Development District (§128-40)
- Planned Hamlet District (§128-41)
- Conservation Subdivision Regulations (§103.18)

This section presents a town housing assessment including the current housing stock, growth trends, and housing affordability in the town. This assessment was driven by the demographic and economic analysis which identified Bethlehem consisting of a highly educated and high-income earning population compared to Albany County and the Capital District. Further, many employees

of Bethlehem businesses (large employers and smaller store front operations) commute into town to work. Employers have stated that affordable, inclusive housing in-town for their employees is a high priority in their ability to retain skilled labor. This plan recognizes that housing plays a critical role in the economic development strategies for growth and diversifying the tax-base.

Even though fifteen (15) years seems like a long time, it may be too soon to judge the success of the 2005 Vision. Since 2005, the Town has completed virtually all studies recommended in the original Comprehensive Plan and has an extensive understanding of the natural systems, agriculture and farming as an economic industry and lifestyle choice by owners. Multiple citizen groups have organized to address; bike / pedestrian safety, environmental sustainability and historic preservation. Vigorous efforts have been made to conserve valued farms, fields and forests with willing landowners and the establishment of conservation easement and purchase of development rights programs. Home builders are looking at in-fill opportunities where infrastructure systems already exist vs. sprawling further into greenfield sites. The town is also seeing new mixed-use development with residential over commercial and retail uses (New Scotland Road). The influences of climate change require renewed interest in protecting valuable natural resources. Substantial social shifts and the Covid-19 pandemic have influenced our behavior and understanding of community planning.

### What is Zoning?

Zoning is a form of land use regulation, whereby municipalities pass laws and codes to regulate what types and form of land uses are allowed on private and public properties. In the state of New York, the statutes governing zoning and planning in towns are set forth in Town Law Article 16. NYS Town Law §261 authorizes towns to enact zoning ordinances, for the 'purpose of health, safety, morals, or the general welfare of the community'. In the Town of Bethlehem, three boards are involved in the zoning process; the Town Board enacts and amends zoning laws and retains the power to approve planned development districts and mixed economic development districts; the Zoning Board of Appeals, which hears variance applications and appeals from rulings of the Towns' Code Enforcement office (Town Law §267); and the Planning Board, which approves site plans, subdivisions, and special permits (Town Law §271).

These laws are intended to organize (by districts) a town by permitted uses and control patterns of development. For example, municipalities may want to avoid people from living near industrial land uses, so they would isolate industrial zones away from existing residential uses and restrict developers from building new housing near industrial zones. Zoning regulations generally divide municipalities into residential, commercial and industrial districts, but more categories are possible in more complex zoning codes. Zoning codes also can regulate the site and architectural design of new development in each zone,

setting standards for lot size, building heights and character, setbacks, utility locations, parking requirements and more.

### What is Land Use?

The term “land use” refers to what types of development or natural feature exist on public or private property. Land uses may be categorized to help simplify analysis. For example, the uses of “single family housing,” “apartment building,” and “duplex” would all fall under the land use category of “residential use.”

The NYS Department of Taxation and Finance has developed a set of nine land use categories for the purpose of property assessment, which includes agricultural, residential, vacant land, commercial, recreation and entertainment, community services, industrial, public services, as well as public parks and wild land. The Town of Bethlehem includes all of these land use categories and multiple sub classifications.

While efficient and useful for separating incompatible uses, traditional zoning (also known as Euclidean zoning) can be a contributing factor to exacerbating low density suburban sprawl, extending road and utility infrastructure, reduction of farms, fields and forests, as well as an unsustainable reliance on fossil fuel consumption. Traditional zoning, along with other local, state and federal policies have led to limited housing alternatives, decreased housing affordability and deepening segregation. In recent decades, many communities, including the Town of Bethlehem have amended

their zoning practices to include mixed-use development, based on smart growth and “new urbanism” principles, and form-based codes to achieve sustainable development.

### Zoning in Bethlehem

The Town of Bethlehem zoning code, known as the Zoning Law of the Town of Bethlehem, is found in Chapter 128 of the Town Code. The Town’s Subdivision Regulations are found in Chapter 103 of the Town Code and include Conservation Subdivision regulations designed to conserve open space lands.

The Town’s Zoning Law is primarily based on “Euclidean” principles, amended over time to include provisions that promote mixed-use development, walkable/bikeable, connectivity, as well as preservation of valued agriculture, fields and forest resources. The Zoning Law also includes supplementary regulations, special use permit and site plan review requirements, and land use standards primarily focused on ensuring that adjacent land uses are designed to be compatible with each other. Examples include: proximity to harmful toxins and pollutants; adequate utility infrastructure, and provisions for building compatibility with the surrounding area.

The Zoning Law includes regulations pertaining to seventeen (17) district zones presented in the Table below and illustrated on the Zoning Map in Figure 4.1.

Residents should be aware that the Town does not propose real estate development projects. Property and business owners, along with real estate developers and home

builders new development based on the development rights and regulations dictated by the Town Comprehensive Plan and land use regulations. The zoning code sets the parameters for development, but the Town generally responds or reacts to proposals. What needs to be resolved is ‘risk’ in the Town’s land use regulations, both for residents as well as property owners and developers. Residents want predictability and not surprises when certain developments are proposed. Owners and developers also want to reduce risk and uncertainty when planning a project.

### Community Character

Since the 2005 Comprehensive Plan, the Town of Bethlehem remains predominantly a residential community with large areas of agricultural and vacant land. Vacant land includes natural (fields and forests) area and inactive agriculture. Industrial uses are focused in South Bethlehem along the CSX rail corridor (Selkirk Yards) and Creble Road, southeast Selkirk near NYS Thruway Exit 22 and in the northeast quadrant of the town along River Road. The Commercial areas of town are located along Delaware Avenue from the Normans Kill through the hamlets of Elsmere and Delmar to Cherry Avenue. Commercial development in the hamlet of Glenmont is focused along the Route 9W corridor from the town border with Albany south to Feura Bush Road (Bethlehem Center) and extending south to Beacon Road. There are additional (non-contiguous) commercial properties along Rt. 9W as it traverses through South Bethlehem and Selkirk. In the hamlet of Slingerlands commercial

Current Zoning Districts	Purpose
<b>Residential Districts</b>	
Rural (R)	The purpose of this district is to encourage a variety of uses, including agriculture, forestry, mining, small-scale commercial and light industrial activity, and development using traditional farmstead designs where appropriate. Characterized as working landscapes (agriculture and forestry).
Residential Large Lot (RLL)	characterized by semirural, minimum size of two acres, located between rural / natural areas and more intensively developed residential areas. Areas often have environmental constraints or attributes that support less intensive development.
Residential 'A' (RA)	characterized by traditional suburban residential development, including developed single-family dwellings, The purpose is to protect the residential viability of established adjacent residential settlements.
Residential 'B' (RB)	Same as Residential A above.
Residential 'C' (RC)	characterized as land appropriate for moderately dense residential development, including single-family, two-family, and three- and four-family dwellings. The purpose of this district is to encourage diversity in residential development and to encourage the use of conservation subdivision design to preserve open space and viable agricultural lands.
Core Residential (CR)	generally mature residential neighborhoods. The purpose of this district is to ensure that the general character of these neighborhoods, which include tree-lined streets, sidewalks, smaller lot sizes, moderately sized homes, interconnected street patterns, and a location near some small-scale services, is protected from pressures to convert residential structures to inappropriately sized nonresidential uses.
Multifamily (MR)	The purpose of this district is to protect the existing high-density residential character from encroachment by inappropriate nonresidential development. These areas are served by municipal sewage treatment and water supply.
<b>Mixed-Use Districts</b>	
Rural Riverfront (RR)	Areas overlooking the banks of the Hudson River, the purpose of this district is to limit the density of residential development while encouraging tourism and recreational-based development.
Hamlet (H)	Original settlement areas along major corridors and at crossroads and contain small-scale businesses and essential services in close proximity to residences. Very often the first floors of buildings in the hamlet districts are in commercial use with the upper floors in residential use. Pedestrian-friendly access along street fronts and alleyways, with on-street parking and loading, with compact, mixed-use commercial and residential development or redevelopment in identified neighborhood commercial centers and hamlet centers throughout the Town.
Commercial Hamlet (CH)	The purpose of this district is to encourage compact commercial development in neighborhood commercial centers throughout the Town.
Rural Hamlet (RH)	The purpose of this district is to encourage compact commercial and residential development in rural neighborhoods throughout the Town.
<b>Commercial Districts</b>	
General Commercial	The purpose of these districts is to encourage the development of a variety of small-scale and large-scale commercial retail and service businesses for the community, including shopping malls.
Mixed Economic Development (MED)	The purpose is to encourage individual lots as part of an integrated development plan including office, industry, service, small-scale retail, and technology-based businesses. Residential uses may be permitted as accessory to the nonresidential business development.
Heavy Industrial (I)	Dominant uses are industrial, manufacturing, assembly, processing, requiring trucking or rail transportation.
Rural Light Industrial (RLL)	Same as Heavy Industrial above.
<b>Special (Floating)</b>	
Planned Development District (PDD)	Projects planned and developed as a whole in a single development operation or a programmed series of development operations or phases. The nonresidential uses within a PDD are typically neighborhood-scale businesses, parks, community buildings, day-care centers, schools and churches.
Planned Hamlet (PHD)	The PHD encourages the creation of hamlet centers with mixed use buildings, smaller scale ground floor commercial uses and residential and/or office uses above the ground floor, in a compact hamlet-like setting that encourages pedestrian activity using traditional hamlet design principals.

Table 4.1: Current Zoning Districts

development is concentrated along portions of New Scotland Road and within the Vista Technology campus. Limited commercial land uses are found in North Bethlehem. There are also industrial uses in the southwest quadrant of town along Old Quarry Road and W. Yard Road as well as the central section of Glenmont along River Road.

The towns roots were founded in agriculture and the industries to support and transport agriculture products. (Please refer to Section 2 for further detail). Today, the agriculture and farming land uses are located south of the Rt. 32-Delmar By-Pass, along Delaware Avenue in the west area of town, in Glenmont along sections of Rt. 9W and east of the NYS Thruway. Large sections of South Bethlehem and Selkirk are also agricultural land uses. Pockets of agriculture are located in Delmar/Elsmere north of Rt. 32 straddling Kenwood Road.

Bethlehem includes substantial natural areas across the entire town. As previously mentioned, these areas include fields, forests (woodlands), steep slopes / ravines, streams and wetlands. In many cases these areas are classified as 'vacant land', and 'undefined' in the land use classifications. The Town of Bethlehem has several programs to acquire (by purchase or conservation easement) several of these large parcels which are then classified as 'Conservation' or 'Community Service' land uses. The highest concentrations of residential development are in Elsmere, Delmar, Slingerlands and North Bethlehem. Central Glenmont has experienced substantial residential (primarily single family

detached housing) growth over the past 15-20 years. Lower density residential areas are located in Selkirk, South Bethlehem and in Glenmont east of the NYS Thruway to the Hudson River.

Land uses including public services (schools, libraries, town facilities, utilities and infrastructure), parklands, community services, as well as recreation and entertainment (public and private) are located in all hamlets of the town.

**Land Use in Bethlehem**

The actual land uses in the Town of Bethlehem do differ (percentage of land area) from the zoning districts. It is important to understand that the zoning code does allow multiple land uses within zoning districts. For example, agriculture uses exist and are permitted within residential districts and commercial uses are permitted in light and heavy

industrial districts. Further, there are no specific zoning districts for Agriculture, Vacant Land, Recreation & Entertainment, Community Services, Public Services and Wild. Again, these are land use classifications that are permitted within zoning districts.

Table 4.3 presents a comparison of land use areas (by percentage) from 2007 and 2020. Land use classifications presented are established by the NYS Department of Taxation and Finance and used by the Town of Bethlehem Assessor and Planning Department.

**Comparison of Land Use Maps 2007/2020**

There were several notable shifts in land use between 2007 and 2020. There was a loss of industrial, agricultural, vacant, wild, and community services land; while residential and commercial uses gained in total area. Although

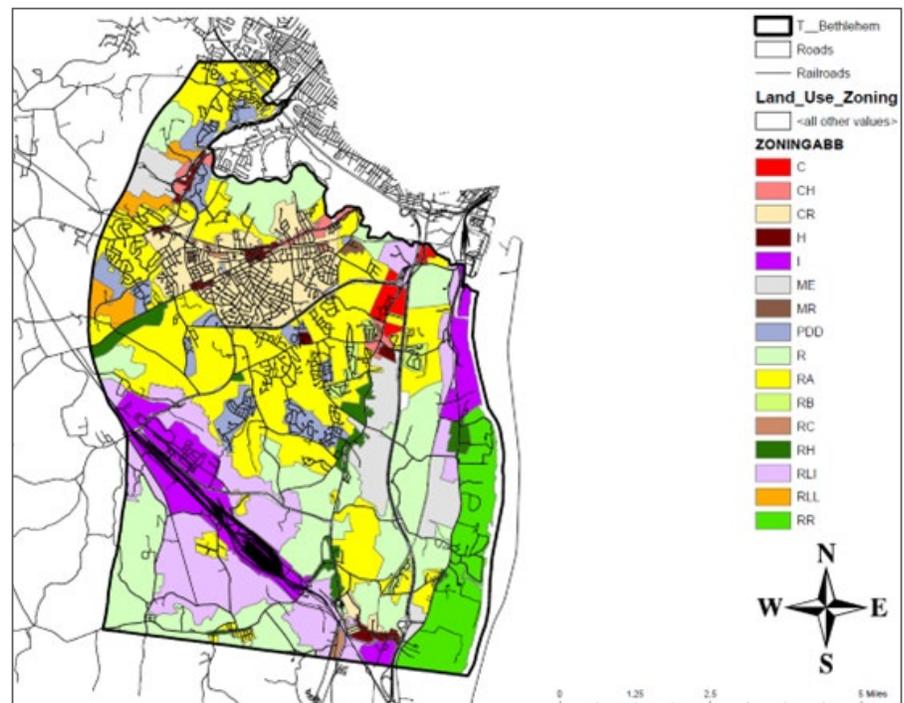


Figure 4.1: Current Town of Bethlehem Zoning Map

agriculture makes up 3% less of the town’s total acreage now compared to 2007, the town lost close to 2,000 acres (37% of 2007 area). The town also lost almost 2,700 acres of vacant land. Designated wildlands made up a small fraction of the total land area in 2007, but decreased more than half, losing almost 490 acres between 2007 and 2020. Area of residential land saw a substantial increase and residential lands now are the dominant land use in Bethlehem, making up 37% of the total land area in town. Commercial land expanded by 340 acres, making commercial land 7% of the total land area in Bethlehem today. While the data shows that industrial use lost almost 2,800 acres (a substantial 74% of 2007 area), this decrease may be attributed to a change in the land use classification of the Selkirk Yards from Industrial to Public Service. Data shows a large increase in the public services land

and much of that can be attributed to the same reclassification.

**Priority Issues: Specific Zoning Districts and Regulations**

Table 4.1 presents the 17 zoning districts in the Town’s zoning code (Chapter 128 Zoning) along with the purpose of each district. The 2005 Comprehensive Plan focused on strategies that would permit a desired mix of land uses across the town, which emphasized and reinforced the town’s historic development (hamlets) and sought to capitalize on economic opportunities anticipated in the Capital Region at that time. It also examined preserving and enhancing a rural lifestyle for landowners who manage the town’s farms, fields and forests. This section reviews the details of three specific zoning districts; Mixed Economic Development, Planned Hamlet

Development and the Planned Development District.

The Mixed Economic Development District’s zoned lands are located in several areas across the town; Vista Technology Campus west of Rt. 85 (Cherry Street Extension) in Slingerlands, between Rt. 9W and the NYS Thruway in Glenmont, and along River Road west toward the NYS Thruway, also in Glenmont. The Planned Development District (PDD) and Planned Hamlet District (PHD) are considered ‘floating’ districts and can be proposed almost anywhere in the town. The PDD was established prior to the 2005 Comprehensive Plan and was used to create a range of residential projects across town from North Bethlehem to Slingerlands, Delmar and Glenmont. The PHD was created after 2005, to address opportunities for traditional hamlet development, such as along New Scotland Road. Another tool in the subdivision regulations intended to offer density incentives for open space preservation is the Conservation Subdivision. These districts and regulations have faced challenges since initiated, with developers and Town planners realizing that in practice each has resulted in unintended consequences in implementation, even though the fundamental principles of tool are sound. The Mixed Economic Development (MED) zone was intended to provide areas of town where technology based business companies (such as nanotech and chip fabrication) and light industrial manufacturing and assembly could be located with adequate infrastructure and transportation access. The Planned Development District (PDD) zoning

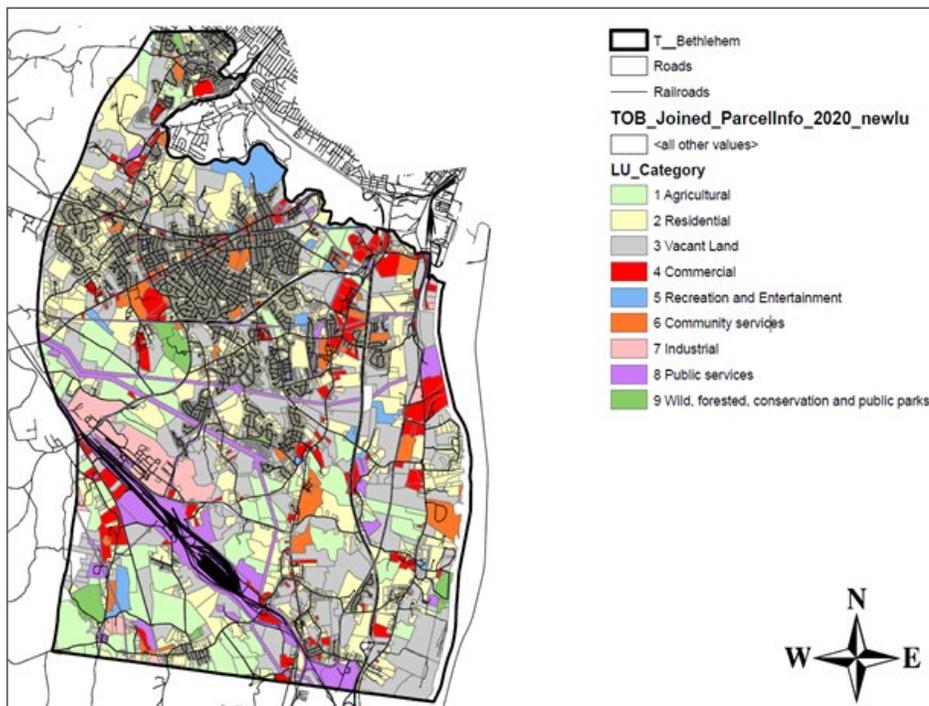


Figure 4.2 Current Town of Bethlehem Land Use Map, 2020.

has been employed for several decades for single family residential development with success; however, when used to propose multi-family residential there has been opposition to its use. The Planned Hamlet District (PHD) has not been used for any project proposals to date. The Conservation Subdivision regulation has faced challenges where the incentive offered for more and smaller lot sizes has not necessarily yielded a corresponding amount of preserved public open space. Further, many residents perceive those lands offered in conservation by developers are lands which are already restricted from development by virtue of their natural condition (wetlands, streams, flood plains, steep slopes).

This section assesses whether the regulations applicable to these specific zoning districts require amendments or if other external forces (i.e., economic and market demand) have influenced successful implementation.

### Mixed Economic Development District (§128-37)

Following adoption of the Town's 2005 Comprehensive Plan, the Town Zoning Law was amended to include provisions for mixed use development with the goal of broadening the town tax base and having 'shovel ready' development sites within the town. These areas, identified as Mixed Economic Development Districts (MED) (Zoning Law, §128-37), are located along State highways on the west and east sides of I-87/NYS Thruway. The most well known MED District is the Vista Technology Campus. These areas are generally bounded by Glenmont Road, Route 9W, I-87/ NYS Thruway, and Wemple Road; an area south of Wemple Road between Route 9W and the Thruway; an area between Wemple Road and Clapper Road to the north and south, and between the railroad tracks and Route 144 to the west and east; and an area along Route 144, just north of Exit 22 and south of the Cedar Hill hamlet.

The MED provisions allow for a mix of office, light industrial, manufacturing, and technology businesses as primary uses and higher-density residential and commercial as secondary uses. A specific amount of primary uses are required to be built before secondary uses are built. The MED regulations require preparation of a master development plan for approval by the Town Board. The Town Board then refers the proposal to the Planning Board for its review and recommendation. The Town Board then acts on its State Environmental Quality Act (SEQR) review, holds a public hearing, and considers approval, approval with modifications or disapproval of the MEDD proposal. Once the master development plan is approved by the Town Board, individual projects must secure subdivision and site plan approval from the Planning Board.

The Vista Technology Campus is located in the MED zone and has not achieved the desired development of technology based businesses and light manufacturing ("Tech" space) and offices that the Town originally envisioned since the Zoning Law MED amendment. Although the goals of the MED district zone were designed to spur mixed use development, most of the development has been single use; such as warehousing and commercial office at the Exit 22 MED zone, and an expansion of a self-storage business on Route 9W in Glenmont.

Land Use Areas	2007	2020	Change 2007-2020
01 Agriculture	15%	12%	-3%
02 Residential	28%	37%	+9%
03 Vacant Land	29%	27%	-2%
04 Commercial	4%	7%	+3%
05 Recreation & Entertainment	2%	2%	-
06 Community Service	4%	3%	-1%
07 Industrial	11%	3%	-8%
08 Public Services	1%	7%	+6%
09 Wild	3%	1%	-2%
No Data	3%	0%	NA
Total	100%	100%	

Table 4.3: Comparison of Proportion of Land Use Areas between 2007 and 2020.

## Assessment

The pool of developers who specialize in land development permitted in the MED district and have the financial capacity is very limited. Most developers and individual companies specialize in one specific land use (e.g., multifamily housing, commercial, warehouse and distribution, flex space or manufacturing, etc). Taking on a master plan effort for a landowner or developer whose interest may be for one specific use has not generated much interest with the exception of Vista Technology Campus. Ten years after commercial retail and restaurants and medical office space were developed at Vista, Plug Power desires to develop a 350,000 square foot manufacturing facility for their GenDrive hydrogen fuel cell line.

The provisions for primary and secondary uses is logical in principle, where primary uses are intended to be employment drivers that are supported by secondary uses, which will create a district of diverse uses complementing each other. However, as seen with Vista Tech, the demand for building secondary uses has outpaced the demand and construction of primary uses. The requirement to construct a higher percentage of the primary uses before allowing buildout of secondary uses has not aligned with market conditions. And as market conditions fluctuate, the master development plan may need to be updated, requiring often lengthy Town Board reviews and approvals. Master developers and potential tenants in an MED zone typically have to respond quickly and amendments to the master development plan and modifications

to site plan approvals affect timeliness of bringing a product to market.

Projects less than five (5) acres in an MED district are exempt from the master development plan requirement. However, five acres may not represent enough development space, particularly for the primary land uses.

The MED regulations also include design guidelines which apply to both the master development plan and site plan. These guidelines are vague, and open to interpretation and discretion of the Town Board and Planning Board. This adds risk and unpredictability for developers.

During economic forum interviews conducted as part of this plan, the MED regulations were not identified as a concern. Rather, economic conditions and the geographic location of Bethlehem within the Capital District were mentioned as issues likely limiting interest. Also, the sequencing of primary and secondary uses was mentioned. There has been interest in developing the secondary uses with very little interest in developing primary uses. While the regulations were not mentioned as a perceived problem or potentially why there has been such limited interest (in MED and Vista Tech), the time frame for approvals was mentioned, and the process extends the time to secure approvals. Other factors include economics and market conditions as well as Bethlehem's geographic location in the southern portion of the Capital Region. After the Great Recession of 2008-2010, many tech companies chose to locate in cities, taking advantage of older

existing buildings with lower cost of construction, character and adjacent amenities that greenfield sites don't offer.

One thing to consider is that the Rural Light Industrial (RLI) district permits essentially the same land uses as the Mixed Economic Development district, but does not require Town Board approval of a master development plan. It is possible that potential MED developers and tenants have been looking to find property in the RLI district to avoid the time-consuming MED regulations.

The Mixed Economic Development district offers opportunities for larger scale projects and uses that provide a transition from (or between) Commercial and Industrial. What procedural alternatives should the town consider to achieve the same purpose with a more predictable and streamlined process? The Town should consider the following:

- Eliminate the Town Board from the process. The Town Board typically does not have expertise in land planning or economic development that cannot be addressed by the Planning Board and Town Staff.
- Assuming that master planning is important for the Town officials, staff, residents and developers to visualize and better predict built environment outcomes, the Town could consider taking the responsibility for developing the master development plan(s). The level of master plan detail should be limited to general land use diagrams, potential street corridors and regional storm water management.

The carrying capacity of the parcels within the district can be analyzed in a Generic Environmental Impact Statement (GEIS) to provide some procedural efficiencies when projects are proposed.

### **Planned Development District (§128-40)**

The 2005 Comprehensive Plan included recommendations for utilizing the Planned Development District (PDD) requirements found in section 128-40 of the Zoning Law, which was in place prior to the comprehensive plan. The PDD regulations are intended to provide for a range of (primary) residential uses from single family to multifamily with (secondary) non-commercial and commercial uses planned and designed at neighborhood scale. A PDD is deemed a rezone from the underlying zoning district and therefore an applicant must receive approval by the Town Board based on recommendations from the Planning Board. The Town Board typically considers such a proposal if the applicant demonstrates the need and public benefit in return for the flexibility in use mix and density that the PDD zoning provides. Residential uses of any variety constitute primary uses in the PDD, with secondary non-commercial uses specifically approved by the Town Board as part of a district plan and secondary commercial and service uses (i.e., neighborhood commercial and service businesses) permitted in certain circumstances.

Procedures for the application and approval of a PDD are complex, time consuming and expensive for an applicant to prepare. A complete

application, including a district plan, demonstration of need and public benefit, as well as SEQRA environmental assessment form are submitted to the Town Board, which then refers the application to the Planning Board. Based on a favorable recommendation from the Planning Board, the Town Board may proceed to schedule a public hearing and approve the rezone. An unfavorable recommendation from the Planning Board may result in a denial by the Town Board or the applicant may choose to submit a new application.

Once rezoned, building projects within a PDD must obtain all subdivision and site plan approvals from the Planning Board, preceded by a SEQR review and determination. It is noted that specific bulk regulations (density and yard dimension regulations) apply to proposed building projects in the PDD.

### **Assessment**

The Planned Development District does offer a land use mechanism that allows and encourages the creative development of a mix of residential uses with supporting non-commercial and commercial services. Although the language in the code does not specifically state this, a PDD could be developed employing the best principles of Smart Growth or Traditional Neighborhood Design; neighborhoods that are walkable and offer amenities for personal and family services and leisure activities all in close proximity to residents.

The Town approved many of the PDD rezoning/developments prior to the 2005 Comprehensive Plan.

Many, if not all, of the approved and constructed PDD projects were limited to a residential mix of units with several only providing a single type of residential unit (i.e., duplexes or multifamily). Very few approved projects included other uses such as non-commercial or commercial uses.

The economic and social conditions that have led to a slowing of applications for PDD's may also be responsible for the slowing in-migration to Bethlehem. The 1980's, 1990's and early 2000's saw rapid expansion and development of both PDD and Residential A district subdivisions in the town. However, in the late 1990's through the first decade of 2000, there was a national shift of the Baby Boomers and Millennial cohorts moving to cities, town centers and villages where most primary needs are met within walking distance. The desire to drive everywhere for all daily tasks has shifted but the PDD regulations has remained static.

There is, of course, still a desire to live in Bethlehem but not at levels that justify large numbers of units that are not accompanied with amenities in close proximity. Further, home builders and developers have a strong desire (and financial incentive [taxes and interest payments]) to get in and get out of a project and move on to the next. Home builders and developers are typically skilled at building a specific product (single family, duplex, townhouses, apartments) and not as capable in the non-residential uses.

The PDD regulation discusses ownership and maintenance requirements of 'common property'

that meet the approval of the NYS Attorney General and Town Attorney (§128-40, B(3)). Without specifically stating it, this means that a Homeowners Association (HOA) must be formed and approved by the state Attorney General prior to the transfer of title to any property. This requirement may substantively contribute to the lack of applications in recent years. For developers, the process is costly and time consuming. For residents, it adds a financial burden but also an administrative burden that many people prefer to avoid. Once the majority of units / properties have been sold, then the developer can back away from administrative responsibilities to the HOA.

Is the Planned Development District regulation producing the desired outcome? Is the process 'predictable' for residents and the applicant? To date, it does not appear that any development utilizing the PDD regulations has achieved a balanced mixed-use project consistent with the intended purpose of the district. The stated purpose of the district needs to be better defined to include desired outcomes. The rezone process will always require Town Board approval. However, the application submittal requirements should be modified so the applicant does not have to commit to time consuming and expensive plan preparation, requiring full development of preliminary district plans prior to engagement with the Planning Board. The applicant and Planning Board should engage collaboratively on critical issues of: environmental protection, usable open space, land use adjacencies and configuration, access and circulation, infrastructure

and more. An iterative process with the Planning Board, continuously assessing the development plans through the lens of SEQRA, should minimize the potential for denial of an application, allow public engagement throughout the process, and streamline the rezone, subdivision and site plan approvals. This collaborative approach puts the responsibility in the hands of the board most capable of managing it, and offers predictability for the community (and applicant) as they can participate from concept development through final plans.

The initial application to the Town Board should be an existing site conditions plan, community context plan and narrative describing the intended program of the development. The application should then be referred to the Planning Board for final programming, land uses, density and potential impact scoping. No statutory time frames need to be associated with the process, other than SEQRA once a preferred alternative has been determined. The district plan and SEQRA determination of significance can be forwarded to the Town Board for rezone approval. The Planning Board would have subdivision and site plan approval, but it is assumed that this would include only 'final approval' of both.

A Planned Development District regulation is a good tool for a larger scale development project and every effort should be made to reduce the time frames, cost and risk associated with use of this regulation. Collaboration with Town Staff, Town Board and Planning Board

can help inform a more streamlined approach.

### **Planned Hamlet District (§128-41)**

Following adoption of the Town's 2005 Comprehensive Plan, the Town embarked on development of hamlet master plans for specific hamlets including the Delaware Avenue and New Scotland Road Hamlet areas. The Town subsequently completed the Delaware Avenue Hamlet Enhancement Study and the New Scotland Road Hamlet Charette which established a vision for each hamlet's development and identified streetscape improvements and design principles to achieve the vision.

The hamlet master plan studies culminated in amendment of the Town Zoning Law, adding Planned Hamlet Districts (PHD) which are intended as floating zones to provide for mixed residential and commercial uses in a compact hamlet-like setting while encouraging pedestrian activity using traditional hamlet design principles. As indicated in section §128-41 of the Zoning Law, the purpose of a PHD is to design and develop projects which contain mixed-use buildings with retail, personal service, restaurant and related uses on the ground floor, and residential and/or office uses in the upper floors. Buildings fronting up-close to the street and with entrances and fenestration orientated toward the street, curbside parking and/or parking to the rear of structures in shared parking facilities, sidewalks, pedestrian-scale street lighting, street trees, public spaces, street furniture with bicycle and pedestrian

connections to surrounding neighborhoods.

PHD zones are designed for compatibility with the criteria for rezoning and uses permitted within a PHD zone are determined by the provisions of the district plan approved at the time of rezoning to PHD. Permitted uses in the district include commercial, residential, noncommercial and accessory uses. The Town Board, after recommendation from the Planning Board, establishes the permitted land use intensity and/or dwelling unit density for the PHD based on a district plan submitted by the applicant. Once the rezone is established, the review and approval for subdivision and site plan by the Planning Board follows the same procedures as those for review and approval of building projects within a Planned Development District §128-40 (PDD) (see above).

### Assessment

The Planned Hamlet District offers a valuable regulatory tool to plan and develop projects that employ planning and design principles that create places people desire to live, work and spend leisure time. Hamlet districts are encouraged to develop in much the same manner as European and early American settlements.

The 'purpose' section of the regulation does speak to buildings and their ground floor uses being oriented to the street, adjacency to curbside parking and connectivity to surrounding neighborhoods. One point that should be clarified in the purpose section is that buildings with active ground floors should be oriented to existing streets. The

commercial portions of a PHD should be oriented to streets in order to draw on pass-by traffic to help support business. The commercial portion of a PHD should not be inward focused or oriented within the development away from primary travel routes.

The regulations state the application procedures for the PHD are the same as the Planned Development District (PDD); both of which are 'floating' districts, with the project applicant responsible to document existing conditions and prepare the proposed district plan. Land use mixes and density (intensity) are reviewed by the Planning Board, which prepares a recommendation letter to the Town Board regarding the proposed plan and SEQRA determination of significance.

In section B – General Requirements, there are several modifications to consider:

- Section B(4) Common property and section F(4) Public space should align together more closely. First, as with the PDD regulation, the language requires ownership and maintenance of Common space, specifically implying establishment of a Home Owners Association (HOA). Most developers will try to avoid an HOA and these vertical mixed-use projects will largely be for rent residential and commercial tenant spaces. In addition, the regulations should address private versus public spaces. Developers will want to provide amenities for residents and tenants (plus employees) in the project with amenities such as pools, game

courts, playgrounds, dog parks, fire pits, outdoor kitchens and more. These private spaces need to be coordinated with publicly accessible spaces which are intended to attract local neighborhood residents and travelers passing by. Establishing the intended uses for the public (on a project by project basis) may prove more effective than the established quantitative metrics found in F(4).

- In B(2) – Permitted uses, it states the Town Board shall establish a 'minimum' floor area within the PHD that shall be devoted to commercial uses. Section B(5) Commercial floor area is set at 'not less than 15% of the total gross building floor area.' It is challenging to understand the value in setting minimum requirements for commercial space. New hamlet districts are not as likely to attract national or even regional commercial tenants, instead most tenants would be local business owners. New construction costs mean that high leasing costs could be hard to achieve. Developers typically don't want to build space without a commitment from a reliable user. To get around the expense of ground floor retail / commercial construction, developers may propose the commercial space in a single standalone building.
- The regulations may be better served focusing on where the commercial and retail space is located within the structures and on the site. The gross building area may include underbuilding parking and mechanical / utility space which also increases the

square footage (minimum 15%) of commercial lease space.

Where the commercial spaces are located with visual access from road and sidewalks, parking and public spaces is what supports placemaking more than a quantitative number. Section F(5)(b) should be a primary requirement in the siting and orientation of PHD buildings.

Section E, Changes in district regulations are the same for the Planned Development District (§128-40(E)). This section should clarify what level of change merits review and modification of the district plan by the Town Board. Recommended modifications to the PDD process, state the applicant should work closely with the Planning Board to develop the plan from initiation and concept design. This should be applied to the PHD process as well to avoid significant changes to the district plan requiring modification to an approved rezone.

Section F, District standards, relies upon conventional Euclidian area metrics. The lot and bulk standards should be assessed with 'test fit' models to determine their efficiency. The myriad of area minimums and maximums likely result in too much space devoted to setbacks which could be better used for usable public spaces. Further, Section F(5) (a) dictates the building footprint size.

Sidewalk connectivity is implied but not specifically addressed in the regulations, and bicycle facilities are not mentioned. Both factors should be addressed in further in detail as these are important modes

of travel to be encouraged and accommodated in PHD's.

Item F(1)(l), Maximum Dwelling Unit Density should be moved to section B(6) after the Commercial Floor Area standard.

The Planned Hamlet District regulations offer an opportunity to employ density bonuses or incentives. The regulation should consider an increase in permitted residential density when a developer or builder agrees to provide a percentage of affordable residential units or complete streets improvements. The density increase could also be accomplished through the purchase of 'development rights' that the Town has secured through the Farms and Forests Fund or other mechanism.

The stated purpose of the PHD is clear and concise in defining the desired outcomes. The rezone process will always require Town Board approval. However, as with the Planned Development District, the application submittal requirements should be modified to engage the applicant and Planning Board in concept development (programming and site planning) prior to time consuming and expensive plan preparation. The applicant and Planning Board collaboration should include collaboration on critical issues of; environmental protection, usable open space, land use intensities and configuration, access and circulation, infrastructure and more. An iterative process with the Planning Board, continuously assessing the development plans through the lens of SEQRA, should minimize the potential

for modification or denial of an application. This would also allow public engagement throughout the process, and streamline the rezone, subdivision and site plan approvals. This collaborative approach puts the responsibility in the hands of the board most capable of managing it, and offers greater predictability for the community (and applicant) as they can participate from concept development through final plans.

The initial application to the Town Board should be an existing site conditions plan, community context plan, site land use diagrams and brief narrative describing the intended program of the development. The application should then be referred to the Planning Board for final programming, land uses, density and potential impact scoping. No statutory time frames need to be associated with this process, other than SEQRA once a preferred alternative has been determined. The district plan and SEQRA determination of significance can be forwarded to the Town Board for rezone approval. The Planning Board would have subdivision and site plan approval, but it is assumed that this would include only 'final approval' of both.

The Planned Hamlet District regulation is a good tool for a larger mixed-use development project and every effort should be made to reduce the time frames, cost and risk associated with use of this regulation. Collaboration with Town Staff, Town Board and Planning Board can help inform a more streamlined approach.

### **Conservation Subdivisions (§103.18) Regulations**

The 2005 Comprehensive Plan recommended the use of conservation subdivision techniques to support the Town's goals of protecting significant environmental systems by linking networks of natural resources and providing for a variety of housing options. Section 103.18 of the Town Subdivision Regulations was created to encourage "...the use of conservation subdivision design to preserve open space, agricultural land, water supplies, and other environmental resources identified in the Comprehensive Plan and to harmonize new development with the traditional open, wooded, agricultural and hamlet landscapes of the Town." These conservation provisions allow the Planning Board to modify the applicable area and bulk provisions per the Town's subdivision regulations in order to preserve open space and encourage more sensitive and efficient development patterns including a unit mix within a development proposal which would not be possible by strict adherence to the conventional subdivision model.

A conservation subdivision allows the reduction of applicable minimum lot size and bulk requirements for the district in which the property is located and by grouping residences in those areas where development would have the least impact on identified natural and community resources. The Town requires that the approved conservation subdivision plat identifies the location and types of resource(s) proposed for preservation and that such resources be permanently preserved by a conservation easement(s), restrictive covenant(s) and/or appropriate deed

restriction(s) as determined by the Planning Board. The transfer of title to the Town or not-for-profit agency is another alternative. Using the Conservation Criteria Assessment Form, currently regulated natural resource features (wetlands, floodplains, steep slopes) are identified to inform the conservation of land (open space) within a conservation subdivision layout. Density incentives are available to applicants/developers based on an increase in open space provided, above the minimum and based on the conservation value of the open space.

An applicant for a major subdivision has the option of requesting that the Planning Board consider approval of a conservation subdivision plan in lieu of a conventional major subdivision plan, with the decision at the sole discretion of the Planning Board. Conservation subdivision approval includes an application with conventional layout plans and supporting documentation. The Planning Board review process and findings include; determination of density and minimum acreage and maximum density unit calculations, incentive density adjustments, if applicable, a determination on minimum acreage per lot, unit mix, location of open space, pedestrian access, utilities provisions, and open space preservation requirements.

#### **Assessment**

The Conservation Subdivision Regulation (103.18) is a valuable tool to assist the town in protecting undeveloped natural resources and agriculture from expanding residential development. The regulation language can be edited and modified to express the intent

and desired outcomes more clearly. The initial Statement of Policy (A) and Purposes (C) can be better aligned to educate town residents and developers of how the regulation can achieve open space preservation without compromising permitted density. The regulation should state that the open spaces areas to be preserved should limit the amount of resources already regulated by the Town Code and state (NYSDEC) or federal agencies (FEMA, ACOE wetlands, floodplains, and streams). Residents should know that 'regulated' does not guarantee perpetual preservation.

Regulated protections do not include forest patches, prime farmland, or soils of statewide importance (refer to Conservation Criteria in the Open Space Plan, 2019). Residents have indicated that developers are attempting to use a majority of natural resource areas which are already regulated in the required open space set aside. This requires educating residents and developers of how the buildable yield, maximum density unit calculations and minimum open space percentages are determined. To accomplish this, Section J, Maximum Density Unit Calculation needs to be simplified for clarity.

Further, the 2005 Comprehensive Plan stated that density incentives should be calculated against total unconstrained land. The current conservation subdivision law and incentive zoning provision neglected to incorporate the recommendation in the Comprehensive Plan that the density benefits provided to subdivision developers should accrue only where the developer sets aside unconstrained land. A

review of four previously approved conservation subdivisions shows two providing approx. 65% constrained land and two providing approx. 15% constrained land within the required open space. A fifth conservation subdivision not approved and currently paused by the residential moratorium also provides for approx. 15% constrained land within the required open space. This wide range of constrained land proportions included in the open space should be normalized to a set amount so there is predictability in the implementation of a conservation subdivision.

#### Technical observations

- Section C(1); edit man-made to "historic and cultural"
- Section C(3); recommend deleting the statement. Subdivision design should require that adjacent neighborhoods are interconnected with streets, sidewalks, and trails as well as green infrastructure and wildlife habitat corridors.
- Section C(9) and Section F(4); delete these sections as there are no Critical Environmental Areas designated by NYS DEC in the Town of Bethlehem.
- Section F; Standards and Procedures. Clarify the methodology for delineating wetlands, slopes greater than 20%, flood plains and flood ways. Note that regulated streams are not mentioned in this regulation and should be included in the definition.
- Section F(6&7); consider eliminating the area minimum for application of this regulation. The alternative to use the

Conservation Subdivision should apply to major or minor subdivisions of any acreage or lot count.

- Section G, Required Plans: A rewrite of this section is recommended. Plans submitted to the Planning Board should include existing conditions, and site analysis and delineation of regulated natural features, the buildable yield (per zoning district) and percentage of open space. Planned diagrams should highlight agricultural lands and natural resources to be included in the open space set aside as well as the area most suitable for building lots and stormwater management. The process of lot configuration, infrastructure layout and open space set aside is iterative as lot sizes and other bulk area requirements are worked through with the Planning Board. Additionally, any requested incentive densities and open space percentage should be included. The density calculation can either be a simple formula or conventional subdivision layout. The applicant could be given the option to use the simple formula or prepare the conventional subdivision plan at their discretion.
- Section N, Unit Mix: the 1/3 requirement in the last sentence is confusing, but the mix of housing types permitted is an important distinction of this regulation and should be included in the Purposes of section 103.18C.
- Section P, Pedestrian Access: This section states that the Planning Board may require sidewalks and trails to meet

the needs of the conservation subdivision residents. This is a potentially significant cost to developers and a risk that may make them look to other subdivision alternatives. Further, sidewalks and trails should be for all residents if required or negotiated. Streets and sidewalks should connect to town roads and adjacent neighborhoods.

As previously stated, the conservation subdivision offers a strong tool in the Town's open space preservation strategies. The regulation doesn't completely stop suburban sprawl, nor does it reduce dependence on automobiles. However, a far greater percentage of the town's undeveloped open space will be preserved compared to conventional subdivisions. So why isn't the regulation being used more?

- Time-consuming and expensive conventional layout calculations
- Inconsistency of density incentives calculated against total unconstrained land
- Perceived risks outweighing potential incentive benefits
- Risk of the developer / builder not being able to 'get in' and 'get out' quickly
- Unfamiliarity of unknown or untested regulation

The Town has established a set of programs to conserve open space; the Conservation Easement Exemption (CEE) program, the Farms & Forest Fund and Parkland Set-aside Fund to purchase land directly or purchase the development

rights. The CEE and Albany County Agriculture District program offer tax reductions for conserving agricultural lands for extended periods of time, but they do not guarantee perpetual open space preservation. Property acquisitions and purchase of development rights are the primary mechanism of perpetual open space preservation. All efforts should be made to provide a consistent funding source to the Farms & Forest Fund to systematically buy development rights.

The next best opportunity for open space preservation is the use of Conservation Subdivision regulations. Clearer and simpler regulation language could remove perceived obstacles, risks or disincentives and broader use of the regulation could result in greater open space and natural resources protection and preservation.

The biggest obstacle to achieving open space preservation with the Conservation Subdivision is that the regulation is voluntary and not required. The regulation is laced with the word 'encourage' which implies the Town may not have a solid commitment to its use. There appears to be no downside to the regulation from the perspective of the public, developer, and landowner.

- The same density is permitted as the underlying zoning,
- Preserves a greater percentage of property as preserved open space than would be achieved with conventional zoning,

- Requires less road and utility infrastructure to be publicly maintained,
- Achieves the same economic value for landowners,
- Offers environmental and climate change resiliency benefits,
- Offers the developer ownership alternatives allowing them to build out the project and move on.

It is recommended that the Town consider requiring the Conservation Subdivision, with recommended modifications, and eliminating other conventional subdivision regulations for all major land subdivision applications. The percentage of open space set-aside will differ between zoning districts based on long established permitted densities. The open space minimums should be established on historical evidence and test fit scenarios and ultimately practical and achievable. The regulation offers no benefit if it isn't used. Finally, the consistent use of the conservation subdivision will provide a means to quantify and track the amount of open space area protected from development.

### Findings and Opportunities

- The Town's Zoning Law is a conventional "Euclidean" code with several special district zones, overlays, floating zones and allowable uses. The Town's Zoning Law is primarily based on "Euclidean" principles, amended over time to include provisions that promote mixed-use development among other goals. Although the zoning provisions are designed to achieve a more

balanced development pattern throughout the town, such goals are not always achieved through a conventional approach.

- Form based provisions are found in the Zoning Law. Explore opportunities to incorporate a form-based code application to areas and road corridors in the Town, such as Delaware Ave. Rt. 9W, New Scotland Road to achieve a mixed-use, walkable outcome.
- The Town's Zoning Law includes six residential district zones which tend to add to the overall complexity of the code. Consolidation of these districts may be appropriate to streamline the code and corresponding approval process.
- The Town's Zoning Law in many instances is comparatively complex which is likely inhibiting developer interest and the outcomes the Town desires per the Comprehensive Plan and zoning provisions. A more streamlined, less complex approach may be appropriate to achieve desired outcomes.
- The Town's Zoning Law includes few as-of-right provisions which could help streamline the development review process where relatively ministerial proposals are proposed.
- The procedural requirements for MEDD, PHD, PDD zones and Conservation Subdivisions are generally complex, cumbersome, and difficult to navigate, which may create uncertainty for applicants/ developers, constraining the number of proposals since promulgation. Amendments to

these zoning regulations may be appropriate to create efficiencies in the procedural requirements, simplify the language, and reduce the timeframes for approval, while still achieving desired outcomes.

### Housing

Bethlehem is a suburban community, and better known as a bedroom community for the employment areas in City of Albany and surrounding urban job centers of the Capital Region. The characteristics and quality of the housing stock are an important factor that dictates the economic vitality of a town, the types of transportation opportunities that are available, traffic volumes, and the demographic makeup. Owner occupied single family detached housing generally has a larger number of children and families. Renter occupied multi-family housing usually is represented by younger professionals or empty nesters. Communities that have a greater level of diversity in age, income, racial and ethnic characteristics, and disability status are most often communities that include a variety of housing types and price ranges.

Evaluating the housing stock characteristics and changes over time along with demographic data can reveal how a community is growing and whether housing needs are being met for existing residents and those who wish to live in the community.

### Existing Conditions: Housing Stock

The Town of Bethlehem’s housing stock is predominately detached single family homes. The greatest number of detached single-family homes are concentrated in the areas of Elsmere, Delmar, Slingerlands and Glenmont. North Bethlehem has a mix of single family detached as well as single family attached (townhouse style) and multi-family developments. The areas of Town that have a lower density of residential development include east of the NYS Thruway, south of Elm Avenue East and west of Van Dyke Road, Selkirk and South Bethlehem. These are the more rural areas of the Town.

With 14,485 total housing units, single family housing units account for 10,784 or 77% of all housing units being single family. This is higher than the US average share of single-family units at 60.4%, higher than the NY State average of 44.1% and the Albany County average of 32.5%. Compared to peer towns, Bethlehem has the second highest

share of single-family detached units behind Rotterdam. Colonie is close behind with a 68.1% share of detached units. In terms of attached units, Bethlehem has the third highest share of units with 6.5%. (Single-family residential units are typically divided between two categories; attached and detached. Attached units are single-family homes that have at least one wall in common with an adjoining unit, such as those found in Walden Fields or Chadwick Square.)

Table 4.4 shows more detail of the housing units by type of structure both detached and attached in Bethlehem, Albany County and the Albany MSA. The data in the table is from the US Census Bureau ACS 5-year period from 2015-2019 which explains the slight difference in numbers compared to the previous graph which used Census data from 2013 to 2017.

Residents living in housing units are classified as either owners or renters. Bethlehem has a much

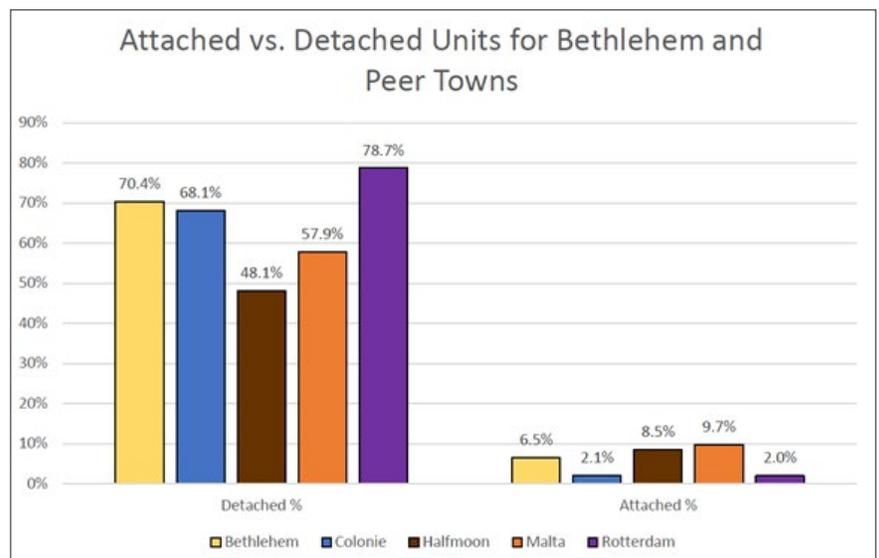


Figure 4.3: Attached vs. Detached Units for Bethlehem and Peer Towns. Source: U.S. Census Bureau 5-Year ACS 2017-2013

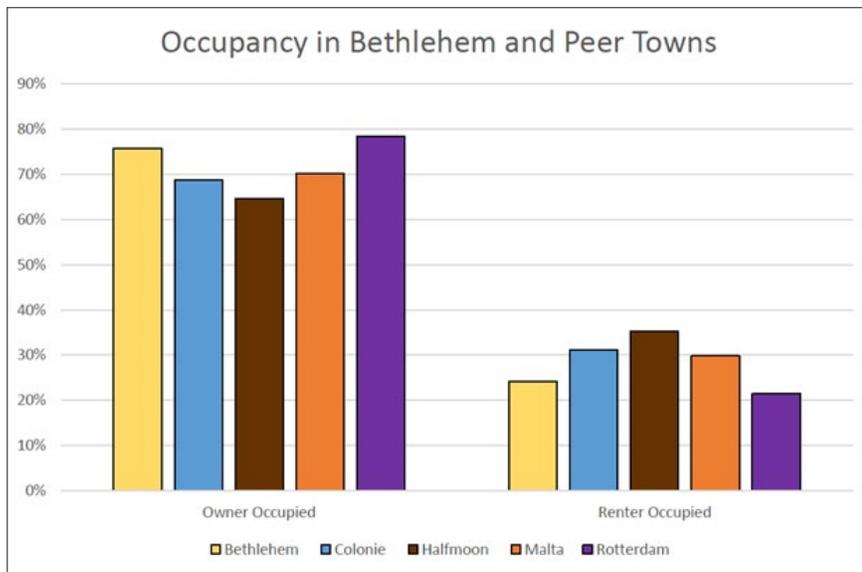


Figure 4.4: Occupancy in Bethlehem and Peer Towns. Source: U.S. Census Bureau 5-Year ACS 2017-2013

higher share of owner-occupied units at 75.8% than the rest of the country at 63.8%, as well New York State and Albany County. Renters make up only 24.2% of Bethlehem, approximately a fourth of all housing units, a much lower percentage than the state, county, and country. Bethlehem is in-line with the other peer communities for other types of multi-unit residential structures,

if not on the lower end of the group as shown below in the graph for type of occupancy.

**Growth Trends**

A December 2019 Demographic and Growth Analysis report by the Capital District Regional Planning Commission (CDRPC) for the Town of Bethlehem documented 733

residential units developed on 836 acres from 2005-2018. This is the period occurring after the adoption of the first Comprehensive Plan. A residential housing unit is described as a house, an apartment, a mobile home or trailer, a group of rooms, or a single room occupied as separate living quarters, or if vacant, intended for occupancy as separate living quarters (U.S. Census Bureau). Development in this time frame was dispersed across the town, but the majority of lots developing were further from the Delmar area. Recent development since 2005 represents approximately 35% of the total residential development in the previous time frame from 1991-2004 (prior to the Comprehensive Plan). According to the CDRPC data analysis, during the later period, overall growth has slowed and single family units have been developing at a lower rate since 2005. The 2019 study was prepared using US Census Bureau American Community Survey (ACS) data for a 5-year period from 2013-2017.

Units Per Housing Structure						
	Town of Bethlehem		Albany County		Alb.-Schn.-Troy MSA	
	Estimate	Percent	Estimate	Percent	Estimate	Percent
Total housing units	14,916	-	141,553	-	407,696	-
1-unit, detached	10,204	68.4%	70,390	49.7%	230,873	56.6%
1-unit, attached	827	5.5%	6,120	4.3%	14,826	3.6%
2 units	940	6.3%	22,408	15.8%	51,473	12.6%
3 or 4 units	1,201	8.1%	14,129	10.0%	33,261	8.2%
5 to 9 units	532	3.6%	8,980	6.3%	21,827	5.4%
10 to 19 units	371	2.5%	6,026	4.3%	14,912	3.7%
20 or more units	683	4.6%	11,441	8.1%	25,679	6.3%
Mobile Home	158	1.1%	2026	1.4%	14,722	3.6%

Table 4.4: Units Per Housing Structure Source: U.S. Census Bureau 5-Year ACS 2019-2015

Looking at the different types of residential units built more recently there was a period of time between 2011 and 2015 when building permits that were issued reflected a greater percentage of multi-family units (100 units in 2011 and 248 units in 2015). After this period, multi-family permits fell sharply to 0 in 2017 and 2 in 2018. In 2016, building permits for single family homes returned to reflect the greater percentage of new permits issued.

The 2019 CDRPC report also looked at the 1,500 residential units that have been approved but not constructed, as well as units in land use review or proposed in conceptual form to the town. These units were described as “in the development pipeline”. Of the total 1,500 units in the pipeline, single family detached residences make up roughly 34%, while attached residences make up roughly 18%.

Multi-family residential units make up 48% of the total units in the pipeline, but the majority of multi-family units are in review, proposed, or have not received approvals. The larger percentage of multi-family units being proposed since 2005 is a common trend throughout

the Capital District as well as in the nation’s housing market overall.

**2005 Comprehensive Plan & Housing**

The 2005 Comprehensive Plan included information on Residential growth and Housing Needs. Data was derived from the 2000 Census and documented that 71% of housing units were single family, the median housing value (self-reported) of an owner-occupied home was \$143,700 which was the “highest in the area”. The second highest was Guilderland at \$135,300. Under Housing Values, it states “As housing values rise, a community should consider options to provide for a mix of housing options such as senior housing and affordable housing.”

The Town’s 2005 Comprehensive Plan included a goal to “provide opportunities for the development of a variety of housing options to meet the needs of its increasing diverse population. In particular, the trend toward smaller household sizes, the aging population, and the increasing need for affordable housing (for low to moderate income households), means that Bethlehem must provide for the development of housing types and sizes so that existing and future

residents can continue to live in the community.” Most recently, housing diversity was identified as a theme that emerged from the public workshops and a survey that was done as part of community outreach.

Within the recommendations section of the 2005 Plan related to Hamlet areas, the Plan states “The Town should allow for and promote a mix of housing options in the hamlets...the opportunity exists to create...senior housing and/or low to moderate income housing... Senior housing might be in the form of independent living options such as apartments or accessory units, or in the form of senior facilities that provide for various levels of care. Low to moderate income housing might include units that are developed with the benefit of government subsidies or incentives, but more often will be market rate units that are developed in a variety of sizes and types that are affordable for and appeal to smaller households – young workers, couples without children, empty nesters etc. At its center, a mixed-use hamlet might have commercial or retail uses on the first floor of a building and residential uses on the upper floors.”

The In-Town Residential and Residential Areas were also recommended as a location for senior and low to moderate income housing by use of accessory apartments, carriage houses, and well-designed duplexes. These two residential areas were shown on the Plan Recommendations Map and are located in the areas of Town that are generally zoned Core Residential (CR) and Residential

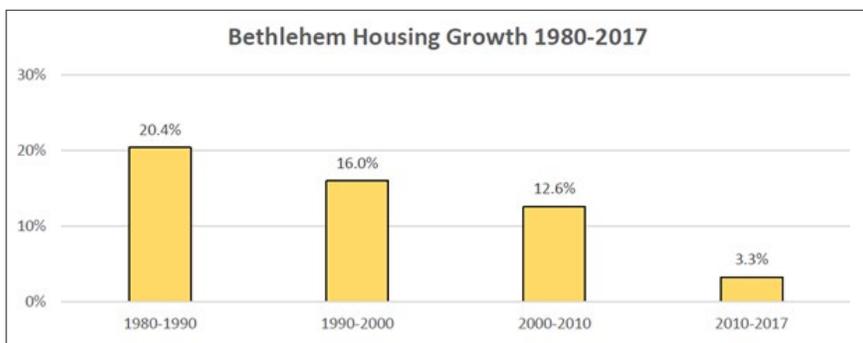


Figure 4.5: Bethlehem Housing Growth 1980-2017. Source: U.S. Census Bureau Building Permit Survey

A (RA) on the current Zoning Map. In the Rural and Riverfront Areas the recommendation was to promote housing diversity with a mix of attached housing types such as well-designed duplexes and townhomes permitted in conservation subdivisions in addition to detached single-family homes. These two areas shown on the Plan Recommendations Map correspond most closely today with the Rural and Rural Riverfront zones on the current Zoning map.

**Existing Conditions: Zoning (related to Housing)**

The following section describes the existing zoning districts in the Town related to housing, as a result of the 2005 Comprehensive Plan. Development of new housing is driven in part by land that is available and the zoning (which dictates allowed uses) of the land. The Town’s Zoning Law includes twelve different zoning categories that allow housing as a primary use (see Zoning Map, Figure 4.1). The largest residential zone by land area coverage in the town is the

Residential A (RA) zone. Residential A allows single family detached housing, and is characterized by the typical one third acre (14,520 square feet) suburban lot. The RA district is located surrounding the Core Residential (CR) district in the center of town. The RA district is also found in North Bethlehem, south of the Delmar Bypass, parts of Selkirk and in an area on the east side of Thruway in Glenmont.

The Core Residential (CR) zone is another large land area in town that represents primarily single family detached homes in older neighborhoods that are already built out in Delmar, Elsmere and Slingerlands. The Core Residential zone is characterized by smaller lot sizes (less than 10,000 square feet) and homes located in neighborhoods between Delaware Avenue and the Route 32 bypass. It is the area of town that was built out around the original commercial and transportation corridors in town. The CR zone also includes some existing two family attached housing

(commonly called duplexes) as well as some multifamily housing that was existing prior to the adoption of the 2006 Zoning Law.

The Planned Development District (PDD) zone represents a zoning category where residential developments have been built. The PDD is a floating zone that has been used for many years in town and predates the current Zoning Law and the 2005 Comprehensive Plan when it was called the Planned Residential District (PRD). Housing types that have been built in either the PRD or PDD zones include a mix of multi-family (e.g., Adams Station), single family attached (Walden Fields and Chadwick Square), as well as single family detached. It is also a zoning district that was used to build senior living facilities (Beverwyck, in North Bethlehem; and Atria Delmar Place in Delmar, Van Dyke Spinney in Delmar) and a nursing home (Good Samaritan, in Delmar). The PRD and PDD zones have been developed in several different locations in town.

Other zoning categories in the Zoning Law that allow residential development include two districts that are small pocket areas in town that have built-out, the Residential B (RB) and Residential C (RC) zones. RB and RC represent single family detached homes as well as some older multi-family units that pre-date the current Zoning Law. These zoning districts are found in Delmar, Selkirk, and Glenmont.

The Multi-Family (MR) district is found in two small pocket areas in town (off of Cherry Avenue and Rockefeller Road in Delmar) and has been constructed with attached single family homes. The

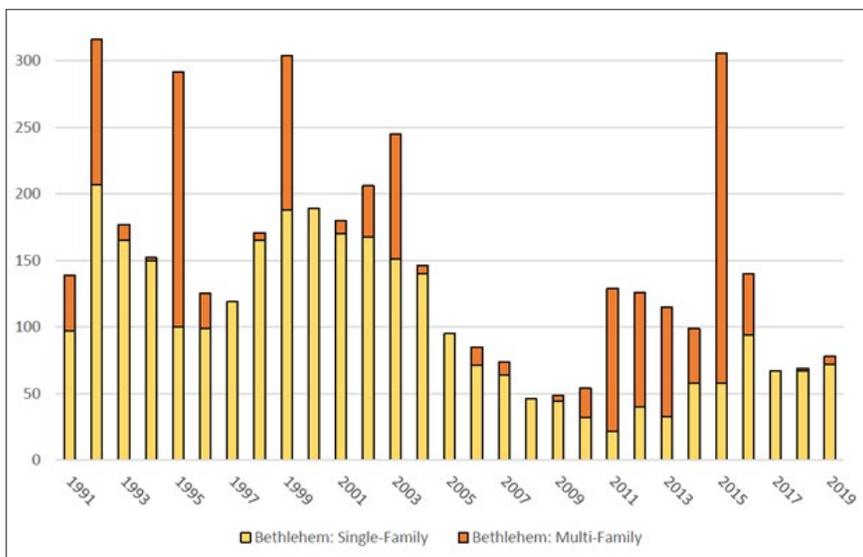


Figure 4.6: Building Permits Issued 1991-2019. Source: U.S. Census Bureau Building Permit Survey. Note: 2019 Data through 12/11/2019

Residential Large Lot (RLL) district is found in pocket areas on the western and northern sides of town and characterized by large lot single family detached homes, with a minimum lot size of 2-acres. The Rural Riverfront (RR) zone is located along the Hudson River east of River Road. It is predominately a single family detached residential area, with a minimum lot size of 5 acres. There is limited public sewer and water availability in the Rural Riverfront zone, and so most residences are serviced by private well and sanitary septic systems.

Zoning categories that allow both single family and multi-family residential development along with other commercial land use categories are the Rural, Rural Hamlet, Commercial Hamlet and Hamlet zones. The Rural zone allows 1 unit per 2 acres single family and 4 units per acre multi-family. It is located primarily in Selkirk and South Bethlehem, where public sewer and water is limited, east of the Thruway and in North Bethlehem and Slingerlands. The Rural Hamlet zone

is located in smaller sections along Route 9W and the western edge of Delaware Avenue. This zone allows 4 units per acre single family and 6 units per acre multi-family. The Hamlet zone allows 8 units per acre single family and 8 units per acre multi-family and is located in small pocket areas in Slingerlands along New Scotland Road, in Delmar/ Elsmere along Delaware Avenue, in Glenmont along Feura Bush Road and Glenmont Road and in Selkirk along Maple Avenue.

#### Since 2005 What Types of Housing Units Have Been Built?

Since the 2005 Comprehensive Plan and the 2006 adoption of the Zoning Law the Town has had residential housing proposals in the form of major subdivisions, both conventional and conservation, for single family detached homes as well as multi-family developments in the form of apartment buildings and townhome style (single family attached) buildings. All of the residential development proposals built since 2005 have been market rate housing (renter or owner-

occupied units). Examples of senior citizen housing, multifamily units, and single family attached (townhomes) include the following:

#### Location of Residential Growth

Figure 4.7 from the 2019 CDRPC report depicts the location of residential projects constructed between 2005 and 2018.

#### Accessory Apartments

The code amendments after 2005 also included an accessory apartment use allowed by special use permit. Just over 20 accessory apartment applications have been approved by the Planning Board. Requirements of an accessory apartment include the landowner residing within one of the units (main single-family home or accessory apartment) and the property deed updated to reflect this requirement. These units are occupied by both family members (i.e. parents, grandparents) and non-family members.

Project Name	Units	Zoning District	Occupancy
Glenmont Abbey Village - Senior Citizen (55+)	150	Hamlet	Rental
Van Dyke Spinney - Senior Citizen (55+)	200+	PDD	Rental
Kendall Square	100	Hamlet	Rental
Delmar Pointe Townhomes	45	PDD	Owner
Stuyvesant Landing Townhomes	20	RA - Conservation Subdivision	Owner
Blessing Corners	50	PDD	Rental
Legends Preserve Townhomes	50	RA - Conservation Subdivision	Owner
Windsor Hamlets I & II	90	Hamlet	Rental
Park Place at Glenmont Square	53	Rural Hamlet	Rental
Park Place at Town Center	24	Commercial Hamlet	Rental
Locus View	34	Rural	Rental
Wemple Road	96	Rural Hamlet	Rental

Table 4.5: Project Name, Units, Zoning District, Occupancy

**Incentive Zoning – Mix of Housing Types**

Zoning Law 128-51 Incentive Zoning allows multiple housing types in exchange for community open space benefits or affordable housing. Through conservation subdivision developments different tiers of density bonus units are allowed based on an increase in open space provided. The conservation subdivision option allows single-family attached, and a 1/3 of units to be multi-family. There is also an incentive option for affordable housing units, where affordable housing reflects residential units available for sales price or rental fee within the means of a household income which is 80% of the median income of the Town. If a certain percentage of units (sales price or rental fee) qualify as affordable in a proposed project the incentive options allows the Town to award density bonuses.

Most recently in 2020 there was a proposed multifamily project that applied for the incentive option within the Zoning Law for affordable housing. The proposal includes 100% affordable units, and therefore requested a 20% increase in the total number of units. Affordable units would be available to eligible households earning 30% to 60% of the Area Median Income. This was the first housing development to apply to the town since the Zoning Law adoption in 2006 using the incentive zoning for affordable housing option.

**Owner-Occupied Home/Lot Size**

While some of the single family detached and attached units developed since 2005 have been smaller in square footage and

lot size, the smaller size has not dictated a more affordable price on the sale as was expected by the 2005 Comprehensive Plan recommendation. An example is the Newell Conservation Subdivision in Glenmont that is a detached single-family development on lot sizes that are between 1/6th acre to 1/4 acre in size. Sale prices have ranged from approximately \$370,000 - \$500,000 since 2017 for homes that are between 1,300 square feet and 1,900 square feet (according to information from Town of

Bethlehem Online Assessment rolls). The demographic purchasing these smaller lots reflect empty nesters who have downsized from the traditional four-bedroom single family home.

**Housing Affordability**

The Town began the Comprehensive Plan Update process in 2018 by holding Community Forums in several different locations throughout the town to allow residents to learn about the Comprehensive Plan and provide

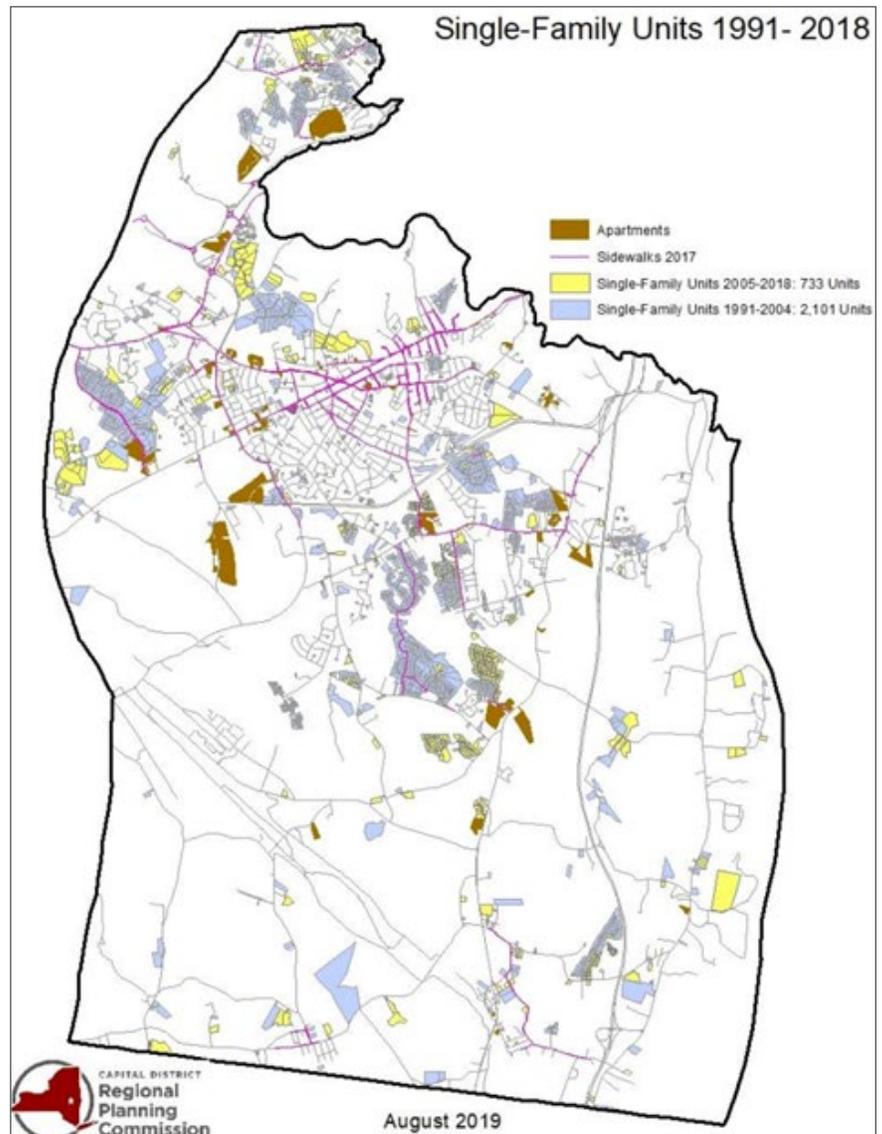


Figure 4.7: Single Family Units 1991-2018

feedback on issues and concerns that they thought the town should address in the Plan. One of the common themes across all of the forum locations was the concern residents had about the availability of affordable housing, especially for seniors. Residents were concerned that seniors would be forced out of Bethlehem due to the inability to afford housing costs. Residents also voiced concern about the lack of diversity in the town and the fact that groups such as young adults, the elderly who wish to downsize and minorities who desire to live in the town may not be able to afford housing costs.

The housing themes heard in the Community Forums in 2018 and 2019 are the same as those documented in the 2005 Comprehensive Plan. Affordability and diversity of housing stock remain a need for town residents.

#### Why the need for affordability?

Communities with housing options that are affordable to a wide range of incomes allow a wider range of people to contribute to the local economy by being a part of the workforce. In today's economy it is not only food service/retail workers, teachers, health care providers and librarians who may find it difficult to find adequate housing, but also young professionals with student debt and seniors on fixed incomes. If a community has a limited

supply of housing for segments of its workforce, that means local businesses, organizations, health care facilities, and schools must hire from outside the community, increasing the commuting distance and potentially making traffic congestion an issue. (Demographic and Growth Analysis for the Town of Bethlehem, December 2019, CDRPC) Employers often cite less turnover and fewer costs related to hiring and training new staff when access to affordable housing is in close proximity to the workplace.

For example, as the median age of the community increases, and the over 65 years age cohort increases in the next 10-15 years, the need for home health aides caring for seniors

#### Average Salaries by Occupation and Affordable Rents

Occupation	Average Annual Salary	Hourly Wage	Affordable Rent
Cashier	\$27,310	\$13.13	\$683
Dry-Cleaning Worker	\$28,000	\$13.46	\$700
Childcare Worker	\$29,650	\$14.25	\$741
Restaurant Cook	\$30,590	\$14.71	\$765
Home Health Aide	\$32,350	\$15.55	\$809
Crossing Guard or Flagger	\$32,780	\$15.76	\$820
Preschool Teacher	\$34,170	\$16.43	\$854
Receptionist	\$35,400	\$17.02	\$885
Security Guard	\$37,260	\$17.91	\$932
Animal Control Worker	\$41,430	\$19.92	\$1,036
Paramedic	\$46,550	\$22.38	\$1,164
Mental Health Counselor	\$47,770	\$22.97	\$1,194
Highway Laborer	\$50,620	\$24.34	\$1,266
Postal Service Clerk	\$50,720	\$24.38	\$1,268
Firefighter	\$56,060	\$26.95	\$1,402
Middle School Teacher	\$58,750	\$28.25	\$1,469
Clergy	\$61,260	\$29.45	\$1,532
Librarian	\$66,900	\$32.16	\$1,673
Dental Hygienist	\$68,930	\$33.14	\$1,723

Table 4.6: Average Salaries by Occupation and Affordable Rents Source: Bureau of Labor Statistics, Albany-Schenectady-Troy MSA ([https://www.bls.gov/oes/current/oes\\_10580.htm](https://www.bls.gov/oes/current/oes_10580.htm)) Note: Assumes 40 hours of work per week and 30% income spent on housing costs.

who wish to remain in their homes will continue to be important. The existence of affordable housing units in the Town will help to serve a workforce tending to the needs of the community.

Table 4.6 is a list of occupations by average annual salary for the Albany Metropolitan Area (a US Census designation for place that includes the Town of Bethlehem). Based on their average annual salary for a single income household, these occupations may find it difficult to afford to live in Bethlehem. Affordable rents are included, based on salary.

Should these occupations be unable to reside in Bethlehem due to housing affordability, they would commute into Town for jobs located in Bethlehem. The diagram below shows that currently 9,043 non-Bethlehem residents travel into town to work (US Census Bureau data, CDRPC December 2019).

**Income**

By exploring the data available to depict the local housing conditions of costs of homes and rents a community can make an assessment of the availability of housing for a variety of income levels and determine the needs and opportunities. The following information provides details on the income levels in Bethlehem and explains the terminology used in order to understand the questions of affordability.

In order to determine income levels and affordability for a community, housing experts, planners and developers use the median income estimates for a region (called a

Metropolitan Statistical Area or MSA) that is derived from the US Census. These estimates apply to varying sizes of families and households. A family is defined by a group of two or more people related by birth, marriage, or adoption residing together. Households include both family and nonfamily members, including a person living alone.

According to 2019 data from the American Community Survey (ACS), the median household income (across all household sizes) is \$66,252 for Albany County and \$71,285 for the Albany-Schenectady-Troy MSA. Looking at

the Town of Bethlehem alone, the median household income increases to \$97,867. The following chart shows population income levels for Bethlehem as compared to Albany County & the Albany-Schenectady-Troy MSA. Note that both family and household income levels are provided, and across all indicator's household income is less since households include single-persons and unrelated people.

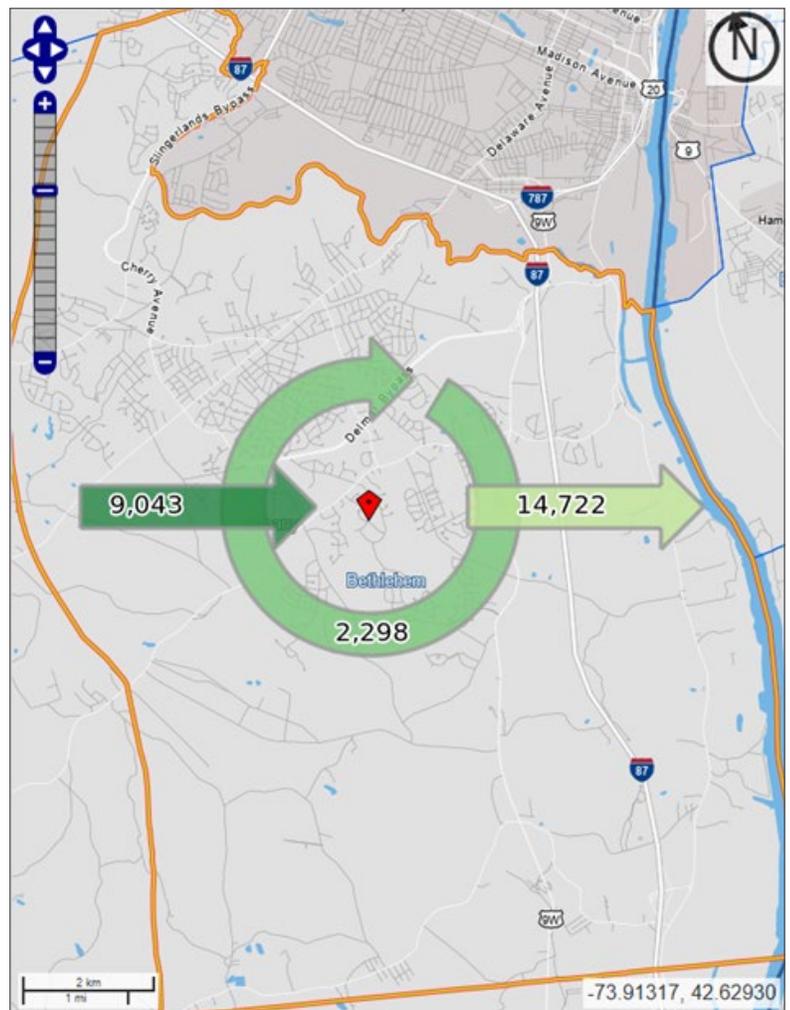


Figure 4.8: Commuters in and out of Town

### Area Median Income (AMI)

Area Median Income (AMI) is another term that is associated with housing affordability discussions. AMI is defined as the midpoint of a region's income distribution, half of families in a region earn more than the median income and half earn less than the median income. Levels of income can be broken out as a percentage of the AMI to better understand affordability. The chart below shows different levels of affordable rents and income limits for a family of 4. This is based on the HUD median family income estimate for the Albany-Schenectady-Troy MSA in 2019 of \$89,900. For example, low income is considered to be earning 80% to 60% of the AMI. According to the data, a low income family is earning between \$53,950 and \$71,900 a year.

Income levels in Table 4.8 can be compared to the average salaries for different occupations in the Albany MSA in the chart above to gain a better understanding of income level and housing cost affordability.

Although Bethlehem's median income is higher than that of the MSA, nearly 32% of households in town have an income less than \$60,000 per year and families (of four) in this situation would be considered low income or below. Approximately 12% of Bethlehem households have an annual income less than \$30,000 and these families would be considered extremely low income. Table 4.9 shows household incomes by percentage for Bethlehem, Albany County and the MSA.

### Housing Cost Burden

To measure affordability for housing units whether they are owner or rent occupied, single family or multi-family; financial planners recommend that a household spend no more than 30% of the household income on housing costs. The US Housing and Urban Development Agency (HUD) uses the 30% guideline in subsidy programs. Housing costs for owner occupied units include mortgage payment, taxes, insurance, and utilities. Costs for renters include rent payment and utilities. This explains what is referred to as affordable rents in this report.

If a household is spending more than 30% of gross income on housing costs then they are considered cost burdened. If they are spending more than 50%

#### Population Level Incomes

Income Measure	Town of Bethlehem	Albany County	Alb.-Schen.-Troy MSA
Median Family Income	\$133,906	\$94,506	\$92,922
Median Household Income	\$97,867	\$66,252	\$71,285
Mean Family Income	\$158,128	\$113,784	\$111,546
Mean Household Income	\$126,641	\$89,267	\$91,065
Per Capita Income	\$52,083	\$37,635	\$37,557

Table 4.7: Population Level Incomes. Source U.S. Census Bureau 5-Year ACS 2019-2015

#### Income Classification and Affordable Monthly Rents

Income Category	Percentage	Income Limit (Four-Person Household)	Affordable Monthly Rent
Extremely Low-Income	30%	\$28,700	\$718
Very Low-Income	50%	\$47,800	\$1,195
Low-Income	60%	\$57,400	\$1,435
	80%	\$76,500	\$1,913
Median-Income	100%	\$95,600	\$2,390

Table 4.8: Income Classification and Affordable Monthly Rents Albany-Schenectady-Troy MSA. Source: HUD, 2019 data for Albany County/Albany-Schen.-Troy MSA. Note: Income Limits may not be exact percentages of the median due to being adjusted by HUD.

of income on housing they are considered severely cost burdened. Cost burdened means a family or person has less money every month to spend on basic needs such as food, transportation, health needs, and education. Not having a certain percentage of disposable income every month means a household may not spend money in the community supporting local businesses like restaurants or services like dance lessons or lawn mowing.

Table 4.10 depicts Households with Cost Burdens of both 30% and 50% in Bethlehem compared to Albany County and the Albany MSA for both homeowners and renters.

The proportion of cost burdened (> 30% of income) homeowners is greater in Bethlehem than at the County or MSA levels, with 16% of Bethlehem homeowners reporting a cost burden. The proportion of

renters with cost burdens is similar in Bethlehem and Albany, at 46% for cost burdened and 23% for severe cost burden (>50% of income). This data reflects a regional rental cost burden across all locations, including Bethlehem. There is no data available for measuring severe cost burdens for homeowners.

Renter Occupied Units Bethlehem was compared to peer communities for gross rent as a percentage of household income in the CDRPC report using ACS 2017 5-year data. The town's percentage was below Colonie, Rotterdam and Malta and above Halfmoon with all of the municipalities within the range of households paying 40.7% to 49.4% of income for rent.

Since 2015, median rents in Bethlehem have steadily increased from \$1,094 to \$1,185 in 2018 (across all unit sizes – number of bedrooms), as shown in Figure 4.9.

As of 2019, the overall median rent in Bethlehem reached over \$1,200 per month, with rental units in Bethlehem costing more in comparison with rental units at the County level or at the Regional level as shown in the following table.

Based on all the the figures in this section, a family of four earning \$53,950 (60% AMI) is considered low-income and should spend no more than \$1,349/month in rent. Under current market rental rates (see table above) this family would not be able to afford a 2019 market rate 3BR unit in the Town of Bethlehem, but could afford a 2 BR unit. Additional options to meet their housing needs could include (1) residing outside the Town in other areas of the County/MSA or (2) residing in a housing development supported by NYS assistance based on eligible family income limits. For example, the same family could find an affordable 3BR

Household Incomes						
	Town of Bethlehem		Albany County		Alb.-Schn.-Troy MSA	
	Estimate	Percent	Estimate	Percent	Estimate	Percent
Total:	14,283	-	126,540	-	352,713	-
Under \$30,000	1,705	11.9%	28,083	22.2%	70,449	20.0%
\$30,000 to \$59,999	2,846	19.9%	29,564	23.4%	81,120	23.0%
\$60,000 to \$99,999	2,669	18.7%	28,238	22.3%	81,651	23.1%
\$100,000 to \$149,999	2,943	20.6%	21,596	17.1%	64,692	18.3%
\$150,000 or more	4,120	28.8%	19,059	15.1%	54,751	15.5%

Table 4.9: Household Incomes. Source: U.S. Census Bureau 5-Year ACS 2019-2015

Households with Cost Burdens						
Location	Renters with Cost Burden		Homeowners with Cost Burden		Renters with Severe Cost Burden	
Town of Bethlehem	1,818	46%	1,698	16%	915	23%
Albany County	25,479	46%	13,136	10%	12,851	23%
Albany-Schenctady-Troy MSA	55,375	44%	41,603	11%	27,520	22%

Table 4.10: Households with Cost Burdens.

unit at \$1,403/month rent, which remains consistent with the 30% rule of thumb. Table 4.14 reflects an example annual income and rent limits of a proposed affordable housing development proposed in the Town.

**Housing Assistance – Rental Units**

A total of 101 subsidized housing units are located in Bethlehem across all HUD programs. A total of 55 units are part of the Section 8 Housing Choice Voucher (HCV) program, with the Supportive Housing for the Elderly (202/ PRAC) program including 46 units. There is incomplete data for these programs for the Census Tracts within town. Based on the data available, the subsidized units are predominately occupied by women over the age of 62 who live alone. All residents fall below the very low income threshold, with the majority qualifying as extremely low income residents. Some of these residents

have disabilities. The vast majority of the residential units are single BR.

An example is the Van Allen Senior Apartments located along Route 9W in Glenmont that provide for residents age 55 or older or disabled residents using a senior tax credit program to allow rents to be more affordable for lower income brackets. A total of 110 apartments are 1 or 2 bedroom and range from 633 square feet to 892 square feet. Rents range from \$540 to \$642 per month. As of December 2019, there was a waiting list of 75 people in need of units.

Bethlehem has been part of the Housing Choice Voucher Program (HCV) since 1985. Housing choice vouchers are administered locally by public housing agencies (PHAs). The PHAs receive federal funds from the U.S. Department of Housing and Urban Development (HUD) to

administer the voucher program. A family that is issued a housing voucher is responsible for finding a suitable housing unit of the family's choice where the owner agrees to rent under the program. This unit may include the family's present residence. Rental units must meet minimum standards of health and safety, as determined by the PHA.

A housing subsidy is paid to the landlord directly by the PHA on behalf of the participating family. The family then pays the difference between the actual rent charged by the landlord and the amount subsidized by the program.

As of November 2019, there were 48 vouchers being used in Bethlehem, with 87% of these households having an elderly or disabled person in the family. The average gross monthly income for a participating family was \$1,567 with the average subsidy at \$561. Bethlehem families and elderly or disabled residents in the program have spent an average between 10 and 11 years in the program. The waiting list for the HCV program in November 2019 included 94 people, with 51 of those (54%) living or working in Bethlehem. At the time, 27 of the waitlist applicants were elderly or disabled.

Historically, more vouchers were available in previous years than the 48 available in 2019. Reports from the mid-late 2000s indicate between 54 and 59 vouchers were available, and reports in the early-to-mid 2010s indicate 59 vouchers were available. The consultant who prepared the 5-year PHA Plan for the Town indicated that the number of vouchers does not reflect

Gross Rent as a Percentage of Household Income (GRAPI)	
Colonie	47.80%
Rotterdam	49.40%
Halfmoon	40.70%
Malta	49.40%
Bethlehem	44.60%

Table 4.11: Gross Rent as a Percentage of Household Income (GRAPI). Source: U.S. Census Bureau 5-Year ACS 2013-2017

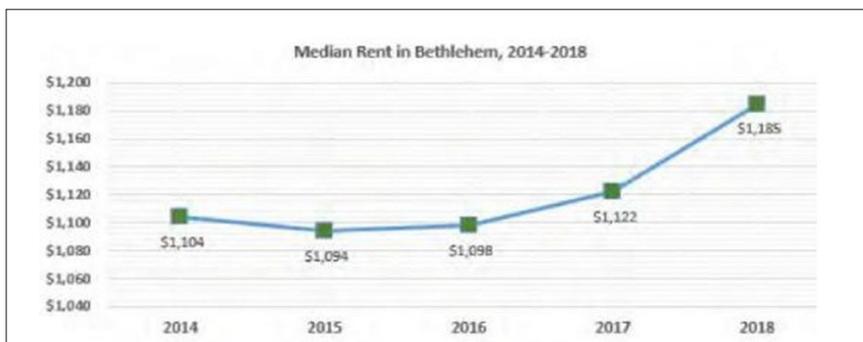


Figure 4.9 Median Rent in Bethlehem, 2014-2018 Source: U.S. Census Bureau 5-Year ACS

demand, but rather that annual funding varies with the makeup of the Federal Executive Branch and Congress along with many other factors. The consultant also indicated that HUD reports 5 families on a waiting list for every voucher.

**Owner Occupied Units**

When looking at the data for owner occupied units in Bethlehem, 50% of owner occupied homes with a mortgage are paying more than \$2,000 per month in monthly housing costs (Figure 4.8), which based on the median household income for the town means many owner-occupancy residents are in line with spending 30% of gross income on housing costs. However, affordability may be difficult for those households with incomes at or below \$71,285 (the MSA median household income) that currently reside in the town or desire to live in the town. The graph below shows the amount of money being spent on a monthly basis by both owners and renters in the Town as compared to the Albany MSA (based on US Census 5-Year ACS 2017-2013).

The median value of homes from 2014 to 2018 in the Town of Bethlehem did not fluctuate widely based on Census data as shown in Figure X. Median home values were \$268,700 in 2014 and \$269,900 in 2018.

However, more recent home sale prices in Bethlehem from March of 2019 to March of 2020 (pre-pandemic) show an increase from 2018 in the median price to \$299,200 according to Multiple Listing Service. A snapshot of data from May 2021 shows the median

Median Rent by Number of Bedrooms			
Median Rent	Town of Bethlehem	Albany County	Alb.-Schen.-Troy MSA
Overall	\$1,211	\$1,022	\$1,013
No Bedroom	-	\$767	\$796
1BR	\$962	\$902	\$872
2BR	\$1,251	\$1,104	\$1,090
3BR	\$1,609	\$1,140	\$1,121
4BR	\$1,636	\$1,226	\$1,188
5 or more BR	-	\$1,516	\$1,241

Table 4.12: Rent by Number of Bedrooms (5-year Median) Source: U.S. Census Bureau 5-Year ACS 2019-2015

Bethlehem Market Rate Rent by Number of Bedrooms (2019 Average)		
	Range	Average
No Bedroom	NA	NA
1BR	\$1,179 - \$1,273	\$1,226
2BR	\$1,329 - \$1,451	\$1,390
3BR	\$1,543 - \$1,814	\$1,678
4BR	NA	NA
5 or more BR	NA	NA

Table 4.13: Bethlehem Market Rate Rent by Number of Bedrooms (2019 Average). Source: Comprehensive Market Study Proposed Family Affordable Housing Development, Selkirk Reserve, prepared by Newmark Knight Frank, dated December 11, 2019

Annual Income and Rent Limits				
	Unit Type	Units Available	Monthly Rent (Includes Utilities)	Annual Household Income (Minimum - Maximum)
30% AMI	0 bedroom	0	\$472	\$18,870
	1 bedroom	12	\$506	\$20,220
	2 bedroom	0	\$607	\$24,270
	3 bedroom	0	\$701	\$28,050
50% AMI	0 bedroom	0	\$786	\$25,160 - \$31,450
	1 bedroom	5	\$843	\$26,960 - \$33,700
	2 bedroom	10	\$1,011	\$32,360 - \$40,450
	3 bedroom	10	\$1,169	\$37,400 - \$46,750
60% AMI	0 bedroom	0	\$944	\$31,450 - \$37,740
	1 bedroom	7	\$1,011	\$33,700 - \$40,440
	2 bedroom	14	\$1,214	\$40,450 - \$48,540
	3 bedroom	14	\$1,403	\$46,750 - \$56,100
80% AMI	0 bedroom	0	\$1,258	\$44,030 - \$50,320
	1 bedroom	0	\$1,348	\$47,180 - \$53,920
	2 bedroom	0	\$1,618	\$56,630 - \$64,720
	3 bedroom	0	\$1,870	\$65,450 - \$74,800

Table 4.14: Annual Income and Rent Limits

Source: Newmark Knight Frank-CMS

price has spiked to \$378,000 post pandemic due in part to a low inventory of homes on the market versus a high number of buyers who are looking to take advantage of low interest rates and possible desire to relocate to suburban communities.

**Affordability of Owner-Occupied Housing Units**

In addition to the 30% rule of thumb, another commonly accepted metric to measure owner-occupied affordability is to use the purchase price multiplier. This statistic represents the maximum mortgage approval amount likely to be given to potential homebuyers—usually

about 2.25 – 2.50 times annual income. Based on the 2019 median income estimate in Bethlehem of \$97,867, this approach indicates the Bethlehem median income household could afford a house costing between \$220,000 - \$245,000, assuming a 10% down payment. This is less than the ACS estimated median home value between 2014 and 2018 (\$269,000), as well as recent median price home sales in 2019 (\$299,000). Comparatively, the 2019 median income estimate of the MSA \$71,285 indicates the MSA median income household could afford \$142,000 - \$178,000. As previously stated, a

household outside the town earning at or less than the median income of the MSA will find it difficult to purchase a house in Bethlehem. Table 4.17 identifies homes sales in Bethlehem in 2019. The table indicates there was limited supply of homes that sold for less than \$200,000 (15%).

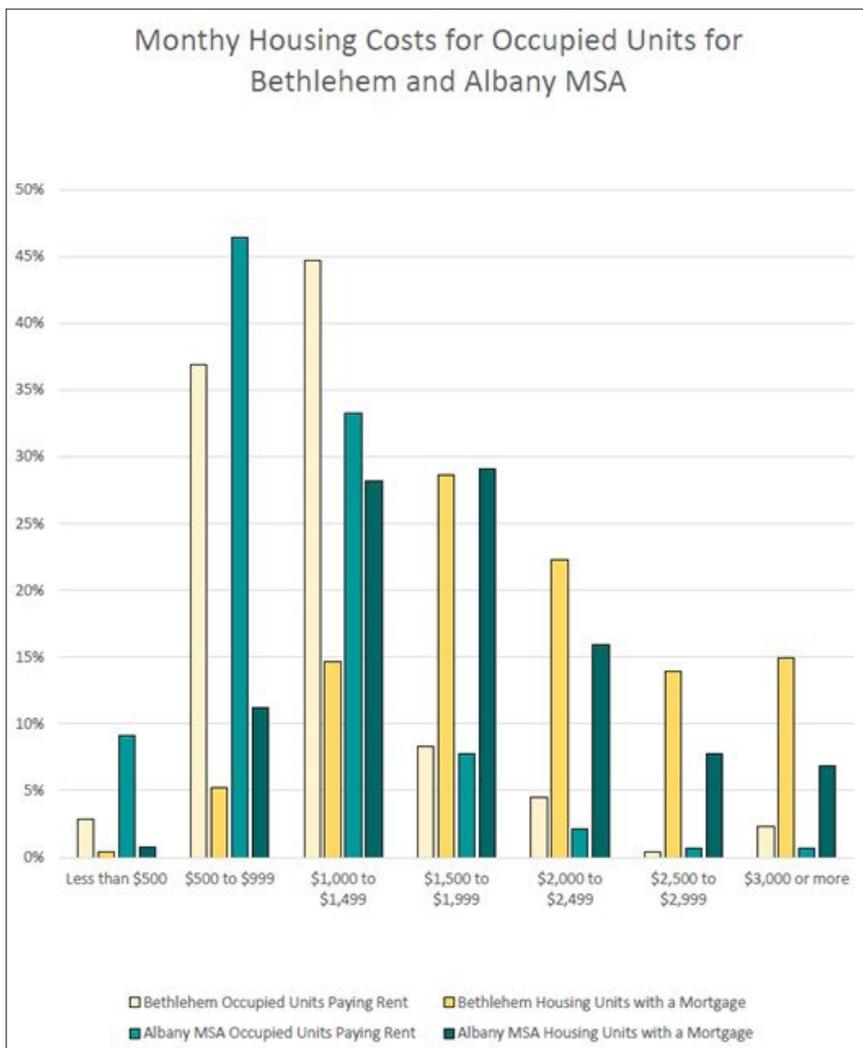


Figure 4.8: Monthly Housing Costs for Occupied Units for Bethlehem and Albany MSA. Source: U.S. Census Bureau 5-Year ACS 2017-2013

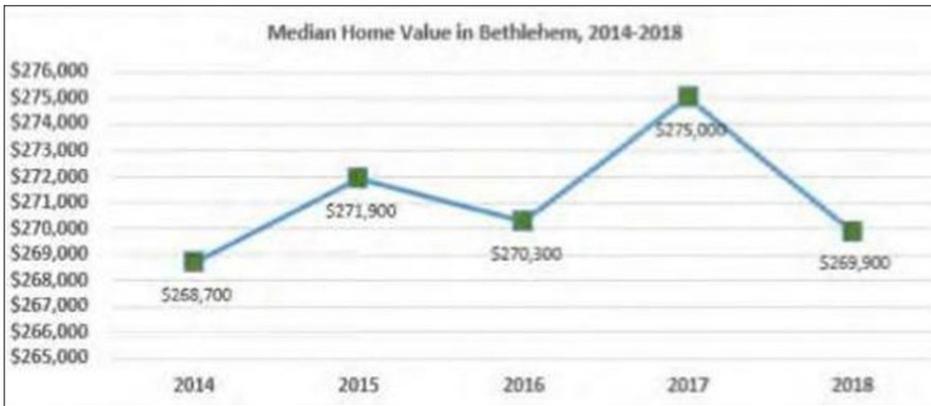


Figure X: Median Home Value in Bethlehem, 2014-2018 Source: U.S. Census Bureau 5-Year ACS

**Bethlehem Homes Sold 3/1/19 to 3/1/20 by Type**

	Single Family Homes	Two-Family Units	Multifamily Buildings (3-4 units)	Condo Units
Number	480	13	4	6
Median Price	\$299,200	\$262,000	\$383,093	\$241,250
Mean Price	\$315,692	\$260,308	\$905,046	\$244,167

Table 4.15: Bethlehem Homes Sold 3/1/19 to 3/1/20 by Type

**Bethlehem Active Home Listings May 2021**

Number	Max Price	Min Price	Mean Price	Median Price
37	\$1,699,900	\$44,900	\$429,785	\$378,000

Table 4.16: Bethlehem Active Home Listings May 2021

**Bethlehem Homes Sold 3/1/19 to 3/1/20 by Sold Price**

< \$200K	\$200K to 300K	\$300K to 400K	\$400K to 500K	\$500K to 600K	\$600K to 700K	\$700K to 800K	\$800K to 900K	900K to 1M	\$1M+
75	177	139	69	23	8	1	0	2	1
15.2%	35.8%	28.1%	13.9%	4.6%	1.6%	0.2%	0.0%	0.4%	0.2%

Table 4.17: Bethlehem Homes Sold 3/1/19 to 3/1/20 by Sold Price

### Housing Market 2020 - 2021

The housing market in suburban communities from Albany to New York City has been strong through 2020 and 2021. Low interest rates coupled with the COVID-19 pandemic requiring many people to work from home has resulted in a trend driving home purchases upward in the suburbs. It is unclear how long the trend of increased sale prices will last. If the current level of low housing inventory on the market continues then increased prices will remain dominant. This situation will further emphasize the need for affordable housing.

### Findings and Opportunities

The following list is a combination of findings based on the 2019 CDRPC Report for the Town of Bethlehem, observations of the existing Zoning Law from Staff, and best practices for housing policy decisions gathered from research on recent affordable housing studies and municipal code provisions for housing.

- Bethlehem has 14,485 total housing units and is dominated by single family housing units with 10,784 or 77% of all housing units being single family. This is higher than the US average share of single-family units at 60.4%, higher than the NY State average of 44.1% and the Albany County average of 32.5%.
- Bethlehem's higher rates of single family and owner-occupied units and lesser amount of multifamily and rental units indicates a limited supply of attainable and affordable housing in the Town.
- For a period of time between 2011 and 2015 building permits that were issued reflected a greater percentage of multi-family units (100 units in 2011 and 248 units in 2015). After this period, multi-family permits fell sharply to 0 in 2017 and 2 in 2018. In 2016, building permits for single family homes returned to reflect the greater percentage of new permits issued.
- Bethlehem's low number of rental and multi-family units may make it difficult for young adults who have grown up in the area to stay in the community if they attend college locally or to return after graduating from college.
- If a household is spending more than 30% of gross income on housing costs then they are considered cost burdened. If they are spending more than 50% of income on housing, they are considered severely cost burdened. Cost burdened means a family or person has less money every month to spend on basic needs such as food, transportation, health needs, and education.
- Although Bethlehem's median income is considered high (\$97,867 per household), nearly 32% of households in town have an income less than \$60,000 per year and families in this situation would be considered low income or below. Approximately 12% of Bethlehem households have an annual income less than \$30,000 and these families would be considered extremely low income.
- The median value of homes from 2014 to 2018 in the Town of Bethlehem did not fluctuate widely based on Census data. Median home values were \$268,700 in 2014 and \$269,900 in 2018. More recent home sale prices in Bethlehem from March of 2019 to March of 2020 (pre-pandemic) show an increase from 2018 in the median price to \$299,200, and in a snapshot of data from May 2021 shows the median price has spiked to \$378,000 post pandemic.
- The proportion of cost burdened (> 30% of income) homeowners is greater in Bethlehem than at the County or MSA levels, with 16% of Bethlehem homeowners reporting a cost burden. The proportion of renters with cost burdens is similar in Bethlehem and Albany, at 46% for cost burdened and 23% for severe cost burden (>50% of income). This data reflects a regional rental cost burden across all locations, including Bethlehem.
- A low-income family of four earning \$53,950 (60% AMI) spending no more than \$1,349/month rent would not be able to afford a 3BR market rate unit in Bethlehem without spending more than 30% of their income on housing. However, their housing needs could be met (1) by residing outside the Town in other areas of the County/MSA or (2) residing in a housing development supported by NYS assistance based on eligible family income limits. The same family could find an affordable 3BR unit at \$1,403/month rent, which remains consistent with the 30% rule of thumb.

- Limitations exist in zoning laws and from neighborhood opposition that restrict the construction of various housing types (e.g., housing size, affordability, etc.) in the community. Affordable housing discussions in communities typically center on the perceived cost to the taxpayer. Issues center on schools, policing, fire protection, social services and infrastructure. Many people lose sight of the fact that affordable housing development is economic development. Housing affordability increases the availability and reliability of workers for local businesses, which reduces the overall costs of business.
- People working middle to low wage occupations who desire to live in the Town may be priced out of living in the community. There is a connection between community economic health and affordable housing - if residents (both home owners and renters) have high housing costs even if it's not unaffordable (i.e., cost burdened), it limits their spending at local businesses and restaurants. Spending money locally creates more tax revenue. Bethlehem has many small/local businesses and there is certainly support for local business within the community. The local economy can be better supported by having more affordable options for housing.
- Business owners and representatives at the economic development focus groups identified difficulty attracting employees to jobs in the Town due to higher housing costs.
- In discussing and reviewing existing and proposed land uses, the Town and community members should consider the types of housing options that are affordable that fit harmoniously into the variety of residential and mixed-use areas within the Town. Housing options are often referred to as housing typologies, meaning the type of housing unit (townhome style, 2 family home, 3-4 story infill developments in hamlets, larger scale buildings 4 stories or more etc.)
- Adaptive reuse of existing nonresidential buildings should be considered as an opportunity to provide housing options, an example would be the church on New Scotland Road in Slingerlands that was changed to an office and apartments.
- The Special Use Permit process could be used to consider applications for increased density or to allow conversion of single-family residences to multifamily along certain roadways or zoning districts, if affordable units are included. A special use permit is used by municipalities to allow uses with certain conditions that ensure adjacent properties will not be adversely affected.
- Just over 20 accessory apartment units have been approved by the Planning Board through special use permit review and approval. A special use permit application requires a site plan layout, application fees, and public hearing, which in total reflects a minimum of 3 Planning Board meetings. Accessory apartments can provide additional housing opportunities for those of moderate-income levels. A streamlined review process subject to administrative review only (building permit) and allowance for detached units may help to provide more opportunities for a variety of housing options.
- To provide for additional density while also preserving the character of a neighborhood or area in Town the option of using form-based code as an overlay district should be explored. Form based code language concentrates on design of sites and can be used to better fit a project into an existing neighborhood by considering the placement, mass and orientation of buildings.
- Consider the breakdown of housing types in the current Town development review pipeline in relation to the demographic changes the Town expects to experience in the next 10 years. As the share of older adults (age 65+) grows, will residential development projects under review now address their housing needs? Does the town wish to attract a younger generation, and if so, what are their housing needs?
- Bethlehem Zoning Law 128-51 E (2) provides for an affordable housing incentive. It defines affordable housing to mean a household income which is 80% of the median income of the Town. This 80% threshold is too high to accommodate low to moderate income families

to afford to live in the town. Options to address this include applying a lower median income threshold such as those making less than 60% of the Town median income, or utilizing the Area Median Income at the same 80% threshold.

- Refinement of the incentives to developers in exchange for a percentage of residential units in a proposed development priced at a certain income level or percentage of the median income (affordable) should be explored as an option in the Zoning Law. Incentives can include increased density, flexibility in dimensional requirements, and mix of unit types in a project.
- Homeownership provides financial stability for a family. A family that has the opportunity to build wealth by owning a home also benefits the economic health of a community.
- The Town's plans for economic development should be tied to housing policy. For example, diversifying the tax base will help ease the residential property tax burden which helps in affordability of homes. Providing jobs locally that pay enough for workers to buy homes in the community lends itself to a more stable local economy where people can live, work, serve the community, and spend their money in local businesses.
- Some municipalities have utilized inclusionary zoning provisions in their land use regulations, requiring developers to provide a percentage of the housing units within their developments applied to both single family lots (ownership) and multifamily units (rental) at an affordable level. Inclusionary zoning is successful when accompanied by increased density to offset the loss of market rate income.
- Community outreach and education on inclusive housing policies will help residents, staff, and municipal board members to understand the benefits of affordable housing and a strong local economy. A local housing committee could help to serve a role in community outreach.
- A housing needs assessment would include a study of the population in need and should provide a summary of available funding opportunities for developers and the requirements for funding to better understand what the town needs to do to attract developers of affordable housing. For example, 60-70 units in a project is often needed to be competitive for funding opportunities with tax credits, while the use of existing infrastructure and predictable land use regulations allows construction costs to be lower. From the housing needs assessment, the Town can create more detailed policy, establish goals and actions to be taken to create more affordable housing.
- A multi-pronged approach should be used to promote diversity and affordability in housing.

## Demographics

Bethlehem is a community of approximately 35,000 residents with large percentages of residents having higher educational attainment levels and average or above average income levels. Approximately 90% of resident's self-report as White, Non-Hispanic and the Town has seen gradually increasing racial and ethnic diversity over the past few decades. About three quarters of residents own their homes, which is above average compared to the metropolitan area. Bethlehem is on average a middle age to older community, with a median age of 43.5 years, but there's a significant number of families with school age children living in town.

### Introduction

This section and the following Economic Development section (2.6) use 5-year estimates from the Census Bureau's American Community Survey (ACS). Data across a 5-year period is averaged to produce a more statistically reliable estimate and the following sections frequently compare two 5-year periods (2009-2013 and 2014-2018) to identify trends. It is important to note that due to the ACS methodology, there are margins of error, so these are estimates and do not reflect exact population counts. Though the ACS data is not exact, the estimates are accurate enough for planning purposes. The group names and gender categories used in these sections are pulled directly from the US Census Bureau's American Community Survey.

### Total Population and Growth Trends

While the Town is experiencing significant population growth compared to the region, the rate of housing development has slowed over time. With projected increase in older residents, the provision of housing, transportation, and other services for the community should be considered appropriately.

Population growth in the Town has historically been faster than the state and Albany County. Bethlehem's estimated population

in 2017 was approximately 34,912, which represents about 11% of Albany County's population and less than one percent of New York State's population. Between 2010 and 2017, Bethlehem's rate of population change (4.6%) was higher than both Albany County (1%) and the State (0.8%). The total population is projected to grow to 36,088 residents by 2030 and 36,735 by 2040. In other words, by 2030 an additional 1,176 residents are projected to reside in the Town. Further, between 2030 and 2040 projections show an additional 647

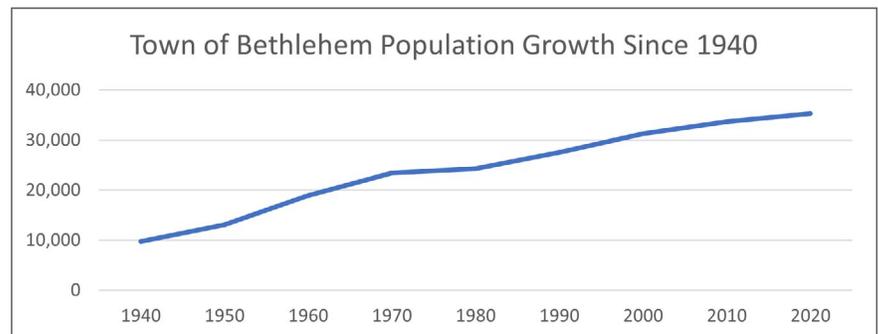


Figure 5.1: Town of Bethlehem Population since 1940

residents will call Bethlehem their home.

## Population Characteristics

### Households and Families

In 2018, married couples made up 56% of households in Bethlehem, while married couples with children were about 23% of households. Male householders (no wife present) were 3% of total households and female householders (no husband present) were 6% of total households. Non-family households made up 36% of households in the Town.

Between 2013 and 2018 the town has seen shifts in family and household makeup. During this period the number of married couple families increased by just 1% and the number of married couples with children dropped by about 10%. The number of households headed by a male (no wife present) increased by about 15%, and the number of such households with children increased by 31%. Conversely, the number of female led households (no husband

present) decreased by 18% and the number of those households with children fell by 32%. The number of non-family households grew by 7%. Between 2013 and 2018, the average family size in the Town remained the consistent at 3.1 people, while average household size declined by 4% (from 2.55 to 2.44 people) in the same period.

### Population History of Region (1980-2020)

Municipality	1980	1990	2000	2010	2020	Change 1980 -2010	Change 2010 - 2020
Bethlehem	24,296	27,552	31,304	33,387	35,349	37%	6%
City of Albany	101,727	100,031	94,301	97,856	99,068	-4%	1.2%
Guilderland	26,515	30,011	34,045	35,303	36,070	33%	2.2%
New Scotland	8,976	9,139	8,626	8,648	9,093	-3.5%	5.1%
Coeymans	7,896	8,158	8,151	7,418	7,385	-6%	-4%
Albany County	285,909	292,793	294,565	304,032	312,794	6.3%	3%

Table 5.1: Population History of Region 1980-2020, Source: US Census (presented in 2005 Bethlehem Comprehensive Plan); ESRI, 2020; Town of Bethlehem Demographic and Growth Analysis, 1991-2018

### Household Makeup (2013 vs 2018)

	Married couple family		Male householder, no wife present		Female householder, no husband present		Non-family Households	Total Households
	Total	With Children	Total	With Children	Total	With Children		
2013	7791	3585	305	178	999	609	4030	13128
2018	7870	3216	350	234	822	409	5061	14103
Difference	79	-369	45	56	-177	-200	1031	975
% Change	1.01%	-10.29%	14.75%	31.46%	-17.72%	-32.84%	25.58%	7.43%

Table 5.2: Household Makeup, 2013 vs. 2018, Source: Source: Bethlehem Demographic and Growth Analysis: Detailed Supplement

### Persons per Household Over Time

	1990	2000	2010	2020 (Source: ESRI)	Percent Change 2000 -2020
Town of Bethlehem	2.61	2.53	2.46	2.45	-3%
Albany County	-	2.32	2.27	2.27	-2%
Capital District Region	-	2.41	2.36	2.34	-3%

Table 5.3: Persons per household over time, Source: Bethlehem Demographic and Growth Analysis: Detailed Supplement and ESRI

### Age and Racial Diversity

Residents under the age of 19 (pre-K, K-12, and post high school graduation) make up 22% of the population. The lowest percentage (11%) of town residents are those between the ages of 20-29, those who are post higher education, certificate programs and early in their careers. Almost 48% of the total population are residents between the ages of 30 and 64. This large group includes those whose careers are stabilizing to those approaching retirement. The total number of residents over age 65 comprise 19% of the population, most assumed to be in retirement or alternate careers.

The smallest single age group (across all races) are residents 18-19 years old, the next smallest group being the 85+ age group. The single largest age group (across all races) are those 55-64 years old. Age cohort projections show an aging population, with an increase in the 65-74 and 75+ age group of almost 2,000 people, or 120% of current levels by 2050.

In the Town of Bethlehem in 2018 the population is 91% White. The next largest racial groups are Asian at 4.5% of the population, Black or African American at 2.7%, Hispanic or Latino at 2%. Native American/Alaskan Native people made up .02% of the population, people identifying as two or more races comprised about 1.6% and people identifying with another race were about .2% of the population.

Roughly one third of the population of Bethlehem is between the ages of 55 and 84. This proportion is consistent in the White, Black, and Hispanic/Latino population.

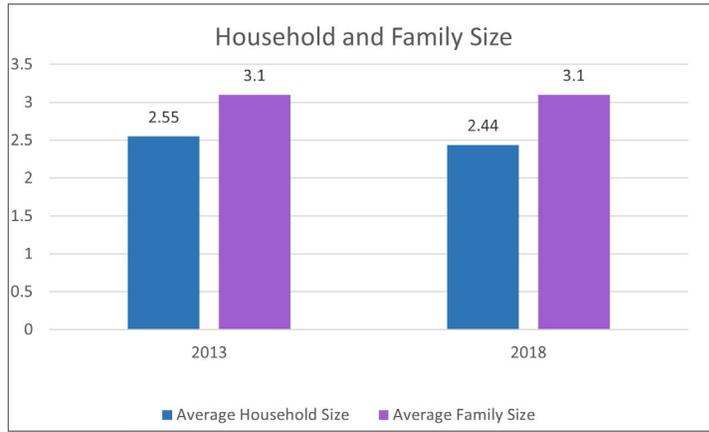


Figure 5.2: Household Size and Family Size (persons per household or family), 2013 vs. 2018, Source: Bethlehem Demographic and Growth Analysis: Detailed Supplement

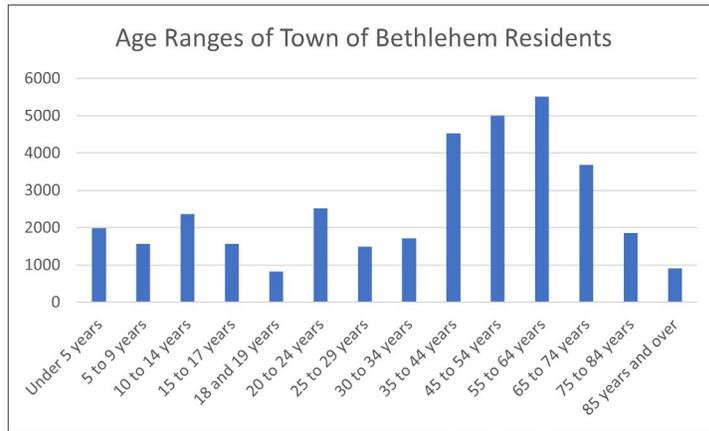


Figure 5.3: Age Ranges of Town of Bethlehem Residents

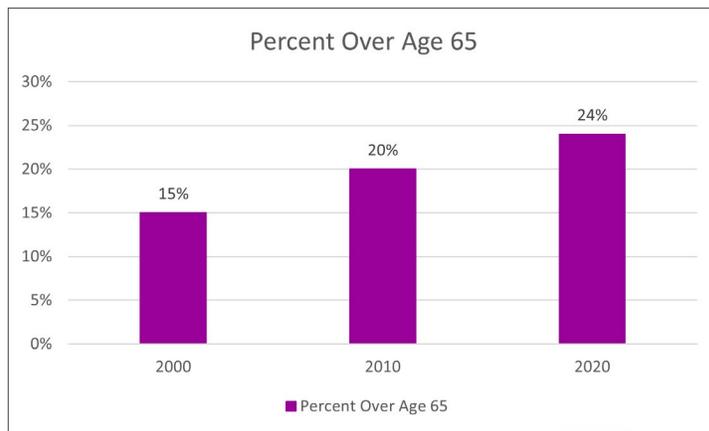


Figure 5.4: Percent of Population over 65, 2000-2020

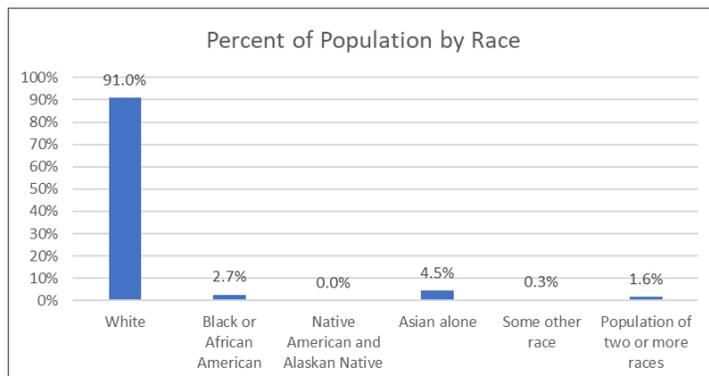


Figure 5.5: Percent Population by Race

The population of Asian residents and those identifying as 2 or more races are slightly younger, with only 10% and 21%, respectively, being between 55 and 84. In 2018, no racial group except Whites had any residents over the age of 85.

**Foreign Born Residents**

In 2018, the population of foreign-born residents was 2,336 people, about 7% of the total Town population. The largest percentage were born in Asian countries (56% of foreign-born residents) with approximately 31% from Europe, 11% from the Americas and just under 2% from Africa.

**Transportation Modes**

Between 2013 and 2018 single occupied vehicles (cars, trucks, vans) remained the predominant means of transportation among all racial groups in the Town. The number of White and Black residents traveling in single occupancy vehicles increased, while there was a decrease among Asians and those of other races. Carpooling for Whites decreased by about 2% while carpooling among Asians decreased by 48%. During the same time period the number of Whites using public transportation increased by 40% and Black residents' usage dropped by 40%.

Although low from a percentage of total transportation modes, number of walkers increased substantially across all races: Whites 100%, Black 100%, Asian 200%.

The residents working from home between 2013 and 2018 were comprised of only Whites, Asians, and those of two or more races. The overall increase during the five year period was approximately 7% (from 843 to 900 residents).

The Covid-19 pandemic of 2020-2021 have dramatically affected the population of residents working from home. Dramatic increase in ride-sharing services could affect these trends in transportation mode utilization by race.

**Tenure**

Understanding that White residents account for slightly over 90% of the Town population, the period of 2013 to 2018 saw changes in resident tenure (owner or renter occupied). Proportion of White owner-occupied households decreased

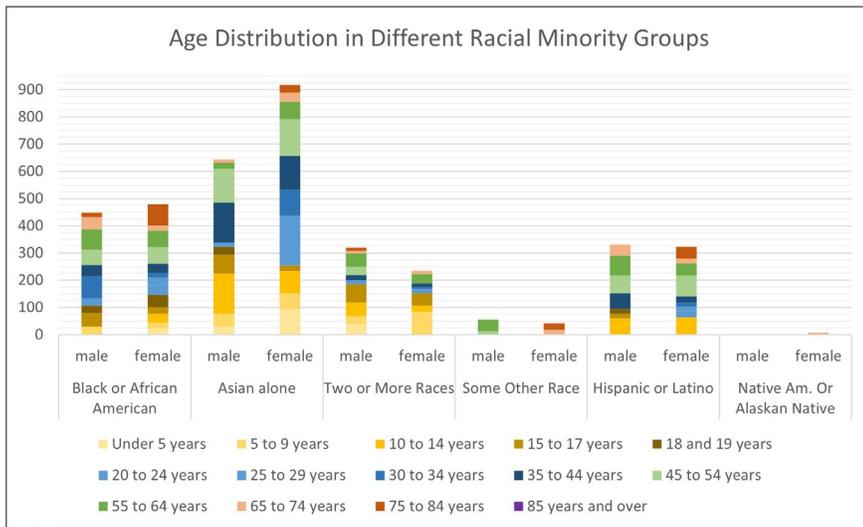


Figure 5.6: Age Distribution in Different Racial Minority Groups. Note that those self-report as Hispanic or Latino may be of any race.

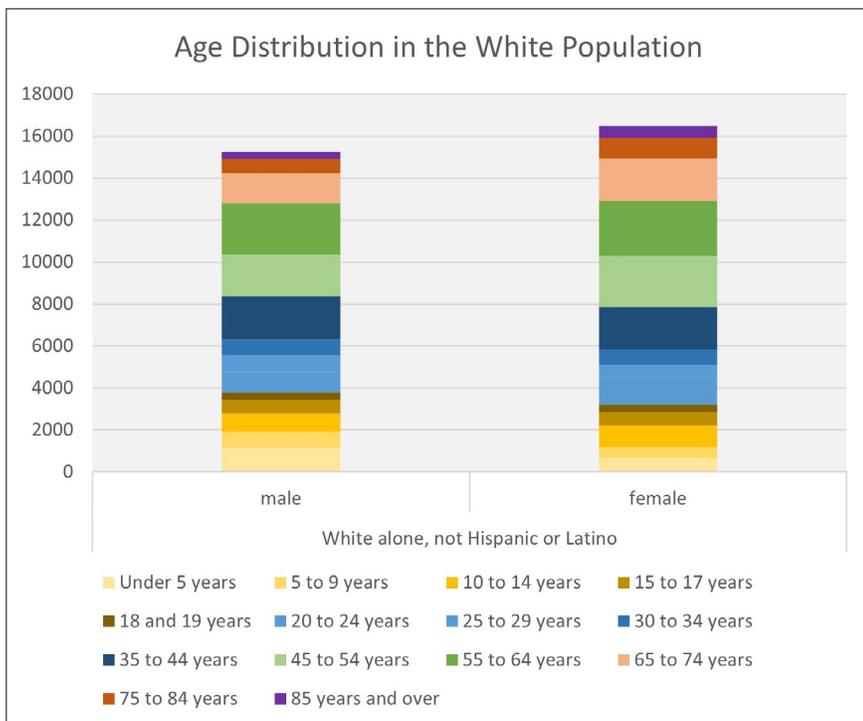


Figure 5.7: Age Distribution in the White Population who do not self-identify as Hispanic or Latino

by 3%, and White rental occupied households increased by 3%. Black owner-occupied households increased by .4%, while renter-occupied households remained the same. Both owner and renter-occupied households decreased among Asian residents, and both increased slightly for Hispanic/Latino residents.

**Income**

Bethlehem’s median household income is higher than the metropolitan region. Bethlehem’s median household income is \$96,384, which is significantly higher than that of the Albany metropolitan area (\$65,743). As previously stated, White residents comprise 90% of Bethlehem’s total population. Income levels have some similarities across race. Of their respective population totals, Hispanic/Latino residents, persons of two or more races and Whites have the same percentage earning between more than \$100K per year (all about 48.5%) and the same percent (approx. 51%) earning \$25K-99K. 32% of Black residents earn \$100K-200K, and 68% earn between \$25K-99K. Among Asian residents, 68% earn \$100K-200K while 30% earn between \$25K-99K. The group of residents making less than \$25K per year are comprised of 79% of people of two or more races, 33% of Hispanic/Latino residents, 29% of Black residents, while only 11% of Asians and 8% of Whites earn in this income bracket.

Bethlehem is a highly educated community. Of Bethlehem residents, about 33% have a Graduate or Professional degree and about 26% have a bachelor’s degree, which is significantly higher than

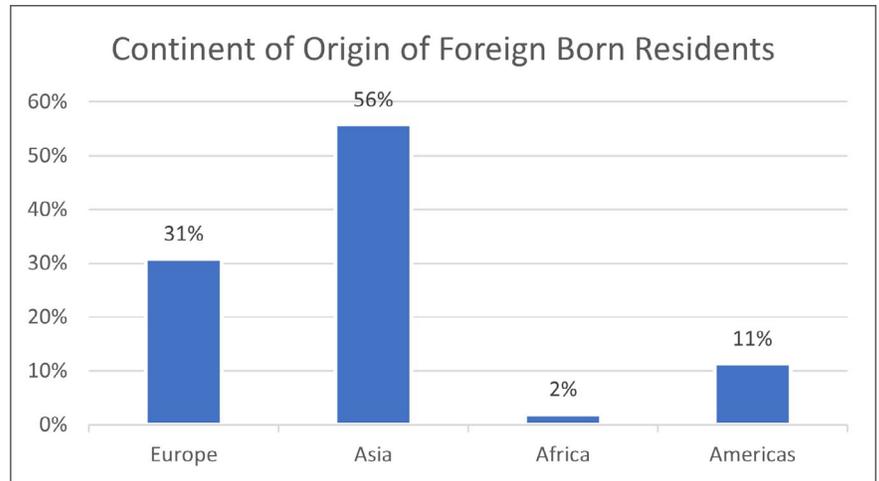


Figure 5.8: Continent of Origin for Foreign-Born Residents

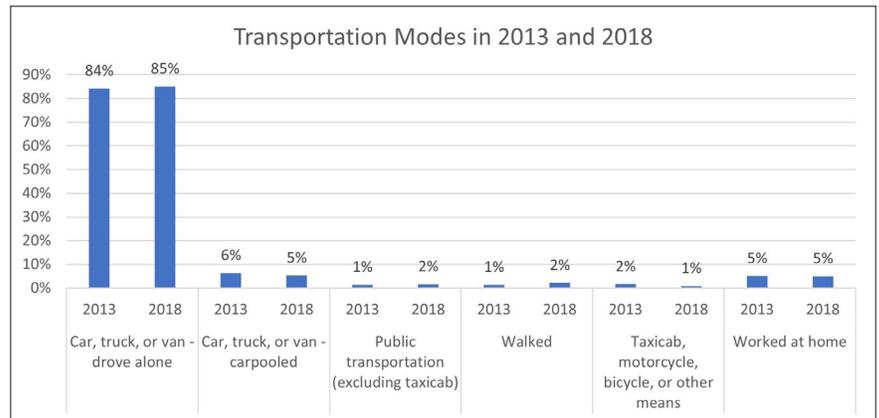


Figure 5.9: Transportation Modes, 2013 vs. 2018

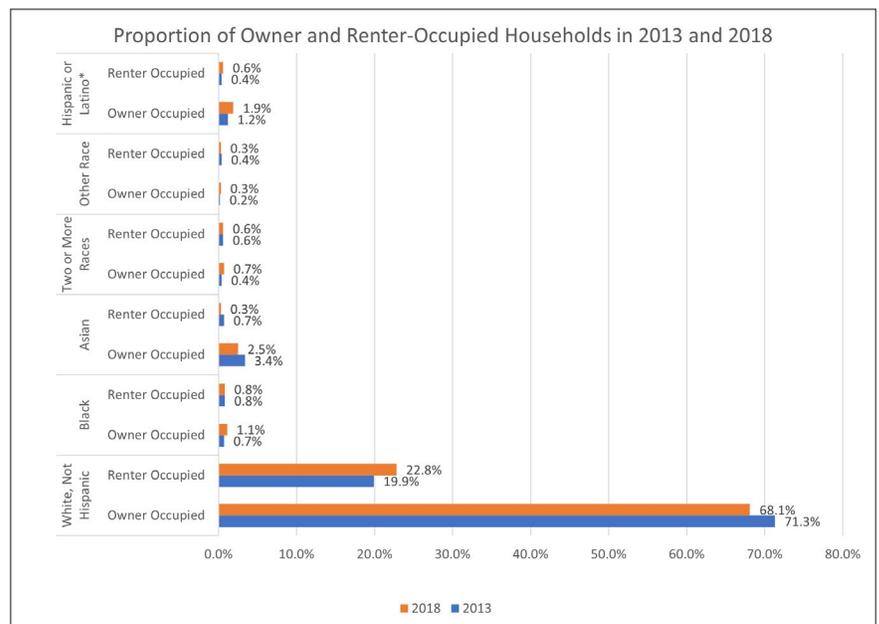


Figure 5.10: Proportion of Owner and Renter Occupied Households, 2013 vs 2018. Note that those self-report as Hispanic or Latino may be of any race.

the national averages at 12% and 19% respectively. Overall, only 3% of Bethlehem residents did not complete high school, whereas the national average is 13%.

**Disability**

In 2018, just over 8% of the (civilian, noninstitutionalized) population of Bethlehem had a least one disability.

**Findings and Opportunities**

- Population growth in the Town has historically been faster than the state and Albany County.
- By 2030 an additional 1,176 residents are projected to reside in the Town.

- Between 2013 and 2018 the town has seen shifts in family and household makeup.
- The lowest percentage (11%) of town residents are those between the ages of 20-29, those who are post higher education, certificate programs and early in their careers. Almost 48% of the total population

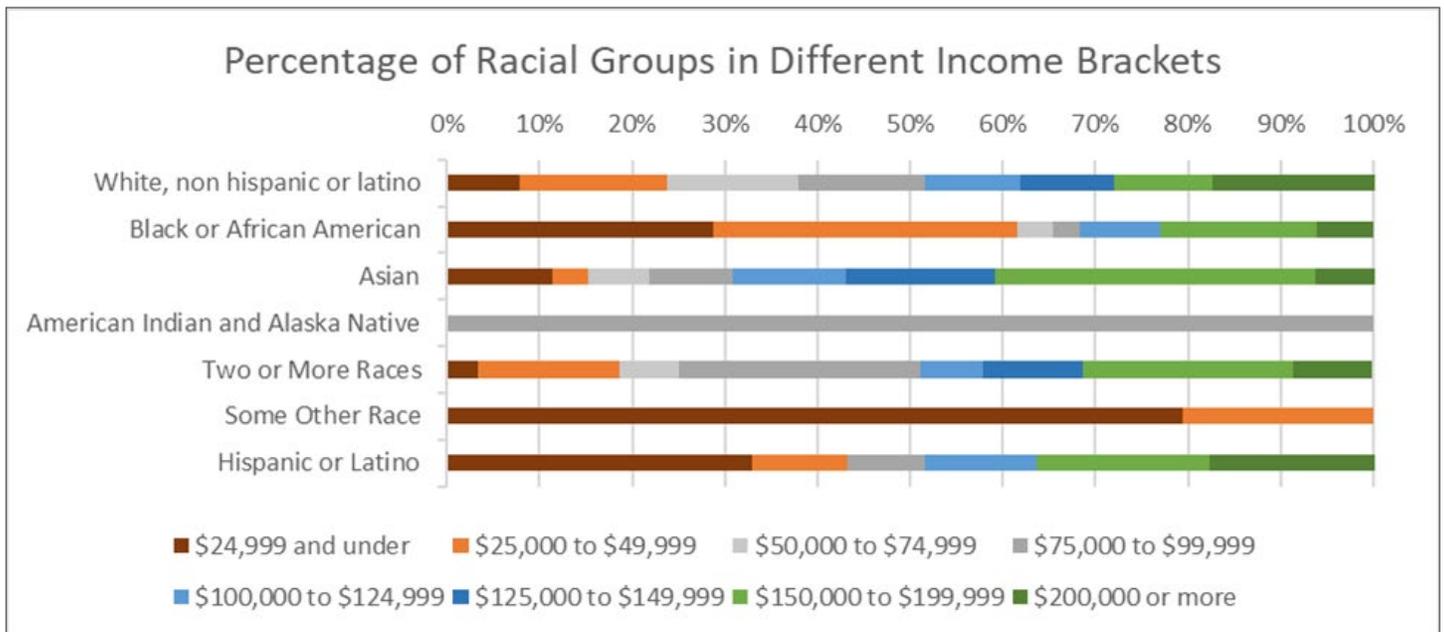


Figure 5.11: Percentage of Racial Groups in Different Income Brackets. Note that those self-report as Hispanic or Latino may be of any race.

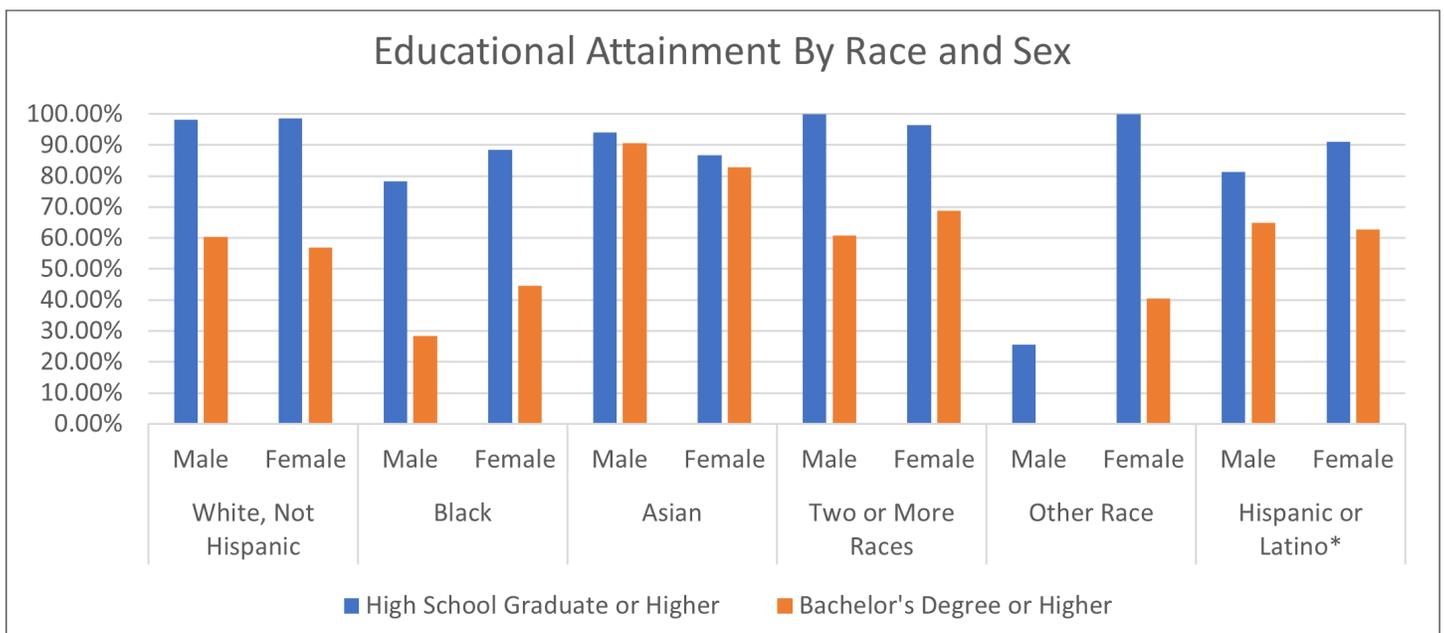


Figure 5.12: Educational Attainment by Race and Sex. \*Note that those who identify as Hispanic or Latino may be of any race.

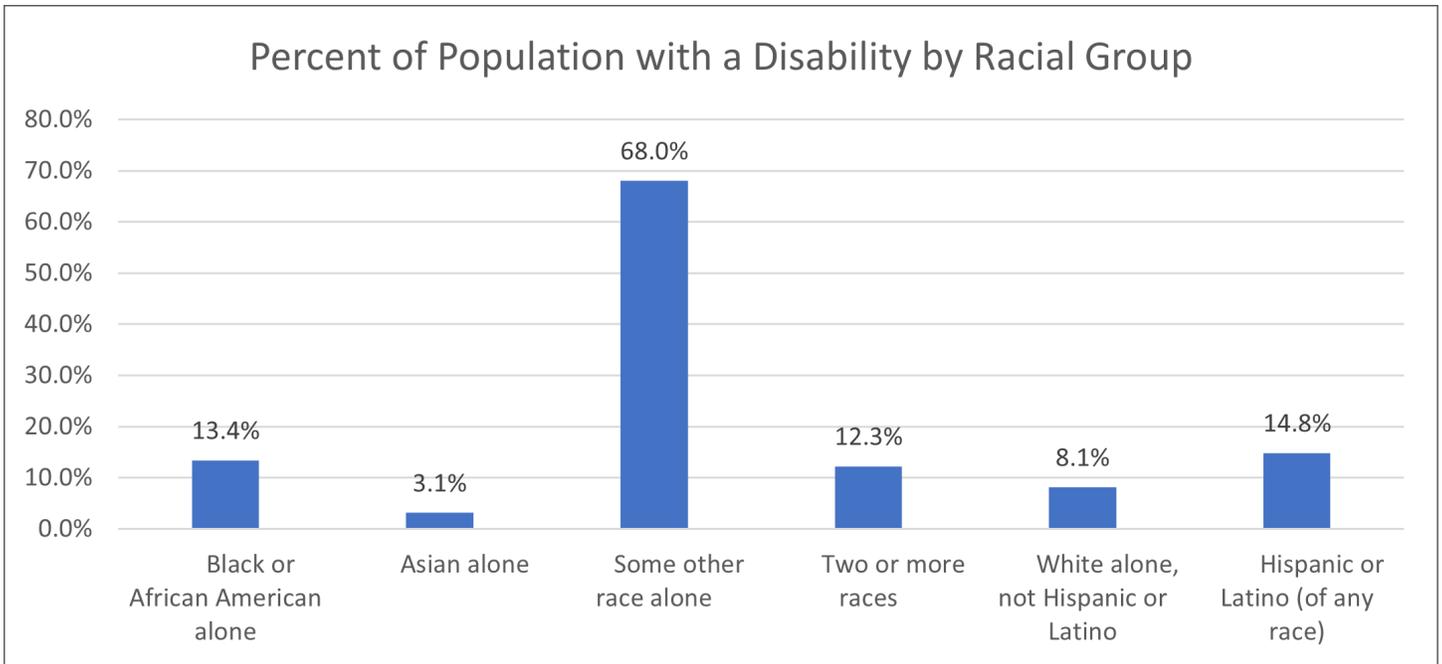


Figure 5.13: Percent of Population with a Disability by Racial Group. Note that those who identify as Hispanic or Latino may be of any race.

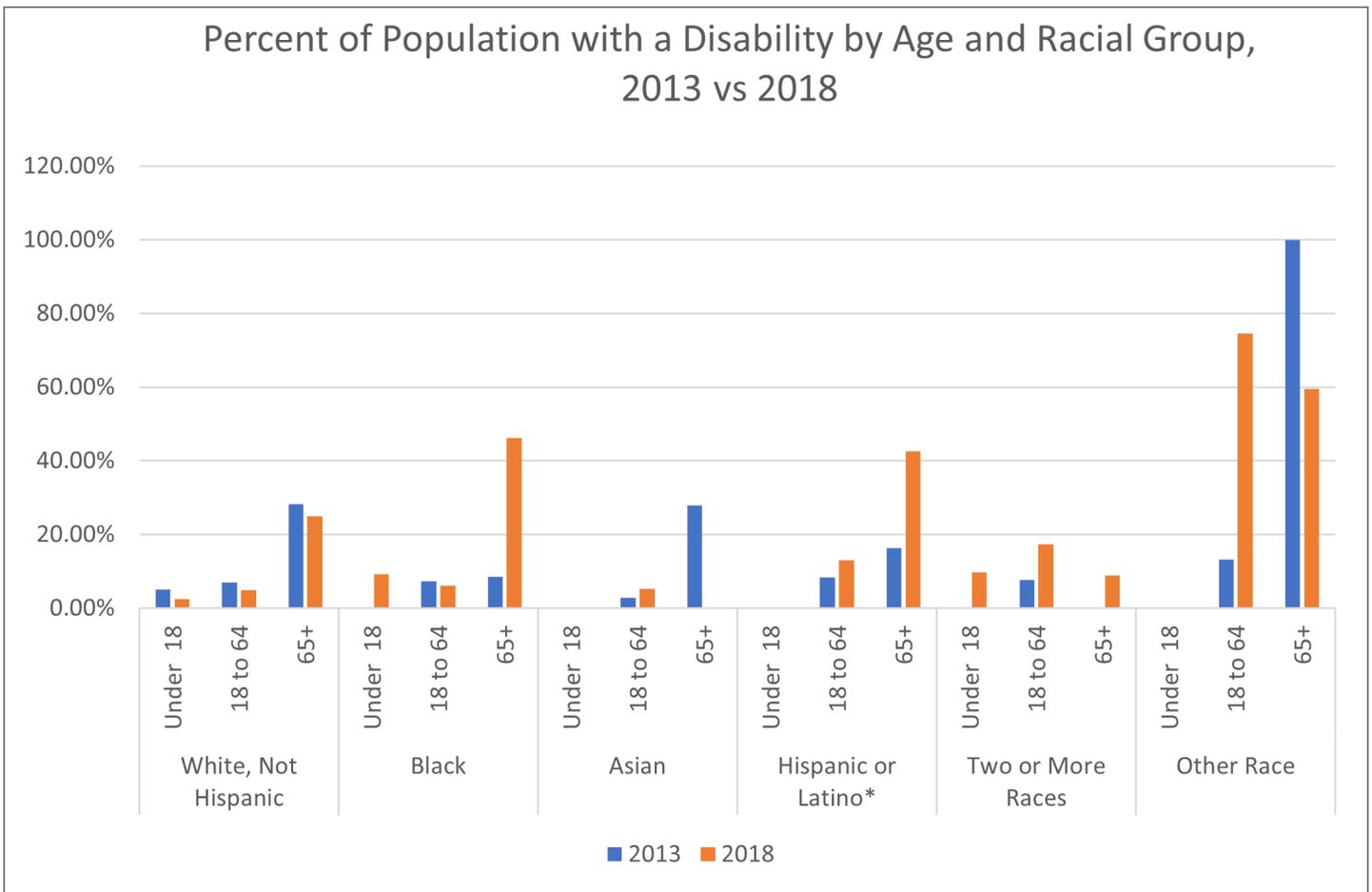


Figure 5.14: Percent of Population with a Disability by Age and Racial Group, 2013 vs 2018. \* Note that those who identify as Hispanic or Latino may be of any race.

are residents between the ages of 30 and 64. This large group includes those whose careers are stabilizing to those approaching retirement.

- Bethlehem lacks the racial diversity found at the regional, State, and National level.
- Bethlehem is a highly educated community.
- Bethlehem's median household income is \$96,384, which is significantly higher than that of the Albany metropolitan area (\$65,743).
- The group of residents making less than \$25K per year are comprised of 79% of people of two or more races, 33% of Hispanic/Latino residents, 29% of Black residents, while only 11% of Asians and 8% of Whites earn in this income bracket.

## Economic Development

Bethlehem has long benefited from its close proximity to Downtown Albany. Health care, social assistance, retail, and educational services are some of the town's prominent industry sectors, but the town has a variety of small businesses and restaurants. It is also home to larger manufacturing businesses like SABIC and Owens Corning. Bethlehem's economic development programs continually strive to support local businesses.

### Regional Economic Development Context

#### The Geographic Boundaries of the Capital Region

As a town within Albany County, Bethlehem's local economic development opportunities are inextricably linked with the industrial composition of the surrounding region. Anchored by the City of Albany, the Capital Region's economic engines are fueled by the intersection of the I-87 and I-90 highway corridors as well as the confluence of the Mohawk and Hudson Rivers. Exceptional connectivity to New York City as well as other markets throughout the northeast have expanded the economic influence of the Capital Region to areas far beyond the boundaries of New York State. However, there is not one singular geographic definition of the Capital Region, making it challenging to accurately represent the spatial extent of its production networks.

The most expansive definition of the Capital Region, used by the Albany Times Union, includes 11

counties; however, other planning and economic development entities have defined the region by narrower boundaries. Given the level of fit between the five-county MSA and the four-county boundary used by the CDRPC, the analysis presented within this section draws upon data at the MSA level.

Bethlehem's location in the Capital Region is advantageous due to its proximity to the central business district in Albany and to its location adjacent to I-87 and I-90 (NYS Thruway). It also enjoys access to the Hudson River (Albany Port)

and railroad lines connected to regional CSX hubs at Selkirk Yards. Bethlehem is not centrally located in the region; however, and this may be a disadvantage because population and job centers as well as economic markets are situated further north and west of the City of Albany.

### Capital Region's Industrial Composition

#### Total Jobs in the Capital Region

Between 2007 and 2018, the total number of jobs in the Capital Region increased by 6% from 421,861 jobs to 447,103 jobs.

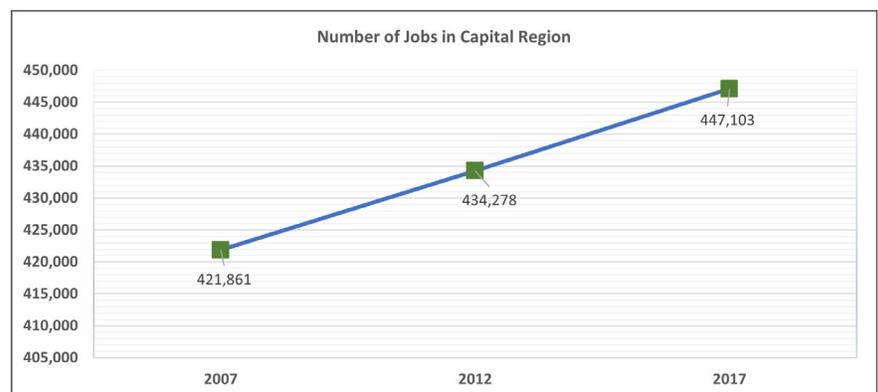


Figure 6.1 Number of Jobs in Capitol Region, Source: US Census Bureau Longitudinal Employer-Household Dynamics Data

### Sectoral Trends in the Capital Region

The Capital Region is a key part of the “Tech Valley” the corridor of technology-focused companies that extends from the greater Albany area to the lower Hudson Valley. Within the Capital Region are several research-oriented institutions such as the Colleges of Nanoscale Science & Engineering at SUNY Polytechnic Institute, Rensselaer Polytechnic Institute,

General Electric Global Research, Albany Medical Center, and the Pharmaceutical Research Institute. These institutions, alongside proactive technology-focused economic development strategies, have helped attract a highly educated workforce to the Capital Region and grow the nanotechnology and biotechnology industries within the City of Albany.

However, sectoral analysis for the Capital Region also reveals the degree to which other industries besides technology continue to dominate the region’s employment landscape. Just over 40% of the total jobs in the Capital Region are supplied from the healthcare, public administration, and educational sectors combined. Over the last ten years, technology jobs have indeed been growing as demonstrated in part by the 11.8% increase

#### Sectoral Distribution of Jobs in the Capital Region, 2007 - 2017

Industrial Sector	2007		2012		2017		Shift from 2007 to 2017
Health Care and Social Assistance	66,343	15.7%	67,445	15.5%	70,283	15.7%	5.9%
Public Administration	48,609	11.5%	62,764	14.5%	58,566	13.1%	20.5%
Educational Services	54,359	12.9%	50,934	11.7%	51,151	11.4%	-5.9%
Retail Trade	46,939	11.1%	45,893	10.6%	44,706	10.0%	-4.8%
Accommodation and Food Services	26,235	6.2%	29,598	6.8%	33,694	7.5%	28.4%
Professional, Scientific, and Technical Services	27,485	6.5%	30,257	7.0%	30,715	6.9%	11.8%
Manufacturing	24,023	5.7%	23,665	5.4%	27,077	6.1%	12.7%
Finance and Insurance	21,221	5.0%	20,851	4.8%	20,703	4.6%	-2.4%
Administration & Support, Waste Management and Remediation	17,539	4.2%	15,056	3.5%	18,409	4.1%	5.0%
Construction	16,127	3.8%	15,938	3.7%	18,328	4.1%	13.6%
Other Services (excluding Public Administration)	15,846	3.8%	15,648	3.6%	16,404	3.7%	3.5%
Transportation and Warehousing	12,996	3.1%	12,873	3.0%	14,750	3.3%	13.5%
Wholesale Trade	14,976	3.5%	14,227	3.3%	13,779	3.1%	-8.0%
Management of Companies and Enterprises	7,115	1.7%	6,773	1.6%	6,956	1.6%	-2.2%
Information	9,035	2.1%	8,772	2.0%	6,730	1.5%	-25.5%
Real Estate and Rental and Leasing	5,396	1.3%	4,927	1.1%	6,028	1.3%	11.7%
Arts, Entertainment, and Recreation	4,952	1.2%	5,763	1.3%	5,401	1.2%	9.1%
Utilities	1,428	0.3%	1,507	0.3%	1,591	0.4%	11.4%
Agriculture, Forestry, Fishing and Hunting	765	0.2%	873	0.2%	1,089	0.2%	42.4%
Mining, Quarrying, and Oil and Gas Extraction	472	0.1%	514	0.1%	743	0.2%	57.4%

Table 6.1 Sectorial Distribution of Jobs in Capitol Region, Source: US Census Bureau Longitudinal Employer–Household Dynamics Data

in Professional, Scientific, and Technical Services jobs from 2007 to 2017. Nonetheless, jobs in public administration during this same period rose by 20.5%, reaching more than 58K jobs in 2017. The enduring vitality and growth of the public administration sector speaks to the location of New York State's capital within the City of Albany.

### Major Employers in the Capital Region

The largest employer in the Capital Region is the State of New York. More than 42,000 employees are employed by various units of state government located with the City of Albany. Presented below are the next five largest employers in the region.

### Unemployment in the Capital Region

The average unemployment rate in the Capital Region for 2019 was 3.7%, a rate that was even lower than unemployment rates in the years before the Great Recession.

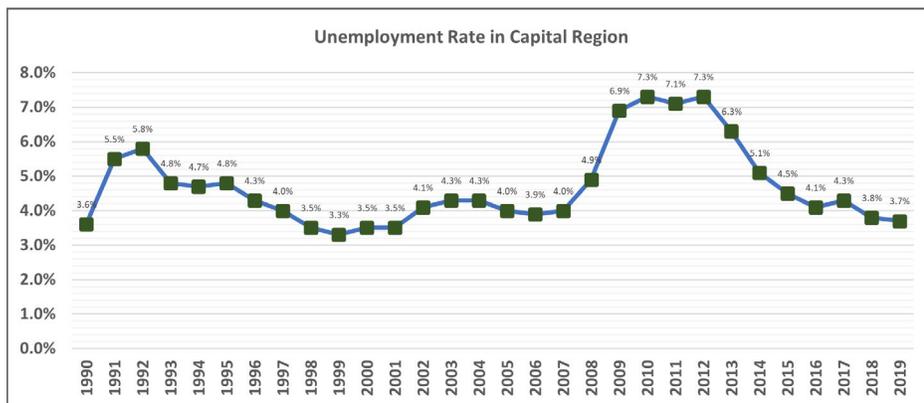


Figure 6.2: Unemployment Rate in Capitol Region, Source: New York State Department of Labor

### Largest Private Sector Employers in the Capital Region, 2019

Company	Location	Employees in the Region	Business Description
Albany Medical Center	City of Albany	14,175	Region's largest locally governed health system
St. Peters Health Partners	City of Albany	12,004	Nonprofit integrated health care network
Golub Corporation	Schenectady	8,075	Parent company for Price Chopper and Market 32 grocery stores
Hannaford Supermarkets	City of Albany	5,000	Supermarket chain that operates stores in New York and New England
General Electric Resource and Development	Multiple Locations	4,000	Headquarters for companywide R&D facility; gas, steam and wind turbine design and production

Table 6.2: Largest Private Sector Employees in the Capitol Region, 2019, Source: Albany Business Review

## Local Economic Development and Market Trends

### Bethlehem’s Industrial Composition

#### Total Jobs in Bethlehem

Whereas the Capital Region has experienced job growth over the last decade, the total number of jobs within Bethlehem fell by 3% between 2007 and 2017.

#### Sectoral Trends in Bethlehem

Close to half of all jobs located within the Town of Bethlehem are provided through the healthcare, retail, or educational industries. Over the last decade, the number of healthcare jobs has increased by 42.5% while public administration jobs plummeted by 54.5%. Other shrinking industries include construction, information, mining, and management.

#### Agriculture in Bethlehem

Agriculture is a way of life for many town residents and as a land use contributes significantly to the historic origins, character of the community, and scenic interest. Farmland, fields and forests provide immeasurable environmental and habitat benefits that mitigate

the impacts of climate changes and provide valuable carbon sequestration.

It is less clear how best to define Bethlehem’s agriculture and farming significance in the local economy. Through the process of developing this plan landowners and agriculture business agencies (see Agriculture Business Forum dated 3/25/2021) described the challenges of making a living in agriculture and farming. The quality of soils, access to water (for irrigation), markets for sale of products, government regulations and taxes, as well as market pricing all influence the viability of agriculture.

The farm economy is constantly in transition, with farmers modifying practices to respond to regional and national trends in the economy and market demands. As an example, the dairy industry is essentially gone in the Town of Bethlehem (only one dairy remains) and only five (5) dairies remain in Albany County . The impacts on dairy farming began back in the 1960’s when the prices of milk fluctuated dramatically at a time when most dairies sold their product to cooperatives. Also, the

method of collecting milk from small farms changed (~1980’s) from traditional cans to collection in large tractor trailer length tankers, and required farmers to store milk in expensive on-site tanks. Many of the smaller scale dairy farmers were located in remote places, hard to get to and didn’t produce enough milk product to warrant pick up. As dairy declined, farmers took to raising livestock (beef cattle, sheep, hogs, etc.). Raising beef cattle requires the farmers to develop their own markets to sell products. Those raising smaller livestock, like sheep, found that the nearest USDA processing facility is 90-100 miles south of Albany County. Wool, however, is still viable and some farmers are working with Capital Region mills to directly create, market and sell “value added” wool products.

With the decline of dairy over the past five decades and the limited volume of vegetables grown in the town, there is little to no demand for food processing facilities.

A great deal of agricultural land in Bethlehem is leased to farmers from outside of town, primarily to growing hay and animal feed crops (corn). The rents received

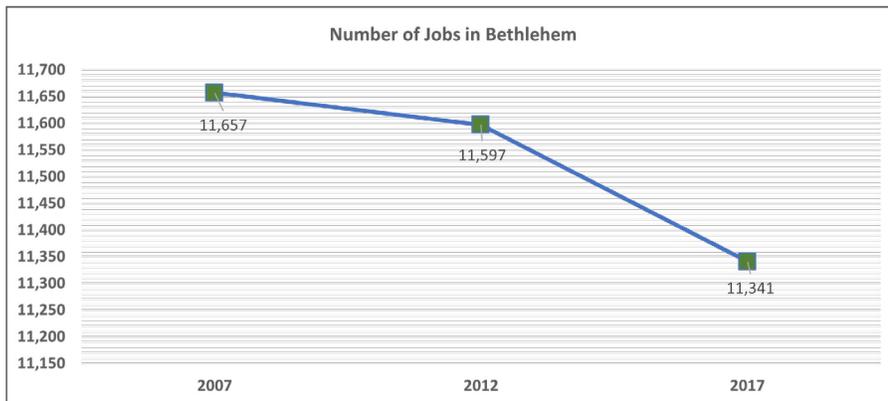


Figure 6.3: Number of Jobs in Bethlehem, Source: US Census Bureau Longitudinal Employer–Household Dynamics Data

are generally not an income to do much more than cover taxes and basic expenses. For many farmers and families with large land holding, a supplemental income is required, making these farming activities a part-time lifestyle choice.

Over the past few years state (Department of Agriculture & Markets) and regional (Albany

County Cornell Cooperative Extension) have seen a modest resurgence in agriculture in Bethlehem and Albany County based on the desire from residents to buy local products, the farm to table movement, the success of farmer's markets and access to strong markets (Capital Region, Boston, NYC). A new generation of farmers are interested in growing

vegetables and raising livestock on smaller plots of land, typically ten (10) acres or less. Many however, are finding the price of land a barrier to entering the agriculture business.

Sectoral Distribution of Jobs in Bethlehem							
Industrial Sector	2007		2012		2017		Shift from 2007 to 2017
Health Care and Social Assistance	1,343	11.5%	1,982	17.1%	1,913	16.9%	42.4%
Retail Trade	1,803	15.5%	1,770	15.3%	1,809	16.0%	0.3%
Educational Services	1,508	12.9%	1,543	13.3%	1,466	12.9%	-2.8%
Accommodation and Food Services	638	5.5%	787	6.8%	861	7.6%	35.0%
Manufacturing	1,142	9.8%	894	7.7%	860	7.6%	-24.7%
Finance and Insurance	868	7.4%	814	7.0%	788	6.9%	-9.2%
Other Services (excluding Public Administration)	575	4.9%	715	6.2%	738	6.5%	28.3%
Transportation and Warehousing	478	4.1%	470	4.1%	544	4.8%	13.8%
Construction	557	4.8%	497	4.3%	489	4.3%	-12.2%
Public Administration	942	8.1%	926	8.0%	429	3.8%	-54.5%
Administration & Support, Waste Management and Remediation	179	1.5%	207	1.8%	402	3.5%	124.6%
Professional, Scientific, and Technical Services	384	3.3%	386	3.3%	357	3.1%	-7.0%
Wholesale Trade	214	1.8%	209	1.8%	196	1.7%	-8.4%
Real Estate and Rental and Leasing	126	1.1%	121	1.0%	161	1.4%	27.8%
Arts, Entertainment, and Recreation	120	1.0%	77	0.7%	123	1.1%	2.5%
Information	124	1.1%	127	1.1%	93	0.8%	-25.0%
Utilities	90	0.8%	21	0.2%	83	0.7%	-7.8%
Mining, Quarrying, and Oil and Gas Extraction	26	0.2%	30	0.3%	15	0.1%	-42.3%
Management of Companies and Enterprises	540	4.6%	21	0.2%	10	0.1%	-98.1%
Agriculture, Forestry, Fishing and Hunting	0	0.0%	0	0.0%	4	0.0%	-

Table 6.3: Sectorial Distribution of Jobs in Bethlehem, Source: US Census Bureau Longitudinal Employer–Household Dynamics Data

## Workforce Trends

### Description of the Bethlehem Workforce

The total number of jobs held by Bethlehem residents in 2017 was 17,020. Just over 40% the jobs held by Bethlehem residents generate a monthly income of less than \$3,333/month. The racial composition of the town's workforce is rather homogenous with 91% of Bethlehem workers identifying as White.

### Industries Employing Bethlehem Residents

About 47% of Bethlehem residents are employed in the public administration, healthcare, or educational sectors. About 8.1% of Bethlehem residents work in retail jobs and another 7.7% work in the professional, scientific, and technical services sector.

### Bethlehem's Labor Flows

As diagramed below, the majority of employed Bethlehem residents do not work within the town. Approximately, 14,722 residents commute each day outside of the Town while 9,043 non-Bethlehem residents come into the Town for work. Only 2,298 residents both live and work within the town. These statistics account only for the divergence between places of residence and employment. The data does not account for the growing number of residents who work at home for companies located outside the Town.

### Bethlehem Workforce by Sector in 2017

	<i>Number</i>	<i>Percentage</i>
Public Administration	2,852	16.8%
Health Care and Social Assistance	2,849	16.7%
Educational Services	2,243	13.2%
Retail Trade	1,386	8.1%
Professional, Scientific, and Technical Services	1,317	7.7%
Accommodation and Food Services	989	5.8%
Finance and Insurance	874	5.1%
Manufacturing	717	4.2%
Other Services (excluding Public Administration)	658	3.9%
Administration & Support, Waste Management and Remediation	602	3.5%
Transportation and Warehousing	515	3.0%
Wholesale Trade	471	2.8%
Construction	460	2.7%
Information	333	2.0%
Management of Companies and Enterprises	277	1.6%
Real Estate and Rental and Leasing	206	1.2%
Arts, Entertainment, and Recreation	181	1.1%
Utilities	61	0.4%
Agriculture, Forestry, Fishing and Hunting	15	0.1%
Mining, Quarrying, and Oil and Gas Extraction	14	0.1%

Table 6.4: Bethlehem Workforce by Sector in 2017, Source: US Census Bureau Longitudinal Employer–Household Dynamics Data

**Bethlehem Residents’ Place of Employment by County Subdivision**

More than a third of employed Bethlehem residents work within the City of Albany while less than 14% work within Bethlehem itself. A little more than 12% of Bethlehem’s work force is employed within Colonie. Less than 3% of working Bethlehem residents are employed in the Manhattan borough of New York City.

**Unemployment Trends**

The average annual unemployment rate in Albany County fell to 3.6% in 2019, the lowest rate since 2001. Unemployment data specific to Bethlehem is not available. The data below does not reflect the effects of the COVID 19 pandemic on employment status in 2020.

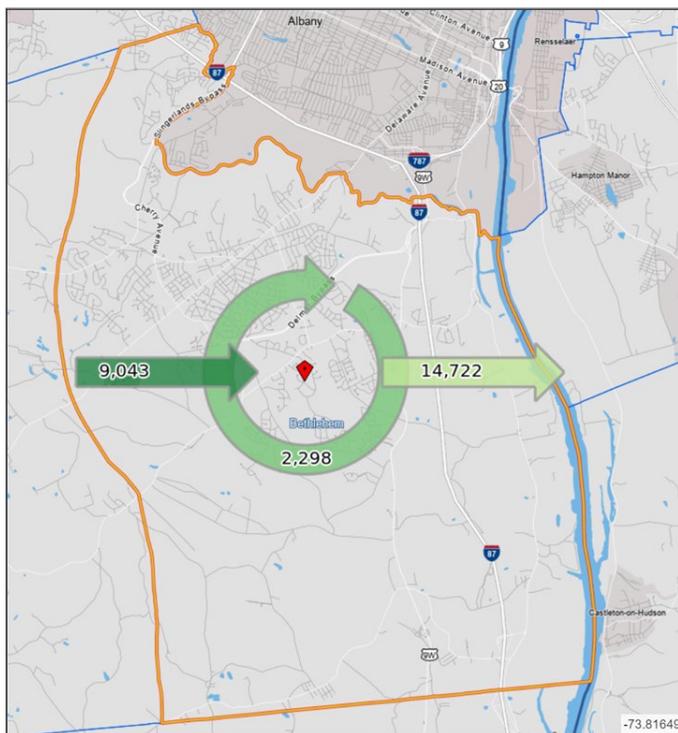


Figure 6.4: Job Flows In and Out of Bethlehem, 2019, Source: US Census Bureau Longitudinal Employer–Household Dynamics Data

**Jobs Counts by County Subdivisions Where Bethlehem Workers are Employed in 2017**

County Subdivision	Number	Percentage
City of Albany	6,147	36.1%
Bethlehem	2,298	13.5%
Colonie	2,056	12.1%
Guilderland	507	3.0%
Schenectady	451	2.6%
Manhattan	436	2.6%
Troy	375	2.2%
East Greenbush	370	2.2%
Clifton Park	191	1.1%
Niskayuna	190	1.1%
All Other Locations	3,999	23.5%

Table 6.5: Jobs Counts by County Subdivision Where Bethlehem Workers are Employed in 2017, Source: US Census Bureau Longitudinal Employer–Household Dynamics Data

### Market Trends

#### Median Home Value

Overall, home values in Bethlehem have not fluctuated widely over the last five years. Based upon the most recently available census data, the median home value in Bethlehem was just around \$270,000 in 2018.

#### Median Rents

Since 2015, median rents in Bethlehem residents have steadily increased from \$1,094 to \$1,185 in 2018.

#### Commercial Rents

Unlike housing data, there is limited trend data available for commercial and retail rents. Anecdotal research of commercial listing sites suggests that asking commercial rents in Bethlehem typically range from \$12 - \$14/sf, considerably lower than commercial rents in downtown Albany where asking commercial rents can be as high as \$24/sf.

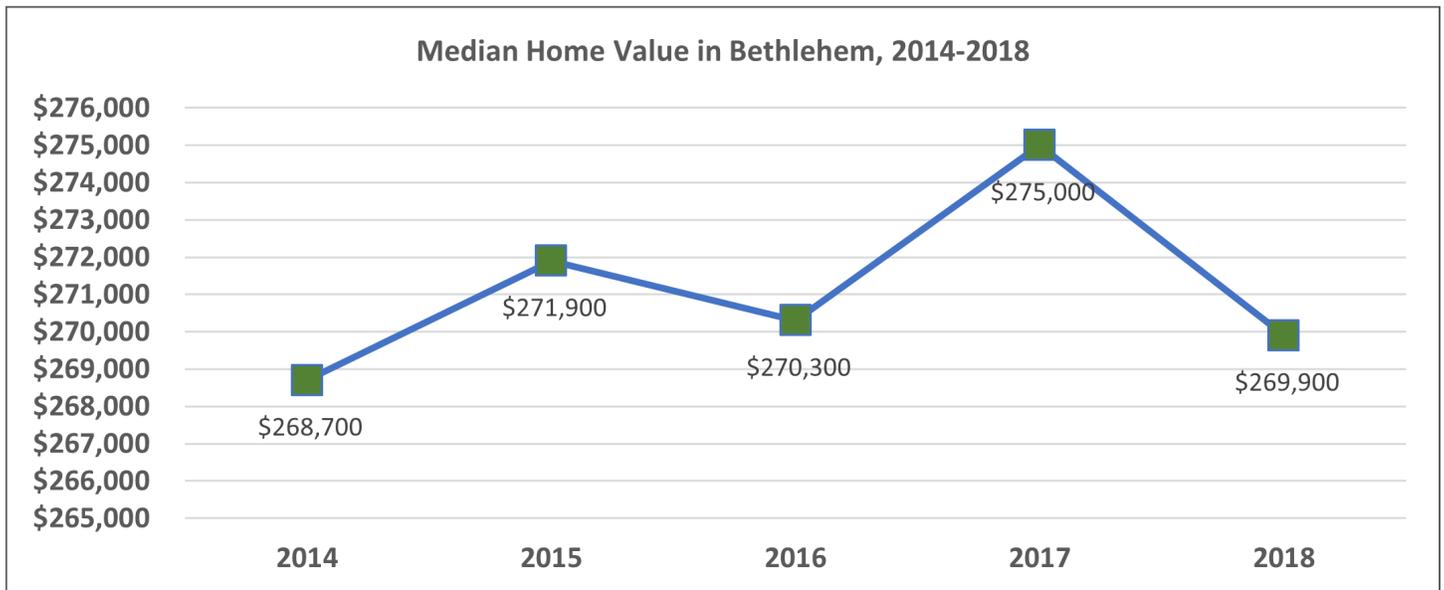


Figure 6.6: Median Home Value in Bethlehem, 2014-2018, Source: US Census American Community Survey, 2014-2018

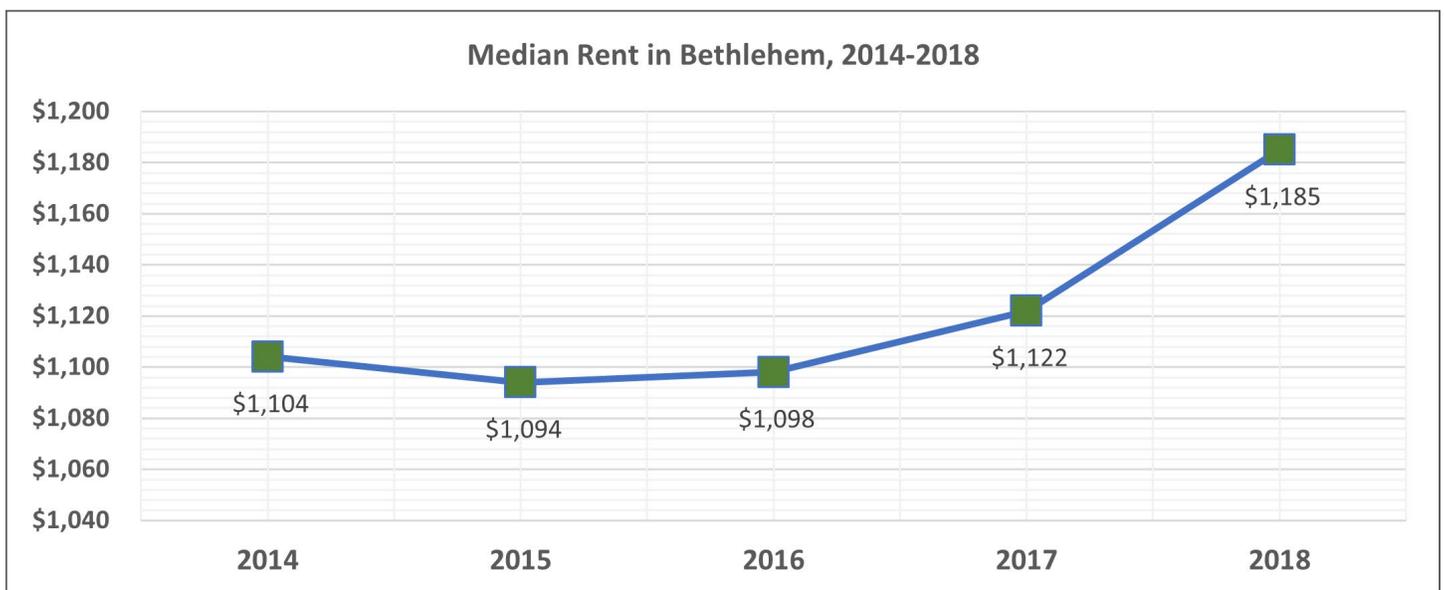


Figure 6.7: Median Rent in Bethlehem, 2014-2018, Source: US Census American Community Survey, 2014-2018

## Development Activity

### Major Economic Development Initiatives

As noted above, the vast majority of Bethlehem’s workforce is employed outside of the town thereby contributing to the perception of the town as a bedroom community. However, there have been a couple movements toward large-scale economic development within the Town itself.

The 440-acre Vista Technology Campus provides a mix of office and retail space. Originally envisioned as a hub for high paying jobs in technology, key tenants for the site have included a mix of retail, healthcare and personal service establishments including ShopRite Supermarket, SEFCU Federal Credit Union, Community Care Physicians, Cornea Consultants, and Berkshire Bank.

At the end of 2018, the Port of Albany purchased just under 82 acres of land within the Glenmont section of Bethlehem for the purposes of developing the area for warehousing uses as well as potential wind turbines. The redevelopment plan for this site has continued in the form of recent partnership between the Port of Albany and Equinor, a Norwegian off-shore wind company. The completion of a wind tower manufacturing facility in the next few years on this site could generate as many as 350 jobs.

### Residential Development Trends

#### Building Permits

Between 1991 and 2003, there was a brisk issuance of building permits for residential construction. Starting in 2004, however, the volume of permits issued slowed considerably. In 2018, only 69 residential housing permits were issued by the Town of Bethlehem compared with a peak of 316 permits in 1992.

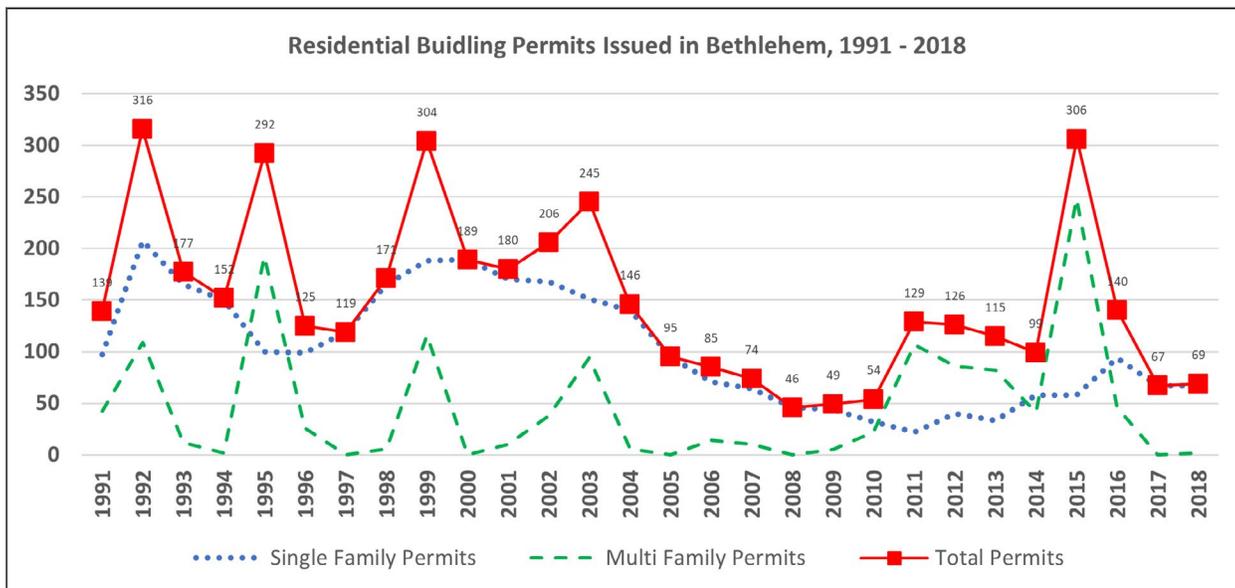


Figure 6.8: Residential Building Permits Issued in Bethlehem, 1991-2018, Source: Capital District Regional Planning Commission (2020). Town of Bethlehem Demographic and Growth Analysis, 1991-2018

**Housing Unit Production**

Tracking closely with the rise and fall of building permits, the actual production of new single-family homes in Bethlehem was much higher in the period between 1992 and 2004 than between 2005 and 2018.

**Development Pipeline**

Nearly 1,500 residential units are in the development pipeline but have not yet been constructed and are at various stages of land use approval. About half of these units are for single family homes while the other half are multifamily homes. The majority of the proposed multifamily units have not received land use approvals.

**Vacant or Underutilized Sites**

During the initial community outreach for the Bethlehem Comprehensive Plan update, participating residents identified several sites within the town that may merit either better utilization in the immediate term or

redevelopment over the long-term. These sites included:

- Picotte building (formerly Blue Cross Blue Shield building)
- Vacant land near Glenmont Walmart
- Jericho Drive-In
- Delaware Plaza
- Vista Tech Park
- Mosall’s Grove property
- West Yard Road industrial properties
- Creble Road industrial properties
- River Road industrial properties
- Security Supply office and warehouse on Maple Avenue (vacant)

Bethlehem and all local businesses faced unprecedented economic consequences. With no blueprint for recovery the town administration and staff responded with policy and procedure modifications to keep local businesses operating.

The town prepared a Covid response plan as mandated by the NYS Governor and provided personal protective equipment (PPE) to small local businesses facing financial constraints. Restaurants shifted to outdoor seating along with ‘pick up’ orders. The town issued permits for tents for outdoor seating that were set up in parking lots. Public and private schools (including churches) set up temporary outdoor classrooms (yurts and tents) which the town granted. These activities would typically require a special use permit or site plan approval from the planning board. Town staff also assisted business owners with interpreting capacity limits for occupancy that were mandated by the state. There were no negative

**Economic Recovery**

**Covid-19 Pandemic**

During the preparation of this comprehensive plan update the nation and world experienced the Covid-19 pandemic. The Town of

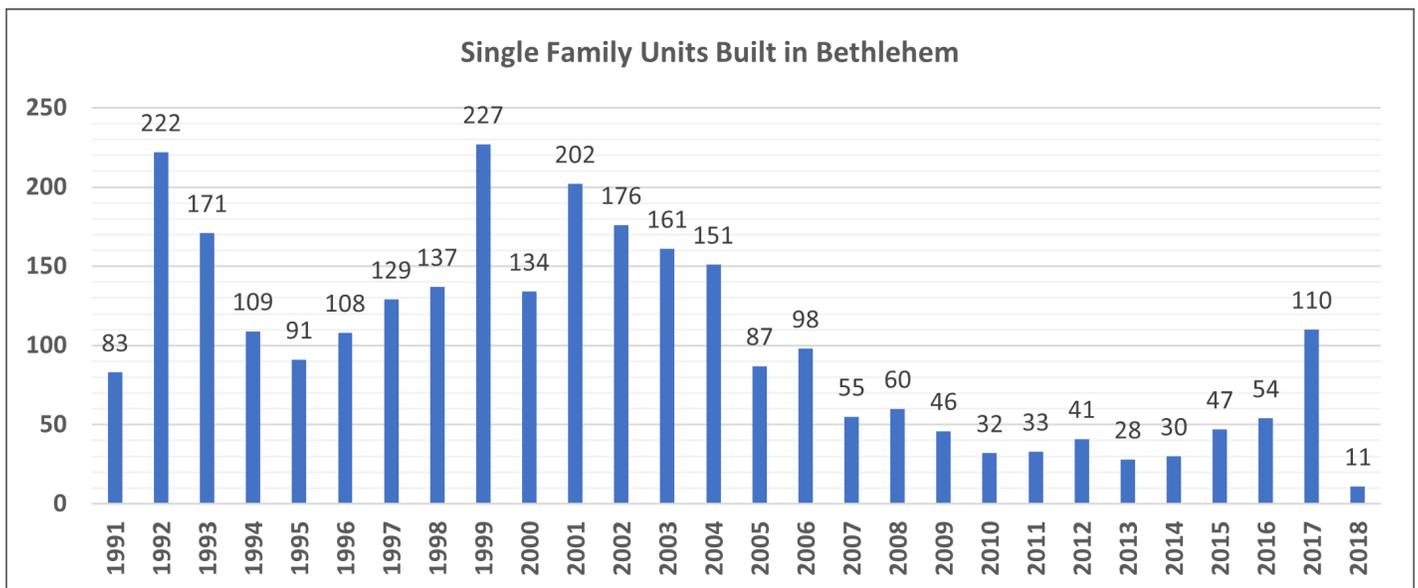


Figure 6.9: Single Family Units Built in Bethlehem, Source: Capital District Regional Planning Commission (2020). Town of Bethlehem Demographic and Growth Analysis, 1991-2018

impacts experienced or complaints received as a result of the temporary policy modifications.

The town adapted quickly to a process of issuing building permits by expediting the application, review, and compliance inspections. The process has been streamlined to on-line (or email), which the town will continue moving forward.

Some of the towns recycling programs were temporarily suspended during the pandemic, specifically the Bethlehem Central School Schools food scrap diversion to the town recycling facility. Other than that, the town saw a large increase in yard waste collected or delivered during the pandemic. Consequently, there was a large increase in composted materials available. This was due to residents working from home and making improvements to their property.

### **Emergency Preparedness**

From an economic resiliency standpoint, the primary emergency issues remain, climatic events and hazardous materials. The town's Comprehensive Emergency Management Plan (CEMP), most recently updated in May 2021, also ranks landslides, earthquakes, terrorism, and social unrest (refer to Appendix 01 of CEMP for list of hazards ranked on probability of impacting Bethlehem). The plan details preparation, mitigation, response, and recovery and is updated annually by the Emergency Management Director in collaboration with Bethlehem Police, the Fire Districts, EMS, and Town Departments. The recovery aspects of the plan address the psychological impacts that

occur with the loss of life, home, or business. Bethlehem has a designated Emergency Management Office (BEMO), which coordinates with all local, county, state and federal agencies to facilitate a flow of information, equipment and supplies, as well as planning. Further, the town emergency management unit works hand-in hand with all Town Fire, EMS and Police entities for emergency planning and Continuation of Operations protocols and procedures (COOP) (found in CEMP Attachment 3 and Annex 12).

The CEMP results from the recognition on the part of town government that a wide-ranging and comprehensive plan is needed to enhance the Town of Bethlehem's ability to manage and survive emergency and/or disaster situations. Town officials working in conjunction with Albany County Emergency Management personnel, in a planning effort recommended by the New York State Emergency Management Office (SEMO) and the Federal Emergency Management Agency (FEMA), prepared the document. Authority to undertake this effort is provided by both Article 2B of State Executive Law and the New York State Defense Emergency Act. The development of this plan included an analysis of potential hazards that could affect the town and an assessment of the capabilities existing in the town to deal with these potential problems. This includes the work of all functional disciplines in emergency situations and events. Further, the planning and emergency preparedness that is in place allows the Town to work collaboratively to ensure fiscal reimbursement during

large scale emergency incidents, such as weather events, declarations of states of emergency and the recent pandemic.

Dealing with disasters is an ongoing and complex undertaking. Through implementation of risk reduction measures before a disaster or emergency occurs, timely and effective response during an actual occurrence, and provision of both short and long term recovery assistance after the occurrence of a disaster, lives can be saved and property damage minimized. This process, called Comprehensive Emergency Management emphasizes the interrelationship of activities, functions, and expertise necessary to deal with emergencies.

Emergency preparedness and response relies on collaboration between many Town Departments. The CEMP identifies the Supervisors' Strategy Board with representatives from Police, Emergency Management, Fire Districts, Emergency Medical Services, and Town Departments. The Bethlehem Police Department manages the 9-1-1 Public Safety Access Point (PSAP) and the computer aided dispatch (CAD) system (updated in 2020). The Town operates an emergency backup communications center, which based on the CAD system and technological advances, is capable of operating as an emergency stand up point to dispatch all town fire, police, EMS, and highway units. This mobile command center is integral in all types of emergency management incidents and operations.

Police and fire representatives are typically first responders to emergency events. During events where trees and/or utility lines are down, landslides or road washout, the Highway Department and Public Works staff must aid police, fire, and EMS in their efforts to provide critical emergency response services.

For significant weather events that impact structures and buildings, the Town Code Enforcement Office is supported by New York State which provides supplemental building inspections through Code Enforcement Disaster Assistance response (CEDAR) program coordinated by the NYS Department of State. The Town of Bethlehem participates in this program, lending support when requested. This program allows for rapid damage assessment so the community understands the full extent of damage and is able to respond accordingly. Building and structures are assessed for safety and potential demolition.

The Town Recycling Coordinator and staff also play a role in the emergency response and recovery efforts during extreme weather events. Extreme weather events can result in large volumes of trees and other debris which needs to be managed. Materials need to be temporarily staged in large open areas across town prior to grinding and composting. The town needs to identify temporary debris management areas and develop a "Recycling Disaster Debris" material management plan.

## Fiscal Conditions and Budgetary Allocations

### Revenues, Expenditures, and Funds

#### Fund Balances in 2019

Table 6.6 shows the revenues and expenses in Fiscal Year 2019 for all four of the Town's operating funds including General, Highway, Water, and Sewer. The data reveals that all four funds finished the year with net surpluses.

#### Revenues and Expenditures

Table 6.7 compares the Town's revenues and expenditures in Fiscal Year 2018 with that of 2019. The data shows that total revenues increased by almost 9.5% while expenditures increased by 9.3% during the period between 2018 and 2019. The expenditures that grew the most during this period were transportation (15.7%), Home and Community Services (13.6%), and Economic Opportunity and Development (12.46%).

	December 31, 2019			
	General	Highway	Water	Sewer
Final Budgeted Operating Revenue	\$ 20,720,902	\$ 7,011,653	\$ 10,260,047	\$ 4,564,235
Final Budgeted Operating Expenses	(22,255,515)	(7,531,070)	(11,022,287)	(5,111,950)
<b>Budgeted Surplus (Shortfall)</b>	<b>\$ (1,534,613)</b>	<b>\$ (519,417)</b>	<b>\$ (762,240)</b>	<b>\$ (547,715)</b>
Actual Revenue	\$ 21,218,177	\$ 7,372,040	\$ 9,770,355	\$ 4,582,298
Operating Expenses	(20,182,501)	(6,732,192)	(8,603,755)	(3,800,119)
Interfund Operating Transfers	447,170	-	(262,557)	(184,613)
Operating Surplus	1,482,846	639,848	904,043	597,566
Capital Fund Transfer	(1,071,209)	-	(666,017)	(314,076)
Net Surplus	411,637	639,848	238,026	283,490
Total Fund Balances, December 31, 2018	7,950,490	4,029,514	3,864,746	3,812,769
<b>Total Fund Balances, December 31, 2019</b>	<b>\$ 8,362,127</b>	<b>\$ 4,669,362</b>	<b>\$ 4,102,772</b>	<b>\$ 4,096,259</b>

Table 6.6: Bethlehem Fund Balances, Source: Town of Bethlehem (2019) Financial Statement

## Town Budget and Tax Policy for 2021

Table 6.7 shows that the Town's total budget for 2021 will reflect only a very modest increase of .8% from the 2020 budget of \$45,027,020 to \$45,378,834. The most significant changes include a major increase (124.8%) in the use of the Fund Balance as a revenue stream and a substantive decrease (33.6%) in expenditures for Equipment and Other Capital. The vast majority of

revenue from real property taxes is expected to come from residential rather than commercial uses.

As part of the adoption of the 2021 budget, the total tax rate increase for Bethlehem residents was kept at +1.47%, the lowest increase since Fiscal Year 2016. This increase means that an average home in Bethlehem, assessed at \$260,000, will experience an average increase of only \$14.96 in the annual tax

bill for 2021. In spite of the Town making only a modest increase in the tax rate and not maximizing the tax levy under the tax cap, it is important to note that effective property taxes in Bethlehem are still comparatively high in the Capital Region. Much of this higher tax burden is attributable to school district taxes. Only 11% of the total tax bill paid by Bethlehem property owners actually flows into the Town's funds.

	2019	2018	\$ Change	% Change
<b>Revenues</b>				
Program revenues				
Charges for services	\$ 12,973,525	\$ 13,095,340	\$ (121,815)	-0.93%
Operating grants and contributions	1,387,070	445,770	941,300	211.16%
Capital grants and contributions	2,654,939	547,867	2,107,072	384.60%
General revenues				
Taxes	27,788,483	26,946,509	841,974	3.12%
Other	2,847,524	2,493,797	353,727	14.18%
<b>Total revenues</b>	<b>47,651,541</b>	<b>43,529,283</b>	<b>4,122,258</b>	<b>9.47%</b>
<b>Expenses</b>				
General government support	6,121,642	5,984,184	137,458	2.30%
Public safety	9,407,358	8,751,442	655,916	7.49%
Health	1,247,241	1,210,899	36,342	3.00%
Transportation	7,378,655	6,379,954	998,701	15.65%
Economic opportunity and development	1,157,093	1,028,941	128,152	12.45%
Culture and recreation	1,829,087	1,673,652	155,435	9.29%
Home and community services	13,658,703	12,024,432	1,634,271	13.59%
Interest on long-term debt	783,106	841,009	(57,903)	-6.88%
<b>Total expenses</b>	<b>41,582,885</b>	<b>37,894,513</b>	<b>3,688,372</b>	<b>9.73%</b>

Table 6.7: Bethlehem Revenues & Expenses, Source: Town of Bethlehem (2019) Financial Statement

<b>Revenues</b>				
Real Property Taxes & PILOTS	\$18,008,718	\$18,456,862	\$451,134	3.0%
Sales and Use Tax	12,331,069	11,873,000	-458,069	-3.7%
Mortgage Taxes	965,000	1,150,000	185,000	19.2%
Interfund Transfers - Revenue	492,000	479,463	-12,537	-2.5%
Metered Water Charges	7,665,477	7,697,000	31,523	0.4%
Sewer Charges	2,994,529	2,899,000	-95,529	-3.2%
Charges for Services	1,878,306	1,891,226	12,920	0.7%
Use of Fund Balance	766,389	1,722,638	956,249	124.8%
Other Revenue	2,928,532	2,209,655	-718,877	-24.5%
<b>Total Revenues and Other Sources</b>	<b>\$45,027,020</b>	<b>\$45,378,834</b>	<b>\$351,814</b>	<b>0.8%</b>
<b>Expenditures</b>				
Wages & OT	\$17,448,356	\$17,647,546	\$199,190	1.1%
Fringe & Payroll Taxes	7,961,531	8,392,123	430,592	5.4%
Retiree Health Insurance	991,011	1,057,562	66,551	6.7%
Equipment & Other Capital	1,709,500	1,135,169	-574,331	-33.6%
Paving	684,000	710,000	26,000	3.8%
Contractual Costs	3,448,934	3,544,814	95,880	2.8%
Interfund Transfers	480,000	467,463	-12,537	-2.6%
Debt Service (Principal and Interest)	3,271,350	3,285,249	13,899	0.4%
Delmar Bethlehem EMS	157,875	161,560	3,685	2.3%
Albany County Paramedic	1,206,356	1,217,885	11,529	1.0%
Other Appropriations	7,668,107	7,759,463	91,356	1.2%

Table 6.8: Bethlehem Budget, Source: Town of Bethlehem (2019) Financial Statement

### Findings and Opportunities

- Bethlehem enjoys advantages of being within the Capital Region, including transportation access to New York City and Boston by road, rail and waterways. However, within the Capital Region itself, Bethlehem is not centrally located and is more inconvenient to drive to from Albany compared to the job markets and economic markets north and west of the city.
- Before the COVID-19 pandemic, the number of jobs in the Capital Region is trending upwards (6% growth between 2007 and 2017), while the number of jobs in Bethlehem decreased by 3% in the same timeframe.
- The three largest sectors in the Capital Region (combined constituting just over 40% of the total jobs) are the healthcare and social assistance, public administration and educational sectors.
- The three largest sectors in the Town of Bethlehem (combined constituting just over 45% of the total jobs) are the healthcare and social assistance, retail trade, and educational sectors.
- While the Capital Region saw an approximately 20% increase in the number of Public Administration jobs between 2007 and 2017, Bethlehem saw a 54% decrease in the number of jobs in that sector.
- The majority of employed Bethlehem residents (86%) do not work within the town. Over a third of employed Bethlehem residents work in the City of Albany.
- Median home values did not fluctuate widely between 2014-2018, while median rents increased over 7% in the same timeframe.
- An inventory of current commercial spaces in the Town is needed.
- Tax base is dependent on residential properties. The town should pursue opportunities to achieve a balanced tax base through additional commercial and industrial properties, which would ease the burden on residents.

## Transportation Network

Comprehensive and partial inventories of the Town of Bethlehem's transportation infrastructure have been completed for past planning documents including the 2005 Comprehensive Plan, 2020 Local Waterfront Revitalization Plan, and numerous planning reports and documents prepared by the Town, NYSDOT, and Capital District Transportation Committee. This review of the town's transportation infrastructure provides an overview and understanding of the transportation systems within the town. This includes a compilation and review of general information on the vehicular, transit, bicycle, sidewalk, and freight networks, as well as a review of the Town's Complete Street policy and planned transportation improvements.

### Vehicular

#### Overview

The town's vehicular network is facilitated by approximately 260 miles of public roadways supporting the hamlets and more rural areas of the town, with connections to the City of Albany, Town of Guilderland, Town of New Scotland, Town of Coeymans, and one connection within the town to Interstate-87. Historically as a town with hamlets and agricultural land, the Town's road infrastructure is comprised of primary routes of curvilinear roads throughout the town, a more defined irregular grid network within Delmar and Elsmere, and more contemporary suburban curvilinear streets and cul-de-sacs in Slingerlands, Delmar, Elsmere and points south to approximately Elm Ave. See Appendix A for additional transportation maps.

### Jurisdiction

According to geographic data from the New York State Department of Transportation (NYSDOT) and as shown in Table 7.1 and in the Roadway Jurisdiction Map within the Map Appendix, the Town of Bethlehem has jurisdiction over approximately 178 miles of public roads, the County of Albany, 16.7 miles, and New York State (including NYSDOT, other NYS agencies, and the NYS Thruway), 64.9 miles. The Town has jurisdiction over the majority of roads within the town at 68.5%, with New York State having jurisdiction over 25.0 %,

and the county of Albany having jurisdiction over 6.5 %. Additional details regarding the functional classification of these roads are described below.

### Functional classification

According to geographic data from the NYSDOT and as shown below in Table 7.2 and in the Roadway Functional Classification Map within the Map Appendix, the majority of roads within the town are classified as local roads (164.1 miles, which is 63 % of all roads within the town) with the town owning almost all of those roads. In addition, the Town

Jurisdiction	Roadway Miles	Percent of Town
Town of Bethlehem	177.6	68.5 %
County of Albany	16.7	6.5 %
New York State	64.9	25.0 %
Total	259.2	100.0 %

Table 7.1 Source: New York State Department of Transportation

owns roadways classified as “Minor Arterial” and “Major Collector.” Roads owned by the town classified as “Minor Arterial” include New Scotland Road between the roundabout with NY 85 to the south and the town line to the north. Roads owned by the town classified as “Major Collector” include Blessing Road, Krumkill Road, Van Dyke Road, Kenwood Avenue between Delaware Avenue and Delmar Bypass, Delmar Bypass Extension between Van Dyke Road and Elm Avenue, Elm Avenue between NY 32 and Creble Road, Elm Avenue East, and Wemple Road. According to the NYSDOT, all roads with a classification other than “Urban Local,” “Rural Minor Collector” and “Rural Local” are federal-aid eligible. These federal-aid eligible roadways include those owned by the town with classifications of “Minor Arterial” and “Major Collector.”

New York State has jurisdiction over Interstate-87 (classification “Principal Arterial – Interstate”) and the Delmar Bypass / NY 32 (classification “Principal Arterial – Expressway”). New York State has jurisdiction over most of the “Minor Arterial” and “Major Collector” roads within the

town. In addition, most roads with a classification of “Principal Arterial – Other” are owned by New York State and include US 9W and the Slingerland Bypass / NY 85.

### Traffic Volumes and Volume-to-Capacity Ratio

Traffic volume data is available from the NYSDOT and is typically quantified as Annual Average Daily Traffic (AADT). This data is commonly used and is the estimated average annual traffic volume on a route segment at a particular count station location. Actual daily volumes encountered on a roadway may vary from the AADT value due to seasonal demand. AADT data from the NYSDOT is shown in the Annual Average Daily Traffic (AADT) Volume (All Traffic) Map within the Map Appendix. As shown in the map, traffic volume data is collected for most roads that do not have a classification of “Local.” In total, 107.2 miles (41.4%) of the roadways within the town have traffic volume data.

Overall, over 70% of the roads within the town have an AADT below 10,000. The highest volume roadway within the town is Interstate-87 with

approximately 50,000 vehicles per day. The next highest AADT volume roads within the town include:

- US 9W between Frontage Road and the town line (approximately 30,000)
- Slingerlands Bypass / NY 85 between Blessing Road and Maher Road (approximately 23,700)
- US 9W between Frontage Road and Feura Bush Road (approximately 19,700)
- Cherry Avenue / NY 140 between New Scotland Road and Kenwood Avenue (approximately 19,300)
- Slingerlands Bypass / NY 85 between Blessing Road and the town line (approximately 18,300)

In addition, traffic volume data is available from the NYSDOT for truck traffic. “Trucks” or “Heavy Vehicles” are all vehicles including buses larger than “2 axle 4 tire pickups, vans, motorhomes.” This classification also includes 2-axle trucks with 6 tires. Truck AADT data from NYSDOT is shown in the Annual Average Daily Traffic (AADT) Volume (Truck Traffic Only) Map within the Map

Jurisdiction	Principal Arterial – Interstate (miles)	Principal Arterial – Expressway (miles)	Principal Arterial – Other (miles)	Minor Arterial (miles)	Major Collector (miles)	Minor Collector (miles)	Local (miles)
Town of Bethlehem	0.0	0.0	0.0	0.9	14.7	0.0	162.0
County of Albany	0.0	0.0	1.7	1.2	6.4	5.9	1.5
New York State	18.9	4.0	11.0	15.5	14.9	0.0	0.6
Total	18.9	4.0	12.7	17.6	36.0	5.9	164.1

(1) New Scotland Road between the roundabout with Slingerlands Bypass / NY 85 to the south and the town line to the north.

(2) Includes Blessing Road, Krumkill Road, Van Dyke Road, Kenwood Avenue between Delaware Avenue and Delmar Bypass, Delmar Bypass between Van Dyke Road and Elm Avenue, Waldenmaier Road, Elm Avenue between Delmar Bypass / NY 32 and Creble Road, Elm Avenue East, and Wemple Road.

Source: New York State Department of Transportation

Appendix. As shown in the map, truck traffic volumes vary across the town from low volumes around Slingerlands, Delmar, Elsmere, and South Bethlehem, to higher volumes through Selkirk, along River Road, US 9W, roads near the CSX Selkirk Rail Yard, Delmar Bypass / NY 32, NY 32, Slingerlands Bypass / NY 85, and Interstate-87. In addition, the 2018 US Route 9W Cumulative Traffic Assessment Update indicated Glenmont Road from US 9W to NY 144 has experienced an increase in traffic over a 15-year period while other sections of roadway within the study area has seen both increases and decreases in traffic. See figure below from the 2018 US Route 9W Cumulative Traffic Assessment Update.

While volume data alone is helpful, the volume-to-capacity (V/C) ratio for roadways is better suited for preliminarily identifying roadways with possible congestion and

in need of further investigation. The V/C ratio is calculated by the NYSDOT using modelling software and data collected over several years. The V/C ratio is the "Directional Design Hour Volume" divided by the "Adjusted Rated Capacity" for roadway segments. The "Directional Design Hour" is typically an hour between 7-9 AM and/or 4-6 PM which represents peak traffic volume within most municipalities. Consideration/ adjustment is typically made for peak hours when adjacent land uses (factories, schools, etc.) have peak traffic volume outside of these AM and PM time periods. Please note that traffic calculations/ analysis associated with peak hours only represents a small time period of traffic throughout the day and is typically only sufficient for evaluating traffic associated with typical weekday daily commuter patterns. In addition, traffic outside of peak hours is typically less with

the exception of traffic associated with infrequent special events. Roadway segments with their ratio less than 0.85 generally indicates adequate capacity is available. Roadway segments with a ratio between 0.85 and 1.0 generally indicates the roadway is operating at its design capacity, while ratios greater than 1.0 generally indicates traffic flow may become unstable, and delay and queuing conditions may occur.

V/C ratio data from the NYSDOT is shown in the Volume-to-Capacity Ratio Map within the Map Appendix. As shown in the map, most of the roads within the town have a V/C ratio below 0.85. The following road segments within the town have a V/C ratio above 1.0 indicating they may have exceeded their peak hour design capacity:

- US 9W between the Delmar Bypass / NY 32 and Feura Bush Road
- Interstate-87

The following road segments have a V/C ratio between 0.85 and 1.0 indicating they may be operating at their peak hour design capacity:

- US 9W between Frontage Road and NY 32 near Old Route 9W
- New Scotland Road between Maher Road and Kenwood Ave
- Krumkill Road between Schoolhouse Road and Russell Road

### Speed Limit

Speed limit data is available from the NYSDOT and is shown in the Posted Speed Limit Map within the

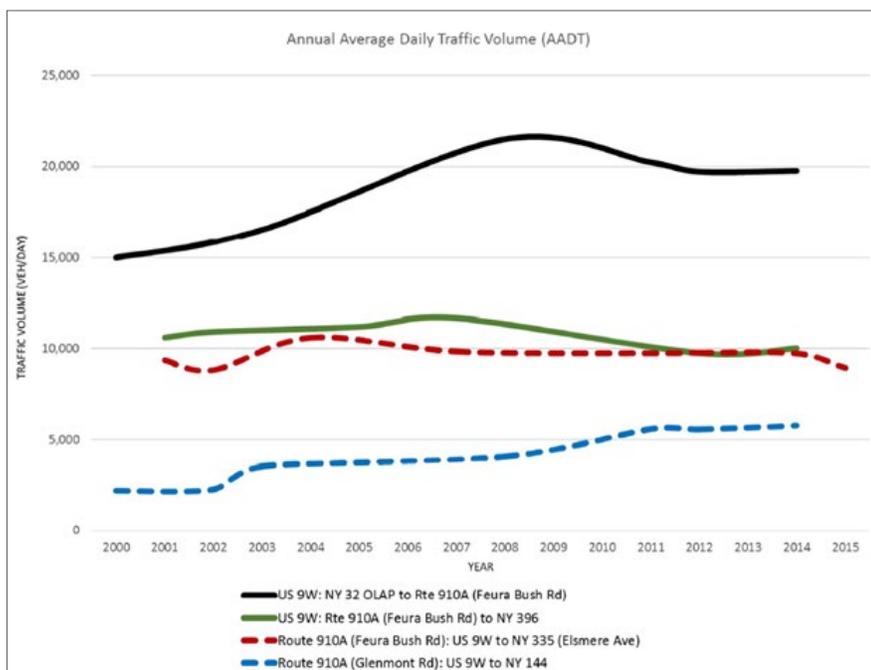


Figure 7.1 Annual Average Daily Traffic Volume (AADT). Source: 2018 Us Route 9W Cumulative Traffic Assessment Update

Map Appendix. Speed limit data is limited within the town and does not include roads with a classification of "Local." As shown in the map, speeds limits within the town range from 30-55 miles per hour with faster speeds distant to populated areas, typical of suburban municipalities.

## Transit

The Capital District Transportation Authority (CDTA) provides transit service within the Capital District, which includes the Town of Bethlehem. According to information from the CDTA, they operate 6 bus routes, 181 bus stops, and 3 park-and-ride facilities within the town which are shown in the Transit Routes and Stops Map within the Map Appendix. Transit routes and descriptions within the town are shown below in Table 7.3. Park-and-ride facilities are located adjacent to ShopRite on Vista Boulevard, adjacent to the Bethlehem Town Park on Delmar Bypass, and near the Delaware Plaza on Delaware Avenue. In November 2020, the

CDTA launched Route 923, the BusPlus Blue Line, which is a Bus Rapid Transit line operating between Pearl Street adjacent to the Port of Albany and Waterford. While not located within the town, this southernmost stop located adjacent to the Port of Albany is located in close proximity to the town and has a parking area.

## Sidewalks

The Town of Bethlehem maintains a geographic database of sidewalks within the town which is shown in the Sidewalk Facilities Map within the Map Appendix. As shown in the map, approximately 43 miles of sidewalks are primarily located within Delmar, Elsmere, Selkirk, South Bethlehem, and along several corridors. Overall, the map shows many areas do not have sidewalks / dedicated pedestrian links between neighborhoods. In addition, the condition of these sidewalks was documented in 2014 which identified some sidewalks in need of repair and replacement. A 2022

update was recently completed by the Highway Department.

The Town's Bicycle and Pedestrian Committee has developed a Bicycle and Pedestrian Priority Network Map documenting where pedestrian facilities are desired. In total, the map identifies approximately 73 miles of desired pedestrian facilities. In addition, the Town's website details 10 sidewalk priorities for sidewalk maintenance projects, 13 sidewalks categorized as "new sidewalks and network gaps" and 8 sidewalks categorized as "new sidewalks addressing network gaps."

According to the 2019 Community Forums, residents identified specific locations for new or improved sidewalks including Feura Bush Road in Glenmont, Kenwood Avenue in Elsmere, Bridge Street in South Bethlehem, Thatcher Street in Selkirk, Blessing Road in North Bethlehem, and New Scotland Road in Slingerlands.

## Complete Streets Resolution

Route Number	Route Name	Timeframe	Route Description	General Headways
Route 13	New Scotland Ave	7 days a week	New Scotland Avenue, between Downtown Albany via St. Peter's Hospital and Albany Medical Center	45 min
Route 18	Delaware Ave	7 days a week	Delaware Avenue, between Slingerlands Shoprite and Downtown Albany via Delmar	30 min
Route 107	Albany Glenmont	7 days a week	Between Albany and Glenmont via Pearl St, Mt. Hope and 9w	30 min
Route 7191	Altamont/ Voorheesville	Weekdays only	Crossgates Mall, Delmar and Downtown Albany	N/A
Route 806	Delaware Shuttle (School)	Weekdays only	Mt. Hope via S.Pearl St via New Scotland Avenue Hackett MS	N/A
Route 8132	Ravena Shopping Bus	Tuesdays only	Ravena Shopping Shuttle, between Ravena, Colonie Center and Crossgates Mall	N/A

Table 7.3: Transit Routes

(1) Route currently not available at the time of this memo

(2) Route is planned to be available from 02/16/2021 to 04/09/2021

Source: Capital District Transportation Authority

In August 2009, the Town Board adopted a Complete Streets Resolution (the "Resolution"), which aims to meet the goal of improving mobility, which the Resolution defines as "the ability of people, regardless of age and status, to engage in desired activities throughout the Town." The Resolution was also developed in response to the Comprehensive Plan recommendations to maintain and enhance bicycle and pedestrian connections within neighborhoods and between neighborhoods and hamlet centers. The Complete Streets Resolution also acknowledges that bicycling and walking contribute to health, fitness, neighborhood vitality, social interaction and economic development. Integrating options for multiple modes has the potential to increase efficiency and capacity of the local transportation network. Additionally, the Resolution is anticipated to reduce traffic congestion by diversifying mobility options, as well as limit greenhouse gas emissions and improve general quality of life. The Resolution calls for bicycles and pedestrians to be equally as important as motorists during planning and design of all new street construction and reconstruction carried out by the Town. The Town and the Bicycle and Pedestrian Committee are continually working towards implementing the resolution. The complete street initiatives for Delaware Avenue and the recently completed roundabout and sidewalks at Feura Bush Road and US 9W are emblematic of the success of this Resolution.

The Town's Complete Streets Resolution was adopted in 2009 to provide guidance on pedestrian, bicyclist, and transit improvements in the Town. Since that time, the NYSDOT and other organizations (NACTO (National Association of City Transportation Officials), ITE (Institute of Transportation Engineers), ULI (Urban Land Institute), and CDTC (Capital District Transportation Committee)) have prepared model complete streets guidance that should be used to update the Town's resolution.

## Bicycle

The Town of Bethlehem and the CDTC maintains a geographic database of bicycle facilities within the town which is shown in the Bicycle Facilities Map within the Map Appendix. According to data, the town's existing bicycle network is comprised of approximately 7 miles of off-road facilities and a signed bicycle route in Delmar. The Albany County Rail Trail is the primary bicycle thoroughway in town and according to a user count completed by the CDTC in 2016, is the fourth highest used trail in the Capital District with an estimated 164,073 users per year. This trail extends from South Pearl Street near the Port of Albany to Voorheesville. The trailhead at South Pearl Street provides a connection to the Mohawk-Hudson Bike Trail. Off-road bicycle infrastructure is present on/ adjacent to Wemple Road, Fisher Boulevard, Delaware Avenue, Van Dyke Road, and a portion of the Delmar Bypass. Overall, the available data suggests a lack of on-road bicycle infrastructure throughout the town, but a thorough review of this data is needed by the town and

CDTC in order to update the dataset with all bicycle infrastructure.

A bicycle-share program has been established by a partnership between the CDTA and the Capital District Physicians' Health Plan (CDPHP). Although not located within the town of Bethlehem, the program is located adjacent to the town in portions of the City of Albany (South Pearl Street Trailhead) and Town of Colonie, and also within the City of Troy, City of Cohoes, and City of Schenectady. The program provides residents and visitors with an alternative form of transportation that supports healthy, active lifestyles while also offering a fun and easy way to explore the local neighborhoods. Bicycle rentals are available through an hourly, monthly, or seasonal rate, and includes a student plan discount of 50%.

The Town's Bicycle and Pedestrian Committee developed a Bicycle and Pedestrian Priority Network Map in 2010 (currently being updated by the committee) which identifies approximately 73 miles of roadways where bicycle facilities are desired and another 73 miles of roadway where bicycle and pedestrian facilities are desired (approximate total of 146 miles). In addition, Kimmey Drive and Elsmere Avenue Extension are planned roadways which would provide vehicular, bicycle and pedestrian connections to adjacent neighborhoods. These planned roadways are shown in the Bicycle and Pedestrian Priority Network Map within the Map Appendix.

In 2010, the Town and the Committee published "Evaluation Process for New Pathway Investment Procedures / User's Guide" for the purposes of documenting a process the town should follow when conducting an evaluation for a new bicycle or sidewalk investment. While the Town has developed a Bicycle and Pedestrian Priority Network Map and evaluation process, the town would benefit from a bicycle master plan or active transportation plan that identifies type of bicycle and pedestrian infrastructure, prioritized phasing of the identified 146 miles of roadways, funding source plan, and a multi-year capital investment plan.

Lastly, the Capital District Trails Plan, published by CDTC in 2018, includes a survey conducted within the Capital Region that indicates an overwhelming majority (93%) of responders use trails for Health/Exercise/Recreation and 66% feel that they would be more likely to use the trail system for commuting, travel or other non-recreational trips if a regional trail system was established. This information will support the Town's efforts to establish facilities for bike and pedestrian users.

The CDTC Capital District Trail Plan identifies existing and conceptual regional trails and existing and possible supporting connections. The plan includes two core trails and three supporting network trails within the town. Core Trails include the existing Albany County Rail Trail and the Hudson Northway, the latter being located along River Road/NY-144 connecting to the South End Bikeway Connector. The first supporting trail would be

the Elm Avenue Bike Path, located along Elm Avenue/Cherry Avenue, Feura Bush Road, and the NY-32 Delmar Bypass. The second supporting trail would be Reservoir Run, and would generally follow the Albany Water Line right-of-way, but have short diversions at Feura Bush Road and Elsmere Avenue. The third supporting trail would be the Ravena-Voorheesville Link, which could utilize former railroad right-of-way in South Bethlehem and follow West Yard Road as it passes through town. Each of the supporting trails would connect to one another.

## Freight

### Truck Freight

According to geographic data from the NYSDOT and as shown in the Truck Routes Map within the Map Appendix, the Town of Bethlehem has several truck routes designated by the NYSDOT in addition to Interstate-87. These routes include River Road / NY 144, Bridge Street / Maple Avenue / NY 396, US 9W, Delmar Bypass / NY 32, Slingerlands Bypass / NY 85, and portions of Cherry Avenue and Elm Avenue. Most of these routes utilize roadways under the jurisdiction of New York State with the exception of portions of Cherry Avenue and Elm Avenue which are the jurisdiction of the County of Albany. A review of truck traffic volume (AADT) is provided above in the "Traffic Volumes and Volume-to-Capacity Ratio" Section.

According to the 2019 Community Forums, residents are concerned about truck traffic in the town and envision that in the future, trucks are

diverted around their neighborhood. Concerns from residents in South Bethlehem and Selkirk were centered on the long history of truck traffic impacts to the nearby residential homes along Rt. 396 (Bridge Street and Maple Avenue). Selkirk residents are displeased in the lack of progress on pursuing a Selkirk Bypass as a solution to relocate trucks traveling along Maple Avenue to/from NYS Thruway Exit 22. South Bethlehem residents experience the trucks from Callanan Industries. The truck traffic issue is also recently being experienced by Glenmont residents on Glenmont Road who have observed increased truck traffic to/from Route 9W and River Road.

### Rail Freight

According to data from NYSDOT and as shown in the Rail Network Map within the Map Appendix, the Town of Bethlehem includes east-west and north-south rail lines both of which are operated by CSX. These rail lines continue along CSX routes and connect to other rail operators facilitating rail transportation throughout the region and across the United States. The east-west line includes the Selkirk Yard and a Total Distribution Services Inc. (TDSI) Automotive Facility both operated by CSX. Roadway access to these facilities is provided by Creble Road which connects on the west to NY 32 and on the east to US 9W. Interstate-87 access to these facilities primarily utilizes the route between Creble Road, US 9W, NY 32, and River Road / NY 144. A review of truck traffic volume (AADT) is provided above in the "Traffic Volumes and Volume-to-Capacity Ratio" Section. The north-south lines parallel the Hudson River

and connects the CSX mainline in Selkirk north to the Port of Albany and beyond through the City of Albany. The Port of Albany includes their own rail infrastructure which is designated by the NYSDOT as a shortline operated by the Port.

### Water Freight

The Port of Albany is primarily located within the City of Albany with portions located within City of Rensselaer and the Town of Bethlehem with a potential expansion also located within the town. The potential expansion of the Port of Albany is thoroughly documented in the GEIS for the Port of Albany and also described in the Local Waterfront Revitalization Plan which is available on the Town of Bethlehem's website. In general, the expansion includes 80-acres for use as a wind tower manufacturing facility and will result in an increase of freight activity/ shipments. According to the Port of Albany, it is the largest inland port in the Northeast United States with its primary cargo including "bulk and break bulk, including heavy lift/project cargo, wind energy, woodpulp, scrap iron and molasses."

### Air Freight

The Albany International Airport operated by the Albany County Airport Authority is located approximately 5 miles north of the Town of Bethlehem. According to the authority, it operates commercial flights from American Airlines, Cape Air, Delta Air Lines, JetBlue, Southwest Airlines, and United Airlines. In addition, the authority operates a full-service Air Cargo Terminal serving FedEx, UPS, and Mobile Air.

## Completed Transportation Studies, Projects and Improvements

1. The Slingerlands By Pass was built including a series of roundabouts to connect Cherry Avenue and Route 85. The ByPass was built to alleviate traffic congestion on New Scotland Road and at its intersections with Cherry Avenue, and Mahar Road.
2. As a result of the State bypass project the Town took over ownership of New Scotland Road from Cherry Avenue to Mahar Road. The Town developed the New Scotland Road Hamlet Master Plan for this section of New Scotland Road to allow for new development options in Slingerlands including mixed uses. The concept plan for future road improvements include sidewalks and bicycle lanes on both sides of the road with one travel lane in each direction.
3. Delaware Avenue Streetscape Improvements project was completed in 2018 to improve walkability along a section of Delaware Avenue in Delmar
4. The Route 9W Corridor Cumulative Assessment was a study completed in 2018 that took the original Route 9W Corridor Study (2008) boundary area and assessed the impacts to certain intersections from a group of proposed developments. The study included traffic growth based on a land use development scenario. The study arrived at a public-private improvement cost formula that can be used by the Town to collect contributions from development proposals for specific improvements that may be needed in the future as a result of cumulative growth. The monies are kept in a dedicated Town fund specifically for the identified future improvements.
5. River Road/SR144 was recently analyzed in the Town's LWRP and the Port of Albany GEIS. Recommendations for the State highway are included in both documents for reduced speed, shared use, and turning lane options.
6. Kimmey Drive, the planned Town collector road that would connect Wemple Road on the east side in Glenmont to Elm Avenue on the west side of Glenmont has been built in sections within the residential subdivisions of Milltown Plaza, Haswell Farms and Dowerskill Village. Most recently it was shown on proposed subdivisions; Kimmey Pointe and Hamden Woods.
7. The Elsmere Avenue extension is a planned future roadway extending Elsmere Avenue south to the future Kimmey Drive in Glenmont.
8. The Town's 2008 Route 9W Corridor Study identified the Selkirk Bypass central alignment as an alternative route for truck traffic from the industrial area of the Selkirk Rail yards to the east to access the NYS Thruway. The study assumed a new roadway

on a new alignment, with a new Thruway interchange. Two options were presented. The first option, estimated at \$24.7 million (in 2007 dollars) would connect US 9W to the Thruway, with the Thruway serving as the termination point for the road. The second option, which would add \$11.1 million to the cost would connect US 9W to NYS 144.

In an effort to potentially reduce costs, the Town Engineering Division investigated the feasibility of utilizing and making improvements to segments of existing Clapper Road as an alternative to constructing a new road on a new alignment. This option was further explored in 2008 by Creighton Manning Engineering, who were engaged by the Town to conduct a Thruway interchange feasibility study for the Clapper Road area. The study assessed the physical and financial feasibility of an interchange, including an analysis of anticipated Thruway toll revenue changes.

The study, completed in December 2008, concluded that reconstruction of Clapper Road in conjunction with interchange development was a feasible option for the area. The study estimated the cost (in 2008 dollars) of Clapper Road reconstruction in conjunction with an EZ Pass only interchange at \$16.7 million. This route would connect Creble Road to Clapper Road, utilizing improvements to Clapper Road to create the Selkirk Bypass Truck route. Utilization of Clapper Road would necessitate zone changes along Clapper Road from residential to industrial.

The 2005 Comprehensive Plan viewed the Bypass as essential for solving the quality-of-life issues for Selkirk and also as a potential opportunity to facilitate economic development in the US 9W corridor. Truck traffic on Maple Avenue/Rte. 396 in Selkirk continues to be an issue identified by Maple Avenue residents. The Town

should assess the viability of this previous transportation connection that was proposed to divert truck traffic from Maple Avenue in Selkirk.

### Planned Improvements

The CDTC is the municipal planning organization for the Capital District which includes the Town of Bethlehem. Federal regulations require that transit, highway and other transportation improvement projects within the Capital District metropolitan area be included in the Transportation Improvement Program (TIP) developed by the CDTC if these projects are to be eligible for federal capital or operating funding from the Fixing America’s Surface Transportation (FAST) Act. The TIP is a multi-year program of transportation projects that implements the products of the planning process described in New Visions 2040, CDTC’s long-range regional transportation plan. The TIP should also include, for informational purposes, non-federally funded projects and New York State Thruway Authority projects located in the region. The current TIP was adopted in June

TIP #	Project Name	Description	Type	Cost (\$M)
A587	US NY 9W/Feura Bush Road/ Glenmont Road (NYS NY 910A): Roundabout	New roundabout to improve traffic flow with pedestrian connections. Project includes sidewalk extension on Glenmont Road to Glenmont Elementary School providing dedicated infrastructure for pedestrians.	Capital	4.2
A598	US 9W Over CSX/CP Rail: Replacement	Bridge replacement project	Maintenance	12.2
A601	Delaware Avenue: Mill & Fill, Complete Streets & Road Diet	Reduce roadway from 4 lanes to 2 lanes with center left turn lane, construct sidewalks, bike lane, crosswalks, pedestrian refuge islands, RRFBs, bus transit pull-offs, and gateway treatment along Delaware Avenue from Elsmere Avenue to Normans Kill Bridge. Project will provide a complete street which will increase transportation access and connections.	Maintenance	3.6

Table 7.4: Funded TIP Projects Within the Town of Bethlehem

Source: Capital District Transportation Committee

2019 to cover the five-year period from October 1, 2019 to September 30, 2024. Table 7.4 lists TIP projects that have been funded within the Town of Bethlehem. Table 7.5 lists project candidates within the Town of Bethlehem that have not been funded, but may be funded in a future TIP.

### Future Improvements

The Town has been planning for future transportation network additions for decades through different long range planning initiatives as a result of population growth. The Land Use Management Advisory Committee Study (LUMAC 1994) report identified the need for an additional east west collector road to alleviate the future congestion foreseen on Feura Bush Road due to the build out of the area of Town south of Feura Bush Road between Wemple Road and Elm Avenue. The new collector road was called Kimmey Drive and connected Wemple Road to Elm Avenue. The 2005 Comprehensive Plan continued the recommendation for the construction of Kimmey Drive as development occurred.

Another planned roadway is Elsmere Avenue Extension that would be a north south collector from the end of Elsmere Avenue at Feura

Bush Road to an intersection with the future Kimmey Drive. The purpose of the added roadways is to disseminate traffic across a wider network and provide for more neighborhood interconnection in this area of the Town. These two key collector roads would help alleviate future capacity limitations on Feura Bush Road, Elsmere Avenue, and Wemple Road, rather than expanding these roadways with additional travel lanes or turn lanes, which could alter their existing character.

An evaluation of the transportation system benefits provided by the construction of Kimmey Drive and Elsmere Avenue extension is presented at the end of this chapter titled: Collector Road Extensions: Kimmey Drive and Elsmere Avenue Extension Analysis using the Capital District Transportation Regional Demand Model .

### Findings and Opportunities

The targeted review of the transportation infrastructure within the Town of Bethlehem focused on vehicular, transit, bicycle, sidewalk, and freight facilities. Key findings, issues, and opportunities identified include:

- Many local roads have maintained their rural character**  
 Many roadways within the town have maintained their original, rural typology that residents and visitors’ value as a town asset. Expanding development pressure with an auto-orientation will continue to add traffic pressure to these roads which will impact existing typologies.
- Most roads within the town are not federal-aid eligible**  
 The Town of Bethlehem has jurisdiction of most roads within the Town boundaries, however, most of these roads are classified as “Local” which are not federal-aid eligible.
- Most roads within the town are well below their design capacity with some needing further investigation**  
 Based on volume-to-capacity data from the NYSDOT, most roadways within the town are operating well below their design capacity at peak hours. However, volume-to-capacity data indicates portions of US 9W may have exceeded design capacity, while other portions of US 9W, New Scotland Road, and Krumkill road may be operating at their design capacity.

TIP #	Project Name	Description	Type
A290	Selkirk Bypass	Selkirk Bypass: Construction of a new 2 Lane Rd from US 9W to Texas Eastern to replace existing NY 396. Note: project first listed in 1993-1998 TIP.	New Road Construction
Not Listed	NY 396 Over Coeyman’s Creek Bridge Replacement	Not Listed	Not Listed
Not Listed	Glenmont Road Bridge Widening Project	Not Listed. Note: project is listed within the “Bicycle and Pedestrian Projects” table of the TIP	Not Listed

Table 7.5: Candidate TIP Projects Within the Town of Bethlehem Source: Capital District Transportation Committee

- **Higher truck traffic volumes through Selkirk and other areas of the town**

The NYSDOT had documented comparatively high truck traffic volumes through Selkirk, along River Road, US 9W, roads near the CSX Selkirk Yard, Delmar Bypass / NY 32, Feura Bush Road / NY 32, and the Slingerlands Bypass / NY 85.

- **Transit options offer an opportunity for Slingerland, Delmar, and Elsmere residents**

Three transit routes currently offer service to areas of the Slingerlands, Delmar, and Elsmere with headways ranging from 30-45 minutes. Three park-and-ride facilities are also located within the town along these transit routes. While a new bus rapid transit line was put into service in November 2020 with the route extending south to the Port of Albany, the route does not enter the town.

- **Most roadways within the town lack dedicated on-road bicycle facilities**

While the town has some off-road bicycle facilities including the Albany County Rail Trail, most roadways within the town lack dedicated on-road facilities. In addition, documentation/verification of all existing bicycle facilities within the town is needed to provide a comprehensive understanding of existing infrastructure to be used to plan improvements to the facilities/network.

- **Many areas within the town do not have sidewalks / dedicated pedestrian links between neighborhoods**

59 miles of sidewalks are

primarily located within Delmar and Elsmere, and in limited areas in Selkirk and South Bethlehem. Overall, many areas do not have sidewalks / dedicated pedestrian links between neighborhoods. Community members have expressed desire for more sidewalk facilities in specific areas in the town which are being reviewed by the Town and the Bicycle and Pedestrian Committee.

- **The Town would benefit from a bicycle master plan or active transportation plan**

While the town has developed a Bicycle and Pedestrian Priority Network Map and evaluation process, the town would benefit from a bicycle master plan or active transportation plan that identifies type of bicycle and pedestrian infrastructure, prioritized phasing of the identified 146 miles of roadways, funding source plan, a multi-year capital investment plan, and a maintenance plan.

- **Kimme Drive and Elsmere Avenue extension opportunity**

The Town has identified an opportunity to extend both Kimme Drive and Elsmere Avenue which would provide vehicular, bicycle and pedestrian connections to adjacent neighborhoods and seek to relieve/re-direct local vehicular traffic volume on/from Feura Bush Road.

- **Railcar/railroad traffic and truck traffic adjacent to residential areas has been identified by residents as an issue for many years**

While the presence of an active rail freight corridor, the CSX

Selkirk Rail Yard, the CSX TDSI Automotive Facility, and nearby Port of Albany offer positive economic benefits to the town and nearby municipalities, rail traffic and truck traffic on local roads has been an issue identified by residents for many years. The Town's 2008 Route 9W Corridor Study identified the Selkirk Bypass central alignment as an alternative route for truck traffic from the industrial area of the Selkirk Rail yards to the east to access the NYS Thruway at a proposed new exit. This route would connect Creble Road to Clapper Road, utilizing improvements to Clapper Road to create the Selkirk Bypass Truck route. Further analysis was conducted in 2012 year – and included the cost of improvements, including cost of new Thruway exit. Truck traffic on Maple Avenue/Rte. 396 continues to be an issue identified by Maple Avenue residents. The Town should assess the viability of this previous transportation connection that was proposed to divert truck traffic from Maple Avenue in Selkirk.

- **Complete Street Resolution success with Delaware Ave complete street and Feura Bush Road roundabout**

The Town is continually working towards implementing the Complete Streets Resolution. The planned complete street for Delaware Avenue and the completed roundabout and sidewalks at Feura Bush Road and US 9W are emblematic of the success of this Resolution.

## Collector Road Extensions: Kimmey Drive and Elsmere Avenue Extension Analysis Using the Capital District Transportation Regional Demand Model

### Introduction

The Town has been planning for future transportation network additions since the 1990's through different long range planning initiatives as a result of population growth. The Land Use Management Advisory Committee Study (LUMAC 1994) report identified the need for an additional east west collector road to alleviate the future congestion foreseen on Feura Bush Road due to the build out of the area of town south of Feura Bush Road between Wemple Road and Elm Avenue. The new collector road was called Kimmey Drive and connected Wemple Road to Elm Avenue. The 2005 Comprehensive Plan continued the recommendation for the construction of Kimmey Drive as development occurred.

Another planned roadway is Elsmere Avenue Extension that would be a north south collector from the end of Elsmere Avenue at Feura Bush Road to an intersection with the future Kimmey Drive (see Attachment 1). The purpose of the added roadways is to disseminate traffic across a wider network and provide for more neighborhood interconnection in this area of the town. These two key collector roads would help alleviate future capacity limitations burdens on Feura Bush Road, Elsmere Avenue, and Wemple Road, the existing east west and north south collectors, rather than expanding these roadways with

additional travel lanes or turn lanes, which could alter their existing character. Limiting impacts (increase in travel delay) to intersections especially along Feura Bush Road is also a benefit of disseminating traffic throughout a network of connected streets.

Kimmey Drive has been built in sections already within the residential subdivisions of Milltown Plaza, Haswell Farms and The Enclave. Planning Board subdivision approval required the construction of portions of Kimmey Drive by the developer, and the roads have been accepted by the Town. Most recently it was shown on the proposed subdivisions; Kimmey Pointe and Hamden Woods. As a local collector road, Kimmey Drive was built with the intent of limiting direct driveway connections and allowing neighborhood street connections.

Elsmere Avenue Extension was planned for in the subdivision approval process for both the Meadowview 2 and Newell Subdivisions located in between the Haswell Farms neighborhood and the west side of Wemple Road. The subdivision plans show a town proposed north-south collector road on the west and east sides of the Dowerskill extending south. Schoonmaker Road was built as part of the Meadowview 2 subdivision in alignment with a future connection.

For purposes of the Comprehensive Plan Update, the two planned collector roadways were analyzed to understand the transportation system benefits the roads could provide to the adjacent street system, both collector roads and local roads. The Town recognized

the need to answer the question of what the impact would be to surrounding neighborhoods if the collector roadways were built or not built considering future growth to 2035. The Capital District Transportation Committee (CDTC) provided technical support using their regional travel demand model. In a simple summary, the model uses existing traffic volumes on roadways within the regional network and then is able to add local roadways within certain geographic boundaries (study area) to create connections to the regional network. Future traffic volumes based on build-out scenarios are added to the network from the connections that are made to see the total combined impact. The future traffic volumes were derived from existing traffic studies and additional volumes from the build-out scenarios were developed by SWBR and the Town.

This analysis includes two components:

1. Build-out scenarios: the potential number of residential units that could be constructed on properties with access to the two collector roads (see Table 1 and Attachment 1); and
2. Assessment of the potential impacts to the regional road network based on build-out scenarios (see Table 2).

The Town of Bethlehem and SWBR / Fisher Associates consultant team developed the residential build-out scenarios and the Capital District Transportation Committee (CDTC) conducted an analysis of the

proposed collector roads using the residential build-out scenarios and its regional travel demand model.

The potential residential build-out scenarios were developed by identifying all of the parcels that could access either collector road (Kimmey Drive and Elsmere Avenue Extension). The total acreage of potentially buildable land was calculated; environmentally regulated lands (wetlands and streams) were subtracted, as was the area required for public roads and infrastructure (assumed 18%), resulting in the net buildable area in acres (see Table 1). The residential build-out scenarios (units per acre) include:

- Existing + Approved/Known proposed developments
- Minimum: Three (3) units per acre reflecting current RA zoning District (existing + minimum development)

- Middle: Six (6) units per acre (existing + middle development)
- Maximum: Twelve (12) units per acre (existing + maximum development)

In the sections to follow, the SWBR/ Fisher team provides a summary interpretation of CDTC’s model outputs, considerations for the Comprehensive Plan planning process, and future considerations for the Town’s continued review and assessment of the viability of these two new collector roadways

### Summary of CDTC Methodology / Analysis

#### Overview

The CDTC STEP Model (Systematic Transportation Planning and Evaluation Model) (the CDTC’s regional travel demand model) was used to analyze the potential benefits and impacts of two (2) new collector roadways under consideration by the Town of

Bethlehem to support potential new residential development. The new collector roadways included in the analysis were the Kimmey Drive Extension, from Wemple Road to Elm Avenue, and the Elsmere Avenue Extension, from Feura Bush Road to the proposed Kimmey Drive Extension (see Attachment 1 at end of section). The CDTC STEP model is a macroscopic regional travel demand model and does not include every intersection and roadway; therefore, it is likely real-life traffic will use all available roadways to some extent. While this is a limitation, the model does provide general insight into travel patterns and likely impacts based on various scenarios (see Attachment 2 at end of section for roadways in the base model). The STEP model is calibrated to the PM peak hour of travel, 2020, pre-COVID-19 pandemic travel conditions.

#### Buildout Area

Legend Key	Parcel	Area	Land Use	Constraints	ROW/ Acres 18%	Env. Constraints Area / Acres	Buildable Acreage	Per Code 3 Units / Acre	Mid Est. 6 Units / Acre	Max. Est. 12 Units / Acre
					18%			3	6	12
1	263 Elm Ave	9.02	SF	None	2		7	22	44	89
2	Elm Ave	7.04	Rural Vac	None	1		6	17	35	69
3	560 Elm Ave.	2	Res. Vac	None	0		2	5	10	20
4	518 Elm Ave.	30	Rural Res.	2 Federal Wetlands	5	6	19	56	112	223
5	Brookhaven Ln.	17.69	Res. Vac	None	3		15	44	87	174
6	Wemple Rd	77.9	Res. Vac	Pond, Wetland, 2 Streams	14	7	57	171	341	683
7	9-27 Oberlin Pl.	6.79	Res. Vac	Stream (Dowers Kill), land locked	1	1	5	14	27	55
8	Feura Bush Rd	19.7	Ag. Vac	None	4		16	48	97	194
	Totals	170.1			31	14	126	377	753	1506

Table 1 - Build-Out Scenarios

Through the Town’s input and guidance, a build-out area was developed to establish a working geographic boundary for the analysis and to estimate the number of residential units of varying density for use in the STEP Model (see Attachment 3 at end of section).

**Build-out Scenarios**

Based on the Build-out Area, the following four (4) build-out scenarios were developed for purposes of the analysis:

Existing Development + Approved/ Proposed development – includes all existing development, and any approved or proposed new developments, or 2,913 residential units

Minimum Development – includes the minimum number of new housing units that could be built under the Town’s zoning code (3 units / acre), or 377 residential units.

Middle Development – includes a moderate number of new housing units that could be built (6 units / acre), or 753 residential units.

Maximum Development – includes the maximum number of new housing units that could be built (12 units / acre), or 1506 residential units.

**Roadway Scenarios**

In addition to the build-out scenarios, three (3) roadway scenarios were developed for purposes of the analysis:

1. Existing Roadway Network – includes only existing roadway infrastructure
2. Kimmey Drive Extension – includes the existing roadway network, and the Kimmey Drive Extension, from Wemple Road to Elm Avenue
3. Kimmey Drive Extension and Elsmere Avenue Extension – includes the existing roadway network, the Kimmey Drive Extension, from Wemple Road to Elm Avenue, and the Elsmere Avenue Extension, from Feura Bush Road to the Kimmey Drive Extension

**Analysis Scenarios**

Once the Buildout Area, Residential Development Scenarios, and Roadway Scenarios were established, twelve (12) separate combinations or scenarios (labeled A through K plus the Base Scenario defined as Existing Development + Approved/Known projects and the Existing Roadway Network)) were then analyzed by the CDTC in its STEP Model. The matrix of the twelve scenarios analyzed in the model is presented in Table 2.

The letters assigned in the table correspond to individual maps (See Attachment 4 at end of section) that were created by the model and show projected traffic vehicle numbers as well as color coding of red for decrease in number of vehicles and green for increase in number of vehicles on each roadway shown.

**CDTC STEP Model**

The STEP Model was run by the CDTC for each of the scenarios (Base + A through K) for the weekday PM peak hour, which is traditionally when the highest traffic volumes occur. As an initial step in the analysis, the CDTC uses Traffic Analysis Zones (TAZs) to allow for specific areas within the broader study area to be analyzed. For purposes of the CDTC’s analysis, the Buildout Area included TAZ 70, 70A, 70B, 73, and 73A. The zones within the study area are shown on Attachment 3. The scope of the roadway network included in the model is shown in Attachment 2 Base Roadway Network.

The CDTC’s modeling results are summarized below. In general, under all scenarios, as development density increases from minimum to maximum, there is a proportional traffic volume increase or decrease on the roadway network depending on whether the road network stays

Analysis year 2035		Roadway Network		
		Existing Roadway Network	Kimmey Dr Ext	Kimmey Dr Ext and Elsmere Ave Ext
Development	Existing Development + Approved/ Known	Base	A	B
	Minimum	C	D	E
	Middle (Moderate)	F	G	H
	Maximum	I	J	K

Table 2: Matrix of Scenarios

as is, operates with Kimmey Drive alone or operates with both Kimmey Drive and Elsmere Avenue Extension.

## Summary of CDTC Model Output

### Overview

In addition to Fisher's review of the CDTC methodology, below is Fisher's summary interpretation of CDTC's model outputs grouped by existing roadway network, Kimmey Drive extension only, and the Kimmey Drive and Elsmere Avenue extensions. (See Attachment 4 at end of section for maps lettered A through K)

### Existing Roadway Network

The model suggests that in the scenarios that only utilize the existing roadway network (i.e., no collector road extensions considered, scenarios C, F, and I), most of the estimated PM peak hour traffic volume increases occur on Elsmere Avenue, Murray Avenue, Elm Avenue-north of Dover Drive, Wemple Road, and Feura Bush Road-east of Hasgate Drive. In the model, access to the new areas of residential development was not analyzed with a new access to Elm Avenue. Subsequently, the model results reflect the main access to Hasgate Drive and, to a lesser extent, Dover Drive. Both roadways would likely have increases in traffic volumes as they provide the only means of access to the new areas of development.

However, in all three scenarios the proposed design of Kimmey Pointe subdivision, Hamden Woods subdivision and other land adjacent to Elm Avenue will have direct access to Elm Avenue. As

a result, the model's suggested volume increases on Dover Drive and Hasgate Drive will be less, and volume decreases on Elm Avenue south of Dover Drive would convert to an increase.

### Kimmey Drive Extension

The model suggests that in the scenarios that include just the complete Kimmey Drive Extension (scenarios A, D, G and J), a portion of the estimated PM peak hour traffic would shift to the new collector roadway (Kimmey Drive Extension). There would be a likely decrease in estimated PM peak hour traffic volumes along Murray Avenue, Elm Avenue (south of Kimmey Drive Extension), and Hasgate Drive under the minimum development scenario. Increases in traffic can be expected on Wemple Road, Elsmere Avenue and Elm Avenue north of Kimmey Drive Extension. As development density increases, especially in the maximum development scenario, the model suggests the increased traffic will use all available local roadways including Hasgate Drive.

### Kimmey Drive & Elsmere Avenue Extensions

The model suggests that in scenarios that include the Kimmey Drive Extension and the Elsmere Avenue Extension (scenarios B, E, H, K), a portion of the PM peak hour traffic would shift to the new collector roadways (Kimmey Drive and Elsmere Avenue Extensions). There would be a likely decrease in estimated PM peak hour traffic volumes along Murray Avenue, Elm Avenue (south of Kimmey Drive Extension), Feura Bush Road between Elm Avenue and Elsmere Avenue and Hasgate Drive. Increases

in traffic can be expected on Wemple Road, Elsmere Avenue and Elm Avenue north of Kimmey Drive Extension.

### Regional Travel Benefits

In addition to analyzing the impacts and benefits from a variety of roadway and residential development scenarios, the STEP model was also used to examine the impacts of the two new collector roadway scenarios (Kimmey Drive Extension and Kimmey Drive Extension + Elsmere Avenue Extension) on overall regional travel (see Table 3). This information was provided by CDTC to compare with the Base Scenario.

When comparing the two different roadway scenarios with the Base (existing roadway network), the new collector roadways provide marginal regional travel benefits. The Annual Time and Operating Costs, a measure of the total costs of travel (time, fuel, etc.), slightly decreases. Likewise, PM peak hour Vehicle Miles Traveled (VMT) and Vehicle Hours of Travel (VHT) slightly improve. This is the case under the three different development scenarios.

The regional analysis also shows that the proposed collector roadways provide a regional travel benefit even when only considering existing and approved/known developments. Further, the scenario that includes the Kimmey Drive Extension and the Elsmere Avenue Extension provides more benefit than the scenario that includes only the Kimmey Drive Extension. The reason for this is that the new roadways allow for a more efficient flow of traffic. Traffic shifts over to the new collector roadways which allow for slightly shorter trips

from time and distance perspectives, thus, VMTs and VHTs will be less. With lower VMTs and VHTs, annual operating and time costs will also be less.

### Summary Conclusion

The following details a summary interpretation of CDTC’s modelling:

1. The modeling effort is a valuable tool and suggests there are vehicular connectivity benefits of Kimmey Drive and Elsmere Avenue Extension (collector roads). The Town should continue to support the future construction of these two collector roads in order to decrease impacts to surrounding neighborhood streets and benefit the regional network. At the time of development proposals, further traffic reviews, analysis, and community engagement should be pursued.
2. The modeling shows that the inclusion of the collector roads would influence vehicular circulation for this area of the town. As a result, these collector roads, depending on the build-out scenario, would increase or decrease vehicular volumes on nearby roadways but ultimately have a positive

benefit on the transportation system. The level of change may influence improvements to area intersections and roadways.

3. The modeling suggests there are overall vehicular travel benefits under the scenario of “Existing Development + Approved/ Known” with the construction of Kimmey Drive and/or Elsmere Avenue extension. The benefit is a decrease in traffic on surrounding neighborhood streets. However, the cost to build these streets for just the Existing + Approved/ Known traffic would likely not achieve a cost / benefit rationale to support or justify public funding of the construction
4. The modelling suggests that minimum to moderate levels of development (Table 2) would have a lesser vehicular travel impact to surrounding local roadways if the collector roads were built. In the scenario of minimum and moderate development without the additional collector roads the surrounding neighborhood streets will see an increase in vehicular travel. Should the collectors not be built (or built over a period of time), this effect can be mitigated

by employing transportation demand management (TDM) strategies. TDM strategies facilitate alternative modes of travel and change the percentage of people in single occupancy vehicles. TDM strategies should be incorporated into the Comprehensive Plan Update.

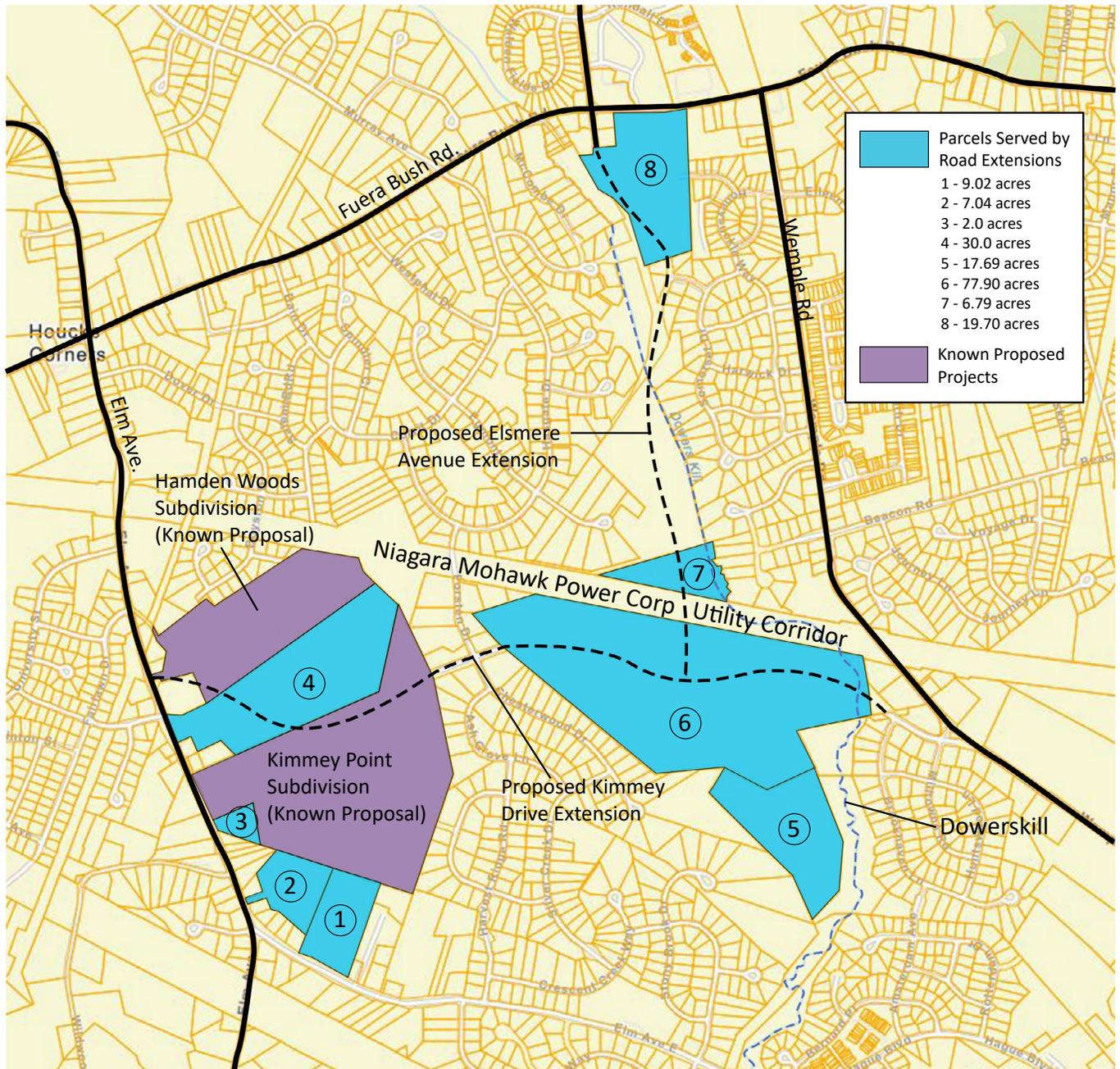
5. The modelling for Scenario H (moderate level of development and both road extensions) suggests development of the area would likely have an overall positive impact on vehicle levels on local roadways. This scenario shows a decrease in vehicle volumes on several local roads with the most notable being on Feura Bush Road near the intersection with Elsmere Avenue. Other roadways show an increase in vehicle volumes which would require additional review for potential impacts and intersection improvements.
6. The maximum build out scenario is not considered reasonable or practical as this level of density should be spread across multiple hamlet areas in town that also provide a diversity of uses not anticipated in this section of central Glenmont. This level of density does have an impact

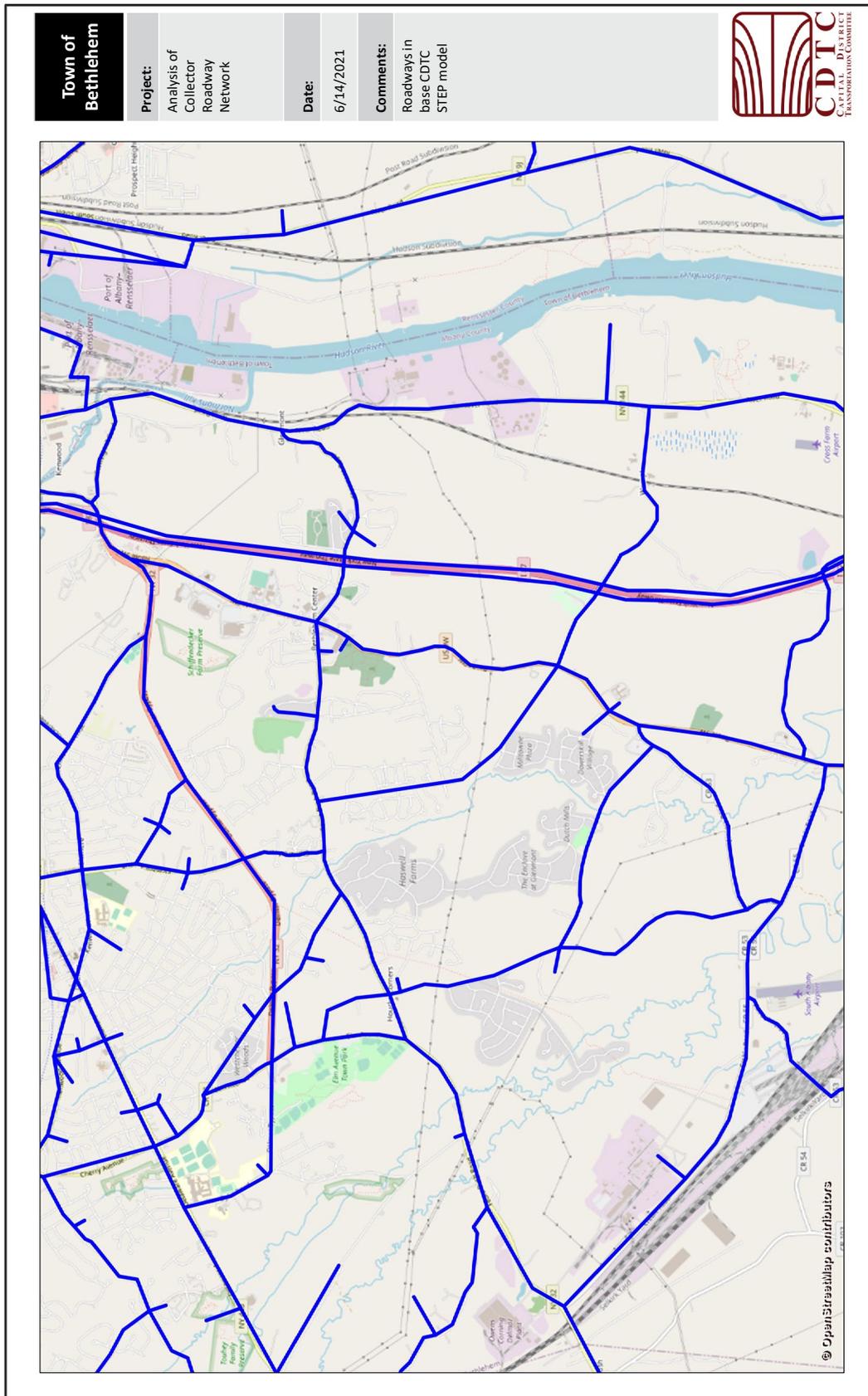
Scenario	PM Peak Hour		
	Annual Time and Operating Costs (thousands)	Vehicle Miles Traveled (VMT)	Vehicle Hours Traveled (VHT)
Base	\$5,330,804	2,149,879	66,655
Kimmey Dr. Ext.	\$5,330,189	2,149,839	66,654
Kimmey Dr Ext, and Elsmere Ave Ext.	\$5,329,821	2,149,755	66,649

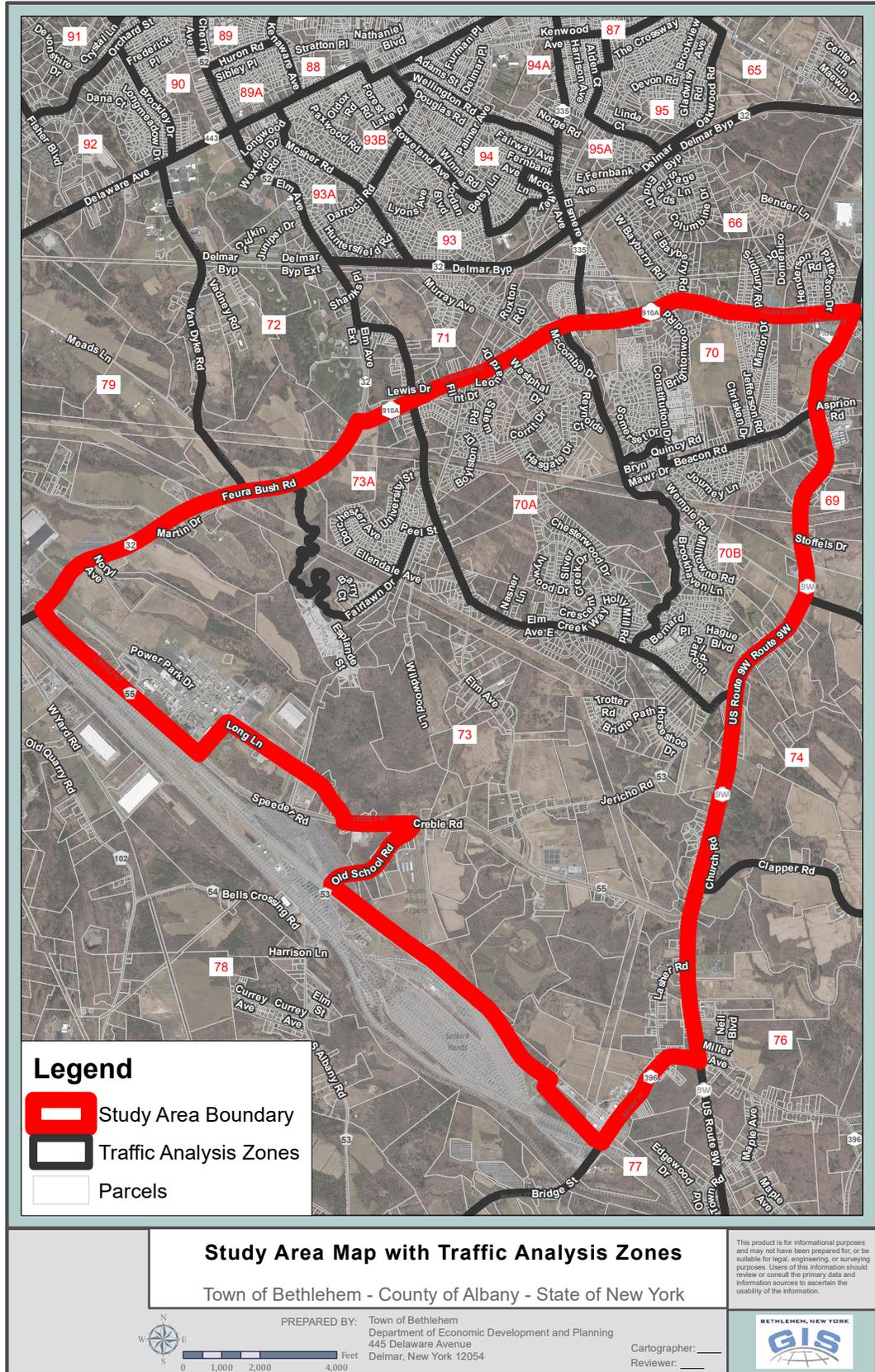
Table 3: Regional Indicators (2035) from the CDTC

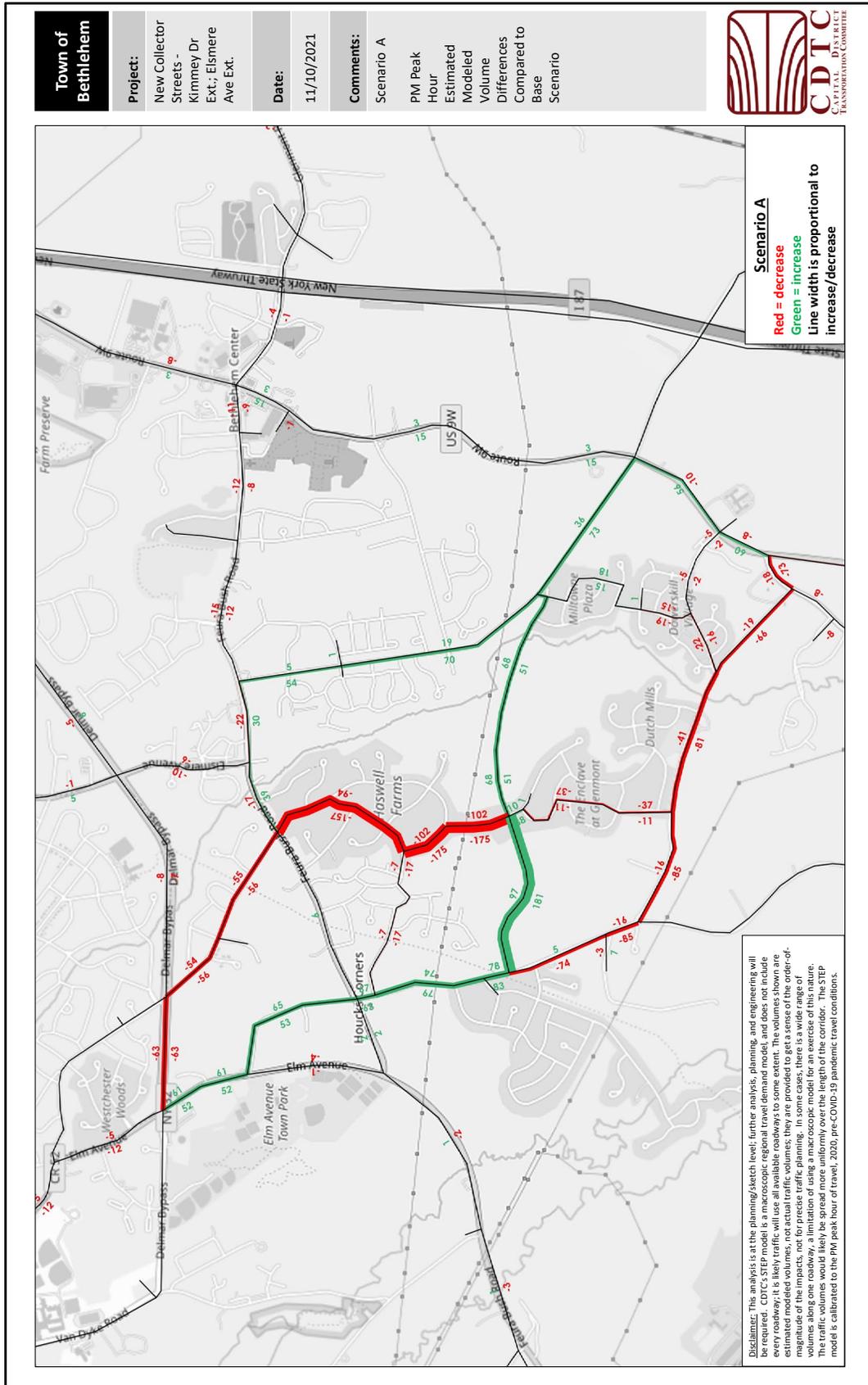
- of added vehicular traffic to a significant number of streets within the network in this area of town with and without the addition of the collector roads.
7. Since driveway access from residential units are discouraged on the proposed collector streets, additional streets and infrastructure will be required to access residential structures. To offset the cost of collector road construction by developers, the Town should consider providing increased density in exchange for the public benefit to the transportation system. Each new development project that is proposed on remaining lands within the road corridor should be assessed individually at the time of review. The increase in density along with the road layout itself will require creative design for a variety of lot sizes and arrangements, and housing types.
  8. Under the current land use density and allowable housing types in this area, construction of the collector roads will result in an increase cost of housing to those buying single family homes since the developer will distribute the cost of road construction amongst each approved unit/lot. As such, modifications to allow an increase in density and housing type will help to provide housing units that may be more affordable since the cost would be distributed amongst a greater number of units/lots.
  9. The importance of sidewalk and/or multi-use pathways will continue to be an important design feature in future developments that include portions of the collector roadways.

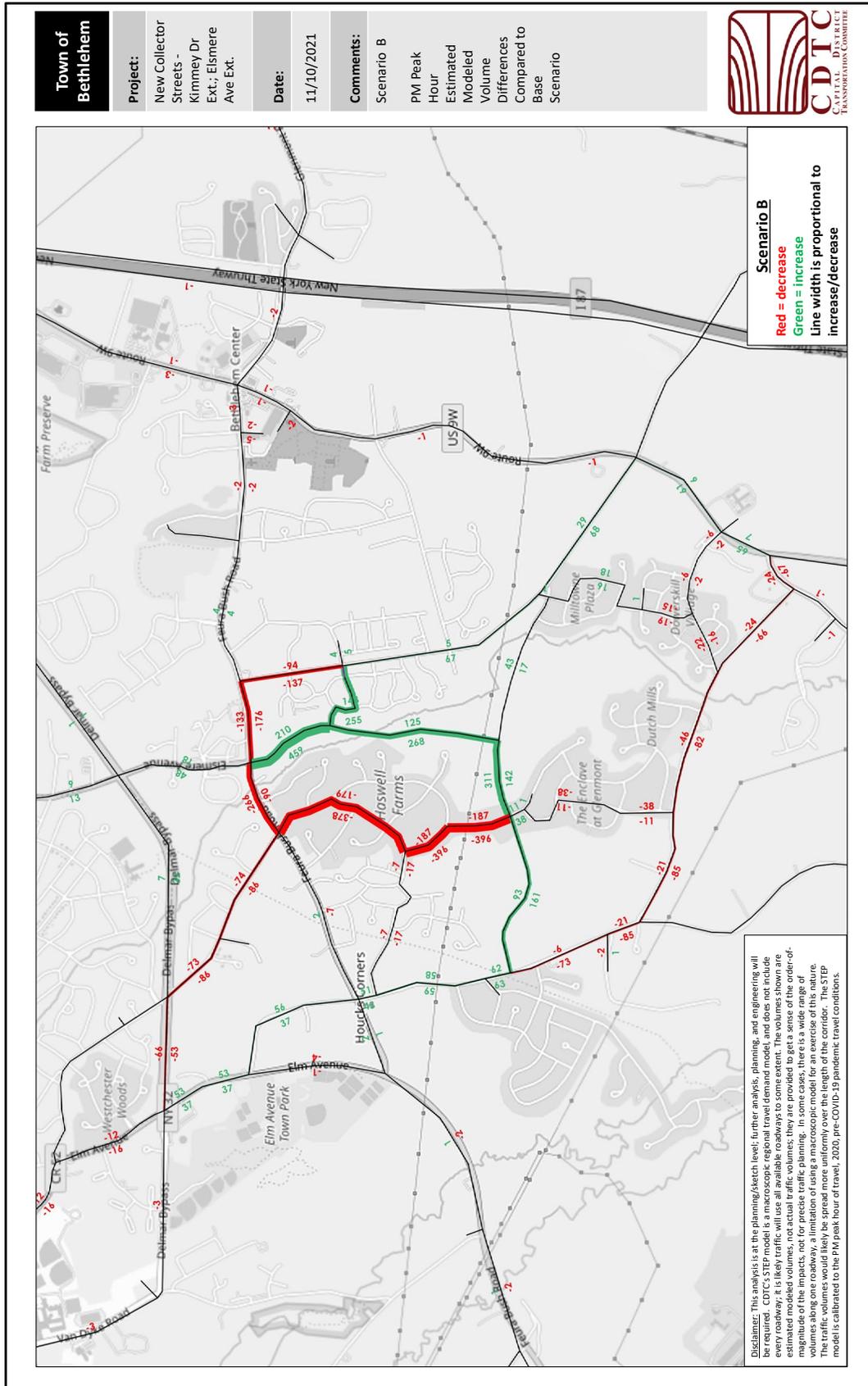
## **Attachments to Summary of CDTC Methodology / Analysis**

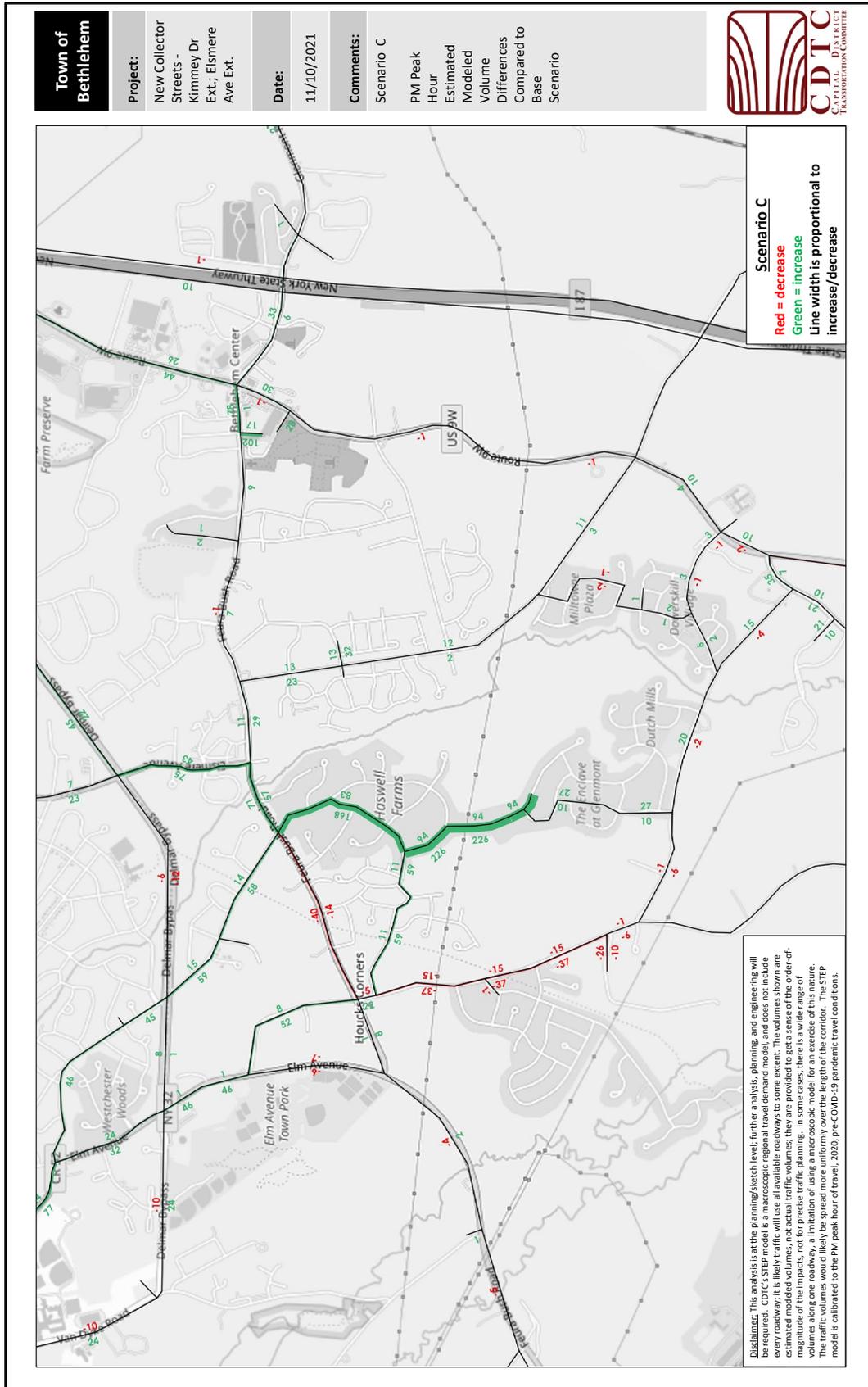


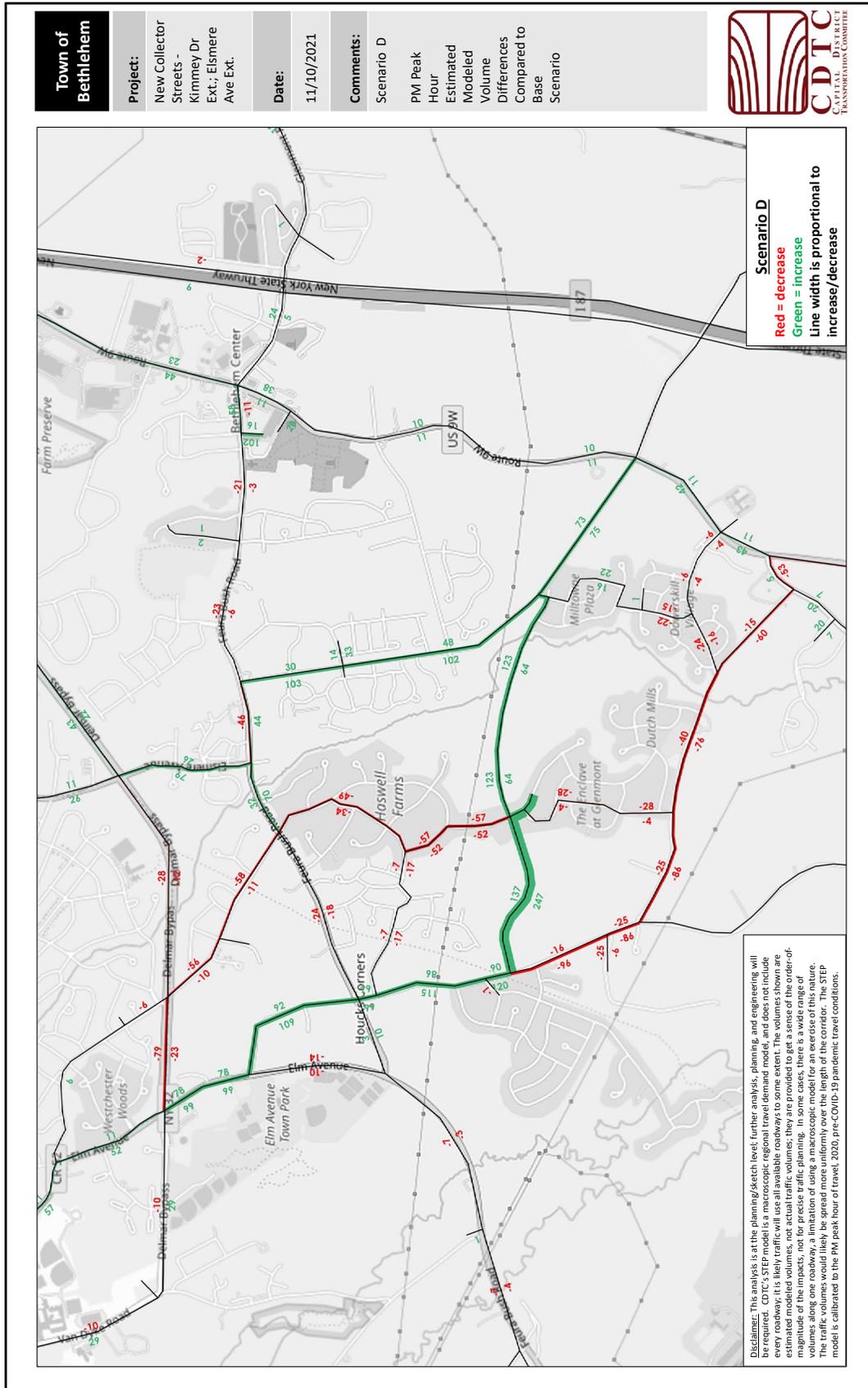


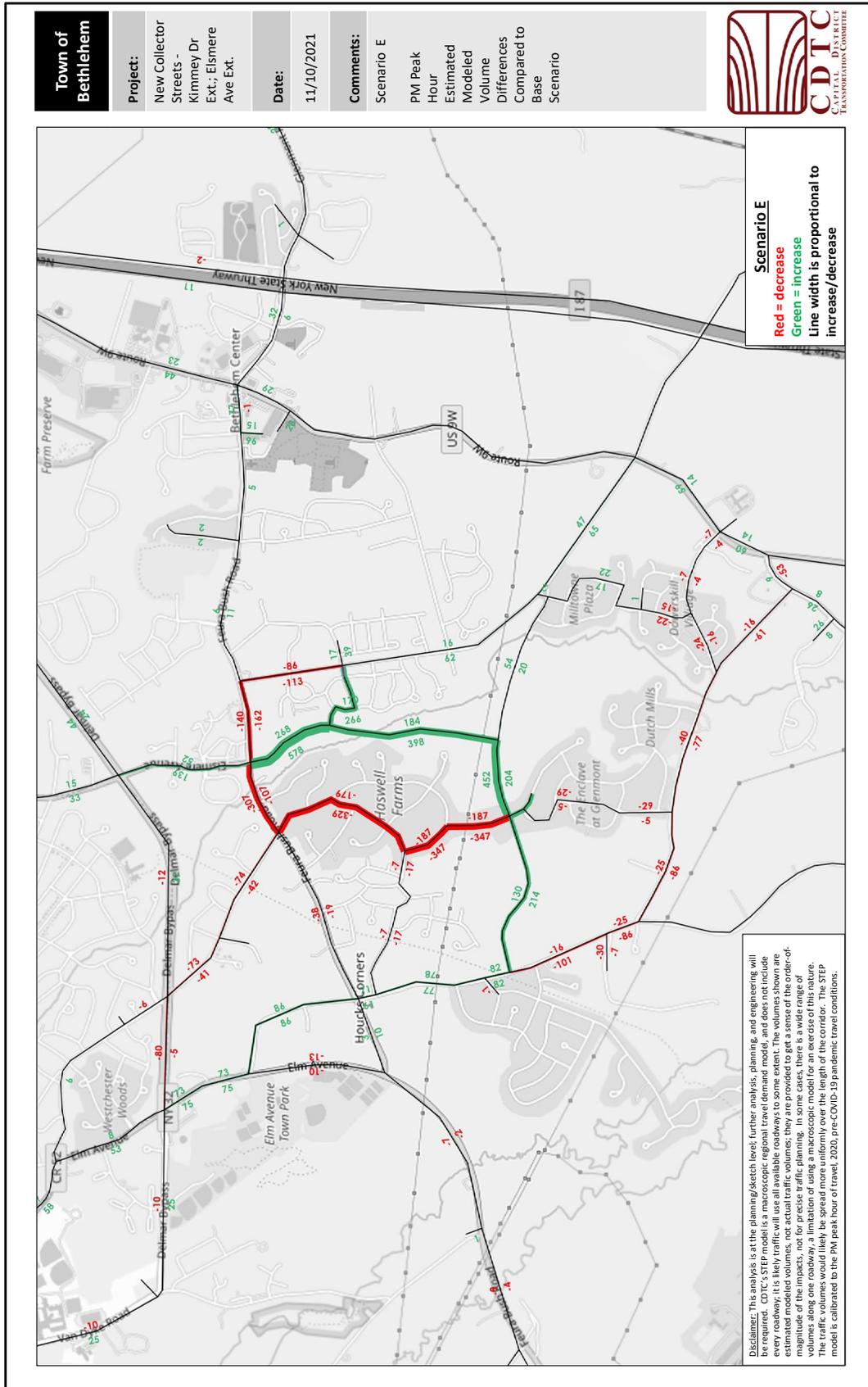


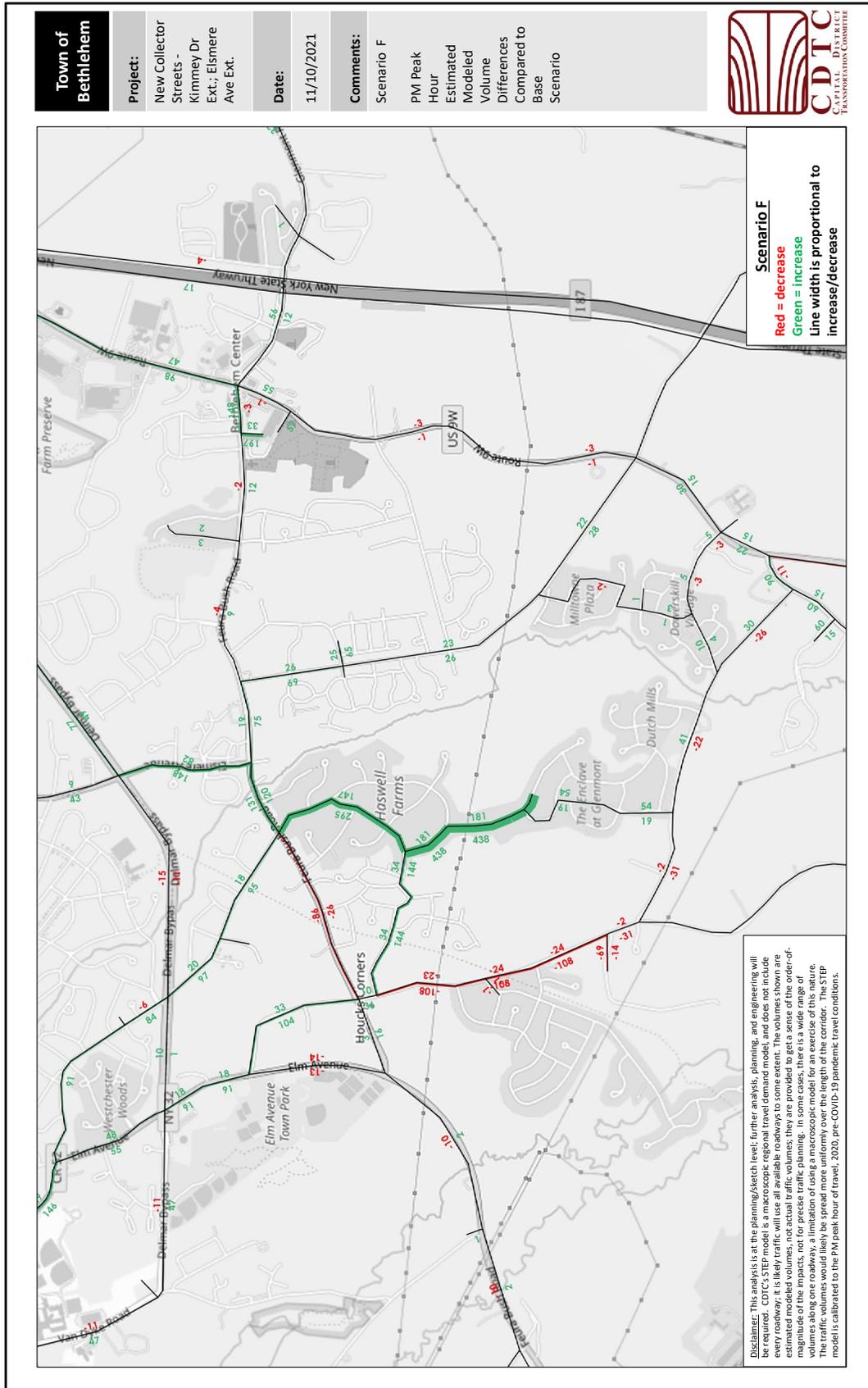


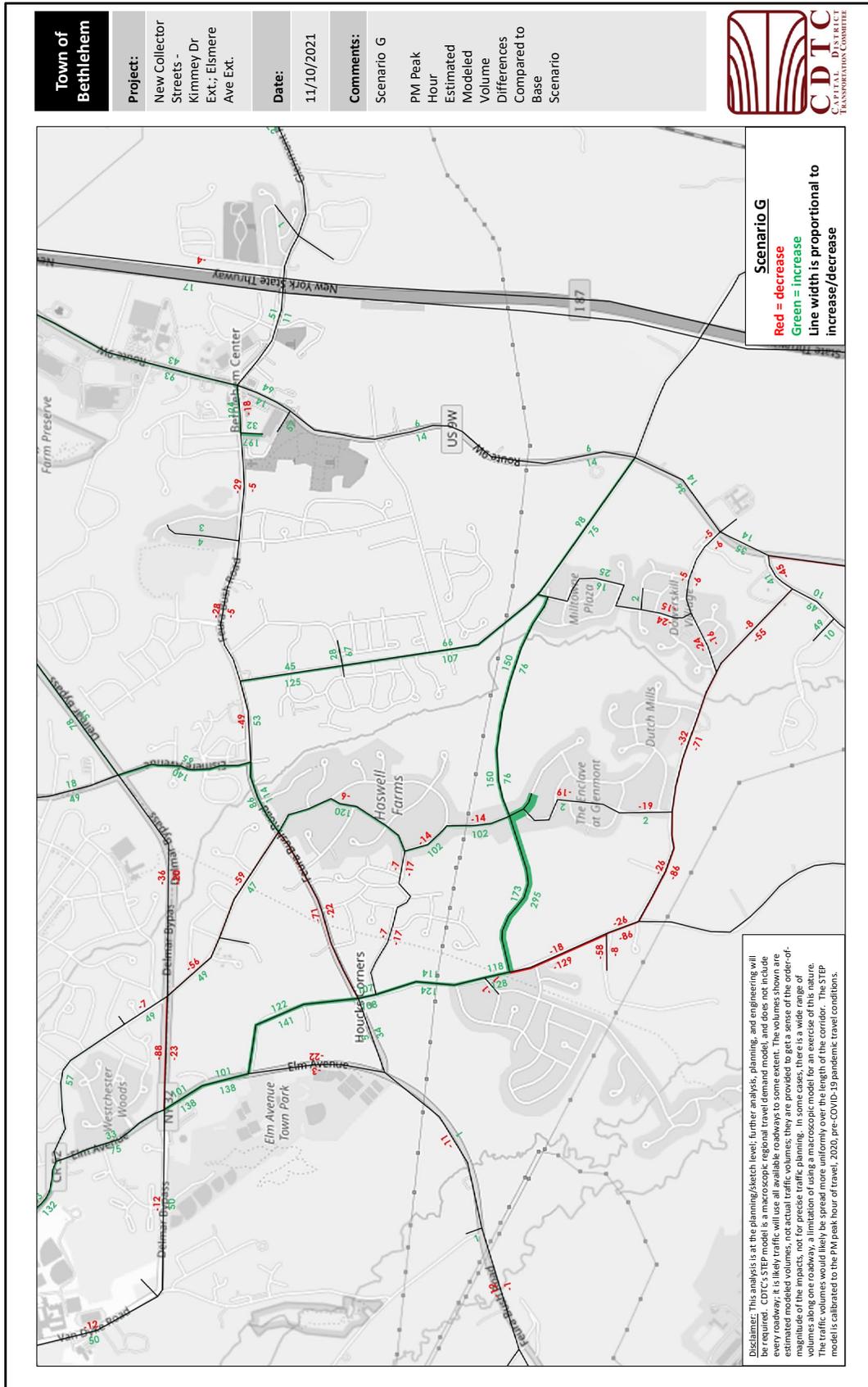


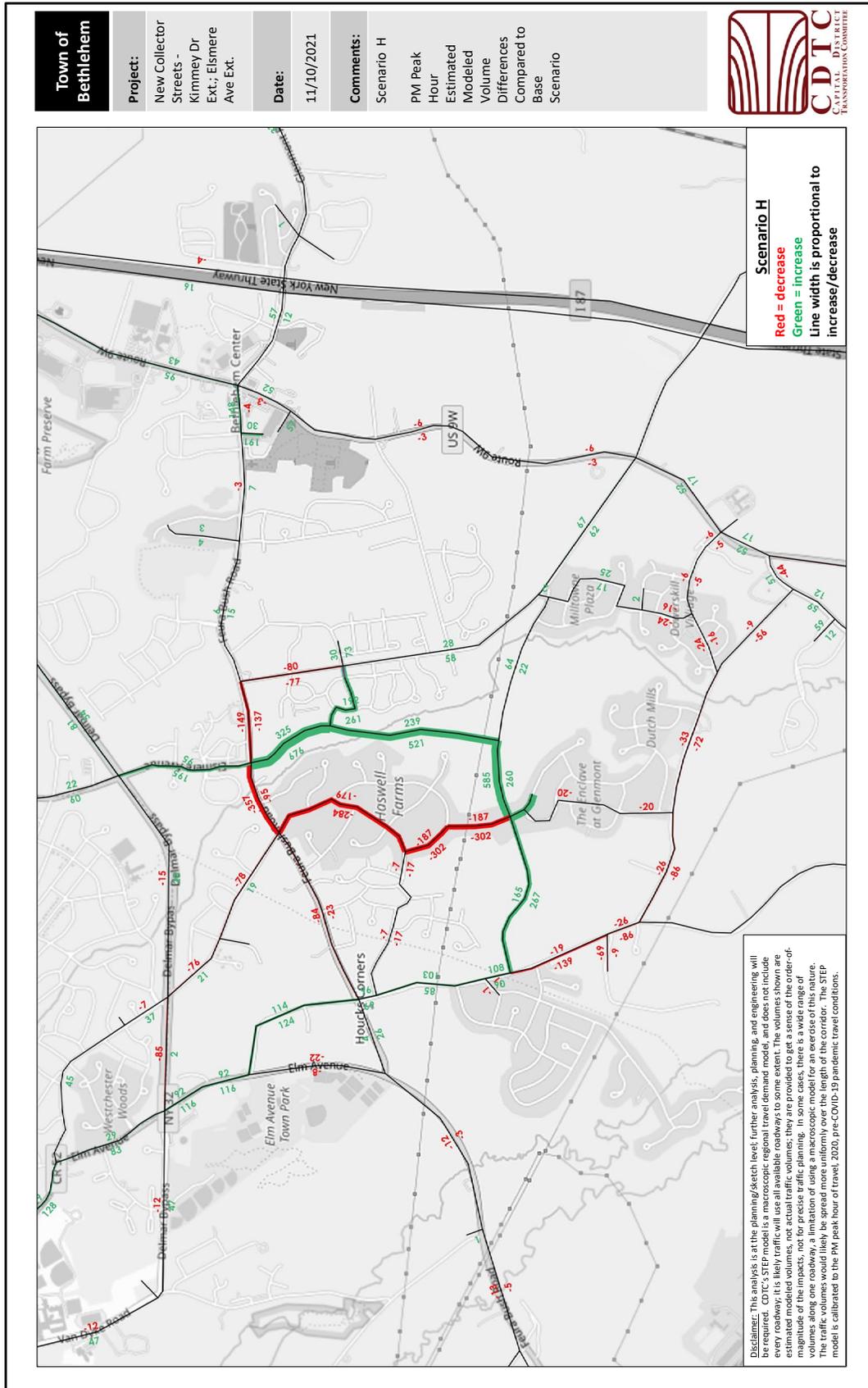


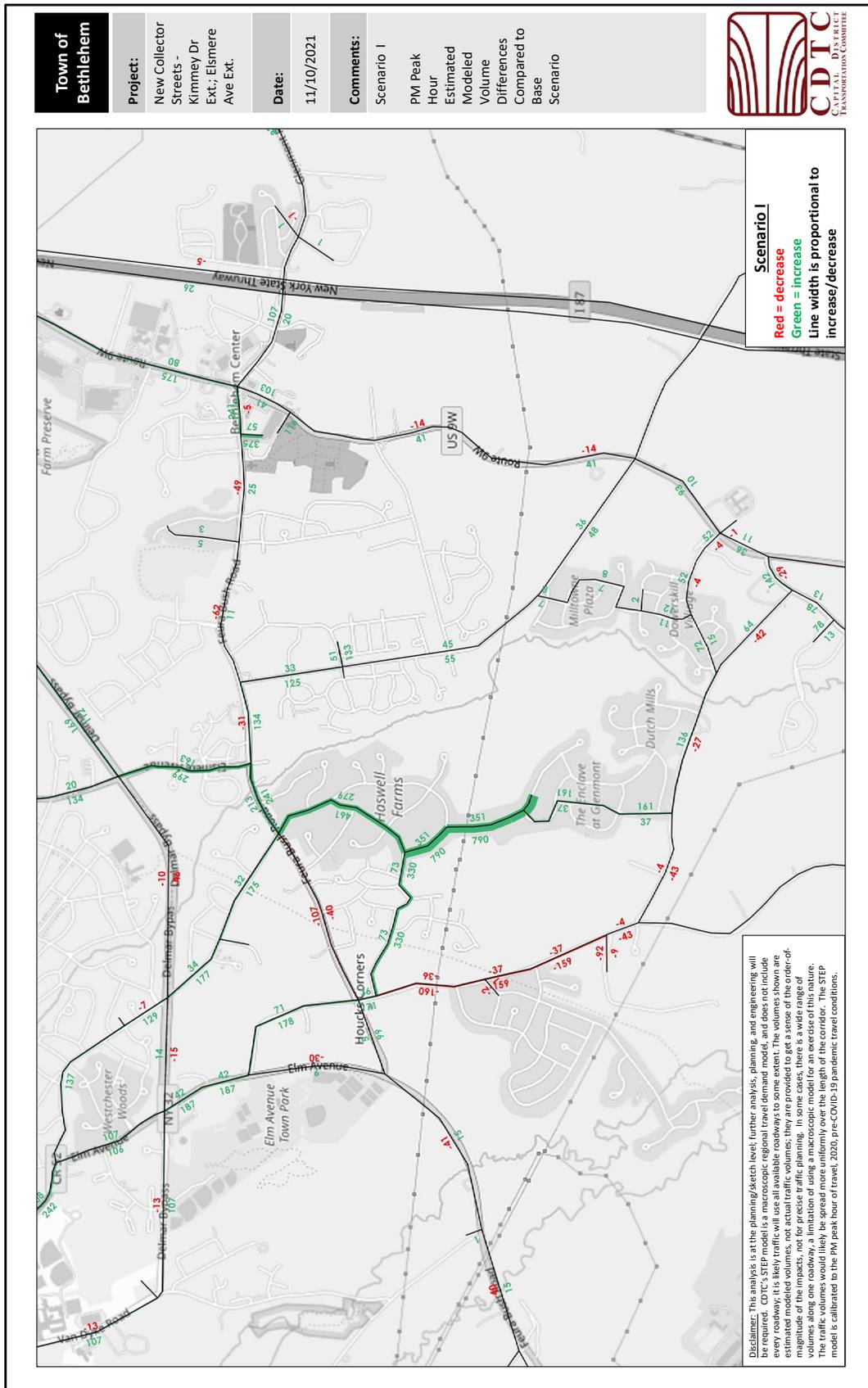


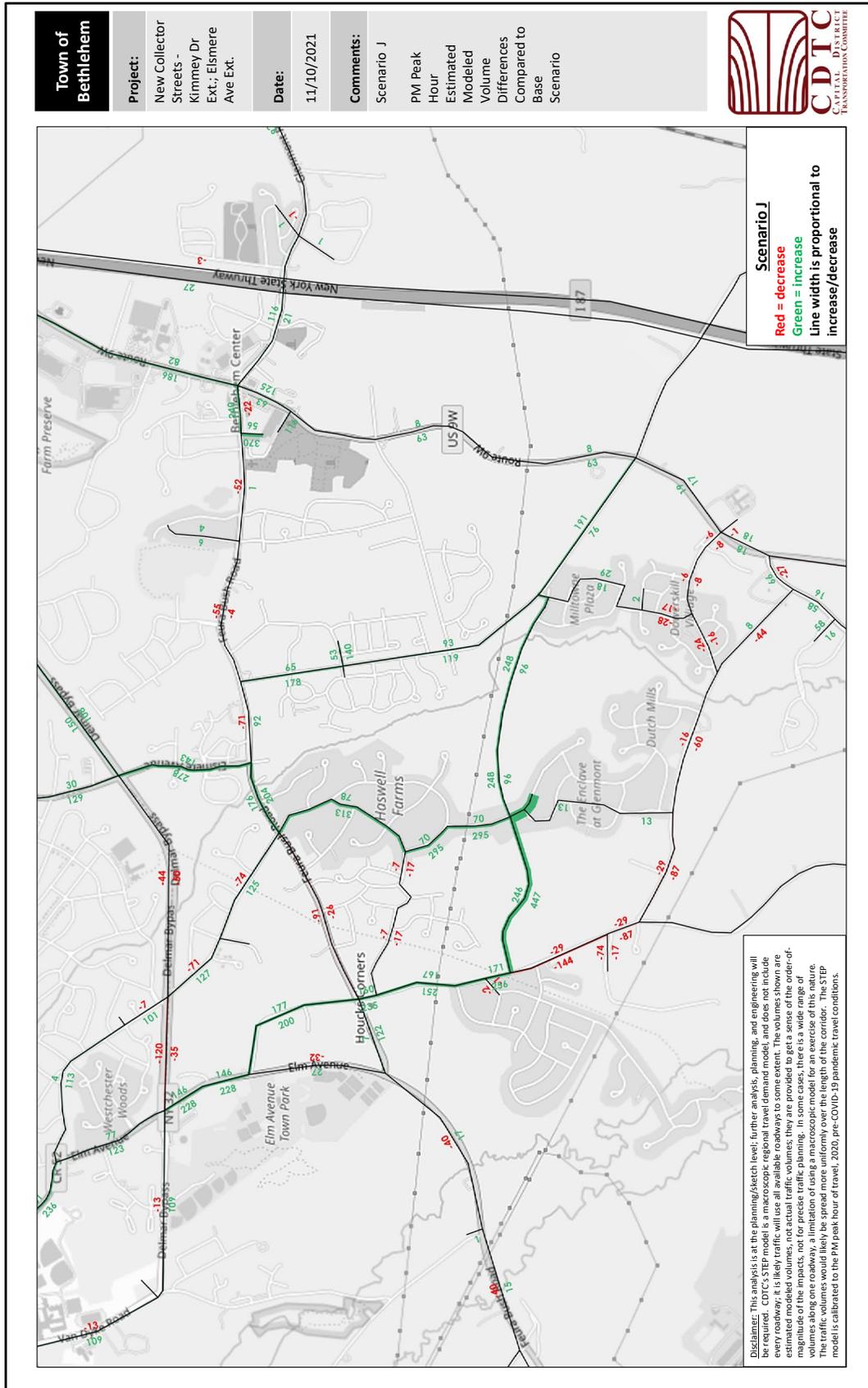


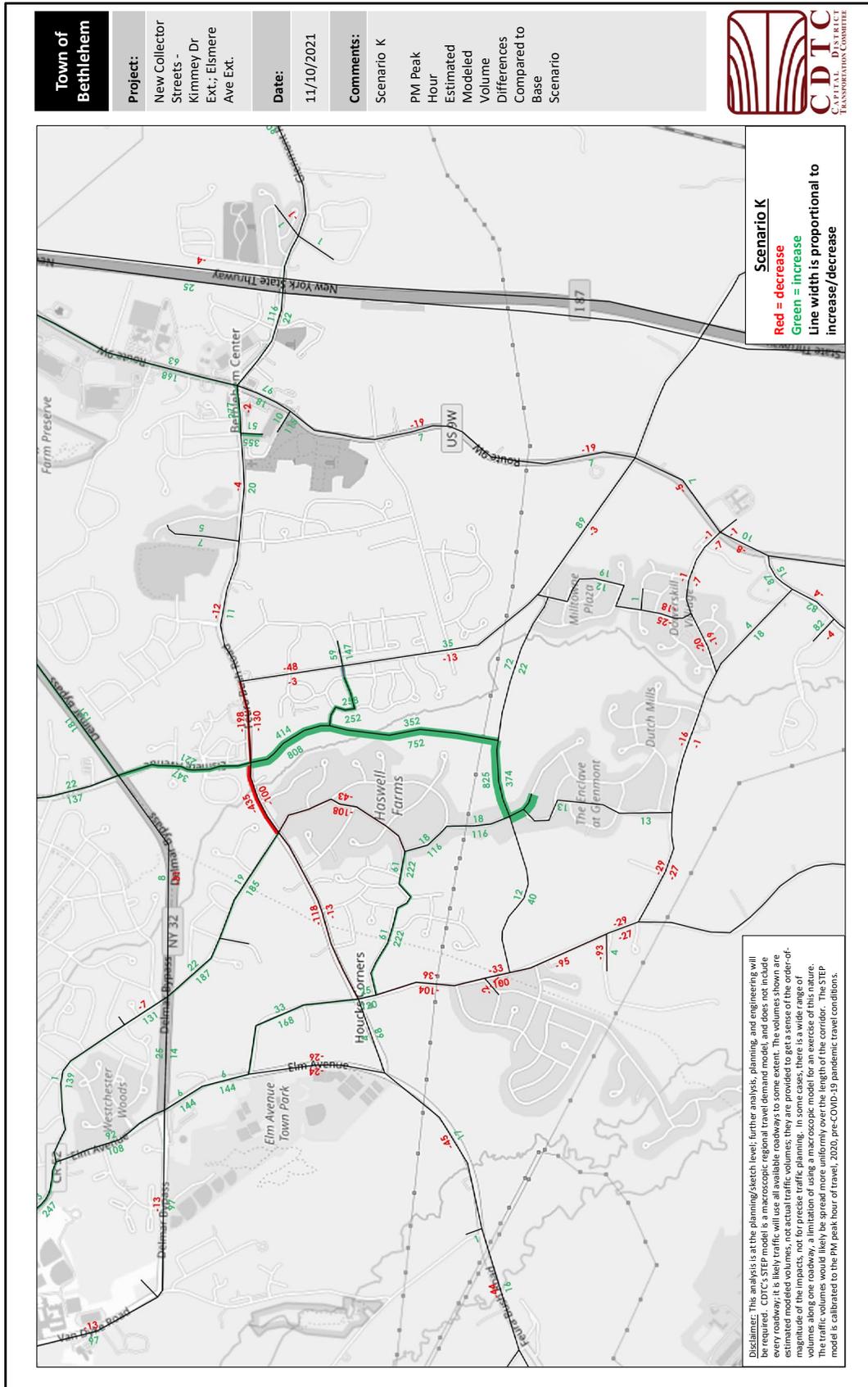












# Infrastructure Capabilities

## Utility Infrastructure

Utility infrastructure within the Town of Bethlehem includes water, sewer, electric, natural gas, and telecommunication infrastructure. See Appendix B for additional infrastructure maps.

This section also summarizes the Town’s composting program for yard waste and food scraps, which is an important program that diverts yard waste and food scraps from the waste stream to landfills. The program offers a significant opportunity to mitigate climate change through the reduction of methane.

## Water Infrastructure

Water infrastructure within the Town of Bethlehem is overseen by the Town’s Department of Public Works Water Division. The town’s water distribution system was first established in 1927 and has been expanded over time to approximately 230 miles of water mains, 1,670 fire hydrants, and annually delivers 1.6 billion gallons of safe and dependable drinking water to approximately 11,500 service connections.

Water is sourced from four major sources:

- Vly Creek Reservoir,
- New Salem Wellfield,
- Selkirk Wellfield, and
- Albany Aqueduct.

Water from the Vly Creek Reservoir and New Salem Wellfield are treated at the New Salem Water Treatment Plant and associated facilities in the Town of New Scotland. New Salem also provides service to residents in the Town of New Scotland. Water from the Selkirk Wellfield is treated at the Clapper Road Water Treatment Plant in the Town of

Water Source	Daily Water Supply Capacity (MGD)
Vly Creek Reservoir (safe yield)	3.0 MGD
New Salem Wellfield	1.0 MGD
Selkirk Wellfield	6.0 MGD
Alcove Reservoir (Albany)	1.37 MGD (contract average)
(max of 500 million gallons / year)	2.5 MGD (max per contract)
<b>Total</b>	<b>11.37 MGD</b>

Table 8.1: Existing Public Water Sources and Capacities - – million gallons per day (MGD). Source: Town of Bethlehem

Land Use	Daily Water Demand (MGD)
Residential	1.53 MGD
Commercial	0.46 MGD
Industrial	1.82 MGD
Town of New Scotland	0.17 MGD
<b>Total</b>	<b>4.0 MGD</b>

Table 8.2: Existing Average Daily Public Water Demand (2019 metered water sales) – million gallons per day (MGD). Source: Town of Bethlehem

Bethlehem. In addition, water is purchased from the City of Albany which is sourced from the Alcove Reservoir in the Town of Coeymans and is treated prior to delivery via the Albany Aqueduct.

As shown in Table 8.1, the Town's water sources could supply up to a maximum of 11.37 million gallons per day. Water demand in the town is approximately on average 4 million gallons of water per day, approximately two-thirds below the daily capacity. The demand level has been relatively stable over the past few years according to the Town's Department of Public Works. The latest available water demand data (2019) is shown in Table 8.2.

### **New Salem Water Treatment Plant**

The New Salem Water Treatment Plant was constructed in 1958 and expanded in 1972. It has a maximum design treatment capacity of six (6) million gallons of water per day, with an average actual capacity of 3 million gallons per day. This water treatment plant draws water from the Vly Creek Reservoir, which has a total storage capacity of 1.25 billion gallons. The treatment process consists of chlorination for disinfection; coagulation with aluminum sulfate; filtration with rapid sand filter, and corrosion control. There is no fluoride added to the Bethlehem water supply. Water from this plant is delivered by gravity through a network of water mains.

### **Clapper Road Water Treatment Plant**

The Clapper Road Water Treatment Plant was constructed in 1994, with an expected maximum treatment capacity of six (6) million gallons of water per day. When the plant was put into service, it was found that the groundwater infiltration system along the Hudson River was not able to provide up to 6 million gallons per day. Eventually, eleven (11) wells were installed along the Hudson River to supplement the infiltration system. The well water contains elevated levels of iron and manganese, which the Town originally removed by a chemical oxidation process using chlorine addition at a facility located near the Dinmore Road wastewater treatment facility. The chemical addition system was unable to treat up to 6 million gallons per day, with a maximum operational treatment capacity of approximately two (2) to three (3) million gallons per day. This plant uses four (4) trident filter units for water purification with chlorine as the primary disinfection agent. Chemicals used include coagulation with Polyaluminum Chloride (PAC) and a non-ionic polymer, and a corrosion inhibitor. The Clapper Road Water Treatment Plant underwent a major improvement project that was completed in March 2021. The project was necessary to meet water quality standards that have become more stringent since the plant was originally built in the 1990s. The project included the use of oxygen and sodium permanganate to remove the iron and manganese from the untreated well water instead of chlorine, and added a dissolved air flotation system ahead of the original

plant filtration units to improve the removal of natural organic matter from the treated water. The Clapper Road Water Treatment Plant improvements also allowed for an increase in water output. By completing these improvements, the facility is now able to produce water at its original design maximum of 6 million gallons per day.

### **City of Albany Interconnections**

To enhance capacity, the Town established two (2) interconnections with the City of Albany's water supply. One interconnection is located in a residential area on Kenwood Avenue and the other is in an industrial area on Creble Road. The Town currently purchases water from the City of Albany to supplement its capacity. The water contract with the City of Albany is scheduled to terminate at the end of 2023. The recently completed upgrades to the Clapper Road Water Treatment Plant have increased capacity and offset the future loss of water from the City of Albany upon the 2023 contract termination. An emergency interconnect is also available with the Town of Guilderland's water system in North Bethlehem, which can provide water from Bethlehem to Guilderland, or vice versa, depending upon which community needs supplemental water.

### **Maintenance**

In addition, the Town performs 1-2 pipeline installations or replacements per year, in addition to making repairs to approximately 70 water main breaks per year. Water main breaks in town are most commonly found on the older,

unlined cast iron water mains. The breaks occur for a number of reasons including, but not limited to, water hammer due to improper operation of fire hydrants or valves in the distribution system, poor installation practices of the past (rocks placed against the pipes instead of cleaner fill), and aggressive soils causing corrosion on the exterior surfaces of the pipes. To address aggressive soil corrosion, new installation practices require a polyethylene sleeve over new ductile iron pipe to prevent future maintenance needs.

**Operations**

The Town’s water district has operated for decades under all federal and state legal requirements. In 2018, the Town adopted a Water Code (Chapter 124) to regulate water usage in the town, promote the uniformity and standardization of materials and procedures used in the construction of water mains and water services, establish rents, rates, penalties and minimum charges for water usage, and establish rights and obligations of water users in the town’s water districts and to any out of district users. The Water District and associated water mains, shown in the Water Infrastructure Map within the Map Appendix, includes most neighborhoods/populated areas within the town with the exception of portions of Meads Lane, Elm Avenue, Jericho Road, Weisheit Road, the area around the Van Wies Point Neighborhood along the Hudson River, and southwest portions of the town including South Bethlehem. These areas obtain their water needs by private wells. The Albany County Health Department approves and regulates on-site private water systems. Participant

feedback during the community forum in South Bethlehem and at LWRP public meetings expressed a desire for public water service in the existing South Bethlehem neighborhood and Van Weis Point neighborhood.

As shown in the Water Infrastructure Construction Year Map within the Map Appendix, water mains have been continuously constructed for decades with most new water mains radiating from the centers of Delmar and Elsmere as new residential and commercial projects have been developed (installation occurring from private development).

**Sanitary Sewer Infrastructure**

The sewer infrastructure within the Town of Bethlehem is overseen by the Town’s Department of Public Works Sewer Division. Similar to the Water Code, the Town has a Sewer Code (Chapter 91) that guides the operations and maintenance of the public sewer system. The Town of Bethlehem sanitary sewer collection system was first established in 1929 and has been expanded over time to approximately 170 miles of sewer mains and 36 sewer pumping stations. There is a single wastewater treatment plant located at Dinmore Road constructed in 1973. Wastewater traverses the system through gravity trunk mains to the plant. Sewer pumping stations are located in areas throughout the town where the use of gravity trunk mains is not feasible due to elevation or location. The Town’s plant treats sanitary sewage and discharges treated water into the Hudson River. The Town sewer treatment plant

has a daily permitted capacity of 6 million gallons.

The 2019 data for the treatment plant indicates the plant is treating on average approximately 4.37 million gallons per day (MGD), just over two-thirds of its daily permitted capacity (see Table 3). Data from 2019 was reviewed since it reflects pre-COVID-19 pandemic conditions. In 2020, during the pandemic the plant treated on average 3.95 MGD. Comparatively, the 2005 Comprehensive Plan identified the plant treated slightly greater flow in 2003 at 4.8MGD. Reasons for the reduction in flow over the past 15+ years may be due to less overall water usage and greater use of low flow fixtures by town residents and businesses.

A brief calculation was prepared to determine if the current excess capacity of the wastewater treatment plant could accommodate the projected population growth in the year 2040 using an average of 123 gallons per person per day (4.37MGD / 35,349 estimated 2020 Bethlehem population). In comparison, the 2040 projected population (36,375) would theoretically use 4.54 mgd. This equates into a 0.17 mgd increase in usage in the year 2040. This rough approximation does not differentiate between residential and commercial/

Daily Sewage Treatment	Million gallons per day
Permitted Capacity	6.0
Demand (2019)	4.37
Available Balance	1.63

Table 8.3: Sewage Treatment Capacity and Demand

industrial uses of water and sewer in Town, so this calculation should be considered conceptual in nature. At this conceptual level, the current 1.63 mgd excess capacity would accommodate the projected population increase. It should also be noted that this calculation assumes the entire population is using the public sewer system, when in reality some are likely using individual septic systems and are not part of the public system.

One issue facing the available daily capacity (one-third) of the Town's sewer collection and treatment system is the infiltration and inflow of stormwater and groundwater into the system. These water sources find their way into the system along the gravity mains or manholes. This also includes water intrusion from illegal connections within homes. The Town Sewer Code strictly prohibits stormwater from being piped directly into the sanitary sewer laterals of homes, but many homes in Town have illegal downspout and sump pump discharge lines that feed into the sewer system. During major storm events the treatment plant's available capacity is reduced. The Town currently works to reduce this infiltration and inflow of additional water, by way of lining existing gravity mains or sealing manholes, thereby conserving capacity at downstream pump stations and the treatment plant.

As new development is proposed in the Town, the impacts of sewage flow demand (residential, commercial, industrial) on the capacity of the treatment plant is reviewed by the Town DPW. Each development that requires an extension of the sanitary sewer line

needs to follow the standard utility extension program, which ultimately results in approvals by the Town and the New York State Department of Environmental Conservation.

Sewer infrastructure facilities and mains within the town are shown in the Sewer Infrastructure Map within the Map Appendix.

### **Town Sewer District**

The Town sewer district and associated sewer mains, both gravity mains and force mains, shown in the Sewer Infrastructure Map within the Map Appendix, includes most neighborhoods/populated areas within the northern portions of the town.

The majority of the southern portion of the town including areas along River Road and the Hudson River, and southwest portions of the town including South Bethlehem, do not contain sewer infrastructure and therefore are outside the town sewer district. These areas rely on individual septic systems for sanitary wastewater treatment. The Albany County Health Department approves and regulates on-site wastewater treatment systems and residential septic systems. There are no known overall operational issues associated with these private treatment systems.

The South Albany Sewer District (SASD) treatment facility treats the sewage generated by twenty-three homes located on Currey Avenue and Scott Boulevard in South Bethlehem. The Town operates and maintains this facility, which treats an average daily flow of 2,200 gallons of sewage a day. The wastewater treatment system

discharges to Tributary 11a of the Coeymans Creek, which is a Class C stream. The treatment facilities design was not intended to take on additional connections.

### **Maintenance Needs**

Pump stations require an additional element of Town maintenance and resources compared to the portion of the system that works by gravity. These pumps stations work to move flow through the collection system to the Dinmore Road treatment plant. With 36 pump stations to maintain, the Town has implemented a pump station replacement program, which includes an analysis of all existing pump stations and their overall condition. The analyses also consider the consequence of failures, safety of Town employees to maintain the facilities, and other factors to formulate a ranking system that helps to identify the next pump stations to be rehabilitated or replaced. In certain instances, pump stations may be removed, as was the case for the Hamagrael pump station. In 2019, this pump station was removed with the flows rerouted by gravity pipe to another point in the sewer collection system. This capital project will save the Town significant future capital improvements. The overall sewer collection system (pipes) is also a major area of focus for operations and maintenance in the Town. DPW staff perform a comprehensive cleaning and inspection of all sewer mains greater than 8 inches in diameter at least once every five years. The Town also proactively cleans individual pipe segments at a frequency of 3, 6, or 12 months, as necessary to maintain proper

operation of the collection system. Limiting the addition of future pump stations associated with new development would help to avoid increases in future maintenance resource needs.

It has been noted that the wastewater treatment plant located immediately south of the Henry Hudson Park can detract from the experience at the park, particularly on weekends and holidays; offensive odor emissions associated with the treatment process can cause a nuisance to the enjoyment of the park. It is also recognized that the Wastewater Treatment Plant is a critical infrastructure resource for the community, providing public health, economic and environmental benefits to the community. The 2012 Sewer Master Plan includes an evaluation of potential odor reduction measures. The costs associated with these improvements should be weighed against other improvements that strike a balance between the facility's capital and process needs and improved odor emissions.

As shown in the Sewer Infrastructure Construction Year Map within the Map Appendix, sewer mains have been continuously constructed for decades with most new sewer mains radiating from the centers of Delmar and Elsmere as new residential and commercial projects have been developed. Some sewer mains within Delmar date back to the 1920's with some areas seeing sewer mains constructed in the 1960's and 1970's.

## Stormwater Management

The 2005 Bethlehem Comprehensive Plan included a recommendation to prepare for and comply with the Phase II (USEPA) stormwater management regulations since the Town is a municipal separate stormwater sewer system (MS4) community. In 2007, the Town adopted Town Code Chapter 98 Stormwater Management to comply with the USEPA regulations.

The regulatory requirements apply to MS4s within the Urbanized Areas as identified by the US Census or areas that have been additionally designated by the NYSDEC (with the exception of minimum control measures 4 and 5, which apply to the municipal boundaries). Bethlehem is located within the Albany Urbanized Area. This program is regulated by the United States Environmental Protection Agency's (EPA) Phase II Stormwater Rule and requires MS4s to develop a stormwater management program that will reduce the amount of pollutants carried by stormwater during storm events to water bodies to the "maximum extent practicable" (MEP). The primary goals of the program also include improving water quality and recreational use of waterways and satisfying the appropriate water quality requirements of the EPA's Clean Water Act (CWA).

The program calls for the implementation of six (6) minimum control measures (MCM), that when implemented together, are expected to result in a reduction of pollutants discharged into waterbodies. The MCMs are: (1) public education and

outreach, (2) public involvement and participation, (3) illicit discharge detection and elimination (IDDE), (4) construction site runoff control, (5) post construction stormwater management, and (6) pollution prevention and good housekeeping to prevent or reduce pollutant runoff from municipal operations.

Three of the MCMs (illicit discharge detection and elimination, construction site stormwater runoff control and post-construction stormwater management) require local laws, ordinances or other regulatory mechanisms to ensure successful implementation of the MCMs. These local laws have been certified by the attorney representing the Town as being equivalent to the NYSDEC's sample model local laws.

In 2008 Albany County formed The Stormwater Coalition of Albany County ("The Coalition"), which is comprised of eleven (11) municipalities, Albany County, and the University at Albany (SUNY), with each providing mutual support and assistance in implementation of MS4 Permit ("the Permit") requirements. The Town of Bethlehem has been an active member since the Coalition's inception. The Coalition has previously participated in two (2) New York State Department of Environmental Conservation Water Quality Improvement Project Program (WQIP) grants.

As an MS4 community the Town is required to develop and enforce a Stormwater Management Plan (SWMP) in order to protect water quality and to satisfy the appropriate water quality requirements of the NYSDEC Environmental

Conservation Law (ECL) and the EPA's CWA. The permit also requires the Town to submit to NYSDEC an annual evaluation of its program compliance ("annual report"). The annual report shall summarize the activities performed throughout the reporting period, demonstrating the appropriateness of its identified best management practices (BMPs), meeting new permit requirements, and progress towards achieving its identified measurable goals, which must include reducing the discharge of pollutants to the maximum extent practical. The Town's SWMP and annual reports are published on the Town's and Coalition's websites.

At the Town level the stormwater management program is administered by the Engineering Division and includes a stormwater management coordinator Staff position. The Engineering Division reviews Stormwater Pollution Prevention Plans (SWPPPs) for development projects or any project that disturbs more than one acre of land. These development projects may result in either publicly or privately owned and maintained stormwater management areas (infrastructure). The Town's GIS mapping system is used to map stormwater infrastructure in the Town, including catch basins, post-construction stormwater management practices, and outfalls. Outfalls are end of pipe locations where the stormwater discharges from the MS4 and enters a water body. The Town's Highway Department is responsible for maintenance of Town-owned stormwater infrastructure, as well as other components of the MS4 program requirements. Other private stormwater infrastructure

is maintained by private entities such as shopping plazas, multi-family developments, homeowners associations, etc. who provide annual maintenance and operation compliance reports to the Town.

The Town's MS4 program was audited by the EPA in 2019 and received no administrative/consent orders based on the fact that there were no significant deficiencies or issues identified in its program. According to EPA auditors, in recent years the Town was only one of two municipalities that did not receive a consent order. Overall, based on the results of the audit the Town is running a program in compliance with all applicable stormwater management requirements.

### **Additional Stormwater Management Requirements**

While not regulated through Chapter 98 of the Town Code, the Town also regulates development projects that disturb between 0.25 acres of land and one acre of land for compliance with the Town's grading, erosion and sediment control requirements found in Zoning Law 128-49. These requirements, implemented by the Town Engineering Division, serve to regulate uncontrolled runoff carrying soil, organic material, and chemicals to address negative impacts on the natural environment (i.e. streams, wetlands, waterbodies, floodplains, steep slopes) and the built environment. For this amount of disturbance, water quantity is regulated while water quality is unregulated, meaning there are no treatment practices required. Stormwater management practices help to improve water quality of our streams and waterbodies by

eliminating or reducing pollutants. Modifications to the disturbance threshold would help to further protect water quality of streams and tributaries within the various watersheds of the Town. Additional Town staffing resources would be needed for an expansion of the program.

Experience with the provisions of Zoning Law 128-49 have posed implementation and interpretation challenges to the Engineering Division including those related to the direction or quantity of runoff and exemptions for fill to be stockpiled or placed on steep slopes that claim to be associated with an agricultural use.

### **Natural Gas Service**

The specific geographic location of natural gas pipelines is not available for public dissemination due to security concerns regarding this data. However, natural gas service within the town is provided by National Grid. All natural gas service is privately owned and maintained.

### **Electric Service**

The specific geographic location of local electric service lines is not available for public dissemination due to security concerns regarding this data. However, electric service within the town is provided by National Grid. Located within the town on the shore of the Hudson River is an 815-MW commercial power plant, which has been in operation since 2005 by PSEG Fossil LLC and utilizes natural gas, and water from the Hudson River. The location of this commercial power plant, major electric transmission lines, and commercial solar fields

were digitized from publicly available aerial images and shown in the Major Electric Transmission/Generation Map within Map Appendix. As shown in the map, several major electric transmission lines are located within the town through portions of Elsmere, Delmar, South Bethlehem, and Selkirk.

Commercial or large scale solar fields are located near some of these major electric transmission lines including fields located along Bridge Street near South Bethlehem, which is owned by the Town and provides power (3MW) for Town municipal use. The Owens Corning company industrial plant on SR 32 near the Town compost facility has its own solar facility (2.6MW) to accommodate a portion of its energy needs. On Delaware Avenue near the intersection of Waldenmaier Road, the Bethlehem School District is the beneficiary of a 2MW solar field. There are also large scale solar projects located on Speeder Road (8MW) and Beaver Dam Road (5MW) in Selkirk, and along Weisheit Road (2.6MW) in Glenmont.

Large scale solar (solar PV systems) are a recently new land use found within the Town. These projects are proposed and constructed by private solar companies in an effort to address the 2015 New York State Energy Plan as implemented through the Reforming the Energy Vision Initiative. Recent PV solar systems as identified above have ranged in production size from 2.0MW to 8.0MW. In 2016, the Town implemented new regulations to the Zoning Law 128-67.2 to address the location, size, setbacks and other

provisions to minimize impacts to surrounding properties.

Small scale PV solar system installations on rooftops are also regulated through the Zoning Law. Systems generating more than 12kW capacity and more than 110% of the kWh's of electricity consumed over the previous twelve-month period by land use(s) existing on the lot where the system is located are subject to a special use permit/site plan review by the Planning Board. Systems capacity sized less than the thresholds above are exempt from Planning Board review and only require Building Permit review/approval. In 2016, when these provisions were implemented they were consistent with NYSERDA guidance (Unified Solar Permit) for local municipal regulation of PV solar systems. However, the Town's requirements have not kept up with NYSERDA's new guidance, which recommends administrative review/approval of rooftop systems up to 25kW permitted through local Building Department. Since 2011, over 500 rooftop solar permits have been issued, with a peak issuance period in 2015 and 2016, when 177 and 115 permits were issued, respectively. Since 2016, the Town Planning Board has reviewed 11 rooftop solar installation applications, all of which have been approved without conditions or modifications to mitigate impacts. Each application requires a public hearing, and there have been no impacts to surrounding properties were raised or identified.

## Telecommunications

The specific geographic location of local communication services and lines is not available for public dissemination due to security concerns regarding this data. However, cable TV, internet, and phone services are provided by Spectrum, and fiber optic TV, internet, and phone services are provided by Verizon Fios. 5G and 4G wireless service is provided by Verizon and AT&T among others.

Overall, the town's denser population areas are well served by broadband coverage, which has increasingly become an important telecommunication utility during the COVID-19 pandemic, as interaction with family and friends, as well as online remote learning for students has become the new normal. Businesses may have also had to shift their marketing communications online to reach their customers/clients. There are a few areas in Town that may not be served by broadband. These areas are representative of having less than 20 homes/linear mile and would typically be found in the more rural, southern area of the Town.

5G wireless service is available to Town residents through recent private carrier upgrades to existing antennas on cell towers. The Town has not experienced small cell attachments to existing utility poles. It appears the industry is pursuing small cell attachment opportunities in more densely populated city centers. However, the aesthetic impact of these small cells has been evolving in those communities experiencing installations and Town policies may be useful to meet

resident expectations should small cells be proposed along roadways in the community.

## Composting Program

According to the Town's Recycling Coordinator, yard waste and food scraps (organics) are the largest category of materials in municipal solid waste entering landfills. Food scraps alone represent about thirty (30%) percent by weight of materials that are currently landfilled and include both wasted food and soiled paper and cardboard products associated with food; napkins, pizza boxes, etc. Landfills are the second (2nd) largest industrial source of methane gas, and methane is up to 80 times more potent a greenhouse gas than CO<sub>2</sub>. Diverting food scraps from the waste stream to landfills offers a significant opportunity to mitigate climate change through the reduction of methane.

The Town of Bethlehem has had a robust yard waste collection and composting program for more than twenty (20) years. As of January 1, 2022 the NYS Food Donation and Food Scraps Recycling Law goes into effect. It requires businesses and institutions (with a few exceptions like hospitals, farms and K-12 schools) that generate an annual average of two tons of wasted food per week or more must: donate excess edible food; and must recycle all remaining food scraps if they are within 25 miles of an organics recycler that will accept their food scraps (organics recyclers including composting facilities and qualified anaerobic digesters).

The Town of Bethlehem's Compost Facility is one of two sites in the Capital Region currently listed, as of 9/21/21, on the New York State Department of Environmental Conservation (NYSDEC) website list of Food Scraps Recyclers per the new food scraps law. The other location is Almstead Nursery in Claverack in Columbia County. Bethlehem's compost facility is the largest in the capital region according to NYS DEC reports, and likely the largest facility per capita in the state. The facility has excess capacity to provide a regional source of 'sustainable materials management', diverting large volumes of materials from landfills. The Bethlehem Central School District has voluntarily composted their food scraps for some time, although the Covid-19 pandemic temporarily suspended the program and they have just recently reactivated the program.

### How It Works

Compost is the 'organic' part of soil and the Town has separate methods for composting yard waste and food scraps. For food scraps the town is currently scaling up its equipment to use an "aerated static pile (ASP)" methodology which injects (via pipes and blowers) a uniform airflow throughout windrowed piles.

As of 2021, food scraps from residents, the school district, and local businesses are brought by the local private hauler, FoodScraps360, which specializes in providing this service, by subscription. Businesses affected by the NYS Food Donation and Food Scraps Recycling Law will also have their food scraps collected and hauled by private food scrap haulers.

Yard waste is composted differently, using a 'turned windrow' method. The town collects yard debris, grinds, lays out material in windrows (i.e., long trapezoidal rows of material) and turns the material with equipment periodically.

In both composting methods, temperature and moisture content is monitored and the Town follows the state required time and temperature protocol to destroy any potential pathogens and weed seeds. Care is also taken to keep the piles aerobic versus anaerobic. The turned windrow method can take between approximately nine (9) months and one and a half (1.5) years to complete, whereas the ASP method usually only takes sixty (60) to ninety (90) days to complete the composting process.

Electric supply was recently installed at the Compost Facility to operate blower motors and other equipment for the ASP composting method. The town hopes to augment the electric supply with a solar source in the future.

Compost is a valuable soil amendment which adds slow-release micronutrients, helps retain moisture and prevent erosion, fosters healthier plants that can better resist pests and disease and whose root structures can more fully utilize soil nutrition, and assists with carbon sequestration to significantly address climate change.

The Town's compost products are free for residents to shovel, and loaded material is sold to residents, non-residents and companies. Companies often purchase screened and leaf compost products in bulk

for topsoil production. The town also has a "Full Circle Compost" enhanced screened bagged product, made from composted food scraps and yard trimmings.

## Findings and Opportunities

- The Town has additional public water capacity. Public water demand is approximately two-thirds below the capacity of water sources and water treatment. Such excess capacity provides the potential for future growth through infill development in areas with existing supply.
- The Town's available sanitary sewer capacity has remained steady for the past 15 years and there is available capacity for future population growth. Excess (available) sanitary wastewater treatment capacity is approximately one-third below (1.63 mgd) the system's capacity. Surprisingly, a comparison of sewage treatment flow in 2003 and 2019 revealed a reduction in sewage treatment flow. While there was residential and commercial growth in the Town over this period, voluntary conservation measures undertaken by property owners to reduce water usage and installation of low flow fixtures, along with sewer main line improvements may be the reasons resulting in this reduction in sewage flow. Looking ahead to future population growth in 2040, the Town's sewage treatment capacity can fulfill the expected additional demand required by future residents.
- The Town is implementing stormwater management (MS4) permit requirements. The Town of Bethlehem successfully implements its stormwater management program, as well as participates with the Stormwater Coalition of Albany County, to comply with the MS4 permit requirements to improve water quality.
- Existing utility infrastructure is generally available throughout the town. Although data associated with natural gas, electric and telecommunications utility providers is unavailable or limited, access to utility (sanitary sewer and water) infrastructure is generally available. Individual projects will need to be evaluated on a case-by-case basis to determine whether utility infrastructure improvements in the immediate area of the project site are necessary to accommodate flow demand to support such development. Further, Town policies would be appropriate to address resident concerns regarding the aesthetic impacts of 5G small cell networks – should they begin to be proposed in the Town.
- Pump station maintenance utilizes DPW resources
- Limiting the addition of future pump stations associated with new development would help to avoid increases in future maintenance resource needs by DPW.
- Rooftop PV solar applications should follow NYSERDA's Unified Solar Permit threshold of 25kW system size. After 5 years of Planning Board experience reviewing rooftop PV solar applications it appears these installations have no identified impact on surrounding properties. Streamlining the application review process by following NYSERDA's Unified Solar Permit threshold of 25kW for rooftop installations would remove unnecessary applications to the Planning Board and provide for a more efficient and predictable approval process for owners and the solar installers (administrative review by the Building Dept. only).
- Revisions to land disturbance thresholds associated with stormwater management practices could further protect water quality of streams and waterbodies. Exploring revisions to Town stormwater management regulations associated with land disturbance of less than one acre could help to protect water quality in addition to water quantity. Available staff resources is a limiting factor in creating, operating, enforcing, and monitoring an expanded stormwater management program. Further, experience with the provisions of Zoning Law 128-49 grading, erosion and sediment control, have posed implementation and interpretation challenges to the Engineering Division including those related to the direction or quantity of runoff, and exemptions for fill to be stockpiled or placed on steep slopes that claim to be associated with an agricultural use.

- The Composting Program offers a significant opportunity to mitigate climate change through the reduction of methane. Town's composting program for yard waste and food scraps is an important program that diverts yard waste and food scraps from the waste stream to landfills.

## Recreation

Town of Bethlehem community members have a wide variety of public and private recreation options that currently include Town parks and facilities, the Five Rivers Environmental Education Center, and the Helderberg-Hudson Rail Trail. The Town Parks and Recreation Department offers a wide selection of programming, but privately-operated leagues offer additional sports programs. Residents also utilize Town roadways and sidewalks for walking, running, and cycling.

In 2015, the Town prepared the Parks and Recreation Master Plan (Master Plan) to help meet the needs of current and future residents. The Master Plan establishes a direction to guide efforts to enhance the community's parks and recreation services and facilities. The Master Plan continues to be followed today. The Master Plan includes a specific master plan for Elm Avenue Town Park, which identified future recreation improvements to the park, including walking trails, playground improvements, amphitheater, etc. Similarly, the Local Waterfront Revitalization Program (LWRP) includes a specific master plan for Henry Hudson Park.

### Parkland Facilities and Level of Service

The Town's publicly owned and operated parkland totals 465 acres for a population of approximately 35,000 residents. With recent land acquisitions (Normans Kill Preserve at Wright Lane, Downs/Vagele Lands adjacent to Henry Hudson Park) using the parkland set-aside funds, Bethlehem currently has 13.29 acres of parkland per 1,000 persons, well above the Master Plan recommendation of 10 acres per 1,000 persons.

The Master Plan performed a level of service analysis utilizing both public and private park facilities, which included several perspectives, including geographical distribution of park resources, proximity to neighborhoods, existing environmental/cultural resources, variety of park resources, and opportunities for park/recreation system expansion. Key findings of the analysis include :

- There is a wide variety of well-distributed recreational opportunities, with the noted exception of the north-south corridor between Magee Park, Colonial Acres Golf Course, and

Maple Ridge Park. Additional islands without nearby park resources are created due to major roadways and varying topographic and environmental resource areas, including the neighborhoods south of North Bethlehem Park.

- The park system is well supplemented by distribution of Bethlehem Central School District properties, which provide playground equipment and recreation fields/courts for basketball, tennis, baseball, etc. Recreational fields and playgrounds are available to

Town residents outside of school hours and scheduled events

- Overall connectivity within and between parks is limited and the Town should focus investment of the bicycle and pedestrian network that provides access to the Town parks, which would greatly improve park-to-park and neighborhood-to-park connections.

## Parks and Recreation Facility Users

Table 9.1 and 9.2 provide identifies public and private recreation facilities in or immediately in the vicinity of Bethlehem. (See pages 138 & 139).

In addition to facilities in the tables, Albany County owns and maintains the Helderberg Hudson Rail Trail which bisects the Town, running approximately 9 miles along the former Delaware & Hudson rail line (5 miles in Bethlehem) from the City of Albany to the Village of Voorheesville. NYS DEC owns and maintains Five Rivers Environmental Education Center and 8 acres are now located in the Town of Bethlehem resulting from a partnership between NYS Department of Environmental Conservation (DEC) and Mohawk Hudson Land Conservancy (MHL). The Center provides trails for all seasons, an education center, and wildlife viewing areas.

The Town's Parks & Recreation Department manages and schedules sports fields and courts for their own programs as well as privately-operated sports leagues. The town

has long standing relationships with many programs including:

- Bethlehem Soccer Club
- Bethlehem Softball
- Bethlehem Babe Ruth Baseball
- Tri-Village Little League
- Bethlehem Lacrosse Club
- Bethlehem Youth Football
- AAU Hoop Youth Basketball
- Bethlehem Basketball Club

The Bethlehem Central School District and Capital District YMCA offers their facilities to privately run sports leagues as well. The town coordinates with the school districts regarding use of school owned facilities. School programs have first priority for use of school-owned fields and courts, then Town Parks and Recreation Department programs, then youth leagues. These youth sports leagues are run by volunteers for both recreational and competitive sports.

Table 9.3 identifies property owned and maintained by the public-school districts (Bethlehem and Ravena-Coeymans-Selkirk Central School Districts) in town.

## Operations

Town Parks and Recreation manages a range of recreation programs, including: sports, senior programs, aquatics, programmed classes, nature/outdoor activities, drop-in activities, and special events. One focus of the 2015 Parks Master Plan is on non-sports activities for residents including community gardening, naturalist education programs, summer camps, after

school programs, adult athletics and fitness.

The Town uses a recreation software system that is used by residents and leagues to reserve park facilities, athletic fields and court, pavilions, and programs. This system allows the Parks Department to maintain a database of contact information and ease the program registration process. The Parks Department maintains several social media accounts including Facebook, Instagram, and Twitter to promote facilities, programs and events.

Future challenges identified by the Parks and Recreation Department include:

- Park maintenance and improvements to existing facilities and development of new ones.
- Focus on ADA compliance and inclusivity in recreation facilities and programming
- Demand for year-round access to facilities
- Facilities to support an aging demographic
- Advantages of best practices in sustainability applied to parks operations
- Maintaining all parks to an acceptable standard with a staff of five (5) maintenance employees

The demand for sports to run virtually year-round continually bring interest in synthetic field surfaces versus natural turf fields. Synthetic is preferred by coaches and managers as it allows access starting earlier in the spring and extends

the season later in the fall. Best practices of drainage, fertilization and overseeding of natural turf can allow similar extension of the season if there is adequate budget. The synthetic vs. natural turf argument will continue and various capital cost and life cycle analysis should be assessed. Elm Avenue Park has clay soils (as an example) which are hard to work with and require adequate drainage to extend useful life. In 2021, an artificial turf field was approved by voters of the Bethlehem Central School District to be installed at the Bethlehem High School.

Recreational programs for seniors are mainly housed in Town Hall, and with minor programming provided at the Park's Administration building. Town Hall is clearly serving more functions than it has capacity. As the senior cohort grows the town should consider developing a community center that serves to address the programming demands for seniors. Recent community support for investment in the town pool complex, highlights the Elm Avenue Town Park as a key community resource, which has available land to locate a community center. The current building that supports the pool complex will soon need improvements to locker rooms and administrative check-in area. A reimagined pool complex building that includes Town Parks and Recreation Department offices and modern bathhouses to support the pool complex could also include a community center to accommodate senior services and programming.

Many residents view walking, running, or biking on the sidewalks and local residential

streets as important recreation opportunities, in addition to the transportation purposes provided by this infrastructure. There are avid cyclists who also ride the shoulders all around town, indicating infrastructure for transportation also serves a recreation purpose for Town residents. Sidewalks and bicycle connections to the Albany County Rail Trail are in high demand for recreational reasons as that Rail Trail connects runners and cyclists to recreational amenities in adjacent communities. Further, the Albany Water Line, while not a formal trail, serves informally for those adjacent neighborhoods looking to walk or run off-road for recreational purposes.

The Capital District Transportation Committee's regional trail plan includes multi-use trail segments located within Bethlehem as part of the Capital District Trails Plan and if constructed, these will further expand recreation opportunities. The CDTC Capital District Trail Plan identifies existing and conceptual regional trails and existing and possible supporting connections. The plan includes two core trails and three supporting network trails within the Town. Core Trails include the existing Albany County Rail Trail and the Hudson Northway, the latter being located along River Road/NY-144 connecting to the South End Bikeway Connector. The first supporting trail would be the Elm Avenue Bike Path, located along Elm Avenue/Cherry Avenue, Feura Bush Road, and the NY-32 Delmar Bypass. The second supporting trail would be Reservoir Run, and would generally follow the Albany Water Line right-of-way, but have short diversions at Feura

Bush Road and Elsmere Avenue. The third supporting trail would be the Ravena-Voorheesville Link, which could utilize former railroad right-of-way in South Bethlehem and follow West Yard Road as it passes through town. Each of the supporting trails would connect to one another.

## Findings and Opportunities

- Bethlehem currently has 13.29 acres of parkland per 1,000 persons. This is above the recommendation of 10 acres per 1,000 persons, presented in the Master Plan (2015) which is based on national standards. The findings of the Master Plan, Level of Service Analysis (page 56) acknowledged that;
  - lower levels of service exist in the 'edges' of town with lower population densities
  - connectivity between parks needs to improved
  - the town has 7 miles of riverfront with only one access point at Henry Hudson Park
- The Town, public schools and private recreation facilities appear to be meeting the athletic (teaching, practice and competition) needs for most town residents. The exception may be residents of Selkirk and South Bethlehem, where the amount (acreage) of parkland available, the maintenance and availability of programs is believed to be inadequate compared to other hamlets of the town. The status of improvements to Selkirk Park hinges on the development of the former Ravina-Coeymans

- public school (now closed) and athletic courts on that parcel used by residents.
- The Parks and Recreation Department programs serve to provide recreational opportunities in all forms and collaborate with private organizations for year-round competitive programs.
  - The Town recognizes there is an opportunity for collaboration between the Town and Leagues to promote athletic opportunities to residents.
- The distribution of athletic facilities is considered inequitable by some residents in the northern and southern geographic areas of the town.
  - The Parks Department lacks the funding to make recommended improvements (per the Parks & Recreation Master Plan) to existing park facilities:
    - ADA Improvements
    - Multi-generational equipment and facilities
    - Pool and bathhouse equipment upgrades
  - Develop facilities that meet current national trends in recreation
  - The Parks Department staffing resources are only adequate to address routine maintenance requirements, according to interviews with Town staff. Financial resources should be allocated in the capital improvement plan and annual operating budget to complete the recommendations presented in the 2015 Master Plan and provide staffing to operate shifting program needs of the community as well as provide

Town Park – Public Facilities	Location	Area (Acres)	Facilities
Elm Avenue Park	Elm Avenue south of Rt. 32	160 ac (includes Line Drive and Dog Park)	Athletic Fields, Basketball Courts, Volleyball & Tennis Courts, Fitness Trail, Ice Rink, Horseshoe, Shuffleboard, Pavilions, Warming Hut, Dog Park, playground, community garden, nature trails
Elm Avenue Pool Complex	Elm Avenue south of Rt. 32	Inc above	50-meter pool, intermediate pool, diving pool, spray pads, lockers, concessions.
Elm Ave Park Bldgs.	Elm Avenue south of Rt. 32	Inc above	Parks & Recreation Office, Maintenance Facilities, Pool Filtration, Greenhouse, fuel station
Firefighters Memorial Park	Slingerlands Fire House, Rail Trail	3.60 ac	Memorial features, landscape
Henry Hudson Park	Off Rte. 144 Cedar Hill, including Dinmore Road	81.80	Boat launch, picnic pavilion, grills, softball field, playground, restrooms, gazebo, accessible fishing area.
Maple Ridge Park	Elm Avenue East	7.0 ac	Playgrounds (2-5 & 5-12), Basketball court, walking paths, picnic pavilion, sledding hill, parking lots.
Moh-He-Con-Nuck Nature Preserve	Hudson River east of Rt. 144, Selkirk	55 ac	1.2 miles trails, kiosk, trail signage
North Bethlehem Park	Russell Road	22.70 ac	Playground, basketball court, parking lot, trails, picnic area
Selkirk Park	Thatcher Road	4.10 ac	Playground and youth softball field, Tennis courts and basketball court is through a lease agreement with private owner.
South Bethlehem Park	South Albany Road / Wylie Lane, shore of Onesquethaw Creek	37.25 ac	Playground, basketball court, picnic area, fishing access, parking
Town Hall Park	Delaware Ave., Delmar	1.0 ac	Playground, T-ball field, benches, tables, site furniture, drinking fountain
Veterans Memorial Park	Delaware Ave / Rail Trail	.14 ac	Memorial, landscape, bike rack, benches, signage
Colonial Acres Park	Glenmont	27.70 ac	Trails, disc golf, and open space for walking and other passive recreation
Normans Kill Preserve	Delmar - Wright Lane	147 ac	Walking and mountain biking rails
Total		465.57 ac	

Table 9.1: Town Parks and Public Facilities

a level of maintenance and preventative repairs to avoid substantial future capital costs.

- A reimagined pool complex building that includes Town Parks and Recreation Department offices and modern bathhouses to support the pool complex. The Town should study the feasibility of a community and recreation center as part of this complex, although location and programming needs should be objectively evaluated.

Private Facility	Location	Area (Acres)	Facilities
Normanside Country Club	Delmar	278.37 ac	Golf
Colonial Acre Swim Pool	Glenmont	.88 ac	Pool
Chadwick Square Park	Glenmont	4.00 ac	Pool, Tennis
Albany Co. Pistol Club	Glenmont	.34 ac	
Capital District YMCA	Delaware Ave.	19.90	Indoor sports and outdoor facilities
Bethlehem Soccer Club	Wemple Road	27.00 ac	Soccer
Afrim's Sports	Wemple Road		Indoor sports
Kenholm Pool	Dumbarton Drive, Delmar	2.34 ac	Pool
Magee Park	Kenwood at Rt. 32, Delmar	8.45 ac	Tri-Village Baseball
Hidden Meadows Golf	Smultz Road, Glenmont		Golf
Pine Hollow Arboretum	Slingerlands	21.8 ac	Walking Trails, wildlife viewing

Table 9.2: Private Facilities

School Property	Owner	Area (Acres)
Slingerlands Elementary School	BCSD	14.47 ac
Elsmere Elementary School	BCSD	6.52 ac
Glenmont Elementary School	BCSD	17.83 ac
Hamagrael Elementary School	BCSD	16.22 ac
Eagle Elementary School	BCSD	20.49 ac
Becker Elementary School	RCSCSD	54.24 ac
Bethlehem Middle School	BCSD	26.49 ac
Bethlehem High School	BCSD	134.20 ac
Total		290.46 ac

Table 9.3: School Properties

## Community Services

The 2005 Comprehensive Plan presented a discussion of community services that included; school systems, fire and emergency services, libraries, post offices, senior services as well as the Parks & Recreation programs. In this 2021 Update, some of the Town department services are addressed in various sections of this community profile. It is valuable to further examine not only physical infrastructure and regulations, but also the impacts future growth and development will have on individual department operations, staffing resource needs and technology tools to assist in the delivery of services.

This section includes a discussion of the Town's three school districts; enrollment figures, budgets and staffing. Town services are presented along with the responses to a questionnaire completed by individual department directors or key staff. The comprehensive plan update is intended to address the planning needs of all town service providers in anticipation of future growth and demands on town resources.

The final section looks at the Town budget and the annual costs for the past five years, but also

includes figures used in the 2005 Comprehensive Plan to illustrate the financial costs over the past 15 years. Additionally, the Albany County Agriculture and Farmland Protection Plan Update (2018) included a Cost of Community Services (COCS) assessment specifically for the Town of Bethlehem. The COCS compares the expenses by land uses vs. revenues generated. These figures may help understand the land uses needed to diversify and stabilize the tax base.

### Public Schools

The Town of Bethlehem is served by three school districts; Raven-Coeymans-Selkirk Central School District which includes residents in the southern portion of the town including Selkirk and South Bethlehem, Bethlehem Central School District which includes residents of Delmar, Glenmont, Elsmere, Slingerlands as well as portions of New Scotland. The Guilderland Central School District serves residents in North Bethlehem.

District	Projected School Enrollment Grades K-12						Variance 2002-20
	2002-03**	2017-18	2018-19	2019-20	2020-21	2021-22	
Ravena – Coeymans - Selkirk	2,328	NA	NA	NA	1,859	NA	-20%
Guilderland	5,667	NA	NA	NA	4,836	NA	-15%
Bethlehem	5,034	4,518	4,451	4,322	4,217*	4,162*	-16%

Table 10.1: Projected School Enrollment Grades K-12. Source: 2019-2020 School Enrollment Projections, BCSD, CDRPC December 2019, \*Projected, publicschoolreview.com for 2020-2021 for RCSD, GCSD, \*\*Figures from 2005 Comprehensive Plan, source, NYS District Report Card

The five-year enrollment decrease for the Bethlehem Central School District is -8% for the period 2017-2022. School enrollment has been steadily declining since 2009 when total enrollment reached 5,116 students (figures presented by CDRPC for BCSD). Conversations with RCSD and GCSD indicate similar trends in those districts. Family size has been declining and the Gen Z cohort has a lower overall population than generations before and after. Therefore, enrollment numbers are projected to steadily drop through 2025. The 2019-2020 Enrollment Projections for BCSD prepared by CDRPC reviewed building permit activity and presented those new detached single-family homes traditionally produced more children than multifamily housing. However, in their conclusions, the CDRPC anticipated monitoring the sale of 'existing' homes over the near future to see if there is a correlation with birth rates and potential increases in school enrollment.

In the case of the Bethlehem Central School District, total enrollment is projected to decrease by 8% for the five (5) year period of 2017-2022. Actual enrollment has decreased by 16% between 2002 and 2019. This percentage decrease does not include peak enrollment of 5,116 in 2009.

This table examines the public-school employment as a percentage of the town's overall employment. The data is reasonably accurate compared to other data sources although not precise matches. The Bethlehem School District recently provided data stating that total district employment is 825 Full Time Equivalents (FTE). This number is more current but substantially higher than the nced.ed.gov data.

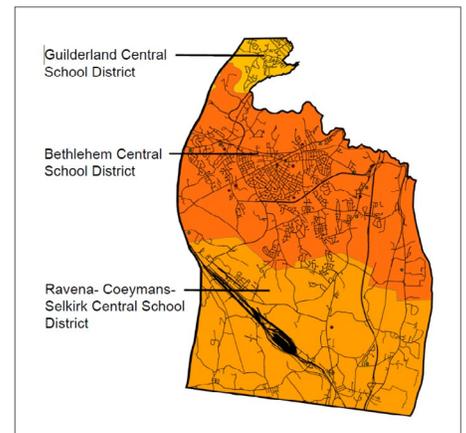


Figure 10.1: School District Map

School District Budgets								
District	School Year						5 yr. Variance	18 yr. Variance
	2002	2016-17	2017-18	2018-19	2019-20	2020-21		
Ravena – Coeymans - Selkirk	\$36.5M	\$44.5M	\$45.8M	\$47.7M	\$48.1M	\$48.6M	9.2%	33%
Guilderland	\$65.7M	\$96.6M	\$98.5M	\$100.9M	\$102.1M	\$103M	6.6%	57%
Bethlehem	\$57.5M	\$96.5M	\$97.1M	\$98.8M	\$100.8M	\$103.4M	7.2%	80%

Table 10.2: School District Budgets. Source: BCSD, GCSD, RCSD websites. 2002 figures from 2005 Comprehensive Plan, NYSORPS

District Employment Statistics (Fiscal Data 2017-2018)				
District	Enrollment	#Teachers	#Other Staff	Total Employment
Ravena – Coeymans - Selkirk	1,922	191	283	474
Guilderland	4,882	424	518	943
Bethlehem	4,478	385	323	709

Table 10.3: District Employment Statistics (Fiscal Data 2017-2018). Source: National Center for Education Statistics, NCED.ED.GOV

## Town Services

The Town is managed by an elected Supervisor and four Board members, each having equal weight voting authority. The Highway Superintendent is an elected position (every 2 years). The Town of Bethlehem provides a multitude of services to residents and business owners. Most residents typically interact with Police, Fire, EMS, Senior Services, and the library. Many of the services provided by the town have been presented in previous sections of this community profile; Highway, Parks & Recreation, Public Works, as well as Economic Development & Planning. The services and programs provided by each town department can be found on their website, and on Facebook or Twitter.

Each fire district is managed and staffed by volunteers and each its own taxing authority with no direct contractual obligation to the Town of Bethlehem. For further detail about the Fire Districts please refer to the town and individual district websites presented.

Town Departments	Website / Facebook / Twitter
Assessor	<a href="http://www.townofbethlehem.org/123/Assessor">http://www.townofbethlehem.org/123/Assessor</a>
Building Division	<a href="http://www.townofbethlehem.org/194/Building-Division">http://www.townofbethlehem.org/194/Building-Division</a>
Cable Television Administrator	<a href="http://www.townofbethlehem.org/124/Cable-Television-Administrator">http://www.townofbethlehem.org/124/Cable-Television-Administrator</a>
Comptroller	<a href="http://www.townofbethlehem.org/126/Comptroller">http://www.townofbethlehem.org/126/Comptroller</a>
Economic Development & Planning	<a href="http://www.townofbethlehem.org/133/Economic-Development-Planning">http://www.townofbethlehem.org/133/Economic-Development-Planning</a>
Emergency Management	<a href="http://www.townofbethlehem.org/134/Emergency-Management">http://www.townofbethlehem.org/134/Emergency-Management</a>
Highway	<a href="http://www.townofbethlehem.org/136/Highway">http://www.townofbethlehem.org/136/Highway</a>
Human Resources	<a href="http://www.townofbethlehem.org/137/Human-Resources">http://www.townofbethlehem.org/137/Human-Resources</a>
Justice Court	<a href="http://www.townofbethlehem.org/138/Justice-Court">http://www.townofbethlehem.org/138/Justice-Court</a>
Management of Information Services	<a href="http://www.townofbethlehem.org/139/Management-of-Information-Services">http://www.townofbethlehem.org/139/Management-of-Information-Services</a>
Parks and Recreation	<a href="http://www.townofbethlehem.org/140/Parks-Recreation">http://www.townofbethlehem.org/140/Parks-Recreation</a> <a href="https://www.facebook.com/Friends-of-Bethlehem-Parks-and-Recreation-">https://www.facebook.com/Friends-of-Bethlehem-Parks-and-Recreation-</a>
Police	<a href="http://www.townofbethlehem.org/142/Police">http://www.townofbethlehem.org/142/Police</a> Twitter: @PdBethlehem
Public Works	<a href="http://www.townofbethlehem.org/127/Public-Works">http://www.townofbethlehem.org/127/Public-Works</a>
Recycling	<a href="http://www.townofbethlehem.org/143/Recycling">http://www.townofbethlehem.org/143/Recycling</a>
Senior Services	<a href="http://www.townofbethlehem.org/145/Senior-Services">http://www.townofbethlehem.org/145/Senior-Services</a>
Supervisor	<a href="http://www.townofbethlehem.org/146/Supervisor">http://www.townofbethlehem.org/146/Supervisor</a>
Tax	<a href="http://www.townofbethlehem.org/147/Tax">http://www.townofbethlehem.org/147/Tax</a>
Town Attorney	<a href="http://www.townofbethlehem.org/148/Town-Attorney">http://www.townofbethlehem.org/148/Town-Attorney</a>
Town Clerk	<a href="http://www.townofbethlehem.org/150/Town-Clerk">http://www.townofbethlehem.org/150/Town-Clerk</a>
Town Historian	<a href="http://www.townofbethlehem.org/151/Town-Historian">http://www.townofbethlehem.org/151/Town-Historian</a>
Youth Court	<a href="http://www.bethlehemyouthcourt.org/">http://www.bethlehemyouthcourt.org/</a>
Youth Employment Service	<a href="http://www.townofbethlehem.org/153/Youth-Employment-Service">http://www.townofbethlehem.org/153/Youth-Employment-Service</a>
Bethlehem Public Library	<a href="https://www.bethlehempubliclibrary.org/">https://www.bethlehempubliclibrary.org/</a> <a href="https://www.facebook.com/Bethlehem-Bicycle-Pedestrian-Committee">www.facebook.com/Bethlehem-Bicycle-Pedestrian-Committee</a>

Table 10.4: Town Departments Social Media Accounts

Town / District	Website / Facebook / Twitter
Delmar Fire	<a href="http://www.townofbethlehem.org/537/Fire-Services">http://www.townofbethlehem.org/537/Fire-Services</a> <a href="http://delmarfire.com/">http://delmarfire.com/</a> <a href="https://www.facebook.com/DelmarFireDepartment/">https://www.facebook.com/DelmarFireDepartment/</a>
North Bethlehem/ Elmwood Park Fire	<a href="https://www.facebook.com/NBFDNY/">https://www.facebook.com/NBFDNY/</a>
Elsmere Fire	<a href="https://elsmerefire.org/">https://elsmerefire.org/</a> <a href="https://www.facebook.com/groups/126580251351293/">https://www.facebook.com/groups/126580251351293/</a>
Slingerlands Fire Rescue	<a href="https://www.slingerlandsfirerescue.org/">https://www.slingerlandsfirerescue.org/</a>
Selkirk Fire	<a href="https://www.facebook.com/sfdfire/">https://www.facebook.com/sfdfire/</a> <a href="https://selkirkfd.org/">https://selkirkfd.org/</a> <a href="https://www.facebook.com/SelkirkFD/">https://www.facebook.com/SelkirkFD/</a>

Table 10.5: Fire Districts Social Media Accounts and Websites

Full Time Personnel Counts												
Fund	Dept Code	Department Name	Final Check Run of the Year					Actual 8/21 2020	Budget 2019	Budget 2020	Budget 2021	Change in 2020 to 2021 Budget
			Actual 2008	Actual 2016	Actual 2017	Actual 2018	Actual 2019					
110	1110 Total	Justice	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	-	
110	1220 Total	Supervisor	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	-	
110	1315 Total	Comptroller	3.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0	-	
110	1330 Total	Tax Collection	2.0	-	-	-	1.0	1.0	-	1.0	-	
110	1355 Total	Assessment	4.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	-	
110	1410 Total	Town Clerk/Tax Collection	3.0	4.0	4.0	4.0	3.0	2.0	4.0	3.0	-	
110	1420 Total	Legal	-	-	-	-	-	-	-	-	-	
110	1430 Total	Human Resources	2.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	-	
110	1620 Total	Shared Services	4.0	4.6	4.6	4.7	4.8	4.5	4.8	5.0	4.8 (0.3)	
110	1680 Total	MIS	3.0	3.0	3.0	3.0	2.0	2.0	3.0	2.0	-	
110	1685 Total	GIS	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	-	
110	3110 Total	Telecommunications	14.0	10.0	9.0	11.0	10.0	9.0	11.0	11.0	-	
110	3120 Total	Police - Sworn	41.0	41.0	40.0	38.0	40.0	37.0	40.0	40.0	-	
110	3120 Total	Police - Civilian	3.0	3.0	2.0	3.0	3.0	3.0	3.0	3.0	-	
110	3130 Total	Animal Control	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	-	
110	3620 Total	Building	7.0	5.5	5.5	5.5	5.5	5.5	5.5	5.5	-	
110	5010 Total	Hwy Admin	4.5	3.5	2.6	3.4	4.5	2.8	3.5	4.5	3.5 (1.0)	
111	5015 Total	Community Beautification	-	-	0.3	0.3	0.2	0.8	0.5	0.5	0.5	-
110	5020 Total	Signs & Signals	-	0.8	0.9	0.8	0.9	0.7	1.0	1.0	1.0	-
110	5060 Total	Sanitation	3.0	3.8	3.6	4.2	3.8	5.5	3.5	3.5	3.5	-
110	6772 Total	Seniors	6.0	6.0	6.0	6.0	7.0	6.0	7.0	7.0	-	
110	7110 Total	Parks Admin	5.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0	-	
110	7120 Total	Parks & Rec	5.0	-	-	-	-	-	-	-	-	
110	7145 Total	Parks & Rec/Highway Maint	-	4.0	5.0	4.7	4.3	5.0	5.0	5.0	5.0	-
110	8020 Total	Planning	6.0	5.5	4.5	5.5	5.5	4.5	5.5	5.5	5.5	-
110	8590 Total	DPW Admin	3.8	4.1	4.7	4.7	5.7	5.7	5.7	5.7	5.7	0.0
110	8595 Total	Stormwater	1.5	1.1	-	-	-	-	-	-	-	-
210	5010 Total	Highway Admin	-	2.6	2.9	2.7	2.4	2.2	3.0	3.0	3.0	-
210	5011 Total	Roads	57.0	39.2	43.3	42.9	42.2	35.9	43.7	43.3	43.7	0.4
220	8510 Total	Water Admin	5.1	3.1	3.3	3.3	3.4	2.8	3.4	3.5	3.4	(0.1)
220	8530 Total	New Salem Purification	10.9	9.6	9.8	9.9	9.2	10.5	10.5	13.5	14.5	1.0
220	8535 Total	Clapper Purification	6.1	5.4	5.2	3.1	4.8	3.5	3.5	1.5	0.5	(1.0)
220	8540 Total	Transmission	12.0	13.8	12.0	12.5	12.4	13.8	13.0	11.5	12.5	1.0
230	8510 Total	Sewer Admin	5.1	2.7	2.9	3.0	3.0	2.5	3.0	3.0	3.0	(0.0)
230	8515 Total	Collection	9.0	8.7	9.0	8.9	8.5	7.8	9.0	8.5	8.5	-
230	8545 Total	Treatment	7.0	6.0	5.9	5.9	5.9	6.0	6.0	6.0	6.0	-
	<b>Grand Total</b>		<b>241.0</b>	<b>211.0</b>	<b>212.0</b>	<b>213.0</b>	<b>215.0</b>	<b>202.0</b>	<b>220.0</b>	<b>219.0</b>	<b>219.0</b>	<b>0.0</b>

Table 10.6 illustrates the net reduction in staff positions since 2008. The 2005 Comprehensive Plan did not present the total number of town employees at that time. Therefore, a comparison cannot be done. Note the 2008 employment total was 241 and the 2020 actual staff count was 202, which is a 16% decrease. The 2021 staffing budgeted is 219 or a 9% reduction over 2008 levels.

### Town Budget and Services

Table 10.7 presents the approved town budget for the past five fiscal years. Fiscal year 2002 has been included as that was the town budget amount presented in the 2005 Comprehensive Plan. The town budget has stayed consistent over the past five (5) years with approximately 2% growth annually. Reviewing the average annual

Table 10.6: Full Time Personnel Counts. Source: Town of Bethlehem Human Resources Department

Bethlehem Town Budgets							
FY 2002	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	5 Year Variance	18 Year Variance
\$26.9M	\$41M	\$41.7M	\$43M	\$45M	\$45.3M	10.5%	68%

Table 10.7: Bethlehem Town Budgets. Source: Town of Bethlehem website, budget archives

Municipal Taxable		
Property Type	Total by Land Use (\$)	Percent Total
Commercial	534,668,240	14.15%
Farm	10,902,607	0.29%
Industrial	272,689,206	7.22%
Residential	2,916,063,500	77.17%
Vacant	34,494,891	0.91%
Vacant Commercial	9,182,100	0.24%
Vacant Industrial	727,000	0.02%
<b>Total</b>	<b>3,778,727,544</b>	<b>100.00%</b>

Table 10.8 Town Property Assessed Value, Source: X

increase in the Town budget over the past 18 years (since 2002) the overall increase is approximately 68% or 3.7% annually.

### Town Property Assessed Value

Table 10.8 identifies residential property reflecting the greatest amount of taxable value in the Town at 77%. This information correlates to residential land use also reflecting the majority of tax revenue received. As previously identified in the housing section, single family residential homes reflect the residential housing stock and land use in Bethlehem. Commercial land use represents 14% and industrial land use represents 7% of total assessed value in the Town.

### Cost of Community Services

The Albany County Agriculture and Farmland Protection Plan Update (2018) included a Cost of Community Services assessment specifically for the Town of Bethlehem. Many municipalities find it useful to analyze how land use impacts local budgets. The Cost of Community Services (COCS) ratio measures this by comparing tax and nontax revenues to expenditures for each land use type (residential, commercial, industrial, and farm and open land). In other words, the ratio compares the amount of revenue a local government receives to the amount used to provide services to those land uses. Ratios greater than 1.0 indicate that expenditures are greater than the respective contributions from the associated land use, and vice versa.

As shown in Table 10.9, residential land uses costs \$1.10 in services for every \$1.00 received in tax revenue.

Comparatively, commercial and industrial land use costs range from \$0.09 - \$0.13, and agricultural land uses costs \$0.16 for every \$1.00 received in tax revenue.

Based on the information in Table 10.9, residential land uses costs the Town more in services provided than received in revenues for these services. Non-residential land uses are a net benefit in revenue to the Town and would help to offset the tax burden on residents. Consistent with the 2005 Comprehensive Plan, the Town should continue to pursue non-residential land uses to help a diversification of the tax base.

### Town Department Overview

In an effort to engage all departments within the Town of Bethlehem a questionnaire was prepared and distributed to department head. The intent of the questionnaire was to assess the extent to which town resident and business owners understand and value the services provided by each department. Further, town growth and economic development do not just impact the towns' planning department or those that manage the physical infrastructure. Future growth patterns or significant shifts in demographics influence the resource requirements of all town services and the departments

	\$ TOTAL	\$ RESIDENTIAL	\$ COMMERCIAL	\$ INDUSTRIAL	\$ AGRICULTURAL
<b>REVENUES</b>					
General Fund Municipal Tax Revenue	11,333,767	9,005,592	1,452,354	840,033	35,788
General Fund Municipal Nontax Revenue	1 : 1.12	1 : 0.18	1 : 0.48	916,298	56,180
Highway Fund Municipal Revenues	1 : 1.51	1 : 0.27	1 : 0.31	87,974	62,585
Water Fund Municipal Revenues	1 : 1.22	1 : 0.27	1 : 0.72	91,035	78,015
Sewer Fund Municipal Revenues	1 : 1.23	1 : 0.31	1 : 0.74	41,862	35,875
School District Tax Revenues	1 : 1.30	1 : 0.15	1 : 0.28	1,486,168	1,064,962
Municipality Share of School District Nontax Revenues	1 : 1.05	1 : 0.21	1 : 0.17	577,689	495,071
<b>Total Revenues</b>	<b>1 : 1.50</b>	<b>1 : 0.28</b>	<b>1 : 0.29</b>	<b>4,041,059.77</b>	<b>1,828,477.22</b>
<b>EXPENDITURES</b>					
General Fund Municipal Expenditures	14,769,303	12,283,912	2,163,586	173,294	1,828,477.22
Highway Fund Municipal Expenditures	5,066,928	4,214,261	742,265	59,452	50,950
Water Fund Municipal Expenditures	7,173,121	5,966,022	1,050,806	84,165	72,128
Sewer Fund Municipal Expenditures	2,673,367	2,223,491	391,627	31,368	26,882
School District Expenditures	157,382,512	157,382,512	0	0	0
<b>Total Expenditures</b>		<b>182,070,197.94</b>	<b>4,348,284.35</b>	<b>348,278.96</b>	<b>298,469.84</b>
<b>COCS RATIOS</b>					
	\$ Total	\$ Residential	\$ Commercial	\$ Industrial	\$ Agricultural
<b>Total Revenues</b>	<b>203,558,804</b>	<b>164,904,478</b>	<b>32,784,789</b>	<b>4,041,060</b>	<b>1,828,477</b>
<b>Total Expenditures</b>	<b>187,065,231</b>	<b>182,070,198</b>	<b>4,348,284</b>	<b>348,279</b>	<b>298,470</b>
<b>Ratios</b> (Expenditures divided by revenues)	-	<b>1.10</b>	<b>0.13</b>	<b>0.09</b>	<b>0.16</b>

Table 10.9: Tax Revenues. Source: Albany County Agriculture & Farmland Protection Plan Update 2018

providing these services need to be engaged in the process, so they can plan for their service delivery.

The following comments and observations represent the information obtained from responses to a questionnaire received from individual town departments. They reflect the thoughts of town administration and staff which are relevant to the comprehensive plan update by informing improved processes for delivery of services, communications and engagement with residents and business owners, management of municipal finances and collaboration with regional and state partner agencies. Responses have been categorized, including the following;

- Zoning and Code Updates – based on day-to-day observations stated by staff to address various code inconsistencies, conflicting regulatory priorities and the need for clarification and/or expanded definitions.
- Plans and Studies – needed to further assess conditions and cost associated with providing services. This may include updates to studies or project plans have that have been completed and are in various stages of implementation.
- Resources and Facilities – include the resources (operating and capital budgets, technology, facilities and equipment, staffing, etc.) required to provide cost effective, accurate and efficient delivery of services to meet or exceed expectation of the public

- Education and Engagement – these observations consist of efforts that staff recommend be communicated with the residents and business owners of the town. Additionally, staff recognize the value in public engagement as a means of setting service priorities and garnering support for critical services and initiatives.
- Policies and Procedures – The recommendations help establish important policies that guide the delivery of services and the improvements to management procedures.

### Zoning and Code Updates

- Update the Town Zoning code to resolve known discrepancies and contradictions
- Code enforcement and intelligent heavy industrial growth. Restricted routing of hazardous materials.
- Update to the schedule of uses in the Zoning Law.
- Clarity of our local and state level codes (i.e., building, energy, etc.). Most codes are explicit others are layered and require multiple staff to review, interpret and reach consensus.
- The Clerk's services are driven by the number of residents. There are few updated or eliminated chapters in our Town Code that pertain to the Town Clerk's services.
- The grading and erosion and sedimentation control regulations could be improved for clarity. Need description of what qualifies as agriculture use. Agriculture use shouldn't be exempt from prohibited

activities (i.e., filling on a steep slope).

- Some of the other exempt items, are not accurate (i.e., Approved DEC Forest management plan).
- Code should be clarified and reorganized to avoid confusion. Modify code language to state 'direction or quantity of runoff from a property cannot "negatively change..."

### Plans and Studies

- Study feasibility of a community center with active adult facilities.
- Inventory and promote existing vacant spaces ready for occupancy in town for business attraction and retention.

### Resources and Facilities

- Acquire infrastructure asset management software.
- Employ new technologies for repairs to old water and sewer mains.
- Upgrade infrastructure technologies for water and sewer in response to new regulations, allowing work to be performed more efficiently.
- Allocate resources for public safety as residential growth and commercial development increases.
- Provide resources for public safety technology (body cameras) which will require more data storage and staff to manage it.
- Allocate staffing resources for permit applications and issuance, specifically during high volume months (March – October).

- Acquire tablet computers (iPads or similar) for department personnel performing field work to increase efficiency and accuracy. This would provide access to plans, and document findings in the field.
- The aging population (65+) may qualify for larger exemptions requires increased paperwork and financial documents. Office reviews obituaries and remove exemptions accordingly.
- Acquire Pictometry license (s) for Assessor to view properties (360 degrees) and confirm built measurements / dimensions.
- Provide a benefit portal for employees.
- Create and support a position of Communication Specialist to coordinate Town content and messaging.
- Acquire web-based application program (Planning Department) that can populate appropriate databases and GIS mapping offering efficiencies in coordination with the Planning Board and involved town departments and permitting agencies.
- Bethlehem's growing senior population will warrant expanding programs which will need support space, staffing and technology (computer hardware and software).
- Laptops are needed, as is the ability to scan records/store them electronically.
- Provide amplification system for use during Court sessions.
- Assess central residency verification software, with potential coordination tax

records. Communicate services to new residents.

During many of the direct interviews with Town directors, administrators and managers it was routinely stated that a lack of staffing currently does or will limit the ability of their department to perform the services residents and business owners anticipate and rely on.

### Education and Engagement

- Support Town staff as the 'people and faces' behind the delivery of public services
- Inform residents and business owners of the efforts required to providing clean, safe drinking water and the proper collection and treatment of sanitary wastewater. Town staff perform critical dangerous tasks to keep infrastructure systems functioning.
- Educate residents and town staff that water and sewer resources are finite and are critical to support future growth in the Town.
- Continuously inform residents of the Town's emergency preparedness plan and procedures.
- Engage with the growing senior population to understand program and recreation needs and how best to provide.
- Continue small scale education efforts of the role and services provided by the Building Division
- Educate residents of work performed by the Assessor's office including exemptions and PILOT opportunities.

- The Town website offers an abundance of information, which can be difficult to navigate.
- Inform residents and property owners of the Planning Department's role to make development projects better by implementing the Comprehensive Plan, Zoning Laws and environmental review.
- Continue to inform residents of extensive senior services and programs. Expand message to network of partner professionals (i.e., medical community).

### Policies and Procedures

- Follow and implement the standards and recommendations of the Town Police Reform and Intervention Plan.
- Consistently deliver equity of services and facilities across the Town.
- Update the Town Zoning Law to resolve known discrepancies and contradictions
- Continue to guide development, maintain and broaden economic development efforts and conserve farmland and undeveloped lands from sprawl, through transparent and consistent public engagement.
- Update procedures for permit issuance coordinated by the Building Department. (Coordinate with Engineering, DPW and Planning.)
- Support safe and equitable access to all modes of transportation in town by updating the Complete Streets resolution.

- Involve Emergency Management Office in review of planning initiatives and project review so that emergency response can plan for future staffing and facility requirements.
- Coordinate and communicate internal activities and responsibilities of all departments and bureaus.
- In addition to staffing, several departments require code updates and technology (hardware and software) to perform their tasks more effectively and efficiently.

### **Findings and Opportunities:**

- All three school districts are experiencing consistent decline in enrollment.
- All three school districts budgets are increasing in the face of declining enrollment. Each district would appear to have sufficient capacity and resources for increased enrollment.
- The Town budget has stayed consistent over the past five (5) years with approximately 2% growth annually. Reviewing the average annual increase in the Town budget over the past 18 years (since 2002) the overall increase is approximately 68% or 3.7% annually.
- Town staff levels have decreased by 15% between 2008 and 2016. The variance in staffing levels between 2016 and 2021 varies by a few percentage points.
- Since the 2005 Comprehensive Plan, the Town has added infrastructure (streets, utilities, open space) yet the staff to maintain the infrastructure and deliver services has been reduced. Town departments are all substantively required to perform in reactive mode, with insufficient resources to address needs and to proactively manage issues before they become critical issues.

