

TOWN OF BETHLEHEM COMPREHENSIVE PLAN AND GENERIC ENVIRONMENTAL IMPACT STATEMENT

Bethlehem, New York
August 2005



Adopted by the Bethlehem Town Board
August 24, 2005

**Final Generic Environmental Impact Statement
for the
Town of Bethlehem
Comprehensive Plan
and
Zoning and Subdivision Amendments**

Title of Action:	Adoption of the Town of Bethlehem Final Draft Comprehensive Plan and Zoning and Subdivision Amendments
Project Location:	Town of Bethlehem, Albany County, New York
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Town of Bethlehem Comprehensive Plan

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Executive Summary

(Final Draft July 29, 2005)

Executive Summary

Over the last several months, the Town of Bethlehem has come together in an effort to define comprehensively a future for the community. What kind of community does Bethlehem want to be? The answer to this question helps to provide a context for the many decisions that the community will make now and in the future. It helps guide and prioritize the investments that must be made to enhance the Town's future.

This is the first comprehensive plan completed by the Town of Bethlehem. As such, many longstanding issues related to change in the community have been discussed and debated. In fact, twelve (12) public workshops, fourteen (14) Bethlehem Planning Advisory Committee meetings, and two written surveys have been conducted thus far to facilitate this discussion. This emphasis on public involvement has improved everyone's understanding of the variety of viewpoints about growth and development in the community. A full description of the public process is located in Section 2 of this document.

The Bethlehem Comprehensive Plan seeks to achieve broad consensus about the development of the town over the next ten or fifteen years. It is understood that not all individual interests can be accommodated through its recommendations. It is further understood that the plan is a living document and must be reevaluated from time to time to address changing circumstances. However, the recommendations within this comprehensive plan do indeed direct the community toward an overall vision to which the most residents of Bethlehem can agree. It 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.

The Town's vision for the future is captured in the following statement:

***In the Year 2020**, the Town of Bethlehem is a community of attractive residential neighborhoods, vibrant hamlets, successful mixed-use commercial centers, modern industrial facilities, and productive rural lands. These are well connected by regional highways and local streets, adequately serviced by public transportation, and linked by a network of sidewalks and trails. Situated at the heart of the Capital District, Bethlehem offers convenient access to all that the region has to offer. It is recognized for the excellence of its schools, the quality of its public safety and community services, the abundance of its recreational opportunities, the productivity of its local businesses, ten miles of Hudson River waterfront, and the beauty and health of its natural environment. This exceptional quality of life contributes to the economic growth and prosperity of the town and the region, assuring that the community can continue to meet the increasingly diverse needs and expectations of its residents in a fiscally sustainable manner.

*** Note:** The Vision Statement is written as if it was the year 2020 and one was describing the Town of Bethlehem. This is how we hope to be able to describe Bethlehem in fifteen years.

The Town of Bethlehem developed a set of Guiding Principles to assist the community as it takes steps to achieve the vision articulated above. These principles are over-arching, and should be considered in all decision-making as the comprehensive plan is implemented. The Guiding Principles include: **Adaptability, Diversity, Environmental Sustainability, Fiscal Responsibility, Intermunicipal Cooperation and Community Partnerships, and Respect for Private Property.** These guiding principles are defined in Section 3 of this document.

Finally, to achieve the vision set forth by the community, multiple goals were established to guide decision-making. The goals address a variety of issues, and the recommendations in the comprehensive plan attempt to direct short-term and long-term actions toward achieving these broad goals.

The goals, in no particular order of priority, are to:

- > Achieve a balanced tax base
- > Create a business-friendly environment
- > Encourage compact, mixed-use commercial and residential development/redevelopment
- > Ensure that there is a reliable supply of high-quality water
- > Expand public, private or non-profit active and passive recreational resources and community services available in the town
- > Improve mobility – the ability of people, regardless of age and status, to engage in desired activities at moderate cost to themselves and society - throughout the town
- > Improve the development review process
- > Maintain existing public water and sewer infrastructure in developed areas of the town. Plan for fiscally responsible capital improvements to expand such infrastructure in a manner that is consistent with this plan
- > Manage and protect significant environmental systems
- > Promote commercial and industrial growth in specifically designated locations
- > Promote energy efficiency and conservation, and the use of renewable energy in the town
- > Provide opportunities for the development of a variety of housing options in the town
- > Recognize the town’s significant cultural resources, historic resources, and natural resources
- > Utilize flexible land use regulations and creative land development techniques to retain the economic value of rural land
- > Work with willing landowners to conserve quality open spaces throughout the town

More detail about the community goals listed above is available in Section 3 of this plan.

Plan Priorities

The following summary organizes the plan's principal recommendations so as to provide clear policy guidance to the Town Board and the Town's staff related to both the level of priority and timing of implementation for the various recommendations. More detail about the plan recommendations can be found in Section 4 of this document. The Plan Recommendations Map is located in Section 5. Additional detail about implementation of the plan is located in Section 6. In the event of any perceived ambiguity in any of the recommendations as presented throughout the plan, the construction of the plan will be guided by the intent expressed in this Executive Summary.

Immediate Action:

- > Update the Town's zoning and subdivision regulations to reflect the recommendations set forth in this comprehensive plan; key recommendations include the following:
 - o *Hamlet Zones*: mixed use high density zones of a variety of scales and designs; encourage a variety of housing types; and mixed use buildings
 - o *In-Town Residential*: high density (6 dwelling units (DU) per acre); traditional residential neighborhoods that border hamlet zones; public water and sewer; and improve pedestrian amenities
 - o *Residential*: medium density (3 DU per acre); conservation design density incentive (4 DU per acre); public water and sewer required for new developments (existing developments grandfathered); and minor subdivision permitted (see definition below)
 - o *Rural*: low density residential (1 DU per 2 acres); conservation design density incentive (1.25 DU per 2 acres); generally no public water and sewer; minor subdivision permitted (see definition below); specific rural mixed uses permitted as of right, others permitted but require special use permit; and with extension of water and sewer Town to consider re-zoning
 - o *Riverfront Rural*: very low density residential (1 DU per 5 acres); conservation density incentive (1.5 DU per 5 acres); minor subdivisions permitted (see definition below); all rural uses permitted; and generally no public water and sewer
 - o *Rural Light Industrial*: minor residential subdivision permitted (see definition below); specific light industrial uses permitted; all rural uses permitted except for major residential subdivision; generally no public water and sewer; and buffering and setbacks required when adjacent to residential district

- o *Density versus Lot Size:* provide flexibility in subdivision design by focusing more on the number of dwelling units per acre rather than minimum lot size per dwelling unit; will assist in encouraging conservation subdivision design
- o *Conservation Subdivision Design:* utilize flexible lot sizes and density incentives to encourage conservation of land in subdivision design; the required open space set aside will be 50% of total site area in suburban residential zones (with public water and sewer) and 40% in rural and riverfront rural zones (no public water and sewer); and densities will be calculated against total unconstrained land. To make it easier to achieve or exceed the minimum open space set aside, and to promote housing diversity in the town, a mix of attached housing types such as well-designed duplexes and townhomes will be permitted in conservation subdivisions in addition to detached single-family homes.
- o *Land Division:* allow in suburban residential, rural, riverfront rural and rural light industrial zones; permit the division of a parent parcel into not more than four lots (exclusive of the parent parcel) during any ten-year period; while there will be no minimum lot size for lots created by land division, it will not be approved without appropriate Health Department approvals for well and septic systems
- o *Incentive Zoning:* include in the zoning ordinance a provision for density incentives related to open space protection (the use of conservation subdivision design) and for other negotiated public benefits (trails, utility ROW, road corridor, etc) resulting from the development; can be applied to all major zoning districts.
- o *Mixed Economic Development Districts:* allow for a mix of office, light industry, and technology business as primary uses and high-density residential and neighborhood commercial as secondary uses; specific areas include the area to the west of the Slingerlands By-Pass Extension, the east side of 9W from Wemple Rd. to Glenmont Rd., the area near the intersection of Wemple Road and Rt. 9W, and, the lands on the west side of Rt. 144 between Clapper and Wemple Roads
- o *Develop zoning to protect stream corridors, wetlands, steep slopes and flood plains:* consistent with existing federal and state regulations, generally accepted engineering and design practices, and the town's current review practices; formally define characteristics of lands constrained for development due to steep slopes, stream corridors, wetlands and other natural constraints; this will form the basis for a site's developable (unconstrained) land area
- o *Design Standards:* as a deliverable of the comprehensive plan, design standards will be established for two zoning districts: hamlets and commercial. The Planning Board will be responsible for design review in these districts as part of special use permit and/or site plan review. An additional board (additional layer of review) is not contemplated. In the

future design guidelines/standards should be considered for other districts, particularly where mixed uses are allowed.

Priority Actions / Tier 1 Recommendations: These are the primary recommendations of the comprehensive plan for which there is broad consensus and an accompanying near term implementation action item.

- > Conduct a Linkage Study for the Route 9W Corridor that includes a feasibility analysis of possible “northern alignment” option for the Selkirk Bypass: The Town has applied for funding to conduct a Rt. 9W Linkage Study to assess needs and develop preferred alternatives for both transportation improvements and land uses in the 9W corridor. If the funding is achieved, the study should be conducted during 2005-2006. The Rt. 9W Linkage Study could result in refined land use recommendations for this important corridor. At the Town Board’s discretion the study may be treated as a comprehensive plan amendment, and it could lead to further zoning amendments impacting lands in the corridor. As a follow-up to the Linkage Study, the Town should consider preparing a Selkirk Hamlet Master Plan once the Selkirk By-Pass location is resolved.
- > Create an Official Map: In accordance with Town Law §270, the Town should develop an Official Map that shows the location of existing and proposed streets and other public facilities. This initiative should track with the Rt. 9W Linkage Study.
- > Develop a Local Waterfront Revitalization Plan (LWRP): The Town has applied for funding from the New York State Department of State to assist in the development of an LWRP for the riverfront area. The LWRP will provide more clarity about future growth and land use preferences in the riverfront area. The LWRP could also result in refined land use recommendations. At the Town Board’s discretion the study may be treated as a comprehensive plan amendment, and it could lead to further zoning amendments impacting lands in the riverfront area.
- > Actively coordinate development of the proposed Vista Technology Park in Slingerlands with planning and development of the proposed New Scotland Road Hamlet: To assist in expanding and diversifying the Town’s tax base, implement Slingerlands By-Pass Extension and development of the VTC. The Town should work with a focus group of stakeholders to develop a build-out concept for the remaining developable lands especially along New Scotland Road.
- > Establish a Citizens Advisory Committee on Conservation (CACC): The Town Board should appoint an advisory committee to explore conservation projects, and opportunities with willing landowners, as identified by the Town Board. In considering appointments to the CACC, the Town Board should identify appointees that are broadly representative of the

various neighborhoods and hamlets of the Town so as to ensure a broad cross-section of community viewpoints. The CACC may provide advisory information to the Town Board as requested, but will not have independent regulatory powers. An immediate opportunity has emerged for the CACC to assist in the development of an integrated network of trails and pedestrian facilities in the Slingerlands area. In addition, the CACC can assist with longer-term activities at the Town Board's request such as exploring funding opportunities for open space protection programs, working to develop a Farmland and Open Space Protection Program, and developing an inventory of open space and farmland resources.

- > Establish a Comprehensive Plan Oversight Committee: This committee would assist the Town Board and help guide the plan implementation effort.
- > Update Planning Department and Building Department Information Systems: Current information about the Town's growth helps to form the basis for good decision-making. Bethlehem is a growing community and it is important to track information about this growth. A system should be established to digitally record the progress of development projects from the approval process through to completion. The data included in this system could later be linked to the Town's geography through the development of a Geographic Information System (GIS). The Town's zoning map could also be updated in a digital manner. A Town GIS would also be used to efficiently manage the Town's facilities and infrastructure.
- > Develop a "Citizen's Guide to Town of Bethlehem Land Use and Development Regulations:" This brochure, developed by Town staff, would assist not only staff, but also board members, residents and developers in understanding the Town's zoning and subdivision regulations. This document would make the development process more clear for developers, Town officials and staff. As follow-up to the publication of this brochure, the Town could coordinate with the Chamber of Commerce and the Industrial Development Agency to reach out to the development community in an effort to further clarify the development process.
- > Identify locations for infill development and redevelopment activities and encourage the use of such locations: As an alternative to greenfield development, the Town should assist and encourage redevelopment of existing vacant and underutilized sites like the Glenmont (Ames) Plaza in Glenmont, the former Blue Cross building in Slingerlands, and the former Daiseytek building on West Yard Road near Feura Bush.

Mid-Term Actions / Tier II Recommendations: (these recommendations relate to important community topics that have emerged through the planning process but for which more focused consideration and consensus building is required for future Town Board implementation; these recommendations are of a more long term nature)

- > Consider development of hamlet master plans for specific hamlets

- > Consider adopting local right to farm and right to practice forestry laws and encourage participation in Agricultural Districts
- > Revive efforts to create a business improvement district demonstration project along Delaware Avenue
- > Conduct a Delaware Avenue Linkage Study
- > Consider reducing street width in new residential developments
- > Consider developing of a Town recreational trail system and identify potential funding mechanisms
- > Consider a Town-wide referendum to create funding for land acquisition and preservation of open space and parkland
- > Consider developing an inventory of farmland, open space, recreational uses and natural resources
- > Consider creating a farm and open space protection program including the purchase of development rights and the use of conservation easements
- > Conduct a Town-wide inventory of historic and cultural resources
- > Consider development of a community center to provide community, youth, and senior programs and activities

Ongoing Actions / Tier III Recommendations: (these are recommendations that relate to Town administration, programming and ordinary operations)

- > Maintain and enhance pedestrian connections within and between neighborhoods, recreation facilities, and hamlet centers
- > Prepare for and comply with the new Phase II Stormwater Management Regulations
- > Promote the use of alternative, renewable energy sources for public and private buildings
- > Coordinate with fire and emergency services providers regarding long term growth needs and facilities planning
- > Encourage the use of Leadership in Energy and Environmental Design (LEED) standards for both new and redeveloped buildings in town
- > Assist developers in understanding and identifying available funding opportunities supportive of sustainable design and construction
- > Provide educational services related to septic system maintenance and the prevention of illicit discharges into the Town's storm drainage system
- > Initiate a "buy local" program and develop an agricultural economic strategy
- > Provide adequate bicycle facilities and establish signed system of routes throughout the Town
- > Coordinate with the Bethlehem Chamber to promote local business and employment
- > Establish a Park Master Plan coordinated with community growth projections
- > Coordinate with school districts, neighboring communities, and other community and regional organizations
- > Enhance entranceways and community gateways

- > Investigate the current condition of and improve as necessary, the technology infrastructure available in Bethlehem
- > Encourage continuing education for members of the Planning Board and Zoning Board of Appeals

Long-Term Action:

- > 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.

Section 1

Section 1 - Introduction

1.1 INTRODUCTION

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. To address this growth pressure, as well as the changing needs of the community, Bethlehem has prepared this comprehensive plan in the hopes of ensuring that the community remains an attractive place for residents, and that its economy remains competitive locally and regionally.

This community of 31,304 residents (according to the 2000 U.S. Census) 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 conventional-style 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. Despite the diversity of its environs, each portion of the community has a well-defined sense of place. This well-defined sense of place is what makes Bethlehem a desirable location for people to live and raise a family.

It is important to place the Town's growth in perspective. Bethlehem's population grew by 13.6% (3,752 persons) in the 1990s, and by 28.8% (7,008 persons) between 1980 and 2000. This rate of growth is significantly higher than Albany County and the four-county Capital Region as a whole during the same periods, however it is similar to the growth experienced by many of the region's suburban communities during this time. Throughout much of Upstate New York State, regional population growth has been slow or stagnant, with cities generally losing population



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while surrounding suburbs and even rural areas at the metropolitan fringe have grown. This situation is one of several unique challenges for the long-term economic competitiveness of Upstate New York. Still, it must be understood that Bethlehem's growth over the last several years is unremarkable in comparison to that experienced in portions of the New York City metropolitan area, or in other fast growing areas of the nation.

Population projections for the region indicate that Bethlehem will continue to experience slow but steady population growth in the decades ahead. By 2030, the Town's population is projected to reach approximately 37,500 persons, a 20% increase over the 2000 population.

Other factors must also be considered when examining the Town's growth. For example, the growth in the number of housing units has outpaced the growth in population in recent years. This is mostly the result of a shrinking household size. New housing construction will need to account for this trend, especially as the baby-boom population continues to age. Housing type and affordability will become more important concerns in the years ahead.

The Town's own records also place its growth in perspective. As of July 2004, there were over 1,000 building lots or units that have been approved, and another 1,800 lots and/or units in the pipeline for approval. At first glance these numbers are alarming in their magnitude, however the actual number of building permits that have been issued by the town has been fairly steady over the years. Approximately 170 building permits equating into nearly 200 total units per year have been issued over the last three years. Land suitability, market demand, the regional and national economies, and the availability of public water and sewer infrastructure have limited the actual pace of development. In fact, very few building permits have been issued annually outside of areas served by public water and sewer.

However, the very elements that make the Town of Bethlehem an attractive community are currently at risk. Bethlehem, like many suburban communities in New York State and across the country, is experiencing the effects of increased growth and out-dated regulations to guide that growth: increased traffic and congestion; a loss of open space and active farmland; conventional-style subdivisions; pressures on school districts; automobile-oriented commercial and retail development; and increased pressures on natural resources.

The Town of Bethlehem has produced a variety of planning documents and studies in an attempt to address the community's concerns in a gradual fashion. These documents include numerous transportation and traffic studies, such as the Route 9W Corridor Report (1989); the Rural Landowners Report (1997); the Land Use Management Advisory Committee Study (LUMAC – 1994); a Survey of Historical Resources (1996); the Bethlehem Tomorrow Booklet about Questions and Answers about the Town (2003); and various other documents produced by the Town, its regional partners, or community groups within Bethlehem. In April 2004, the Town Board authorized the development of a comprehensive plan and amended zoning ordinance, and enacted a moratorium on new residential development during the planning process.

Within New York State, towns are granted the authority to prepare and adopt a comprehensive plan in accordance with New York State Town Law §272-a. A comprehensive plan is defined as “...the materials, written and/or graphic, including but not limited to maps, charts, studies, resolutions, reports and other descriptive material that identify the goals, objectives, principles, guidelines, policies, standards, devices and instruments for the immediate and long-range protection, enhancement, growth and development of the town...”

To clarify, a comprehensive plan provides a venue for identifying the current state within a community, the desired state, and how the community intends to achieve the desired state. The current state involves taking stock of the current situation through an inventory and analysis as well as determining what issues and concerns a community has. The desired state addresses the future vision of a community – what does the community want to be like in the future? To address how a community achieves its desired state and addresses its needs, a variety of standards, techniques, and tools are identified.

The effect of adopting a comprehensive plan is that according to Town Law §272-a, a Town’s land use regulations must be in compliance with its comprehensive plan. These regulations provide a mechanism to implement the Town’s vision. In addition, all plans and projects for other governmental agencies must also consider the comprehensive plan.

Planning activities play a critical role in setting a course for the future of a community. As the most general of community planning activities, a comprehensive plan:

- > Formally considers the need for town-wide changes in development patterns on a basis that is community-driven and community-based;
- > Identifies and documents community assets, opportunities, and needs;
- > Establishes a vision for the future of the community that is shared across a variety of community perspectives and interests, such as neighborhoods, businesses, institutions, and environmental interests;
- > Outlines specific actions to achieve that shared vision; and
- > Produces a framework for community-wide collaboration on plan implementation.

This is the first comprehensive plan completed by the Town of Bethlehem. As such, many longstanding issues related to change in the community have been discussed and debated over the past several months. The Bethlehem Comprehensive Plan seeks to achieve broad consensus about the development of the town over the next ten or fifteen years. It is understood that not all individual interests can be accommodated through its recommendations. It is further understood that the plan is a living document and must be reevaluated from time to time to address changing circumstances. However, the recommendations within this comprehensive plan do indeed direct the community toward an overall vision to which the most residents of Bethlehem can agree. It 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.

As the Town's first comprehensive plan it is tempting to consider Town Board adoption of this planning document as a successful outcome of the process. This is especially true given the Town of Bethlehem's difficulty in achieving success during previous planning efforts. In some ways this plan, and the process that created it, has already been successful. It has helped to develop a shared understanding of the various viewpoints in the community related to growth and development. The planning process has also defined for the first time some agreement about the appropriate type, pattern, and form of future development in the Town. Adoption of the comprehensive plan by the Town Board is an important step: it clarifies and solidifies the will of the Board; demonstrates commitment to the plan vision, goals, and recommendations; and enables the Town to move forward with amendments to its zoning and other land use regulations, and with other implementation actions consistent with the plan.

Still, adoption of the plan should be viewed as a beginning, not an end. It is merely a first step in a much longer process. The comprehensive plan should result in immediate and sustained activities by the Town, and by the many individuals, businesses, agencies, and organizations that have been involved in its creation. The power of a plan rests in its implementation. However, implementing the recommendations found in this plan will require financial resources, staffing resources and time. The key to successful implementation in a world of finite resources is in identifying priorities and focusing the available resources on those priorities. By involving the entire community in the development of the plan, it is hoped that the entire community will work together toward achieving the vision and goals that guided each recommendation described on the following pages.

Section 2

Section 2 – Comprehensive Planning Process

2.1 THE COMPREHENSIVE PLANNING PROCESS

The Comprehensive Planning Process began with a commitment by the Town of Bethlehem Supervisor and Town Board to plan for the community's future. The Town Board appointed the Bethlehem Planning Advisory Committee (BPAC) in March 2004 to advise in the planning effort. The BPAC included a cross-section of residents and business owners representing a range of interests in the community. The BPAC conducted working meetings approximately once a month, and in some cases more than once a month during the time period from April 2004 to March 2005. Each BPAC meeting was open to the public, and a portion of the agenda for each meeting was reserved for public comment. Residents and interested parties attended nearly every BPAC meeting signifying the significant dedication of the community to the planning process and Bethlehem's future.

All materials related to the comprehensive planning process were made available on the Town's website (www.townofbethlehem.org) and at the Town Hall. The local newspapers, including *The Spotlight* and the *News Herald*, were also used to keep the public informed about meetings, issues, and outcomes related to the comprehensive planning effort.

The Town of Bethlehem Supervisor and Town Board believed strongly in the importance of a community-supported comprehensive plan and in balancing a variety of interests. Therefore, the public involvement component of this process was critical. Public involvement provides the community with a sense of ownership of the comprehensive plan and often leads to a long-term commitment toward the implementation of the plan. The BPAC reached out to the community on several occasions to solicit public input. Attendance and response to this outreach was outstanding and as a result, this plan reflects a careful balance of recommendations that address the concerns of all residents. Saratoga Associates facilitated each of the meetings and workshops and assisted in conducting two surveys. Special opportunities for public involvement included the following:

- > **Issues Identification Workshop** – The purpose of this initial public workshop was to introduce the community to the comprehensive planning process. In addition, participants were asked to work together to define the Town's strengths and identify issues that should be addressed in the plan. This workshop was held in April 2004.

The results of this workshop were useful in determining what residents like in the community and what concerns they currently have. In addition, participants in this workshop discussed what should be accomplished and what potential obstacles might exist to address their concerns.

- > **Focus Group Meetings** – The BPAC held seven focus group meetings from May 2004 through October 2004. The focus group meetings were either geographically focused or topical in nature and addressed the following: current zoning and the development review process; the Slingerlands Bypass extension and vicinity; the riverfront; trails, greenways

and recreation; commercial district design; the Route 9W Corridor; and agriculture and rural properties.

- > **Visioning Workshop** – The purpose of this June 2004 workshop was to identify a vision for the future of the town. Workshop participants were asked to take part in an image preference evaluation. Over 50 images were shown illustrating various styles and types of commercial development, housing, streetscape and public spaces. Participants were given a scorecard and asked to rate each image on a scale of 1 to 7. A score of 1 indicated that the image was undesirable or inappropriate; a score of 4 was considered indifferent, while a score of 7 indicated that the image was very desirable or appropriate for Bethlehem. After completion of the survey, the meeting facilitator showed each image again, and asked workshop participants to briefly explain why they scored the image as they did. Following the image preference evaluation, participants were divided into smaller groups to circulate through four different planning stations, each representing a different area of the community. At each station, aerial photos of the area where available for participants to review and discuss. A facilitator present at each station worked with participants to identify and record ideas and opportunities for improving the area.
- > **Community Survey** – In October 2004, survey questionnaires were mailed to a random sample of 1,600 property owners and registered voters in the town. Over 700 completed survey questionnaires were returned to Town Hall and tabulated. The response rate – over 44% - was exceptional.



The survey has a sampling error of not more than +/- 5% at the 95 percent confidence level. In other words, the chances are 19 out of 20 (95%) that the actual population value is within 5% of our estimate, in either direction. The full survey results are located in the Appendix. However, a few highlights are described below.

According to the community survey, a safe community, quality schools, and housing selection and quality are the top three important factors impacting a respondent's decision to live in Bethlehem. Overall, Bethlehem's neighborhood qualities and community performance in terms of road maintenance, public services and parks rated as excellent among respondents.

Taking all things into consideration, approximately 70% of respondents feel the quality of life in Bethlehem is better than in other places. However, nearly 44% feel that the quality of life is getting worse. Issues such as traffic and congestion, the rate of residential growth

and the loss of open land and undeveloped land were cited as important problems facing the town.

In addition to various interesting details, several strong themes emerged from the survey, which reinforce what has been expressed during the many public workshops that have occurred in past months. Those themes include a sense of place; fix what we have; look for opportunities within developed areas; address fiscal aspects of future activity; housing diversity; and protect natural areas and open lands.

- > **Farm and Rural Lands Survey** – In early November 2004, survey questionnaires were mailed to approximately 330 large property owners in the Town as part of the comprehensive planning process. The purpose of this survey was to more clearly understand the future of the rural areas in Bethlehem. Approximately 151 completed survey questionnaires were returned to Town Hall and tabulated by Town staff. The response rate was excellent with over 45% of surveys returned. The full survey results are located in the Appendix. However, a few highlights are described below.

The working landscape is a significant factor contributing to the long-term management of natural resources and to the rural character of the Town. Respondents primarily keep their land open and undeveloped. Others farm their land, manage it or rent it for purposes of farming. Over 40% of respondents are engaged in the production of hay and other crops. This trend toward the production of hay and other crops is similar to that of Albany County farms.

Fifty-six percent of respondents expressed an interest in either selling their development rights or learning more about the possibility, which suggests a need for increased education about the options available to property owners. Forty-four percent would not consider selling development rights to their property.

Fifty-one percent of respondents stated they would favor the Town investing in conservation easement or purchase of development rights programs, whether or not they as landowners would participate. Approximately 25% would not participate in such programs.

Over 21% of respondents hope to keep their land open/undeveloped, but not manage to produce income over the next 10 years. Thirteen percent will still be managing their land as woodlands, for mining, or as fish/wildlife habitat. Nearly 29% percent anticipate that they will still be farming, sell or rent land for someone else to farm, have a member of the family continue farming or sell development rights and continue farming.

- > **Townwide Public Meeting** – The purpose of this meeting, held in November 2004, was to discuss highlights from the community survey, introduce the plan vision statement and

goals, and to present and discuss preliminary plan concepts. Attendees were asked to provide feedback about the direction of the preliminary plan concepts.



- > **Youth Day** – The Bethlehem Rotary Club organized a December 2004 meeting with young members of the community. Current and past students from the Bethlehem Central School District and the Ravena-Coeymans-Selkirk School District participated in this interactive workshop. Participants in the Youth Workshop suggested several interesting ideas including, but not limited to, the need for additional places to gather or ‘hang out’ and the desire for more year round recreational opportunities.
- > **Draft Plan Public Meeting** – The purpose of this February 2005 meeting was to solicit public input about the draft plan. The draft plan document was available for public review in advance of this meeting. Feedback from this meeting was considered in the development of the committee’s final draft plan.
- > **Bethlehem Planning Advisory Committee (BPAC) Public Hearing** – As required by State law, the BPAC held a formal public hearing on March 3, 2005 to receive comments about its final draft plan. BPAC considered all of the comments received, and made final revisions to the draft plan before it voted on a resolution to forward the final draft plan to the Town Board for its consideration.
- > **Town Board Public Hearing** – Once it formally receives the Final Draft Comprehensive Plan from the committee, the Town Board will schedule a public hearing. In accordance with state law, it will hold the public hearing prior to making a decision regarding plan adoption.



In addition to the formal meetings and workshops described above, Town staff met with concerned residents and property owners on numerous occasions throughout the comprehensive planning process. This informal outreach served to better the BPAC’s understanding of issues and possible solutions. Throughout this process, the Town also received many emails and letters, as well as petitions, from interested parties in the community. The BPAC reviewed and considered all correspondence received during the development of the plan.

Meeting notes and results of the surveys, as well as minutes from the public hearings are included in the Appendices.

At the beginning of the BPAC's work, simultaneously with initial portions of the public involvement process, existing conditions within the Town were inventoried. The results of this investigation are documented in the Inventory and Analysis, which is located in Section 7 below. The Inventory describes the community's land use patterns, existing zoning, growth trends and patterns, housing, the natural environment, agriculture, infrastructure capabilities, the transportation network, the economic and fiscal conditions, recreational and cultural resources, and community services.

Section 3

Section 3 – Vision, Guiding Principles, and Goals

3.1 VISION STATEMENT

****In the Year 2020, the Town of Bethlehem is a community of attractive residential neighborhoods, vibrant hamlets, successful mixed-use commercial centers, modern industrial facilities, and productive rural lands. These are well connected by regional highways and local streets, adequately serviced by public transportation, and linked by a network of sidewalks and trails. Situated at the heart of the Capital District, Bethlehem offers convenient access to all that the region has to offer. It is recognized for the excellence of its schools, the quality of its public safety and community services, the abundance of its recreational opportunities, the productivity of its local businesses, ten miles of Hudson River waterfront, and the beauty and health of its natural environment. This exceptional quality of life contributes to the economic growth and prosperity of the town and the region, assuring that the community can continue to meet the increasingly diverse needs and expectations of its residents in a fiscally sustainable manner.***

*** Note:** The Vision Statement is written as if it was the year 2020 and one was describing the Town of Bethlehem. This is how we hope to be able to describe Bethlehem in fifteen years.

The recommendations within this comprehensive plan direct the community toward an overall vision to which the most residents of Bethlehem can agree. The plan 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.

3.2 GUIDING PRINCIPLES

The Town of Bethlehem developed a set of Guiding Principles to assist the community as it takes steps to achieve the vision articulated above. These principles are over-arching, and should be considered in all decision-making as the comprehensive plan is implemented. The Guiding Principles include:

- > **Adaptability** – the plan must be reviewed and evaluated from time to time, and adjustments in whole or in part must be made to address new circumstances.
- > **Diversity** – recognition that Bethlehem is a diverse community, and that it will and should become increasingly diverse as the population ages and as the region grows and changes.

Diversity, in terms of age, household size, race or ethnicity, economic status, or interests, is a positive attribute for the Town of Bethlehem.

- > **Environmental Sustainability** – meeting the needs of the present without compromising the ability of our community to meet its needs in the future. Specifically, this involves managing our community’s natural resources for the benefit of this and future generations.
- > **Fiscal Responsibility** – balance between the desire and need for public investments and services, and the ability to pay for these in a fair and responsible manner.
- > **Intermunicipal Cooperation and Community Partnerships** – encouraging continued dialogue and expanded cooperation with neighboring and regional municipalities, and state and federal governmental agencies, about issues that transcend town boundaries. The Town should also encourage dialogue with the school districts related to growth management and planning, and should also look for opportunities to expand partnerships with public and private sector organizations and enterprises toward accomplishing the recommendations in this plan.
- > **Respect of Property Owners' Rights** - recognition 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.

3.3 GOALS

To achieve the vision set forth by the community, multiple goals were established to guide decision-making. The goals address a variety of issues that were identified through an inventory and analysis (See Appendices), a community survey, a farm and rural lands survey, focus group meetings, public workshops, written public comments, and the experience and knowledge of the BPAC. The recommendations in the comprehensive plan (Section 4) attempt to direct short-term and long-term actions toward achieving these goals.

The goals, in no particular order of priority, are to:

- > Achieve a balanced tax base. As the community continues to grow, the cost of providing services (such as schools, recreation, etc.) for new residential development will grow as well. To preserve fiscal responsibility while sustaining or enhancing services to meet changing desires or needs, it is important to ensure that the community maintains a balance of residential development, commercial and industrial development, and open space.

- > Create a business-friendly environment that is supportive of small local businesses, that encourages entrepreneurship, and that helps assure the provision of quality, living wage employment and a diverse economic base in the community.

- > Encourage compact, mixed-use commercial and residential development/redevelopment in



identified neighborhood commercial centers and hamlet centers throughout the town. Appropriate scale, design, and character, attention to the pedestrian environment, and connections to adjacent neighborhoods are critical to the success of such centers.

- > Ensure that there is a reliable supply of high-quality water to meet the town's demand for this critical resource.

- > Expand public, private or non-profit active and passive recreational resources and community services available in the town to meet the growing and changing demand for these amenities.



- > Improve mobility – the ability of people, regardless of age and status, to engage in desired activities at moderate cost to themselves and society - throughout the town. This includes strategic investments in needed highway infrastructure, improved access to public transportation and development that is supportive of public transportation, and significant enhancements to the safety and attractiveness of non-motorized modes of travel.

- > Improve the development review process by establishing land use regulations that guide development in a manner that is consistent with the vision and goals contained in this plan. The regulations must result in a process that is comprehensible, predictable, and fair.

- > Maintain existing public water and sewer infrastructure in developed areas of the town. Plan for fiscally responsible capital improvements to expand such infrastructure in a manner that is consistent with this plan's identification of areas for continued residential, commercial, and industrial growth, or areas where such infrastructure is needed to resolve health and safety concerns.

- > Manage and protect significant environmental systems such as stream corridors and associated ravines, steep slopes, wetland systems, and in particular, the town's Hudson River waterfront. Enhance public access to, and understanding of, these resources.

- > Promote commercial and industrial growth in specifically designated locations. Encourage the reuse or redevelopment of existing sites and buildings as an alternative to development on "greenfield" locations. Create opportunities for increasing the value of underutilized commercial areas by focusing higher density development/redevelopment, and providing design guidelines and standards where appropriate, in these areas.



- > Promote energy efficiency and conservation, and the use of renewable energy in the town.
- > Provide opportunities for the development of a variety of housing options in the town to meet the needs of its increasingly 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 a range of housing types and sizes so that existing and future residents can continue to live in the community. Provide design guidelines and standards to ensure that new housing integrates appropriately with existing homes and neighborhoods.
- > Recognize the town's significant cultural resources, historic resources, and natural resources (such as farm land, forest land, or mineral deposits). Develop mechanisms for protecting and enhancing these for future generations. Communicate the value of these resources to individuals and to the community.

- > Utilize flexible land use regulations and creative land development techniques to retain the economic value of rural land. These techniques can also help conserve distinguishing features of the rural landscape and maintain rural lifestyles when development occurs.

- > Work with willing landowners to conserve quality open spaces throughout the town and create a network of open lands to provide wildlife habitat and potential recreational trail corridors.



Section 4

Section 4 - Plan Recommendations

The comprehensive plan recommendations are targeted toward achieving the vision and goals identified in the previous section. The intent in offering these recommendations is to provide the Town with an array of options to address the issues and concerns that were identified during the comprehensive plan process. The recommendations are not presented in any order of priority. The purpose of this section is to present recommended methods for moving toward the community's vision for these areas. The Implementation Section of this plan will present a programmatic strategy for implementing the plan's major recommendations. It is in that section that activities will be prioritized, and programs and projects detailed.

Each of the subsections below will begin with a brief description of the issues that have been raised by the community in terms of the specific geographic area or topic. This will be followed by a discussion of the proposed response to these issues and the specific tools / methods recommended for consideration.

4.1 HAMLETS

Goal: *Encourage compact, mixed-use commercial and residential development or redevelopment in identified neighborhood commercial centers and hamlet centers throughout the Town. Appropriate scale, design, and character attention to the pedestrian environment, and connections to adjacent neighborhoods are critical to the success of such centers.*

From Delmar and Slingerlands to Glenmont and Selkirk, the Town of Bethlehem's traditional development pattern was focused around hamlets, each with its own unique character and sense of place. A hamlet is a small, unincorporated village with no governmental jurisdiction or boundaries. A hamlet can also be defined as a 'community of place' and may consist of one centrally located civic building or store, or may contain multiple buildings providing services. According to Anton Nelessen, author of *Visions for a*

New American Dream, a hamlet can be defined as:

"... a dynamic, diverse, compact and efficient Center that has evolved and been maintained at a human scale, with an easily accessible central core of commercial and community services, residential units, and recognizable natural and built landmarks that provide a sense of place and orientation."

Issues:

- > Hamlets are small centers of social, cultural, civic and economic activity within the community.
- > Additional small-scale commercial services and a variety of higher density residential units could be provided in existing hamlets within the Town.
- > The form and design of existing hamlets could be improved to enhance the pedestrian environment from a safety and aesthetic point of view, to maintain adequate traffic flow, and to be more supportive of transit.

- > The form of traditional hamlets can serve as a model for accommodating some of community's continued growth. The creation of new hamlets in particular locations could provide opportunities for higher density residential and commercial development that is consistent with the Town's history, and with the vision and goals identified for the community's future through this plan.

Recommendations for Hamlets:

While many hamlets exist in the Town, some appear more viable than others. The Plan Recommendations Map illustrates the existing hamlets that seem most likely to remain viable in the future. In these existing hamlets there may even be the potential for additional growth in the future. As was said at one of the community meetings, hamlets are not just something to preserve, they should be viewed as something to grow. Existing hamlets with the potential to grow include: Slingerlands, Delmar / Elsmere, Glenmont, Meyers Corners, Beckers Corners, Cedar Hill, Selkirk, North Bethlehem, and South Bethlehem. The recommendations for these hamlets are focused on enhancement of existing conditions, management of potential growth, and preservation of unique and historic qualities related to the scale and design of development.

In addition to existing hamlets, there are several areas that are highlighted on the Plan Recommendations Map which have characteristics of emerging hamlets – some commercial or higher density residential development, limited pedestrian facilities, etc. These areas have infrastructure capacity and could be the focus for additional growth that is shaped into the form of new hamlets. The new hamlets could provide some of the housing variety desired in the town and could create small centers of pedestrian-scaled commercial and civic activity in areas that do not currently have this. Potential new hamlets are identified on the plan recommendations map in the following areas: on New Scotland Road, near the Slingerlands Bypass extension; along Delaware Avenue west of Van Dyke Road; south of the intersection of River Road (Route 144) and Wheeler Road; and at the intersection of Wemple Road and Route 9W. These areas vary in terms of the potential size of their future growth. So, for example, a new hamlet in the vicinity of New Scotland Road and the Slingerlands Bypass Extension could be fairly significant given the infrastructure that will be in place and the proximity to a substantial new office/technology development immediately west of this location. A new hamlet along Delaware Avenue west of Van Dyke Road is likely to be much smaller in scale due to the presence of several stream corridors and associated ravines in this area. Still, with its mix of uses, the new YMCA facility, and the recent addition of sidewalks on Delaware Avenue, the area could develop into a small center of activity.

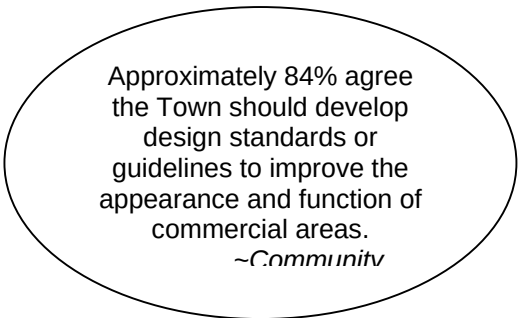
In the long term, additional locations for future hamlets could be identified. For example, the area west of Van Dyke Road (south of the potential new hamlet on Delaware Avenue) is shown on the plan map as residential. However much of the area is currently farmed. Agriculture remains the preferred use for this area, and to the extent that there remains an interest in farming this land, the Town should do what it can to support that decision. Possible mechanisms for the Town to support agriculture in this location and elsewhere are discussed in Section 4.11 Agriculture. In the long-term,

however, this area might still be converted to a non-agricultural use. If that were the case, most of this area would become residential (as defined in Section 4.3). However, it might be more appropriate for some portion of the area to be developed as a new hamlet. The reasons for this are many. First, this would provide an opportunity to provide a wider variety of housing types than are currently available or proposed in this area of the town. Second, small-scale commercial services and employment opportunities could be provided for the new residents of the future hamlet, and for those who live in existing or proposed subdivisions in this vicinity. Third, with the school and the park nearby, there is the opportunity to create a new center for civic activity in this area of the Town. Fourth, roadway, water, and sewer infrastructure are all available at or near this location. And finally, a future road alignment could extend the Delmar Bypass through this area to connect with Delaware Avenue (see section 4.12 Town-wide Recommendations – Official Map). With careful design, the road alignment could even serve as a Main Street for the new hamlet.

The long-term possibility for a hamlet in the vicinity of Van Dyke Road and the end of the Delmar Bypass is not depicted on the Plan Recommendations Map. This is due to the desire to see the area remain in agriculture as a first choice. However, the area should not be developed as a typical residential subdivision(s) in the future. That should be viewed as the least preferred alternative. Current zoning for this area should allow for its continued use as a farm. However, if the area converts out of farming, the Town should work with the landowner(s) or developer(s) to consider the possibility of creating a hamlet here. For example, the Town Board could rezone the area as a mixed-use Planned Development District (PDD) or as a hamlet in order to accomplish this alternative.

As noted above, the Town's hamlets should be viewed as the community's centers of social, cultural, civic and economic activity. As a result, the hamlets should be the preferred location for all community facilities (libraries, post offices, community centers, town offices, etc.) and civic functions. Such a policy, in combination with zoning that allows a full range of mixed residential, commercial retail, office, and entertainment uses; and design guidelines and standards, will help ensure the long-term viability of the Town's hamlet centers.

Maintain and improve walkability within the hamlets. The most basic solution to creating a walkable hamlet is the addition of sidewalks and crosswalks. Combined with traffic calming to influence the "behavior" of traffic, pedestrian infrastructure improvements provide a safe walking environment. Hamlet centers should have wide, well-maintained sidewalks that provide connections between their mixed-use core of stores, restaurants, civic buildings, and higher density residences, and the adjoining residential neighborhoods. When new development occurs, or when significant alterations to existing buildings and sites are proposed, the Town can require that pedestrian infrastructure improvements be made. In other instances, the Town might consider paying for all or part of the improvements to the pedestrian infrastructure in a hamlet, as it



Approximately 84% agree the Town should develop design standards or guidelines to improve the appearance and function of commercial areas.
~Community

would consider decisions about other types of capital improvements based on available resources. Funding from other agencies or organizations could also be used for these efforts.

Another important component in creating a pedestrian-friendly hamlet is to create an inviting streetscape. The streetscape includes all of the area from building front to building front. In addition to sidewalks, it can include planting strips, street trees, curbs, pedestrian-scaled lighting, benches, bike racks and other pedestrian amenities. Building facades frame this public space, creating a sense of enclosure for the pedestrian. Therefore, to foster a pedestrian friendly environment, most buildings should be located close to the sidewalk, with a preference for multi-story buildings (2 or more floors as appropriate). The general design of building facades – first floor height, windows and doors, transparency, and so forth – can also impact the attractiveness of the pedestrian experience. Along with safety, an attractive pedestrian environment encourages walking and benefits commercial viability in these small commercial centers. The presence or absence of these design elements can determine the character and sense of place within a hamlet. The precise standards that are appropriate may vary somewhat for different hamlets in the Town.

Typically, a pedestrian is willing to walk a distance of about 1,500 feet. This is approximately 1/4 – mile and equates into a five-minute walk. Providing commercial and community services within a 1,500 foot radius of a hamlet center can help create a walkable hamlet.

Many of the pedestrian improvements described for the hamlets, can also benefit vehicular movement and the business environment. For example, consolidated curb cuts improve pedestrian safety, access to businesses, and roadway efficiency. Well-designed parking and signage systems can also provide benefits to multiple users.

Create mixed-use hamlet zones for existing and proposed hamlets.

- > The zoning should focus on mixed use, infill development and redevelopment in hamlet centers. Mixed use can involve any variety of office, small-scale retail and entertainment, or high-density residential uses. These can be mixed horizontally (within a site), and vertically (within a building), whichever is more appropriate for the hamlet. Active uses, such as retail and entertainment, should be encouraged on first floor levels with residential or office uses on the second or third floors.

It might be necessary to create more than one type of hamlet zone in order to address differences in the scale or intensity of development desired in one location as compared to another. For example, it might be acceptable to have a higher density of development and taller buildings in Delmar and Elsmere than in Slingerlands or South Bethlehem.

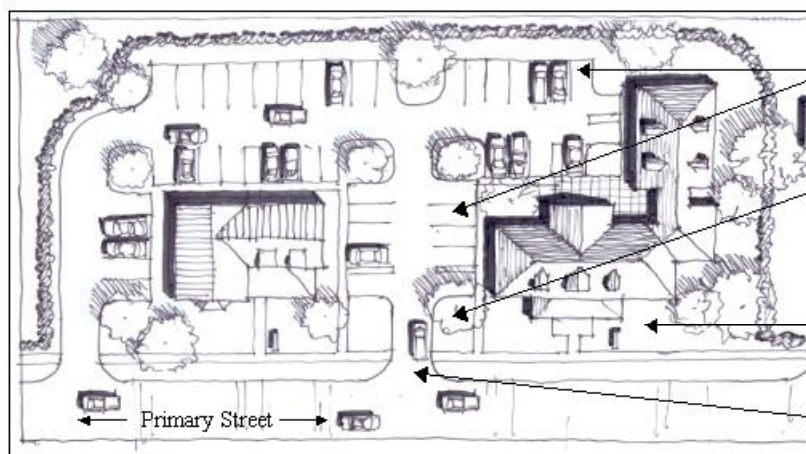
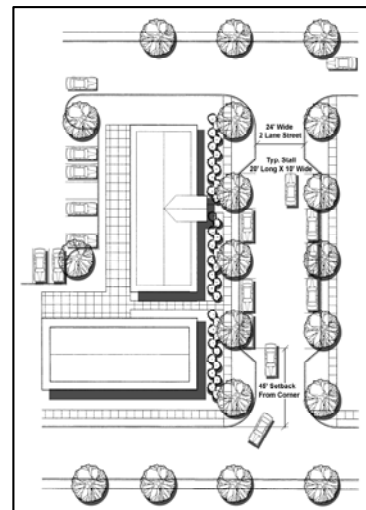
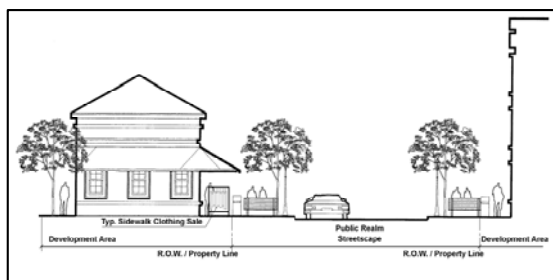
- > The Town should encourage developers to utilize existing vacant buildings and vacant or underutilized sites before building on greenfields. (A list of currently vacant buildings is found in the Inventory and Analysis in the Appendix). This practice will assist in keeping the hamlet compact in nature and also provide opportunities for additional development.

There are numerous ways in which the Town could encourage such activities including tax incentives, an expedited review process, or a reduction in application fees. Additional assistance might also be in the form of sharing the costs of improved infrastructure or forming creative partnerships to assist a developer or group of developers with these costs.

- > The Town should maintain the character and scale of development in the hamlet through the zoning regulations. Small-scale commercial, mixed with some residential would be appropriate for a hamlet. The Town should consider developing design guidelines for new and infill commercial or mixed-use development in the hamlets. Design guidelines can be incorporated into the Town's zoning through the special use permit process. Specially

Example of Design Guidelines*

* This sample set of designs guidelines are not necessarily appropriate for the hamlet areas. ***They are illustrative only.***



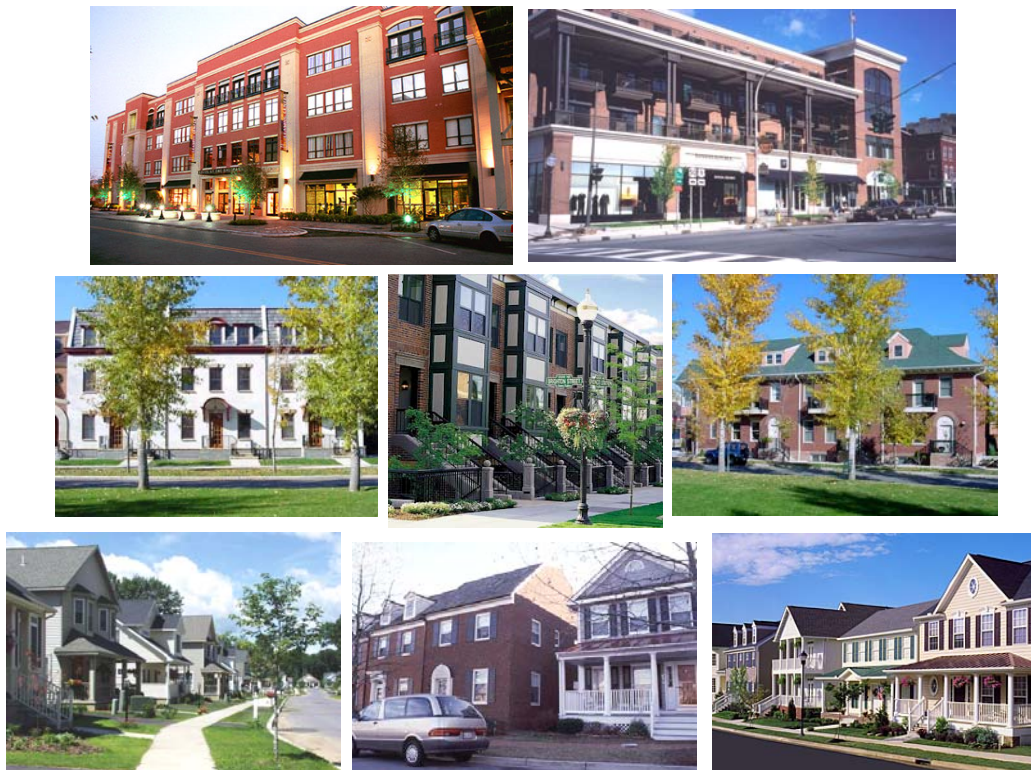
- Off-street parking at the side or rear
- Landscaped buffer between side parking area and back edge of sidewalk
- Small front yard setback
- Use cross-easements to provide shared access to parking when possible

permitted uses are assumed to be generally appropriate for a given zoning district, subject to special considerations. Appropriate design can be the difference between when a use is or is not appropriate, and design guidelines help to clarify how particular uses can be made to fit into the area. Among other things, design guidelines for the hamlets could require

building placement close to the sidewalk edge, and parking in the rear or to the side of buildings. Within the guidelines, some design elements should be required, while others should be suggested. For example, the guidelines could contain very specific requirements with regard to building location or the location of parking, but simply encourage the preference for multi-story buildings in hamlet centers or provide suggestions regarding appropriate building façade materials.

As part of the zoning amendments that will be implemented immediately following adoption of this plan, generalized design guidelines and standards will be developed for the hamlet areas. These will articulate broad design principles that are applicable to all of the town's hamlets. In the future, perhaps as part of the development of specific master plans for individual hamlets (see recommendation below), the Town Board may decide to supplement or replace the generalized design guidelines and standards with unique ones that are tailored to the individual hamlets studied.

- > The Town should allow for and promote a mix of housing options in the hamlets. Greater



The trend toward smaller household sizes, the aging population, and the increasing need for affordable housing, means that Bethlehem must provide for the development of a range of housing types and sizes so that existing and future residents can continue to live in the community. Bethlehem's hamlet centers provide an opportunity to accomplish greater housing diversity.

housing diversity is a community goal, and will be increasingly important as demographic trends continue to shift toward an aging population and smaller household sizes. Much of

the town's need for housing diversity can be accomplished in the hamlet centers. For example as new hamlet-scaled development occurs, the opportunity exists to create senior housing and/or low to moderate-income housing (sometimes called workforce housing). Senior housing might be the form of independent living options such as apartments or accessory units, or in the form of senior housing facilities that provide for various levels of care. Low to moderate income or workforce 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.

- > Safe and adequate locations for commercial deliveries should be considered in the design of commercial areas within the hamlets. At present, delivery vehicles sometimes stop and park in moving traffic lanes to unload goods for local businesses. This can obstruct the flow of traffic and create dangerous conditions by blocking sight lines. The new land use regulations and design guidelines for hamlets should encourage delivery alternatives that do not impede the safe flow of traffic on major arterials that run through these community centers.

Employ traffic calming measures along roadways that traverse through the hamlet.

Traffic calming is concerned with improving safety and quality of the pedestrian experience, as well as creating safer roadways for those traveling via automobile. Traffic calming usually involves reducing vehicle speeds, providing more space for pedestrian and bicyclists, and improving the overall local built environment. Traffic calming techniques could include the simple addition of street trees along the roadway, bulbouts, on-street parking and landscaped medians. For example, the landscaped median illustrated in this photograph is an example of a treatment that would be desirable



An example of a landscaped median functioning as a gateway and a traffic calming method

in the area of the Slingerlands Bypass Extension. These techniques either physically reduce the road width or give the appearance of a narrower street, causing motorists to reduce their travel speed. It is important to recognize that these techniques are not appropriate in every situation, and qualified transportation professionals must evaluate them on a case-by-case basis.

Encourage the use of safe, convenient mass transit options. The Town's hamlets are ideal areas to encourage mass transit usage because compact, higher density development is necessary to support mass transit. The Capital District Transportation Authority (CDTA) operates several routes

throughout the Town. The Town should look to coordinate with CDTA and encourage routes in the vicinity of hamlet centers. The use of mass transit would reduce the traffic and congestion on the Town's roadways, and would also allow those without a vehicle to be more mobile.

Coordinate the promotion of commercial development activities among property owners and business owners. Pooling resources from property owners in order to coordinate ongoing maintenance and improvement activities can enhance the success of commercial areas. In hamlets such as Delmar, Elsmere and Glenmont, the creation of a Business Improvement District (BID) may be appropriate. A BID provides a mechanism for property owners and business owners to raise funds for supplemental services, such as street and sidewalk maintenance, beautification, prospecting, marketing, and business recruitment and retention. It could also assist in developing public parking or coordinating shared parking arrangements. Organizing a BID requires property owners to tax themselves to raise funds and establish an operating budget under their control to provide for the additional services. If a BID is not appropriate within specific hamlets, the property owners could coordinate with the Bethlehem Chamber of Commerce to assist in such activities.

Consider the development of Hamlet Master Plans for specific hamlets. Various hamlets in the town would benefit from a hamlet master plan. A hamlet master plan would identify hamlet specific concerns and would identify the most appropriate recommendations to address those concerns. Once prepared the Town Board could adopt a hamlet master plan as an amendment to the comprehensive plan. As a start, the town could develop a hamlet master plan for the Selkirk or Delmar/Elsmere hamlets. A hamlet master plan for Selkirk, or for Delmar/Elsmere, might include specific considerations such as those described below:

The Selkirk Hamlet is situated on Route 396, which is a major truck route from Interstate 87 (the NYS Thruway) to the industrial area of Selkirk Yards. Achieving a resolution to the long-standing truck bypass issue must be a priority for the Town of Bethlehem (see Section 4.12 Town wide Recommendations, Transportation). Once the bypass question has been resolved, a hamlet master plan for Selkirk could be initiated to address other issues. For example, traffic calming is critical within the hamlet. Traffic calming would serve to reduce traffic speed and create a safer environment for residents. The hamlet could also become a more pedestrian-friendly environment by improving pedestrian facilities such as sidewalks and crosswalks.

There is an opportunity in the Selkirk hamlet to create a more vibrant mix of uses that could provide more services for residents. A mix of uses might include commercial and retail land uses as well as some higher density residential. The hamlet master planning process could work with residents of Selkirk to identify appropriate development and needed services in the hamlet.

The development of design guidelines for this hamlet would assist in ensuring the character of Selkirk remains as development occurs. Design guidelines or standards could address building placement, the location of parking, building character and the scale of development in the hamlet, utilities, signage, and other improvements.

The Delmar / Elsmere Hamlet Area is located along the busy Delaware Avenue corridor. Many areas of Delaware Avenue can be unfriendly to pedestrians and difficult to negotiate due to the existing roadway width, the many curb cuts, and a lack of attention to the pedestrian. This is especially true where Delaware Avenue consists of four travel lanes, as it does through Elsmere. A landscaped median, access management, and improved pedestrian facilities are some of the techniques that should be considered for improving both vehicular and pedestrian safety along this corridor. This hamlet master plan could also identify opportunities to connect with the CP Rail right-of-way, which is a likely future rail-trail. This potential trail could become part of a larger regional trail system and would enhance recreational activities in this more developed area of the town.

Along the Delaware Avenue Corridor there are a variety of land uses including commercial, retail and residential. This mix of uses is generally encouraged, however the mix of retail and commercial should be examined to ensure the residents needs are being met. At a Youth Day Workshop, for example, the town's youth expressed concern over the lack of music stores in this particular area. Also, the development along this corridor is only one parcel deep in most instances. Perhaps there is an opportunity to have more depth of development along Delaware Avenue. Creating additional depth not only provides opportunities for more tax base, but could also establish connections to neighborhoods in the vicinity. As with the Selkirk Hamlet, the town should establish design guidelines along the Delaware Avenue corridor. Design guidelines or standards could address building placement, the location of parking, building character and the scale of development in the hamlet, utilities, signage, and other improvements.

4.2 IN-TOWN RESIDENTIAL AREA

The In-Town Residential Area, as illustrated on the Plan Recommendations Map, is the area to the north and south of Delaware Avenue that contains the Town's most mature residential neighborhoods. Generally this area is referred to as Delmar or Elsmere. The neighborhoods in this area were designed with walking in mind. Elements that create the character of these neighborhoods include tree-lined streets, sidewalks, smaller lot sizes, moderately sized homes, interconnected street patterns, and a location near some small-scale services.

Issues:

- > The In-Town Residential Area is comprised of older neighborhoods. It is important to maintain the fabric of these neighborhoods as they age.
- > While this area contains predominantly single-family homes, there is a need for a greater diversity of housing options in the Town to accommodate an aging demographic.

Recommendations:

Create a zoning district that is appropriate for the In-Town Residential Area. Under the town's current zoning, this area is primarily zoned as A or AA residential. Under the requirements of these zoning districts, many existing lots are actually non-conforming based on the required minimum lot

size, minimum lot width, or other dimensional requirements. Consistent with the existing neighborhoods, it is recommended that a density of approximately 6 dwelling units per acre be allowed in this area. Zoning for the In-Town Residential Area should be crafted to preserve the existing character of these neighborhoods.

Allow greater housing diversity. As the Town's population ages, it is critical to consider housing options for seniors. The In-Town Residential Area (as well as the hamlets) is appropriate for such housing due to its location close to services. In some instances seniors may no longer be able to drive, but may be able to walk to a doctor's office or take the bus to the pharmacy.



Example of two-family dwellings that are indistinguishable from single family homes in this affordable housing subdivision.

In addition, low-moderate income housing options are needed in the town. Accessory apartments, carriage houses, and well-designed duplexes are options that would be

appropriate in at least some portions of the in-town residential area. Whether this is true throughout the area, or just along the main road corridors through the area, remains to be decided. Zoning should be changed to accommodate such housing options as specially permitted uses. The special permit requirements could ensure that such units are designed to be indistinguishable from the single-family homes in the neighborhood.

Create regulations that address home-based businesses, that carefully manage the transition of residences along main thoroughfares to non-residential uses, and that allow for the possibility of small, well-designed neighborhood commercial establishments in specific locations. In recognition of the changing nature of the workplace that technology has created, home based businesses, or home occupations, should be permitted in all of the town's residential areas. Standards should be established for such businesses so that they do not detract from the residential character of neighborhoods in the town.

In addition, there are pressures to convert residential structures along some of this area's main roadways to non-residential use. Zoning regulations might consider allowing for the transition of single-family homes into professional offices and related activities along specific arterial corridors. However, design guidelines should be developed to ensure that the residential character of these areas is preserved, and performance criteria established to protect existing residential properties from any negative impacts of non-residential neighbors.

Finally, the in-town residential area is considerably larger from its edges to the hamlet centers than is comfortably walkable for most people. Therefore, the zoning for this area should allow with careful review and consistent with appropriate design guidelines or standards, small, well-designed neighborhood commercial establishments in a few specific locations. Such establishments would make it possible for someone to obtain a few basic items in their neighborhood without the necessity of driving.

Maintain and enhance pedestrian connections within neighborhoods, and between neighborhoods and hamlet centers. Pedestrian connections are critical to creating the sense of community that exists within these neighborhoods. Enhancing and maintaining a safe pedestrian environment is important within the in-town residential area. Though sidewalks are not necessary on every low-volume residential street, they are important on busy collector streets or arterials. Bike lanes or off-street bike paths may also be appropriate on the busiest of these roads. The Town should require such infrastructure as part of new development or redevelopment proposals. The Town should also work in partnership with landowners and outside funding agencies to develop and maintain such infrastructure where it is needed. The pace and extent of this effort would, of course, depend on the availability of resources and in consideration of the town's many priorities.

Though there are only very limited development opportunities remaining in this area, the Town should consider recreational trail connections as any development does occur. Critical links could be established by utilizing the Town's Parkland Reservation Requirement to set aside actual land, rather than accept payment in lieu of property. Under Article VIIA of the Town of Bethlehem Zoning, the Town has the authority to require a reservation of land for public park, playground or recreation purposes. However, in most cases the Town has accepted a payment in lieu of public parkland, playground or recreational land from developers. Though the payment in lieu option is beneficial in many cases, where the proposed subdivision has the potential to provide an important link between neighborhoods, or to a larger trail, the land reservation option should be strongly considered.

The Town should also work with willing landowners to preserve trail connections, if the opportunity arises. For example, the CP Rail right-of-way is located within the In-Town Residential Area. Albany County is currently seeking funding to develop this right-of-way into a multi-use recreational trail.

Specific opportunities for sidewalks and other pedestrian connections may exist on Kenwood Avenue near the Delmar Bypass, along Bender Lane, and areas such as Wemple Road and Elsmere Avenue, which would create a connection to Delaware Avenue. Improved crossings on the Delmar Bypass should also be considered.

Maintain the streetscape. While the streetscape in an In-Town Residential Area differs slightly from the streetscape found in a hamlet setting, it is no less important. Replacing street trees or hiding utility infrastructure, for example, can be important for maintaining the character of these areas.

4.3 RESIDENTIAL AREA

The Residential Area is characterized today by traditional suburban residential development: exclusively residential except where parcels have not yet been converted to development, limited or no street and pedestrian connections, and larger lots. This area is shown on the Plan Recommendations Map.

Issues:

- > The Residential Area has very few, if any, pedestrian connections making vehicles the only reasonable mode of transportation. This creates a potentially unsafe environment for children trying to visit their neighborhood friends.
- > This area is primarily single-family residential. A wider range of housing options is needed to accommodate the Town's changing demographics.
- > There are active agricultural lands and many undeveloped areas that are facing immediate growth pressure in this area.

Recommendations:

Create a residential zoning district for this area. The residential area should be zoned as a single unit. In general, uses permitted in the current A and AA Residential Zoning Districts would continue to be permitted in this new zone. Additional housing diversity as described below should be incorporated into the list of specially permitted uses for the zone. Agriculture will remain a permitted activity within parts of the Residential Area that are located in a County Agricultural District, and any existing agriculture outside of the Agricultural District, should be allowed to continue. New agricultural uses outside of the County Agricultural District should be allowed by special use permit.

Allow greater housing diversity. As a result of the general aging of the population, smaller household sizes, and the need for low to moderate-income housing in the Town, the Residential Area should allow for a greater diversity of housing type. Accessory apartments, carriage houses, and well-designed duplexes are options that would be appropriate in at least some portions of the residential area. Whether this is true throughout the area, or just along the main road corridors through the area, remains to be decided. Zoning should be changed to accommodate such housing options as specially permitted uses. The special permit requirements could ensure that such units are designed to be indistinguishable from the single-family homes in the neighborhood.

Goal: Provide opportunities for the development of a variety of housing options in the Town to meet the needs of its increasingly diverse population.

Create regulations that address home-based businesses. In recognition of the changing nature of the workplace that technology has created, home based businesses, or home occupations, should be permitted in all of the town's residential areas. Standards should be established for such businesses so that they do not detract from the residential character of neighborhoods in the town.

Separate the concept of “density” (the number of homes that can be built per acre) from the concept of “lot size.” Under the Town’s existing regulations, the density of development is controlled by mandating that every house be placed on a housing lot of some minimum area. For example, a hypothetical zoning district might require that each new home be placed on a lot with a minimum size of 1 acre. 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. Where sewer and water are present, housing lots could be quite small. By separating the issue of lot size from the issue of density, the developer must no longer divide all of the original parcel of land into residential housing lots in order to maximize development potential and profits. Instead, he/she could achieve the maximum allowed density while creating lots of various sizes and preserving exceptional features of the landscape through creative design.



Conventional “minimum-lot-size” zoning requires the developer to divide all of the original parcel of land into residential housing lots in order to maximize development potential and profits.

It is recommended that the density for the new zoning district covering the Residential Area should be established at a maximum of 3 dwelling units per acre of unconstrained land when public water and public sewer will be utilized. Constrained land includes wetlands, floodplains, and steep slopes. The density should be reduced to a maximum of .5 dwelling units per acre of unconstrained land if wells and septic systems will be utilized. [Note: that is the same base density that is recommended for the Rural Area, where water and sewer infrastructure is not available in most cases].

Encourage the use of conservation subdivision design for major subdivisions in the Residential Area. It is recommended that a minor subdivision be defined as one that results in the creation of four (4) or fewer lots (not including the original parent parcel) over a 10-year period. After the ten-year period, additional minor subdivisions would be possible. A major subdivision is one that exceeds this threshold.

For minor subdivisions a simple conventional subdivision approach, with no minimum lot size, should be permitted. County Health Department approval of well and septic systems would be required, and would effectively determine lot size. Though minor subdivision is intended to be a simplified process, especially in rural areas, in the Residential Area there may be instances when a more

thorough review process is warranted. For example, a minor subdivision proposed in a part of the Residential Area that is already built-up, or in an older existing subdivision, may raise specific environmental or other concerns. The Planning Board should have the ability to require a more detailed subdivision review process in such cases.

For major subdivisions (assuming the use of public water and sewer), the landowner should have two density options. The conventional subdivision density option would permit a maximum density of 3 dwelling units per unconstrained acre (expressed as a 1/3 acre minimum lot size). The conservation subdivision option would allow a maximum density of 4 dwelling units per unconstrained acre (with no minimum lot size). Incentive zoning would be used to establish the density bonus indicated for the use of the conservation subdivision option.

Residential Area

Original parcel: 10 acres

Approximately 5.4 acres unconstrained

Base density = 3 du/acre = 16 lots

Conventional subdivision

Approx. 24,000 SF lots

(minimum lot size = 14,500 SF)

Conservation subdivision

Base density = 3 du/acre = 16 lots

Approx. 12,000 SF (maximum average lot size)

If density bonus utilized for conservation subdivision:

4 du/acre = 22 lots

Approx. 8,500 SF (maximum average lot size)

[Note: at least 5 acres – 50% of original parcel remains permanently conserved open space]



A comparison of a conventional subdivision (left) with a conservation subdivision (right). In both cases, a total of 16 residential lots were created. A conservation easement ensures that the open land preserved as part of the conservation subdivision (right) cannot be further subdivided or developed in the future.

As described above, constrained land includes wetlands, floodplains, and steep slopes. While the current practice of most developers and their engineers or designers is to exclude these areas from proposed developments, the Town's current regulations do not provide guidance about when or how this must be done. The precise definition of constrained land, and how such lands are identified during the project approval process, should be established in the town's zoning and subdivision regulations.

Conservation Subdivision Design is a type of clustering that addresses the form of development. By separating the concept of density from the concept of lot size (as described above), the Town could permit flexible lot-sizes that facilitate creative subdivision design in harmony with the landscape. In addition to the environmental and viewshed benefits of allowing homes to be situated in a creative manner, a network of conserved open lands can be created in the process. These conserved lands, for example, might function as wildlife corridors or create buffers between residential areas and those

areas that continue to be actively farmed. In addition, the conserved lands could provide benefits related to stormwater management. This type of benefit will become increasingly important as the Town addresses the Phase II Stormwater Rule required by the New York State Department of Environmental Conservation (See Section 4.10 for more information on the Phase II Stormwater Rule). A brief description of the Conservation Subdivision Design approach is provided in the box below.

The Conservation Subdivision Design approach begins with the identification of open space resources present on the site to be developed (environmentally constrained land, agricultural land, historic or scenic views, significant woodlots, etcetera). A town-wide map of open space and agricultural resources can be a useful guide for starting this identification process. This resource identification will form the basis for designating conservation lands in the new subdivision. Once conservation lands are identified and designated, areas where development would be most appropriate are identified. Homes (the number based on allowable density for the zoning district) are then designed into the development areas of the site in a creative fashion. Flexible lot sizes and area and bulk standards facilitate this creativity. Identifying road alignments and lot lines are the final steps in the Conservation Subdivision Design process.

Conservation Subdivision Design (term coined by Randall Arendt)

Uses open space resources present on a site to be developed as the starting point for design (In the same way that a golf-course community is designed).

The **four-step conservation subdivision design process** is quite simple:

1. Identify conservation areas – potential development areas follow once the conservation areas have been “greenlined”.
2. Locate house sites
3. Align streets and trails
4. Draw in the lot lines

Conservation easement – a legal tool that ensures that conservation lands set aside as a result of this process remain undeveloped.

Ownership options for conservation lands - an individual landowner or several landowners in the new conservation subdivision, a homeowner’s association, the Town of Bethlehem, or a land conservancy such as the Albany County Land Conservancy.

See Randall Arendt’s, *Conservation Design for Subdivisions: A Practical Guide to Creating Open Space*

A required open space set aside should also be established. Because sewer and water infrastructure is already available, or could be made available, in most of this area, a required minimum open space set aside of 50% could be established for conservation subdivisions. Where wells and septic systems will be utilized, the minimum open space set aside could be reduced to 40%. These minimum open space set asides would ensure meaningful open space conservation, and still allow creative subdivision design. To make it easier to achieve or exceed the minimum open space set aside, and to promote housing diversity in the town, a mix of attached housing types such as well-designed duplexes and townhomes will be permitted in conservation subdivisions in addition to detached single-family homes.

In all cases, a conservation easement will be the legally binding mechanism for ensuring that the open space set aside as part of a conservation subdivision cannot be further developed or subdivided in the future. The town will be a party to the easement, and in some cases a third-party enforcer such as a local land trust may also be party to the easement. Ownership options for open land set aside as part of these subdivisions are described above, but in most cases it is recommended that a private landowner, or several landowners in the new subdivision should retain ownership of the land under easement. For larger subdivisions, a homeowner's association may sometimes retain ownership of the open lands. In rare cases, the town or a land trust may become the owner of the open lands.

Establish an Incentive Zoning mechanism. Such a mechanism would allow for modest density increases in exchange for specified public benefits – Incentive Zoning establishes a framework for negotiation between the Planning Board and the developer of a proposed project. Under Incentive Zoning, the Planning Board is authorized to grant a developer additional housing units above the base density in exchange for the developer's agreement to provide specified public benefits. The Incentive Zoning provision must be carefully written to set clear parameters about the extent of the potential density bonus and to specify the public benefits that are required in order to receive the density bonus. The review process established under the incentive zoning provision would ensure that the benefits gained are worth the incentives provided.

Incentive Zoning could also be used to provide public access to protected open space for the development of pedestrian or recreational pathways. It is important to recognize that there is no automatic right for the public to have access to open lands created from conservation subdivisions. When the land remains in private ownership, even under a conservation easement, all of the rights of land ownership except the right to further develop the property remain. This includes the right to prevent trespassing. The Town cannot compel a private landowner to allow public access on their land. However, the Town can purchase the right for public access and/or offer incentives to the landowner for allowing public access through open lands.

Incentives for public access can be built-in to the revised land use regulations as an incentive zoning provision. In this case, the developer of a conservation subdivision would be offered some modest increase in the allowed density, perhaps up to 10% or 15% of the total number of permitted housing units, in return for permitting public access to the open lands. Although NYS General Obligations Law has become much more supportive in terms of limiting the liability of landowners who allow public access to their lands for the purposes of enhancing recreational opportunity, the town should consider if it can extend its own existing liability coverage to any trails created as part of this network. These types of incentives can be very powerful tools for establishing a community trail network.

Consider reducing street widths in new residential developments and encourage a connected street network. Oftentimes, the required minimum residential street width is excessively wide. Wide residential streets inadvertently encourage speeding and, in areas with no sidewalks, can create

an unsafe environment for pedestrians and bicyclists. This recommendation would require further discussion with various Town Departments, such as the Department of Public Works, and with emergency service providers in the area, to ensure safety. Information about the function, safety, and benefits of narrower streets has become available from transportation engineering organizations, such as the Institute of Transportation Engineers (ITE), in recent years.

4.4 RURAL AREA

The Rural Area of Bethlehem is characterized by working landscapes. Traditionally, rural areas have been places where resource based economic activities have flourished. Rural areas typically have less demand for public services. Outside of the hamlets, agriculture and forestry have been the primary uses. Today, economic trends have reduced the viability of agriculture in this area of Albany County. The land, however, remains the primary asset of many landowners in this area.

With its remaining agricultural businesses, undeveloped lands, and natural resources, this portion of the community stands in contrast to the more developed areas of Bethlehem. Its rural character is highly valued among those that live in this area, and it also contributes to the town's overall high quality of life.

Residential development pressure is slowly working its way to parts of this area, however, with difficult soils and the lack of sewer and water infrastructure, much of the area will most likely not be intensively developed. With a few possible exceptions (subject to further study – see recommendations for infrastructure in Section 4.12 Town-wide recommendations) large public investments in such urbanizing infrastructure are not likely in most of the area. However, when the Town does extend water and sewer infrastructure to a portion of the rural area, the Town Board should consider whether the rural zoning designation remains appropriate for this newly served area. At such time, the Town Board may consider rezoning to a residential, or other suitable zoning classification based on the new development potential that this infrastructure provides to the area. In a few areas, either water or sewer infrastructure (but not both) is available today. These areas will be carefully reviewed when determining their appropriate zoning designation consistent with this plan. In most such cases, the road frontages will be considered residential.

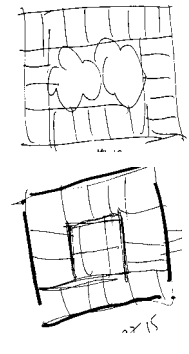
The challenge in this area, therefore, is to provide options for rural landowners so that rural lifestyles and economic opportunity can be maintained here over the long-term.

Issues:

- > Much of this area is currently a rural “not zoned” district. There are virtually no limitations within this district regarding the type, form, location and density of residential and commercial development. The result will ultimately be the slow loss of the very character and quality of life that is valued by residents who live here.
- > The unpredictable nature of the rural “not zoned” district creates uncertainty in the marketplace and may, therefore, limit potential investments.

Recommendations:

Update zoning regulations for the Rural Area. Creating a predictable and fair process for land use and development in this area would be beneficial to property owners, to potential developers, and to the community as a whole. Developers are typically more willing to do business in a community where the development process is clear and predictable – it saves time and financial resources.



Frontage development can create access management problems if individual driveways are permitted for each home (left). Frontage development is also inefficient -- once the frontage is all developed (top right), developing the interior lands (bottom right) is very difficult because proposed new homes are likely to be in the "backyards" of the ones already built along the road frontage.

Typically, a rural area is home to a variety of uses, including agriculture, forestry, mining, small-scale commercial and light industrial activity, and low-density residential development. Revised zoning and subdivision regulations for this area must continue to provide a variety of options in terms of the use of land. Agricultural practices and affiliated agribusiness uses such as farms stands and small scale processing of agricultural products should certainly be permitted. Additionally, low-density residential, home occupations, small-scale commercial or light-industrial uses (maximum 4,000 SF), bed and breakfasts, and private recreational uses should be permitted. Permitted uses should be enumerated in the revised zoning for this area. Some non-residential or non-agricultural uses should require a special permit to ensure that they do not negatively impact the use and enjoyment of neighboring properties. Performance standards for noise, light, vibration, dust, odors, and so forth should be developed to guide the review of such projects. Very broad design guidelines may also be appropriate to limit the negative environmental and visual impact of items such as paved parking areas, lights, and signs, or to improve the safety of items such as driveways, that are necessary for the operation of these uses.

In terms of residential development, there should be options available to the landowners that reflect varying circumstances. In some cases, a landowner may simply wish to split-off a lot or two for a friend or relative, or to generate some needed cash. These types of small subdivisions should be easy to achieve through a conventional minor subdivision process. It is recommended that a minor subdivision be defined as one that results in the creation of four (4) or fewer lots (not including the original parent parcel) over a 10-year period. After the ten-year period, additional minor subdivisions would be possible.

Because small subdivisions are typically created along the frontage of existing roads, such subdivisions can quickly have a negative cumulative impact on the safety and efficiency of the road (due to curb cuts). This type of frontage development can also quickly detract from the rural

character of an area, because despite the abundance of undeveloped land behind these homes, the view from the roadway is dominated by homes. And finally, unchecked frontage development can negatively impact the future development potential of interior lands. Though the original landowner may have intended to develop these areas, they have unwittingly created opposition to such development because the interior lands are the “backyards” of the lots created in the original subdivision. To counter the negative impact of frontage development from minor subdivisions, the Town could allow well-designed flag lots with shared driveways (and cross-easements), as an alternative option to frontage lot development. This could be accomplished as the zoning and subdivision regulations are amended.

In the Rural Area, the density of residential development should vary depending on the pace and form of proposed subdivision activity. For minor subdivisions, a simple conventional subdivision approach, with no minimum lot size, should be permitted. County Health Department approval of well and septic systems would be required prior to subdivision approval, and would effectively determine lot size. For major subdivisions, the landowner should have two density options. The conventional subdivision density option would require a density of one dwelling unit per two (2) acres of unconstrained land (expressed as a 2-acre minimum lot size). The conservation subdivision option would allow a maximum density of one and a quarter (1.25) dwelling units per two (2) acres of unconstrained land (with no minimum lot size). Incentive zoning would be used to establish the density bonus indicated for the use of the conservation subdivision option. It is important to recognize that the maximum allowable density in these areas may not always be achievable, and will be dependent on the ability of the soils to accommodate individual septic systems.

As described for the residential area, constrained land includes wetlands, floodplains, and steep slopes. While the current practice of most developers and their engineers or designers is to exclude these areas from proposed developments, the Town’s current regulations do not provide guidance about when or how this must be done. The precise definition of constrained land, and how such lands are identified during the project approval process, should be established in the town’s zoning and subdivision regulations.

A required open space set aside for conservation subdivisions in the Rural Area should also be established. The minimum open space set aside could be 40% in this area. The minimum open space set aside would ensure meaningful open space conservation, and still allow creative subdivision design. It is important to recognize that the required open space set aside does not affect the number of units allowed in the subdivision because the density calculation is based all of the unconstrained land on the parcel to be subdivided. To make it easier to achieve or exceed the minimum open space set aside, and to promote housing diversity in the town, a mix of attached housing types such as well-designed duplexes and townhomes will be permitted in conservation subdivisions in addition to detached single-family homes.

Incentive zoning, in the form of additional density bonuses for the provision of public access to conservation lands (as described above in Section 4.3, Residential Area), should also be made available for major subdivisions in the Rural Area.

Consider reducing street width in new residential developments and encourage a connected street network. Oftentimes, the required minimum residential street width is excessively wide. Wide residential streets inadvertently encourage speeding and, in areas with no sidewalks, can create an unsafe environment for pedestrians and bicyclists. This recommendation would require further discussion with various Town Departments, such as the Department of Public Works, and with emergency service providers in the area, to ensure safety. Information about the function, safety, and benefits of narrower streets has become available from transportation engineering organizations, such as the Institute of Transportation Engineers (ITE), in recent years.

4.5 RURAL LIGHT INDUSTRIAL AREA

The Rural Light Industrial area is illustrated on the Plan Recommendations Map. The Rural Light Industrial Area would allow minor residential subdivision activities as described for the Rural Area, but it would not allow major residential subdivisions. All other uses permitted in the Rural Area would be permitted in the Rural Light Industrial District with the addition of traditional light industrial activities including, but not limited to warehousing, minor assembly operations, some manufacturing, and research facilities. Permitted uses, and uses that would require a special permit, should be enumerated in the revised zoning for this area. Because the Rural Light Industrial Area by its nature will be a mixed-use area, some level of review and design guidelines or standards should be considered. In particular, buffering, lighting, and other such considerations should be included to ensure that light industrial facilities are good neighbors to nearby residences.

4.6 MIXED ECONOMIC DEVELOPMENT AREAS (LIGHT INDUSTRY / OFFICE / TECHNOLOGY)

As illustrated on the Plan Recommendations Map, there are five primary locations where mixed-use light industry, office and technology development should be focused. Those locations are:

- > an area north of the hamlet of Slingerlands and immediately west of the Slingerlands Bypass Extension;
- > an area bounded by Glenmont Road, Route 9W, the 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.

Issues:

- > It is necessary for the Town to expand its non-residential tax base and to diversify the tax base. Providing for mixed-use light industry, office and technology development areas will

Goal: Achieve a balanced tax base.

assist in achieving such balance and diversity.

Recommendations:

Update the zoning regulations to allow for mixed uses in the areas specified. A mix of office, light industry and technology uses should be allowed in these areas. The zoning should require these areas to have a master ‘development plan’ to create a unique sense of place. The requirement for master development plans in these areas should also be used to ensure that projects are designed with sensitivity to the natural resources and special features of the landscape. Consolidation of smaller parcels under one master developer should be encouraged. The careful planning and design of these areas will help establish them as destination economic development sites in the region. Each phase of development in these mixed-use areas should be well connected with a previous phase through roadways and trails. In addition, there might be opportunities to connect the mixed-use areas to nearby residential areas, commercial areas, or hamlets.

It is important that light industry, office or technology uses are the primary uses within these areas. However, high-density residential development and neighborhood commercial uses should be allowed as secondary uses to the primary light industry, office or technology uses. These secondary components could be incorporated as part of the master development plan for an entire complex, making it possible for people to live in proximity to their job, or to access necessary services at lunchtime or after work without being forced to drive. High-density residential development could include apartments, senior housing and possibly affordable housing as well. Neighborhood commercial services such as dry cleaning, a small store, a bank, or restaurants could also be provided as amenities for employees at these sites.

Design guidelines should be developed for these areas. Particular focus should be given to the placement of buildings and on the design of parking areas. Whenever possible, buildings should be clustered to allow green space to remain. Buildings should be integrated with trails and other pedestrian infrastructure to ensure that it is possible to walk conveniently and safely throughout the complex. Design themes should be consistent and utility facilities should be placed in visually unobtrusive locations. Parking should be integrated throughout the mixed-use areas,



with generous landscaping to reduce large continuous areas of pavement. Shared parking, to reduce the number of curb cuts on local roadways and to minimize the overall area of impervious surface cover, should be encouraged. Amenities such as a central green for public gathering, recreational areas or facilities, or other public benefits could also be created as part of the design of these areas.

Some of these amenities might also be designed to serve as a buffer from any adjacent residential development. Buildings in the Mixed Economic Development Area could be up to four (4) stories in height, except east of the NYS Thruway where a maximum of three (3) stories should be maintained to preserve the rural character of the town's Hudson River corridor.

Establish an Incentive Zoning program in the mixed-use areas. Incentive zoning would allow developers to exceed density, or perhaps dimensional requirements of the zoning district in return for providing public amenities to the Town. For these areas, incentive zoning might allow for increased lot coverage, additional building stories (except east of the NYS Thruway), or other more intensive development alternatives. In return, a portion of the site could be developed as a public green, park, or trail. Specifics for an incentive zoning program should be included in the zoning code.

4.7 INDUSTRIAL AREAS

There are two industrial areas identified on the Plan Recommendations Map. The first is located along the Hudson River, just south of the Port of Albany and extends south to Wheeler Road. This marine-based industrial area includes a deepwater port. The second industrial area is the area adjacent to Selkirk Yards that extends from Selkirk to the Town's border with New Scotland. Much of the activity in this area is centered on the active rail line and the Bethlehem Industrial Park.

Goal: Promote commercial and industrial growth in specifically designated locations.

Issues:

- > Development within the industrial areas provides much-needed tax base for the Town.
- > Portions of the industrial area near the Selkirk Yards are currently used for agricultural purposes.
- > In general, the industrial areas in Bethlehem will remain unchanged.

Recommendations:

Update zoning to allow for agriculture as a permitted use. Since some property within the Selkirk Yards industrial area is currently used for agricultural purposes, this use should remain as an interim use until such as time as the property is developed for industrial purposes. The businesses and industrial activities that are located in these areas are important in balancing the tax base in Bethlehem. In fact, the largest commercial tax base contributors are located in these areas.

It is also recommended that the industrial area adjacent to Selkirk Yards be extended further to the south, as indicated on the Plan Recommendations Map.

4.8 COMMERCIAL AREAS

Commercial areas in the Town provide needed services to residents. The focus of this section will be on the larger scale commercial development within the Town, since significant focus has previously been given to other areas in the Town with commercial components. The most significant large-scale commercial area is located in the northern part of the Route 9W Corridor, primarily at the intersection of Route 9W and the Delmar Bypass (Route 32). This area contains Wal-Mart, Lowes, and other 'big box' development. Through public meetings and other public outreach, residents have voiced their vision that large-scale development of this type should be limited to this specific area.

Issues:

- > Historically, commercial development within the Town has been haphazard, with little consideration given to site organization, design or architectural design.
- > Commercial development, of all scales, is important. Commercial development provides services for residents and also provides tax base.
- > Traffic congestion issues in the areas of large commercial development have arisen.

Recommendations:

Update zoning within these areas to include design guidelines and address pedestrian concerns.

The zoning regulations should address the form and function of development in these areas. Design guidelines should illustrate appropriate site design, site organization and architectural standards. Despite being large developments, the areas in the north part of Route 9W could be enhanced to have more character and more of an identity. The Town should be clear from the beginning what is expected of the developer regarding site and building design. This might assist in expediting the development process and the resulting predictability may also encourage development in these areas.

Site design should emphasize the pedestrian as well as the automobile. Prominent crosswalks should



be located at appropriate signalized intersections and sidewalks should be developed along the roadway, especially as the areas continue to build out. The sidewalk should be separated from the road with a wide planting strip. The planting strip would serve to buffer pedestrians from automobile traffic. Within the parking lots, substantial landscaping to reduce continuous areas of impervious surface, pedestrian walkways, and other such improvements should be required. In addition, smaller buildings

oriented to the sidewalk and street, could improve the pedestrian environment along Route 9W and buffer the large parking areas that large-scale stores require. Design themes for all buildings should be consistent and utility facilities should be placed in visually unobtrusive locations.

These areas should function well, not only from a vehicular point of view, but also from a transit and pedestrian view as well. Access management techniques could be utilized to reduce traffic congestion and potential conflict points with pedestrians and thru traffic. Access management consists of a series of standards that manage (and minimize) the number of access points and curbcuts on the public road system. The purpose of access management is to allow for development to occur, while preserving the

flow of traffic in terms of speed, capacity and safety (traffic includes pedestrians and bicyclists).

4.9 RIVERFRONT

The Town of Bethlehem is located along the western banks of the Hudson River. The Hudson River became an American Heritage River in 1998. It is one of 14 designated American Heritage Rivers. The Hudson River is unique in that it is a freshwater river that experiences tidal flows. This tidal activity creates a unique estuary habitat for a variety of aquatic creatures. The entire Town of Bethlehem is located within the boundaries of the Hudson River Estuary.

The Town has received significant feedback from residents in the Riverfront area in the form of public meeting attendance and petitions for additional study of the area. In addition, the Bethlehem Industrial Development Agency formulated a possible plan for the Riverfront Area in an effort to stimulate discussion about the possibilities of this important area.

Issues:

- > Bethlehem has 10 miles of riverfront.
- > A variety of land uses exist along the river including residential, heavy industrial, recreational, and open spaces.
- > There is limited public access to this great resource.

Recommendations:

Develop a Local Waterfront Revitalization Program (LWRP). The New York State Department of State Coastal Resources Division provides grant funding on a competitive basis to communities and not-for-profit organizations to develop an LWRP. The Town has recently applied for this funding and should proceed with developing an LWRP. This program would provide an opportunity for the community to study the riverfront area in more detail.

The main purpose of the LWRP program is to develop a comprehensive vision for the waterfront area and identify a set of future steps to maintain and improve the waterfront and community character, protect natural resources, enhance public access to the Hudson River, and enhance economic prosperity along the waterfront. The Town should look at opportunities to conserve critical habitat and open spaces and might also look at the future economic activities



within the area. For example, the Town might identify an area for a small, mixed-use waterfront district that could include public access to the Hudson River. The LWRP should also consider whether there are design guidelines or standards appropriate for, and unique to, the riverfront area.

The LWRP may result in refined land use recommendations for the riverfront area. At the Town Board's discretion the study may be treated as a comprehensive plan amendment, and it could lead to further zoning amendments impacting lands in the riverfront area.

Create a Riverfront Rural zoning district. Zoning for the Riverfront Rural Area would be similar to the Rural Area (see Section 4.4) zoning with one exception. The maximum density for major subdivisions in the Riverfront Rural Area would be one dwelling unit per 5 acres of unconstrained land. The lower residential density would ensure that development in this corridor is not as intense as in other areas and that the preservation of important natural resources occurs. Like in the Residential and Rural Areas, major subdivisions in this area would encourage the use of conservation subdivision design through incentives. A conventional subdivision would require a density of one dwelling unit per 5 acres of unconstrained land (expressed as a 5 acre minimum lot size), while a conservation subdivision would allow a density of one and one half dwelling units (1.5) per 5 acres of unconstrained land (with no minimum lot size). A required open space set aside of 50% for conservation subdivisions in the Riverfront Rural Area would also be established. The minimum open space set aside would ensure meaningful open space conservation, and still allow creative subdivision design. To make it easier to achieve or exceed the minimum open space set aside, and to promote housing diversity in the town, a mix of attached housing types such as well-designed duplexes and townhomes will be permitted in conservation subdivisions in addition to detached single-family homes. Minor subdivisions in the Riverfront Rural Area would be handled in the same manner as those in the Rural and Residential Areas.

The location of the Riverfront Rural area is illustrated on the Plan Recommendations Map as the area south of the Industrial Area along the River and east of Route 144 (River Road). A small area east of Route 144, across from NYS Thruway Exit 22, is designated as mixed economic development due primarily to its access to the Interstate Highway system. The eastern extent of this mixed economic development area might warrant further consideration if the lands to the east are found to be unsuitable for large lot residential development (as called for in the Riverfront Rural area) in the future.

4.10 BETHLEHEM GREENWAYS

The Bethlehem Greenways concept envisions a future network of working landscapes, open spaces, trail systems, and natural resource areas. A town-wide greenway network would enhance Bethlehem's quality of life, protect its working and natural environment, provide recreation opportunities, and contribute to the Town's economic and fiscal well-being.

Issues:

- > As Bethlehem continues to grow, its agricultural lands, open spaces, and natural resources face increasing conversion pressure. Once these resources have been developed, they are forever lost.
- > Farmland, open spaces and natural resources such as wetlands and stream corridors contribute to the quality of life in Bethlehem and also serve an important function in maintaining a healthy environment by providing wildlife corridors and buffers to sensitive areas.

Utilize the Existing Development Constraints Map. The Existing Development Constraints Map was created as part of the inventory found in the Appendix. This map illustrates natural resources, such as wetlands, stream corridors, floodplains and steep slopes; and agricultural resources including prime agricultural soils; and is a combination of several inventory maps that can be used by the Planning Board, Town Board, developers and Town staff as part of the development process. Unless other state or federal regulations apply, identification of constraints on this map does not prevent development from occurring on these lands. Instead, these constraints should be taken into consideration as development occurs.

In the future, the Town Board may decide it is appropriate to create a more specific inventory of its farmland, open space and natural resources through the creation of a *Lands of Conservation Interest Map* or a similar map. This map could identify critical natural and recreational resources, and the remaining open lands that deserve the community's careful stewardship. Categories of open space resources would be defined by the community, but might include items such as: high quality agricultural land, environmentally sensitive lands, recreational facilities, community gateways, waterfront access, ridgelines and/or land above a certain elevation, existing and potential trail connections, etc. The process for developing this detailed inventory might include additional research, fieldwork, public workshops, and outreach with landowners. The resource categories would be mapped and collectively would define a vision for a network of open spaces in the community. The map could be used as a tool to assist the Planning Board and developers in the design of conservation subdivisions. It could also become a guide for the establishment of a local Farmland and Open Space Protection Program if the Town Board decides to consider that option.

Goal: *Manage and protect significant environmental resources such as stream corridors and associated ravines, wetland systems, and in particular, the Town's Hudson River waterfront.*

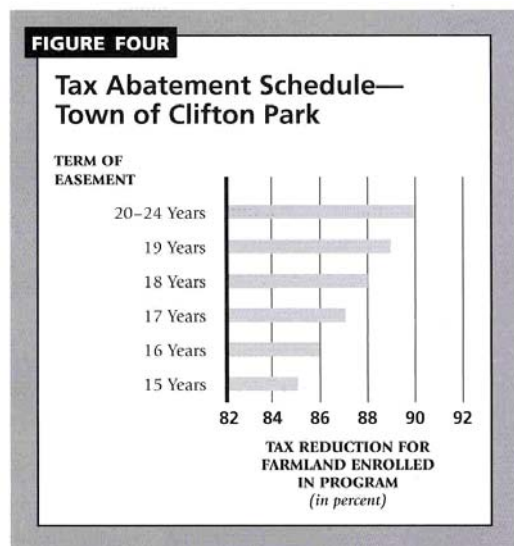
Recommendations for Greenway Conservation / Protection Opportunities:

Create a Farmland and Open Space Protection Program. The Town should create a local program for the protection of its high quality farmland and significant open space resources. This program would have two components:

- > *Farmland Protection* could be accomplished through a Purchase of Development Rights (PDR) program. Under this type of program, the town would purchase the development value of specific parcels of land from willing landowners. The cost of doing this depends on the specific parcel. It is calculated by determining the current appraised value of the property, and its appraised value as open or agricultural land without development potential (development rights extinguished). The difference between these two numbers is the value (or cost) of the development rights to be purchased. Conservation easements are utilized to ensure that once the development rights have been extinguished, the land remains undeveloped in the future.

Local funds can be used to leverage state funding from the NYS Department of Agriculture and Markets. The department's farmland protection program will pay up to 75% of the cost of the development rights for exceptional proposals. It is important to recognize that given current funding levels for the state's program, demand for these grants statewide far exceeds the available funds. As a result, this is a very competitive grant program. The Town of Bethlehem would have a very limited number of farmland parcels, if any, which would be likely to receive funding under this program.

Other sources of grant funding for PDR should also be explored. These could involve other agencies of the state or federal governments, or private foundations that work with land conservation organizations in the Hudson Valley.



From *Action Guide: Agricultural and Farmland Protection for New York* (American Farmland Trust)

benefits of PDR

- PDR protects farmland permanently, while keeping it in private ownership.
- Participation in PDR programs is voluntary.
- PDR allows farmers to capitalize on undeveloped assets—their land.
- PDR can be implemented by state or local governments, or by private organizations.
- PDR provides farmers with a financially competitive alternative to development.
- PDR programs can protect ecological as well as agricultural resources.
- PDR removes the non-agricultural value of land, which helps keep it affordable to farmers.

From - *Action Guide: Agricultural and Farmland Protection for New York* (American Farmland Trust)

- > *Open Space Protection* can be accomplished through Town sponsored PDR or fee-simple acquisition of important open space resources. Other techniques could be included in this program, such as: donation of conservation easements (perhaps through increased educational efforts in partnership with a local land trust), or a term easement / tax abatement program (a means of conserving for a period of years smaller “open space” parcels - the longer the agreed-to term of the easement, the greater the tax abatement). A Parks Master Plan might be coordinated through this process as well.

Even before reaching a decision about creating and funding a full Farmland and Open Space Protection Program, the public discussion about these issues may generate interest from a farm owner or other large property owner. In this case, the Town Board could consider pursuing such an opportunity as a demonstration project. Oftentimes, a well-conducted demonstration project can address the remaining concerns that some members of the community may still have about land conservation tools and techniques.

Consider a town-wide referendum to create funding for land acquisition and preservation of open space and parkland. During development of this Comprehensive Plan, there was much discussion about the need to fairly compensate landowners if the community desired to conserve certain lands as permanently protected open space. In all cases, it has been understood that participation in such initiatives by landowners must be strictly voluntary.

It is important to note that the Community Survey indicated strong support in the community for land conservation. Seventy-three percent (73%) of survey respondents agreed or strongly agreed that the town should buy land or purchase conservation easements to preserve open land. Approximately 51% of respondents said that they would be willing to pay (\$25 to \$50 per \$100,000 of assessed value) for the conservation of open land. However, 68% would like the town to pursue outside funding sources as well.

Respondents to the Farm and Rural Lands Survey also indicated some interest in such initiatives. Fifty-six percent of respondents expressed an interest in either selling their development rights or learning more about the possibility, which suggests a need for increased education about the options available to property owners. Forty-four percent would not consider selling development rights to their property.

The results of both the Community Survey and the Farm and Rural Land Survey demonstrate that the community should continue to explore opportunities for developing a local program to acquire special parcels of farmland and open spaces from willing sellers. It is clear that more information will be needed before the Town is ready to determine the best approach for funding such a program. Important considerations would include the approximate amount of land to be protected, the anticipated total cost of protecting this land (through fee simple acquisition and/or conservation easements), the availability of grant funds from governmental agencies and private foundations, the average cost to town taxpayers, and the fiscal costs and benefits associated with such an initiative.

Usually, communities will develop answers to these questions prior to reaching a decision about funding a local program, or in cases when voter approval is desirable or necessary. Building on the dialogue and understanding established through this comprehensive plan process, the Town of Bethlehem should continue to work toward a program, and a corresponding proposal for funding that could be brought to voters through a public referendum.

In terms of actual sources of local funding, several mechanisms used elsewhere in New York State, should be considered. The least complicated method is to set aside budgetary funds on an annual basis. Another option might be to develop a revenue bond to extend costs over a period of years. This option has proven successful in the City of Saratoga Springs, New York. In 2002, voters approved a \$5 million bond to fund open space conservation. According to the Saratoga Springs Open Space Project, if the entire \$5 million were spent in the first year, property taxes would increase an estimated \$0.27 for every \$1,000.00 of assessed value. At the time of the bond, the average assessed home value in Saratoga Springs was \$134,000. The tax increase would be \$35.75 a year over 20 years. Some communities have discovered that an investment in farmland and open space conservation would cost less in the long term than the cost of providing residential services in those same areas. Ultimately, the most successful funding program may include a variety of funding sources, including grants.

Recommendations for Natural Resource Management:

Prepare for and comply with the new Phase II Stormwater Management Regulations. The U.S. Environmental Protection Agency (EPA), in an effort to protect and preserve the nation's water resources, has developed a stormwater management rule. The Stormwater Phase II Rule requires a permit for discharges from Municipal Separate Storm Water Systems (MS4s) in Urbanized Areas. The New York State Department of Environmental Conservation (DEC) issued two general permits under the State Pollutant Discharge Elimination System (SPDES) to comply with the EPA law. The two state permits address MS4s in urbanized areas and construction activities.

Also under the Phase II regulations, MS4s are required to develop and implement a stormwater management program by 2008. Generally, a stormwater management program must contain six minimum control measures, according to the MS4 Phase II Permit requirements. Each minimum control measure must describe measurable goals as well as select and implement management practices to achieve the goals. The minimum control measures include: public education and outreach; public involvement and participation; illicit discharge detection and elimination; construction site runoff control; post-construction runoff control; and pollution prevention and good housekeeping. So, for example, the town could work with partners to provide educational services related to septic system maintenance and the prevention of illicit discharges into the Town's storm drainage system. As much of Bethlehem is in an urbanized area, the town should work closely with the DEC to ensure they are properly addressing the Phase II regulations.

Develop zoning that addresses the protection of stream corridors. Consistent with generally accepted engineering and design practices, it is critical that the Town protect the many stream corridors in the Town from development, help reduce pollution of these streams and protect all its water resources, many of which drain into the Hudson River. Such protections could include development setback and clearing regulations to protect water quality in the Town's streams and the Hudson River. The purpose of this would be to restrict certain development and vegetative clearing activities that might degrade water quality. Developing such zoning language might also assist in complying with the Phase II Stormwater Management regulations. The development of these regulations must also take into consideration New York State Agricultural Districts Law.

Develop zoning that addresses the protection of steep slopes. Similar to the protection of stream corridors, the zoning could also protect the many ravines and steep slopes in the community from destructive development. Consistent with generally accepted engineering and design practices, limitation could be placed on the type and amount of development that occurs in steep slope areas and guidelines for developing near and on steep slopes could also be developed. Developing language to protect steep slopes might also assist in complying with the Phase II Stormwater Management regulations by reducing the amount of slope development, reducing the erosion of slopes and ultimately reducing the impacts of development on water quality. The development of these regulations must also take into consideration New York State Agricultural Districts Law.

Promote best management practices in agriculture, forestry, and mining/extraction activities. There are many techniques available to manage these resources. Some techniques are more sustainable and could provide a better financial return than others. Property owners could coordinate with the Albany County Farm Bureau, Albany County Department of Economic Development, Conservation and Planning, Cornell Cooperative Extension of Albany County, the local Soil and Water Conservation District, the Rural Landowners of Bethlehem, the New York State Department of Agriculture and Markets, as well as the Department of Forestry, and other local and regional organizations to promote sustainable agricultural, mining and forestry activities in Bethlehem.

Establish a Citizens Advisory Committee on Conservation (CACC). The Town Board should establish a Citizens Advisory Committee on Conservation (CACC) to explore conservation projects, and opportunities with willing landowners, as identified by the Town Board. The CACC could also assist the Town Board and staff in the creation and implementation of plans and policies related to environmental protection and management, agriculture, natural areas and open space. The CACC would provide advisory information to the Town Board as requested, but would not have independent regulatory powers. In considering appointments to the CACC, the Town Board should identify appointees that are broadly representative of the various neighborhoods and hamlets of the Town so as to ensure a broad cross-section of community viewpoints.

An immediate opportunity has emerged for the CACC to assist in the development of an integrated network of trails and pedestrian facilities in the Slingerlands area. In addition, the CACC could work on longer-term activities at the Town Board's request. For example, at the Town Board's discretion,

Goal: *Work 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.*

the CACC could assist in the preparation of a more detailed inventory of the Town's natural and open space resources, in the development of a local Farmland and Open Space Protection Program, and/or in the research and organization that would be necessary before a public referendum to create funding for land acquisition could be held. In all cases, the CACC's role would be strictly advisory in nature – and responsibility for initiating or adopting any such study or town policy would rest solely with the Town Board.

In the future, the Town Board could consider whether or not to restructure the Citizens Advisory Committee on Conservation (CACC) as a formal Conservation Advisory Council (CAC). Authority to create Conservation Advisory Councils in New York State is granted to municipalities in General Municipal Law §239-x. If it considers this option in the future, the Town Board should weigh the potential positive benefits of establishment of a Conservation Advisory Council with any genuine negative impacts on landowners that such designation could create.

Recommendations for a Recreational Trail System:

A conceptual network of trails and paths is illustrated on the Plan Recommendations Map. Located primarily in the northern, more populated portion of Bethlehem, these potential trails follow corridors such as the former CP Rail right-of-way, the Delmar Bypass, stream corridors, Route 144 and more. The proposed trails attempt to establish connections to existing recreational facilities, such as Elm Avenue Park, or provide an opportunity for future connections. When looking at the Plan Recommendations Map, it is important to note that most of the lands through which proposed trails are illustrated are privately owned lands today. Therefore, they are not available for public use. Furthermore, the Plan Recommendations Map shows some of the most obvious possible connections. Additional trail connections could be identified later as part of the development of a more detailed open space map.

Several property owners have already expressed interest in the possibility of allowing public trail access on their property. As a result, there is a very real opportunity to create trail connections in the Slingerlands area and to connect New Scotland Road to the Five Rivers Environmental Education Center.

Most of the trails developed as part of the Town's Recreational Trail System should be multi-use, providing options for hiking, walking, biking, in-line skating, cross-country skiing, and in some areas perhaps horseback riding. Wherever possible, trails should also be designed to provide handicapped accessibility. However, it is possible that some of the trails will not be able to accommodate the full range of uses described due to characteristics of the landscape or other limiting factors. The intent of this initiative is to create a well-connected, well-maintained network of trails and paths throughout the community.

The process for establishing a trail network should be community driven, and would benefit from the participation of a local group of committed advocates. Such a group could help with landowner contacts, with trail maintenance, and other long-term activities that are necessary for the success of this kind of system. The town could assist in the planning and design of these trails, help negotiate with landowners in some cases, help address liability, and coordinate maintenance and safety issues. Landowner participation must be completely voluntary.

Finally, when planning and designing specific trail segments, consideration should be given to appropriate mechanisms for ensuring that trail users are well-informed about any rules or regulations that apply to use of the trail. For example, if trail use is limited to non-motorized vehicles, special design elements (such as bollards or gates) should be utilized in addition to signage to make this clear; or if adjoining landowners are concerned about users leaving the trail and crossing their property, signs and/or design elements should be considered to make it clear that users must remain on the trail. Attention to such details will ensure that the town's growing network of trails remains a source of pride (not a source of concern) throughout the community.

Coordinate with the Albany County Land Conservancy, the Hudson River Valley Greenway and other interested organizations in developing and maintaining a recreational trail system.

These organizations can assist with funding, creating and maintaining trail systems. Such organizations can also assist in educating landowners and the community about issues such as liability and maintenance.

Liability concerns are often expressed when considering recreational trails and there are mechanisms in New York State that provide landowners with some protection regarding liability. The New York State Recreational Use Statute (NYS General Obligations Law subsection 9-103) limits the liability of landowners that voluntarily allow access to their land for trails and other recreational activities. This particular law applies to landowners that permit (and also to those that do not permit) use of their property if the following conditions are met: the landowner does not charge fees and the landowner does not maliciously fail to guard against hazards. Landowners meeting these conditions are protected under this law and liability of those allowing access is no greater than those landowners who post their land against trespass.

Liability concerns can also be addressed through individual insurance policies or through liability insurance from trail partners. Oftentimes, an individual landowner's insurance policy will also assist in protecting the landowner against the risk of litigation. Many communities have partners in creating trails networks and the landowner may be added to the policy as an "additional insured."

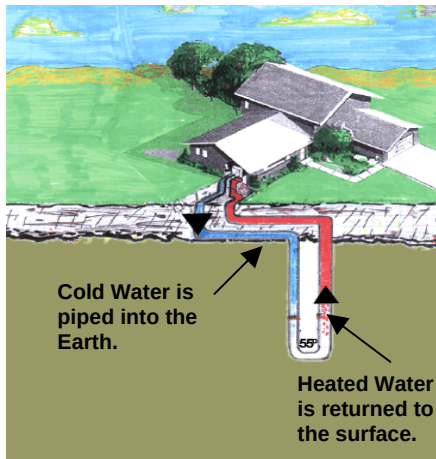
Develop mechanisms for creating and funding recreational trails. There are many mechanisms that communities and organizations can use to create trail networks and many ways in which to fund such networks.

- > Create trail networks by engaging tools such as the Park Land Reservation requirement and Incentive Zoning tied to Conservation Subdivision Design (see description above). An incentive zoning provision for public access to open lands created as part of the conservation subdivision design process would provide an opportunity for a willing property owner to become part of a town-wide trail network. The Town currently has within its zoning code a Park Land Reservation requirement. The recent trend has been for the Town to accept a fee in lieu of parkland. The Planning Board could require actual land, instead of the in lieu fee to satisfy this requirement. This would ensure corridors for future trails as development occurs.
- > Create trail networks by seeking additional opportunities for trails along existing rights-of-way. The New York State Local Open Space Planning Guide suggests that linear corridors, such as railroad corridors, utility rights-of-way, and stream corridors are opportunities for the development of trail networks. The CP Rail line is one example of a potential regional trail corridor in Bethlehem. The Town should work with Albany County to help move this project forward.
- > In addition to funding open space preservation, local funding mechanisms can be established for trail development. The Town should explore appropriate funding mechanisms as a component of a Farmland and Open Space Protection Program (described above).

Recommendations for Energy Conservation:

Today's world is driven by the mass consumption of finite natural resources. This will ultimately have lasting impacts on the environment for future generations. In an effort to be energy conscious and responsible, the Town could examine options for encouraging energy conservation and the expanded use of renewable sources of energy.

Promote the use of alternative, renewable energy sources for public and private buildings. The Town should coordinate with New York State Energy and Research Development Authority (NYSERDA) to determine options for more energy efficient systems. The Town could, for example, replace less efficient heating and cooling systems and utilize alternatives such as geothermal energy.



Geothermal literally means earth heat. Geothermal energy is energy created from heated water below the Earth's crust. Geothermal heat pumps are one method to use the Earth's heat instead of outside air to provide heating, air conditioning and hot water. These systems use the earth's natural heat and are therefore among the most efficient and comfortable heating and cooling technologies currently available.

Wells are drilled into the Earth and the Earth's heat is used to heat water, creating energy. As illustrated in the image to the left, cold water is pumped through piping into the earth. This water returns to the surface as hot water and is used to produce energy, typically in the form of electricity.

The City of Auburn, New York has recently (and successfully) converted its Memorial City Hall to a geothermal heating and cooling system. The geothermal system requires no outdoor equipment and the costs are equivalent to a conventional system.

Goal: Promote energy efficiency and conservation, and the use of renewable energy in the Town

Of course, this is only one example of a renewable energy source. This sector of the energy market is changing and growing rapidly, and numerous technologies are becoming available to harness renewable sources of energy such as solar, wind, hydro, and more. The New York State Energy Conservation Construction Code and NYSERDA are resources available to the Town and to developers.

Encourage the use of Leadership in Energy and Environmental Design (LEED) standards for new development and redevelopment of buildings and sites in the town. The LEED Green Building Rating System® is the national standard for developing high-performance, sustainable buildings. Participation in LEED is voluntary. The standards have been developed by the U.S. Green Building Council through consensus by all members of the building industry. LEED standards address a variety of site design, building design and construction materials based on the long-term sustainability of the community. LEED information could be provided through the Building Department and distributed as potential developers seek information regarding building in Bethlehem. The following is a list of categories that LEED standards consider:

- > Erosion and sedimentation control
- > Site selection
- > Urban redevelopment
- > Brownfield redevelopment
- > Alternative transportation, public transportation access
- > Alternative transportation, bicycle friendly
- > Alternative transportation, parking reductions

- > Reduced site disturbance, protect and restore open space
- > Reduced site disturbance, maximize open space
- > Stormwater management, flow treatment and reduction
- > Landscape and exterior design to reduce heat islands, non-roof and roof surfaces
- > Light pollution reduction

Assist developers in understanding and identifying available funding opportunities supportive of sustainable design and construction. The Bethlehem Industrial Development Agency (IDA) and the Bethlehem Chamber of Commerce could coordinate with the New York State Energy and Research Development Authority (NYSERDA) to discover opportunities for developers regarding grant funding assistance and technical assistance. Programs available through NYSERDA include: the Energy Smart Loan Program which assists in the cost of installing energy-efficient technologies, incentives for photovoltaic installers, a Renewable Resource Development Program, Renewable Energy Technology Development Program, and many more.

4.11 AGRICULTURE

The Town continues to have existing agricultural operations. However, these operations are not as numerous as they once were. To maintain the existing practices and encourage their existence, several recommendations have been formulated and are described below.

Issues:

- > Agriculture remains a component of the local economy. Farms also ensure a local supply of food and farm products for the community.
- > Farmland and open space uses fewer services than residential development, which in turn, reduces the costs of community services for all residents.

Recommendations for Agriculture:

Encourage participation in Agricultural Districts. New York State established an Agricultural Districts Law - Article 25AA in 1971 in response to concerns that non-agricultural land uses were encroaching upon valuable farmland. Authorized at the state level, the Agricultural Districts Law is implemented at the county level. This program is voluntary and provides several protections to farmers including agricultural tax assessment; protection against unreasonable local regulations; special review of proposed eminent domain takings; required Agricultural Impact Statements for public projects; notification requirements to inform property buyers about surrounding farming practices; and limited protection against nuisance lawsuits. There are currently 57 landowners in the town who are utilizing this program, according to the Albany County Cornell Cooperative Extension.

Establish local right-to-farm and right-to-practice-forestry provisions.

Right-to-farm laws are intended to strengthen the position of farmers legally when faced with private nuisance suits and to also protect farmers from unreasonable controls on farming operations. New York State's Agricultural Districts Law Section 308 addresses the right-to-farm. Since the protections under the State right-to-farm law only apply to those farms within an agricultural district, it is recommended that the Town adopt a local right-to-farm law. Local right-to-farm laws provide farmers with a sense that the community understands the value of farming and supports farming practices over the long-term. Furthermore, local right-to-farm laws can be crafted to include helpful provisions that are not available under the

state's right-to-farm provision. For example, the Town could establish a program to work with local realtors to ensure that potential homebuyers are provided with early notification that the home they are purchasing is in an agricultural area; or the local right-to-farm law could create a mechanism for the mediation of disputes as an alternative to the courts.

Definition of Agriculture (as recognized by the NYS Department of Agriculture & Markets):

The employment of real property for the primary purpose of raising, harvesting, and selling crops or feeding, including but not limited to grazing, breeding, managing, selling, or producing livestock, poultry, fur bearing animals or honeybees or by dairying and the sale of dairy products or composting which includes agricultural waste or by any other horticultural, floricultural, or viticulture use, aquaculture, hydroponics, silviculture, by animal husbandry or by any combination thereof. It also includes the current employment of land for the primary purpose of obtaining a profit by stabling or training equines including but not limited to providing riding lessons, training clinics, and schooling shows, and other on farm niche marketing promotion.

The local right-to-practice-forestry provision would be similar to the right-to-farm provision and would provide support to landowners practicing forestry. The New York State Right to Practice Forestry Law ensures that sustainable and legitimate forestry activities are not restricted or banned by local regulations. This also enables the New York State Department of Environmental Conservation (DEC) to comment on local laws that might restrict the practice of forestry and provide local training programs regarding timber theft and trespass; prohibits the removal, cutting or injury of timber on state lands or private property without consent; and increases the penalty for cutting, removing or injuring a tree.

Promote agriculture through education. Working in coordination with local elementary schools, the agricultural community could teach residents about the importance of agriculture to the local economy, the role of farmers as stewards of the land, and the contribution of farming to the overall quality of life in Bethlehem.

Initiate a "Buy Local" program and develop an agricultural economic strategy. Formalizing an agricultural economic strategy is one manner in which to encourage agri-business. Such a strategy

could lead to the identification of niche markets in the area. A “Buy Local” program could include various levels such as farm stands or a farmer’s market. Such a program could also extend to partnerships with local schools, institutions and restaurants.

4.12 TOWN-WIDE RECOMMENDATIONS

Recommendations for Transportation:

Establish an Official Map to identify and reserve future roadway corridors. As described in Town Law §270, an Official Map is a map adopted by the Town Board that shows the location of existing and proposed streets, public facilities, and other public areas. The map allows the Town to reserve future corridors and prevents the corridors from being developed. There are several areas in the Town that might benefit from future roadway connections. All of these will require further study before a decision about whether or not to include them on the Official Map is made. A partial list of possible connections, as identified on the Plan Recommendations Map, is found below. These possible connections have been identified through the comprehensive planning process. Each connection would require additional study to determine the feasibility and benefits of the connection. Other connections might become evident as the Town undertakes future studies, such as a connection between Route 9W and Route 144 resulting from a Route 9W Linkage Study.

- > Extending Schoolhouse Road south to Blessing Road
- > Creating a connection from the Slingerlands Bypass Extension, through the Mixed Economic Development Area (described above), and into the Town of New Scotland to Route 85A.
- > Re-establishing the Rockefeller Road to Normanskill Road connection
- > Continuing the Delmar Bypass Extension to Delaware Avenue
- > Creating an access road parallel to and between the New York State Thruway and Route 9W, from Glenmont Road south to Wemple Road
- > Connecting Kimmey Drive from Wemple Road to Elm Avenue

Provide adequate bicycle facilities and establish a signed system of bicycle routes throughout the Town. Biking functions not only as a recreational activity, but also as an alternative mode of transportation. The Town should provide facilities to ensure the safety and convenience of bicycling. The addition of bike lanes, proper pavement markings and signage, and a map of bike routes in the Town should be considered. The opportunity exists for the Town to connect with regional bicycle routes.

Several key corridors exist where bicycle connections would be advantageous. Corridors such as Kenwood Avenue and Wemple Road to Elsmere Avenue would provide a connection to the Delmar Area and extend the bicycle facilities in the Town.

Consider opportunities to provide paved shoulders on all collector and arterial roads, where sidewalks are not provided. When sidewalks are not available, paved shoulders of sufficient width should be provided to allow for safe pedestrian and bicycle use. Paved shoulders should be provided on collectors and arterials regardless of jurisdiction – state, county or town. A minimum width of four (4) feet would be sufficient.

Conduct a transportation and land use corridor study along the Route 9W corridor. The Town should conduct further study of this diverse corridor. One option is to seek funding assistance through the Capital District Transportation Committee's (CDTC) Linkage Study Program. This program takes an integrated planning approach and recognizes the link between transportation decisions and land use decisions.

***Goal:** Improve mobility throughout the Town. This includes investments in highway infrastructure, improved access to public transportation, development supportive of public transportation, enhancements to the safety and attractiveness of non-motorized modes of travel.*

While many issues should be addressed in this study, several that have been clearly identified through the comprehensive planning process include:

- > Intersection improvements at Route 9W and the Delmar Bypass (Route 32), at Route 9W and Feura Bush Road, and in the vicinity of the Albany City Line.
- > Possible road widening or the addition of turning lanes in the area north of Feura Bush Road.
- > Managing the transportation impact of large-scale commercial development in the area north of Feura Bush Road.
- > The form and function of development in the northern Route 9W corridor.
- > The need for turning lanes or other improvements south of Feura Bush Road to the town's southern boundary.
- > Feasibility of a possible "northern alignment" option for the long-discussed Selkirk Bypass. The Selkirk Bypass problem was originally conceived as a safety issue related to trucks traveling through the Hamlet of Selkirk to or from the Industrial Area west of the hamlet and the NYS Thruway east of the hamlet. This still remains a major issue for the Town of Bethlehem. The "northern alignment" option, however, should be considered in terms of its full regional context. First, there is no clear understanding of where such a route should go. Determining an alignment that would have the least negative impact on local residents and environmental resources should be a priority. And in addition to the potential of this alignment to solve the Selkirk truck issue, it should be studied for its potential transportation, land use, and economic development impacts throughout the 9W Corridor.

Once completed, the Town Board should consider adopting this study as an amendment to the comprehensive plan. It should also consider whether further zoning amendments impacting lands in

the corridor are necessary to implement the refined land use recommendations resulting from the study.

Enhance entranceways / gateways to the community. An entranceway or gateway is important in providing a sense of arrival into a community. There are several entranceways leading into Bethlehem, such as Delaware Avenue, Route 9W, Route 85, the Cherry Avenue Extension between Kenwood Avenue and New Scotland Road, Route 32, and Route 396. These areas could be enhanced to be more prominent and welcoming. A well-placed sign with landscaping indicating that one has arrived in Bethlehem, for example, might be a nice addition in these areas. Additional enhancements might include banners or flowers to improve the sense of arrival. The Bethlehem Chamber of Commerce or a local Business Improvement District might contribute to a streetscape beautification program in the identified entranceway areas.

Since the mid-1990's, community organizations such as the Bethlehem Garden Club and the Community Appearance Committee of the Bethlehem First Task Force have persuaded private property owners to allow street tree planting on sites along Delaware Avenue, Kenwood Avenue, and Route 9W. With the Town's assistance, more than sixty (60) trees have been planted to date. Perennials have also been planted at the intersection of Cherry Avenue and Kenwood Avenue, and at the intersection of Routes 32 and 9W in Glenmont. These and similar efforts should be encouraged to continue. For example, such local volunteer groups could partner with the Town by contributing their time and energy to assist in maintaining the community's improved gateways.



An example of a gateway sign (left) and a landscaped median gateway (right).

Establish Delaware Avenue as a pedestrian friendly, small-scale commercial corridor. While sections of Delaware Avenue, such as the Delmar Four Corners Area, are well-established pedestrian areas, there are significant portions of the corridor that should be enhanced. Streetscape improvements, including sidewalks and consolidated curb cuts, should occur. In addition, clearly identified crosswalks and medians providing pedestrian refuge should be considered at appropriate locations along the corridor.

Recommendations for Economic Development:

Several areas of the Town have been identified as areas to focus economic development. These include the Hamlets, Commercial areas, Industrial areas, and the Mixed Economic Development areas (see previous discussions of each area above). The intent, when considering economic development opportunities in Bethlehem, is to integrate and connect commercial districts with the surrounding community, to create centers for economic and civic activity, and to diversify the Town's tax base.

Goal: Create a business-friendly environment that is supportive of small local businesses, that encourages entrepreneurship, and that helps assure the provision of quality, living wage employment.

Encourage and support development of the Vista Technology Center (VTC) and remaining lands in the vicinity. To assist in expanding and diversifying the Town's tax base, implement the Slingerlands By-Pass Extension and facilitate development of the VTC. The mixed economic development zoning (see Section 4.6 above) will support this important economic development initiative. The Town should work with a focus group of stakeholders to develop a build-out concept for the remaining developable lands, especially as they extend toward the possible new hamlet along New Scotland Road (see Section 4.1 above).

Revise zoning and development regulations to create a more predictable and fair development review process.

Streamlining the development review process is critical to promoting economic development in the community. Developers and potential developers want to understand early in the development process what is expected of them and what they can expect in turn from the Town regarding standards and time schedules. To assist in clarifying expectations, the Town should establish design guidelines for its commercial and mixed-use areas. As discussed previously, design guidelines could address building placement, the location of parking, pedestrian facilities and other design and functional aspects. In hamlets, for example, good design makes higher density, mixed uses, and multiple modes of transportation work. In its commercial area along Route 9W, design guidelines could ensure that the town creates a better form of large-scale retail development than it has thus far experienced. The Town can have high standards for development as long as the standards are clear and fair. Developers value predictability, and to the extent that the town's regulations can make the project review process more predictable, the town will be able to achieve beneficial economic growth while maintaining or improving the community's unique character.

Goal: Improve the development review process by establishing land use regulations that guide development in a manner consistent with the vision and goals in this plan. The regulations must be clear, predictable, and fair.

Furthermore, as the town's zoning is amended immediately following adoption of this plan, provisions should be established to ensure that effective buffers are required as part of the approval process for new development or redevelopment of uses that are allowable in a particular zone, but which may be incompatible with an existing use on an adjoining property. This is especially important for development on parcels near zoning district boundaries, or in locations such as the

Rural Light Industrial Area where a very wide range of uses will be permitted. For example, new residential development next to farmland should be required to provide a substantial vegetated buffer between the new homes and the farm property. The same is true for new residential development adjacent to existing industrial or commercial properties. Likewise, new industrial or commercial uses adjacent to existing residences should be required to effectively buffer the pre-existing homes. Ensuring that the town's property owners are adequately protected from the negative impacts associated with the development of potentially incompatible uses next door helps establish confidence in the development review process, and acceptance in the community of beneficial economic development.

Identify locations for infill development and redevelopment activities and encourage the use of such locations. There are locations in Bethlehem that would be appropriate for redevelopment or infill development. While few in number, locations such as the old Ames Plaza in Glenmont, the former Daisytek warehouse on West Yard Road, and the former Blue Cross/Blue Shield building New Scotland Road in Slingerlands, are places where reuse or redevelopment is strongly desired. Other potential redevelopment areas identified in the Inventory and Analysis (see Appendix) might include buildings along Delaware Avenue, South Albany Road, Booth Road, Krumkill Road, Route 9W, and Bridge Street. The Town should work with incoming businesses to locate in these areas first. The Town should develop an incentive program through the Bethlehem IDA to encourage the reuse or redevelopment of these areas.

Coordinate with the Bethlehem Chamber of Commerce (the Chamber) to promote local businesses and quality employment. The Chamber seeks to encourage planned economic development that supports local commerce and quality of life. The Town should also work with the Chamber to retain the Town's younger population through the creation of quality employment.

Recommendations for a Planned Development District:

Utilize the Planned Development District (PDD) tool found in the zoning regulations. The Town currently has a PDD option in its zoning regulations under Article V. This floating zone allows developers some flexibility as the land is developed. According to the current zoning regulations, "Planned development district regulations are intended to provide for new residential, commercial, or manufacturing uses in which economies of scale or creative architectural or planning concepts may be utilized by the developer without departing from the spirit and intent of this chapter."

Since a PDD is essentially a zoning change, a developer must apply for a PDD through the Town Board. The Town Board typically considers such a proposal if the developer demonstrates some public benefit in return for the flexibility that such zoning provides. Providing for public spaces through pocket parks, trails or other gathering spaces could be a public benefit that is developed as a component of the PDD. A PDD proposal might also provide a public benefit in the form of senior housing, including extended care facilities, or affordable housing.

This tool can be utilized throughout the Town for creating mixed-use developments that include office, residential and neighborhood services. It would most likely be used in areas where public sewer and water infrastructure exists or where the extension of such infrastructure is desired.

Floating zone: An unmapped zoning district that is established on the zoning map only when an application for development meeting the zoning requirements, is approved. The zoning requirements are included in the zoning text.

Recommendations for Parks and Recreation:

Goal: *Expand public, private or non-profit active and passive recreational resources and community services available in the Town to meet the growing and changing demand for these amenities.*

Establish a Park Master Plan. The Town should conduct a Park Master Plan to inventory existing parks and identify a community-based need for future facilities. The Level of Service approach recommended by the National Recreation and Park Association (NRPA) should be utilized. This formula is based on a series of factors such as the number of users per day per facility, participation frequency, type of user, facility demand, population service requirements, and other factors.

As part of the Park Master Plan, the Town could clearly identify areas that need parks, the specific type of facility that is needed, long-term maintenance requirements of existing facilities, and consider additional improvements such as the addition of lighting at Elm Avenue Park for year round use of playing fields, repair of the bulkhead at Henry Hudson Park, or the creation of separate Hudson River launch areas for motorized boats and non-motorized vessels. In addition, a Park Master Plan might also consider programming needs and might assist in addressing the needs of youth in the community for additional places to gather. Investigating public-private partnerships related to recreation might also be appropriate through the Park Master Plan process.

This project could be accomplished in tandem with the development of the *Lands of Conservation Interest Map*.

Recommendations for Cultural and Historic Resources:

Create a town-wide inventory of historic and cultural resources.

The Town Board should initiate the creation of a full, town-wide 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. If a significant

Goal: *Recognize the Town's significant cultural and historic resources and develop incentives for protecting and enhancing these for future generations.*

concentration or a number of historic places exists within the community, the Town Board could consider the establishment of a local historic district or historic standards. The New York State Office of Parks, Recreation and Historic Preservation could provide technical assistance for this action.

Recommendations for Infrastructure:

Maintain existing systems. The Town should continue to maintain existing sewer and water systems as needed. The expansion of these systems should only occur to support specific development opportunities that have been identified through this plan, or when necessary to protect the public health, safety and welfare.

***Goal:** Maintain existing public water and sewer infrastructure in developed areas of the town*

Conduct a study to determine the future capacity of the Town's public sewer system. As the Town continues to grow, it should conduct a study to address the long-term capacity of the current sewer system to accommodate anticipated growth. Similar to the recently completed Long-Range Water Supply Study, this study should offer recommendations and alternatives for the future of such systems, including identifying the location of additional infrastructure and critical maintenance as necessary.

Develop a capital improvement plan to systematically update the water and sewer systems as needed, and to be used as a guide for future development.

The Town should look to conduct hydraulic modeling of the water and sewer systems, clearly identify where improvements are necessary, prioritize the improvements and identify the costs of improvements. One potential improvement should include the Clapper Road Water Treatment Plant. It is important for the Town to resolve the problems associated with the Clapper Road Treatment Plant to ensure the long-term viability of this infrastructure. This plant is dedicated to serve the industrial area of Bethlehem. The current deficiencies of this water treatment plant could threaten the growth of industry and commercial development in the Town. As part of the development of this capital improvement plan, the town should create a future public sewer and water service areas map.

***Goal:** Ensure there is a reliable supply of high-quality water to meet the Town's demand for this critical resource.*

Investigate the current condition of, and improve as necessary, the technology infrastructure available in Bethlehem. In previous decades, transportation, electricity, and water and sewer infrastructures were considered necessary ingredients for economic development. Today, in addition to these forms of infrastructure, the availability of technology infrastructure for high-speed communication is necessary for many technology based or technology dependent industries.

As physical improvements to commercial and mixed-use areas in the community are phased in over time, technology infrastructure should be provided in the areas currently lacking. Niagara Mohawk's

Wired Building Grant Program and similar initiatives through New York State and at the federal level should be pursued.

Recommendations for Community Services:

Coordinate with fire and emergency service providers in the Town regarding service and long-term planning for facilities. The Town and the newly created Fire Advisory Board could work collectively to establish an inventory and needs assessment for fire and emergency services. The Town should also encourage emergency service providers to consider the vision and goals of the comprehensive plan when preparing their own long-range plans for facilities and for their ability to provide services to a growing community.

Consider development of a community center to provide community, youth, and senior programs and activities. As described earlier, hamlets should be the preferred location for all such community facilities (libraries, post offices, community centers, town offices, etc.) and civic functions.

Recommendations for Regional Cooperation:

Coordinate with neighboring municipalities, Albany County and regional entities such as the Capital District Transportation Committee (CDTC), the Capital District Transportation Authority (CDTA), and the Capital District Regional Planning Commission (CDRPC) in planning related activities. The Town should encourage the coordination of long-term planning efforts with these regional partners. The impacts of growth do not stop at municipal boundaries. A coordinated effort to address issues such as transportation, waste management, and water supply would benefit all parties involved. In addition, this might be an opportunity to work with school districts on related issues and to address long-term planning.

Section 5

Section 6

Section 6 - Implementation and Action Plan

6.1 IMPLEMENTATION

The specific actions that will be necessary to implement this plan are described and prioritized below in the Action Plan Section. It is important to recognize that some of these recommended actions should be implemented immediately, while others can be accomplished over several years. Although the preference may be to implement all of the recommendations immediately, an incremental approach is likely to be more efficient and realistic based on the availability of staff, funding resources and volunteers. While the plan attempts to consider the Town's capacity to implement the various recommendations, it is recognized that there may be a need for additional staff or a reallocation of staff responsibilities to fully implement the plan recommendations.

Bethlehem is fortunate to have strong community groups and regional partners to work with as it implements this comprehensive plan. Groups such as Bethlehem Residents for Pedestrian Safety, the Rural Landowners of Bethlehem, the Bethlehem Garden Club, the Community Appearance Committee of the Bethlehem First Task Force, Bethlehem Tomorrow and other groups can assist in implementing certain plan recommendations. The Bethlehem Garden Club, for example, should be encouraged to continue its enhancements to the Town's gateways.

The Town Board should establish a Comprehensive Plan Oversight Committee to help guide the plan implementation effort. The Committee could include selected Town Staff, the Town Supervisor, the Chair of the Planning Board, the Chair of the Zoning Board, and other critical appointments. The primary purpose of the Committee should be to create and implement an annual "Blueprint for Action" that outlines plan implementation activities for the year. To make the most efficient use of the Town's resources, the Committee could work to prioritize actions, assign responsibilities, and also identify public/private partnerships that can be formed to implement specific recommendations. For example, a partnership could be formed with the Albany County Land Conservancy to initiate development of a Greenway Recreational Trail Network.

It is important to note that the comprehensive plan is a living document. As such, the comprehensive plan may need to be adjusted or updated from time to time in order to reflect the current conditions and needs of the community. A Comprehensive Plan Oversight Committee could be the body that evaluates the plan regularly and could provide guidance to the Town Board regarding when it is appropriate to revisit the plan.

6.2 ACTION PLAN

Under each action and priority below, guidance is provided for organizing the action and responsibilities are assigned. Potential sources of funding and technical assistance are identified (if applicable) in a table at the end of this section.

Immediate Actions include the following: (to be completed immediately)

- > ***Update the Town's Zoning and Subdivision Regulations to reflect the recommendations set forth in this comprehensive plan.*** (Already underway) Updating zoning and subdivision regulations is one of the most important tools a community in New York State has for ensuring future growth follows the vision and goals described in the comprehensive plan. The Town Board has already initiated a process to update the Zoning Map and Text, as well as the Subdivision Regulations. The updating process should include consideration of design standards and guidelines that may vary in some aspects and may vary in applicability to different zoning areas. Plan recommendations for the zoning and subdivision regulations include the following:
 - o Create a mixed-use hamlet zone(s) for existing and proposed hamlets.
 - o Create a zoning district that is appropriate for the In-Town Residential Area.
 - o Create a zoning district for the Residential Area.
 - o Incorporate the use of Conservation Subdivision Design.
 - o Establish an incentive zoning mechanism for certain areas.
 - o Create a zoning district for the Rural Area.
 - o Establish a zoning district for the Rural Light Industrial Area.
 - o Create a zoning district for the Riverfront Rural Area.
 - o Establish zoning to allow for mixed-use development in the Mixed Economic Development Areas.
 - o Update zoning regulations in the Industrial Areas to allow for agriculture as a permitted use.
 - o Create a zoning district that is appropriate for the Commercial Area
 - o Establish design guidelines/standards for two zoning districts: hamlets and commercial. The Planning Board will be responsible for design review in these districts as part of special use permit and/or site plan review. An additional board (additional layer of review) is not contemplated. In the future design guidelines/standards should be considered for other districts, particularly where mixed uses are allowed.
 - o Evaluate zoning code requirements for public notice and public participation and revise, as needed.

For each of the proposed zoning districts listed, specific recommendations about use, density, and/or form are described in the plan. A table describing the specific recommendations found in the plan is located in the appendix.

Priority Actions / Tier 1 Recommendations:

- > ***Conduct a Linkage Study for the Route 9W Corridor that includes a feasibility analysis of a possible “northern alignment” option for the Selkirk Bypass.*** The region’s Metropolitan Planning Organization (MPO), the Capital District Transportation Committee (CDTC), manages the Linkage Program. The program provides funding assistance to communities that undertake planning initiatives integrating transportation and land use. The Town has applied for funding to conduct a transportation and land use Linkage Study along the Route 9W Corridor. Among other important issues, the study will include a feasibility analysis for a possible “northern alignment” option to the Selkirk Bypass issue. The full breadth of this proposed study is described under the Town wide Transportation Recommendations. The Rt. 9W Linkage Study could result in refined land use recommendations for this important corridor. At the Town Board’s discretion the study may be treated as a comprehensive plan amendment, and it could lead to further zoning amendments impacting lands in the corridor.
- > ***Create an Official Map.*** The Town Board should adopt an Official Map. This map would show the location of existing and proposed streets, public facilities, and other public areas. The adoption of such a map would allow the Town to reserve future corridors and protect the specified areas from development. Town staff could work to develop the official map.

In conjunction with the development of the Official Map, the Town should advance the work that has already been completed by community volunteers to identify priorities for sidewalk development or improvement, and for the establishment of on road bikeways.

- > ***Develop a Local Waterfront Revitalization Program (LWRP).*** The Town is already pursuing a grant through the New York State Department of State Coastal Resources Division to assist in funding an LWRP. The Town should continue to pursue this program that would establish a comprehensive vision for the waterfront area and identify future steps to maintain and enhance the waterfront. The LWRP could also result in refined land use recommendations. At the Town Board’s discretion the study may be treated as a comprehensive plan amendment, and it could lead to further zoning amendments impacting lands in the riverfront area.
- > ***Actively coordinate development of the proposed Vista Technology Park in Slingerlands (within the Mixed Economic Development Area immediately west of the proposed Slingerlands Bypass Extension) with planning and development of the proposed New Scotland Road Hamlet.*** A mixed-use technology park has been proposed in this vicinity. The proposed technology park is generally consistent with the recommendations in this plan, and after careful review of the specific details of the proposal, it will likely be approved and move forward to development. This project, together with the significant

transportation improvements taking place on Route 85 with the Slingerlands Bypass Extension, will significantly change this area of the Town. In addition to coordinating and facilitating these projects consistent with the comprehensive plan, the opportunity exists to use these major private and public sector investments as catalysts for the initial planning and design of the proposed new hamlet. A master plan for this entire area would consider how to integrate the technology park with the proposed hamlet in a positive manner. One way to integrate the technology park with the hamlet is through pedestrian and bicycle connections or to create a public green by clustering the buildings on the technology park site. Another opportunity might be the addition of small-scale commercial services in the hamlet for employees of the technology park. The Town should work together with the developer of the proposed technology park to fund the master plan and possible public improvements in the area.

- > ***Establish a Citizens Advisory Committee on Conservation (CACC).*** The Town Board should establish a Citizens Advisory Committee on Conservation (CACC). The Town Board could task the CACC with a variety of possible responsibilities related to implementation of the vision, goals, and recommendations of the comprehensive plan. For example, the CACC could assist the Town Board and town staff in the preparation of plans and policies related to environmental protection and management, agriculture, natural areas and open space; or the CACC could be asked to provide comments to the Town Board, Planning Board, or Zoning Board of Appeals on proposed development projects.

In the short-term, the CACC should be asked to work toward implementation of the first segment or segments of the Town's envisioned recreational trail system. Initially, this might involve coordination with Albany County regarding the eventual conversion of the former CP Rail right-of-way to a multi-use recreational trail. The CACC could also work with landowners in the Slingerlands area who have expressed an interest in providing public access across their properties for the purpose of creating a trail between the proposed rail trail discussed above and the New Scotland Road / Vista Technology Park area. Additional opportunities may exist for working with interested landowners, the Albany County Land Conservancy, and others toward achieving some short-term successes with regard to recreational trails. Development of potential canoe/kayak launches along the Normanskill could also be considered as part of this initiative.

- > ***Establish a Comprehensive Plan Oversight Committee*** (as described above in section 6.1).
- > ***Update Planning Department and Building Department Information Systems.*** Current information about the Town's growth helps to form the basis for good decision-making. Bethlehem is a growing community and it is important to track information about this growth. A system should be established to digitally record the progress of development projects from the approval process through to completion. Once the system is created, it could be used to determine, for example, the number of approved building lots at any

given time, or the number and types of building permits issued over specified period. This data could later be linked to the Town's geography through the development of a Geographic Information System (GIS). The Town's zoning map could also be updated in a digital manner. A Town GIS would also be used to efficiently manage the Town's facilities and infrastructure.

- > ***Develop a "Citizen's Guide to Town of Bethlehem Land Use and Development Regulations."*** This brochure, developed by Town staff, would assist not only staff, but also board members, residents and developers in understanding the Town's zoning and subdivision regulations. This document would make the development process more clear for developers, Town officials and staff. As follow-up to the publication of this brochure, the Town could coordinate with the Chamber of Commerce and the Industrial Development Agency to reach out to the development community in an effort to further clarify the development process.
- > ***Identify locations for infill development and redevelopment activities and encourage the use of such locations.*** As an alternative to greenfield development, the Town should assist and encourage redevelopment of existing vacant and underutilized sites like the Glenmont (Ames) Plaza in Glenmont, the former Blue Cross building in Slingerlands, and the former Daiseytek building on West Yard Road near Feura Bush.

Mid-Term Actions / Tier II Recommendations:

These items relate to important community topics that have emerged throughout the planning process. It was determined that these topics require more focused consideration and consensus buildings is required for future Town Board implementation and therefore these items are more long term in nature.

- > ***Consider the development of Hamlet Master Plans for specific hamlets.*** Various hamlets in the town would benefit from a hamlet master plan. A hamlet master plan would identify hamlet specific concerns and would identify the most appropriate recommendations to address those concerns. Once prepared the Town Board could adopt a hamlet master plan as an amendment to the comprehensive plan. As a start, the town could develop a hamlet master plan for the Selkirk or Delmar/Elsmere hamlets.
- > ***Consider adopting local Right-To-Farm and Right-To-Practice-Forestry laws.*** The Town Board could adopt such laws to provide added protection from nuisance suits to farmers and individuals wishing to harvest timber on their property. Technical assistance could be provided through the New York State Department of Environmental Conservation Division of Lands and Forests for Region 4, as well as the New York State Department of Agriculture and Markets.

- > ***Revive Efforts to Create a Business Improvement District (BID) demonstration project along Delaware Avenue.*** The Town could coordinate with the Chamber of Commerce and the IDA to develop a demonstration BID project. A BID provides a mechanism for property owners and business owners to raise funds for street and sidewalk maintenance, beautification, prospecting, marketing, and business recruitment and retention.
- > ***Conduct a Delaware Avenue Linkage Study.*** Similar to the Route 9W Linkage Study, the Town Board should apply for funding to conduct a transportation and land use Linkage Study along the Delaware Avenue corridor. The Town could partner with the Capital District Transportation Committee (CDTC) to fund and conduct this study.
- > ***Consider reducing street width in new residential developments and encourage a connected street network.*** Oftentimes, the required minimum residential street width is excessively wide. Wide residential streets inadvertently encourage speeding and, in areas with no sidewalks, can create an unsafe environment for pedestrians and bicyclists. This recommendation would require further discussion with various Town Departments, such as the Department of Public Works, and with emergency service providers in the area, to ensure safety. Information about the function, safety, and benefits of narrower streets has become available from transportation engineering organizations, such as the Institute of Transportation Engineers (ITE), in recent years.
- > ***Explore Local Funding Opportunities for Farmland and Open Space Protection.*** The Town should explore appropriate funding mechanisms for farmland and open space protection. A Town-wide referendum is one option for providing local funding for such action.
- > ***Consider developing a more specific inventory of the Town's farmland, open space and natural resources through the creation of a Lands of Conservation Interest Map.*** This map could identify critical natural and recreational resources, and the remaining open lands that deserve the community's careful stewardship. Categories of open space resources would be defined by the community, but might include items such as: high quality agricultural land, environmentally sensitive lands, recreational facilities, community gateways, waterfront access, ridgelines and/or land above a certain elevation, existing and potential trail connections, etc. The process for developing this detailed inventory might include additional research, fieldwork, public workshops, and outreach with landowners.
- > ***Conduct a Town-wide inventory of historic and cultural resources.*** The Town Board should initiate the creation of a full, town-wide 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 a significant

concentration of historic places exists within the community, the Town Board could consider the establishment of a local historic district. The New York State Office of Parks, Recreation and Historic Preservation could provide technical assistance for this action.

- > ***Consider development of a community center to provide community, youth and senior programs and activities.*** As described earlier, hamlets should be the preferred location for all such community facilities (libraries, post offices, community centers, town offices, etc.) and civic functions.

Additional actions resulting from the priority items described above would need to move forward while the Town also considers the mid-term and long-term actions listed below.

Ongoing Programs / Activities:

These items relate to Town Administration, programming and ordinary operations.

- > ***Investigate the current condition of, and improve as necessary, the technology infrastructure available in Bethlehem.*** In previous decades, transportation, electricity, and water and sewer infrastructures were considered necessary ingredients for economic development. Today, in addition to these forms of infrastructure, the availability of technology infrastructure for high-speed communication is necessary for many technology based or technology dependent industries.

As physical improvements to commercial and mixed-use areas in the community are phased in over time, technology infrastructure should be provided in the areas currently lacking. Niagara Mohawk's Wired Building Grant Program and similar initiatives through New York State and at the federal level should be pursued.

- > ***Maintain and enhance pedestrian connections within and between neighborhoods, recreation facilities, and hamlet centers.*** Pedestrian connections are critical to creating the sense of community that exists within these neighborhoods. Enhancing and maintaining a safe pedestrian environment is important within the in-town residential area. Though sidewalks are not necessary on every low-volume residential street, they are important on busy collector streets or arterials. Bike lanes or off-street bike paths may also be appropriate on the busiest of these roads. The Town should require such infrastructure as part of new development or redevelopment proposals. The Town should also work in partnership with landowners and outside funding agencies to develop and maintain such infrastructure where it is needed. The pace and extent of this effort would, of course, depend on the availability of resources and in consideration of the town's many priorities.

- > ***Prepare for and comply with the new Phase II Stormwater Management Regulations.*** The U.S. Environmental Protection Agency (EPA), in an effort to protect and preserve the nation's water resources, has developed a stormwater management rule. The Stormwater Phase II Rule requires a permit for discharges from Municipal Separate Storm Water Systems (MS4s) in Urbanized Areas. The New York State Department of Environmental Conservation (DEC) issued two general permits under the State Pollutant Discharge Elimination System (SPDES) to comply with the EPA law. The two state permits address MS4s in urbanized areas and construction activities.

Also under the Phase II regulations, MS4s are required to develop and implement a stormwater management program by 2008. Generally, a stormwater management program must contain six minimum control measures, according to the MS4 Phase II Permit requirements. Each minimum control measure must describe measurable goals as well as select and implement management practices to achieve the goals. The minimum control measures include: public education and outreach; public involvement and participation; illicit discharge detection and elimination; construction site runoff control; post-construction runoff control; and pollution prevention and good housekeeping. So, for example, the town could work with partners to provide educational services related to septic system maintenance and the prevention of illicit discharges into the Town's storm drainage system. As much of Bethlehem is in an urbanized area, the town should work closely with the DEC to ensure they are properly addressing the Phase II regulations.

- > ***Promote the use of alternative, renewable energy sources for public and private buildings.*** The Town should coordinate with New York State Energy and Research Development Authority (NYSERDA) to determine options for more energy efficient systems. The Town could, for example, replace less efficient heating and cooling systems and utilize alternatives such as geothermal energy.
- > ***Coordinate with fire and emergency service providers in the Town regarding service and long-term planning for facilities.*** The Town and the newly created Fire Advisory Board could work collectively to establish an inventory and needs assessment for fire and emergency services. The Town should also encourage emergency service providers to consider the vision and goals of the comprehensive plan when preparing their own long-range plans for facilities and for their ability to provide services to a growing community.
- > ***Encourage the use of Leadership in Energy and Environmental Design (LEED) standards for new development and redevelopment of buildings and sites in the town.*** The LEED Green Building Rating System® is the national standard for developing high-performance, sustainable buildings. Participation in LEED is voluntary. The standards have been developed by the U.S. Green Building Council through consensus by all members of the building industry. LEED standards address a variety of site design, building design and construction materials based on the long-term sustainability of the community. LEED information could be provided through

the Building Department and distributed as potential developers seek information regarding building in Bethlehem.

- > ***Assist developers in understanding and identifying available funding opportunities supportive of sustainable design and construction.*** The Bethlehem Industrial Development Agency (IDA) and the Bethlehem Chamber of Commerce could coordinate with the New York State Energy and Research Development Authority (NYSERDA) to discover opportunities for developers regarding grant funding assistance and technical assistance. Programs available through NYSERDA include: the Energy Smart Loan Program which assists in the cost of installing energy-efficient technologies, incentives for photovoltaic installers, a Renewable Resource Development Program, Renewable Energy Technology Development Program, and many more.
- > ***Provide educational services related to septic system maintenance and the prevention of illicit discharges into the Town's storm drainage system.*** The Town could work with partners to provide educational services related to septic system maintenance and the prevention of illicit discharges into the Town's storm drainage system in conjunction with other activities related to compliance with the Phase II Stormwater Regulations.
- > ***Initiate a "Buy Local" program and develop an agricultural economic strategy.*** Formalizing an agricultural economic strategy is one manner in which to encourage agri-business. Such a strategy could lead to the identification of niche markets in the area. A "Buy Local" program could include various levels such as farm stands or a farmer's market. Such a program could also extend to partnerships with local schools, institutions and restaurants.
- > ***Provide adequate bicycle facilities and establish a signed system of bicycle routes throughout the Town.*** Biking functions not only as a recreational activity, but also as an alternative mode of transportation. The Town should provide facilities to ensure the safety and convenience of bicycling. The addition of bike lanes, proper pavement markings and signage, and a map of bike routes in the Town should be considered. The opportunity exists for the Town to connect with regional bicycle routes.

Several key corridors exist where bicycle connections would be advantageous. Corridors such as Kenwood Avenue and Wemple Road to Elsmere Avenue would provide a connection to the Delmar Area and extend the bicycle facilities in the Town.

- > ***Coordinate with the Bethlehem Chamber of Commerce (the Chamber) to promote local businesses and quality employment.*** The Chamber seeks to encourage planned economic development that supports local commerce and quality of life. The Town should also work with the Chamber to retain the Town's younger population through the creation of quality employment.

- > ***Create a Parks Master Plan.*** The Bethlehem Department of Parks and Recreation should initiate a Town-wide Parks Master Plan. A Parks Master Plan would inventory all the recreational resources throughout the Town. The master plan would also identify recreational needs and address steps to fulfill those recreational needs. Technical and financial assistance could be available through the New York State Office of Parks, Recreation and Historic Preservation or through the New York State Department of Environmental Conservation Hudson River Estuary Grant Program. As an alternative, this could be folded into the more detailed planning study related to the Town's natural and open space resources described for the Conservation Advisory Council (CAC) under priority actions above.

- > ***Coordinate with neighboring municipalities, Albany County, school districts and regional entities such as the Capital District Transportation Committee (CDTC), the Capital District Transportation Authority (CDTA), and the Capital District Regional Planning Commission (CDRPC) in planning related activities.*** The Town should encourage the coordination of long-term planning efforts with these regional partners. The impacts of growth do not stop at municipal boundaries. A coordinated effort to address issues such as transportation, waste management, and water supply would benefit all parties involved. In addition, this might be an opportunity to work with school districts on related issues and to address long-term planning.

- > ***Enhance entranceways / gateways to the community.*** An entranceway or gateway is important in providing a sense of arrival into a community. There are several entranceways leading into Bethlehem, such as Delaware Avenue, Route 9W, Route 85, Route 32 and Route 396. These areas could be enhanced to be more prominent and welcoming. A well-placed sign with landscaping indicating that one has arrived in Bethlehem, for example, might be a nice addition in these areas. Additional enhancements might include banners or flowers to improve the sense of arrival. The Town planning and highway departments should work with businesses and volunteer group to develop beautification improvements at the Town's entranceways and other areas where the visual impression of Bethlehem can be enhanced.

- > ***Encourage continuing education for board members.*** The Town Board should encourage all members of the Town's Planning Board and Zoning Board of Appeals to attend educational programs in an effort to update their knowledge of planning and zoning techniques and laws on a continuing basis. Town Board members and planning staff could also be encouraged to attend such programs as appropriate. This is of particular importance as the Town continues to change and as it considers the use of new planning tools in response to this change. Several organizations offer such programs and hold workshops and conferences or can come to local communities for this purpose. These organizations include, but are not limited to: the Albany County Department of Economic Development, Conservation and Planning, the New York State Department of State Division of Local Government, the New York Planning Federation, the Capital District Regional Planning Commission, the Upstate Chapter of the American Planning Association and local colleges and universities, such as Albany Law School and the State University at Albany.

Long-Term Actions include the following:

- > ***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.

POTENTIAL SOURCES OF FUNDING OR TECHNICAL ASSISTANCE FOR SPECIFIC ACTIONS

Action*		Potential Funding Sources / Technical Assistance**	Contact Information
Priority Actions	Route 9W Corridor Linkage Study	Capital District Transportation Committee (CDTC)	www.cdtcmpo.org
	Develop a Local Waterfront Revitalization Program (LWRP)	NYS Department of State, Division of Coastal Resources	www.nyswaterfronts.com
	Identify locations for infill development and redevelopment	Bethlehem Chamber of Commerce Bethlehem Industrial Development Agency (IDA)	www.bethlehemchamber.com www.bethlehemida.com
Mid-Term Actions	Revive Efforts to Create Business Improvement District	Bethlehem Chamber of Commerce Bethlehem Industrial Development Agency (IDA) The Albany County Partnership	www.bethlehemchamber.com www.bethlehemida.com www.ac-chamber.org/ecodev/albPart/
	Delaware Avenue Linkage Study	Capital District Transportation Committee	www.cdtcmpo.org
	Recreational Trails Initiative	NYS Parks, Recreation and Historic Preservation Albany County Land Conservancy Hudson River Valley Greenway Council	www.nysparks.state.ny.us/grants www.albanylandtrust.org www.hudsongreenway.state.ny.us
	Consider developing an inventory of farmland, open space and recreational uses	NYS Department of Agriculture and Markets NYS Parks, Recreation and Historic Preservation Albany County Department of Economic Development, Conservation and Planning Albany County Land Conservancy	www.agmkt.state.ny.us www.nysparks.state.ny.us www.albanycounty.com/departments/edcp/welcome.htm www.albanylandtrust.org www.farmland.org

		American Farmland Trust	
	Consider a farm and open space protection program including purchase of development rights	NYS Department of Agriculture and Markets NYS Parks, Recreation and Historic Preservation Albany County Department of Economic Development, Conservation and Planning Albany County Land Conservancy American Farmland Trust	www.agmkt.state.ny.us www.nysparks.state.ny.us www.albanycounty.com/departments/edcp/welcome.htm www.albanylandtrust.org www.farmland.org
	Inventory of Historic and Cultural Resources	Advisory Council on Historic Preservation NYS Parks, Recreation and Historic Preservation Preservation League of New York State	www.achp.gov www.nysparks.state.ny.us www.preservenys.org
On-Going Actions	Phase II Stormwater Regulations	NYS Department of Environmental Conservation Capital District Regional Planning Commission (CDRPC)	www.dec.state.ny.us www.cdrpc.org
	Use of alternative, renewable energy sources	New York State Energy Research and Development Authority (NYSERDA)	www.nyserda.org
	Use of LEED Standards	US Green Building Council	www.usgbc.org
	Parks Master Plan	NYS Parks, Recreation and Historic Preservation NYS Department of Environmental Conservation	www.nysparks.state.ny.us www.dec.state.ny.us
	Continuing Education	NYS Department of State Division of Local Government NYS Quality Communities	www.dos.state.ny.us www.qualitycommunities.org

		New York Planning Federation	www.nypf.org
		Capital District Regional Planning Commission (CDRPC)	www.cdrpc.org
		Upstate Chapter of the American Planning Association	www.nyupstateplanning.org
		University at Albany Department of Geography and Planning	www.albany.edu/gp
		Albany Law School Government Law Center	www.als.edu

Please note that this list of actions does not include each recommended action as found in Section 6, but rather those actions for which specific financial or technical assistance outside of Town resources might be available. In addition, this list of potential sources of funding assistance and technical assistance is not all-inclusive, but is intended to provide a direction for specific actions. Additional funding opportunities may be available through other public, non-profit or private sources. In most cases, implementation will likely involve a combination of funding sources and technical partners.

Section 7

Section 7 – Inventory and Analysis

The Town of Bethlehem is located along the western banks of the Hudson River, just south of the City of Albany in Albany County, New York. Incorporated in 1793, Bethlehem continues to reflect its rich heritage. Bethlehem is only hours from major metropolitan centers, such as New York City, Montreal and Boston, and recreational activities in the Adirondack and Catskill Parks. The Town is a mix of suburban living, rural environments and charming hamlets. With its convenient access to major interstate highways and significant rail connections, Bethlehem is also a prime location for commercial and industrial business opportunities.

Bethlehem consists of many neighborhoods and hamlets, from Slingerlands and Delmar to Glenmont and Selkirk. Each hamlet has its own unique character. Several hamlets include North Bethlehem, Slingerlands, Delmar, Elsmere, Normansville, Bethlehem Center, Glenmont Center, Meyer's Corners, Houck's Corners, Jericho, Bell Crossing, South Albany, Becker's Corners, Cedar Hill, Selkirk, and South Bethlehem.

The following inventory will identify existing conditions and trends within the Town of Bethlehem relating to land use and land use regulations; growth trends and patterns; residential growth and housing needs; the natural environment; agriculture; infrastructure; transportation networks; economic development and fiscal conditions; recreational and cultural resources; and community services. A discussion of future needs will occur for each topic area as well.

Existing Land Use and Land Use Regulations

Existing Land Use

The following **Land Use Map** illustrates the location of various land uses in Bethlehem. Land uses are determined by the Town Assessor and are categorized according to property classification codes that are found in the New York State Office of Real Property Services Assessors' Manual. The **Land Use Map** includes the following categories: agriculture, residential, vacant, commercial, recreation and entertainment, community services, public services, industrial, and forested. Due to minor errors in the existing data, there are some parcels for which there is no data. The Assessor's Office is diligently working to correct the data.

The current land use patterns, as illustrated on the Existing Land Use Map, shape the future character of the Town. The type of development that occurs, such as residential, industrial or commercial, the form or design of that development, and the scale of that development, such as large scale or small scale, can significantly impact the appeal of a community. Land use can also impact the function of a community's infrastructure and roadway systems. Allowing new development in an area not previously developed, for example, can add traffic along a corridor or require additional infrastructure or roadways. Allowing redevelopment of an area that already has the infrastructure and roadways would likely reduce the impacts on a community.

Land use within the Town is varied. Commercial land uses are interspersed with residential uses. Agricultural uses are scattered throughout the Town, with large pockets located in the southern portion. A significant number of vacant parcels may represent opportunities for future development or opportunities to create additional community service areas or recreation areas, such as neighborhood parks. Large industrial land uses are located around Selkirk Yards and along the northern waterfront.

Existing Land Use Regulations

The Town of Bethlehem currently regulates land use through its zoning ordinance and subdivision regulations. The following **Zoning Map** illustrates the Town's current zoning districts. The Town contains fifteen zoning districts. These districts include Residence A (A), Residence AA (AA), Residence AAA (AAA), Residence AB (AB), Residence AR (AR), Residence B (B), General Commercial (C), Retail Commercial (CC), Commercial Services (CCC), Heavy Industrial (H), Light Industrial (L), Planned Commercial (PCD), Planned Residence (PRD), Senior Citizen Residence (SCRD), and Rural Unzoned. The table below shows the distribution of current zoning districts throughout the Town.

The majority of the Town consists of residential zoning districts. The Residence AA district accounts for the largest portion of the Town with 23%, as shown in the corresponding table below. This district is located primarily in the central and northwest area of the Town. The A district is dispersed throughout areas in the eastern third of the Town. A large light industrial zone is located along both sides of the NYS Thruway extending from the Vloman Kill north to the area just south of St. Matthews Cemetery and Route 3. Other light industrial zones exist on the perimeter of the heavy industrial zoned Selkirk Yards and in the area near the Route 9W and Route 32 intersection in the northeastern part of Bethlehem.

Zoning Districts		
Zoning District	Acreage	Percent of Town
Residence A	6,806	22.0%
Residence AA	7,203	23.4%
Residence AAA	35	0%
Residence AB	1,343	4.3%
Residence AR	558	1.8%
Residence B	206	0.7%
General Commercial C	406	1.3%
Retail Commercial CC	742	2.4%
Commercial Services CCC	53	0.2%
Heavy Industrial H	3,176	10.3%
Light Industrial L	3,027	9.8%
Planned Commercial PCD	166	0.5%
Planned Residence PRD	1,095	3.5%
Senior Citizen Residence (SCRD)	6	0%
Rural Unzoned	6,084	19.7%
TOTAL:	30,933	100%

Source: GIS data created by The Saratoga Associates with information provided by Town of Bethlehem

The heavy industrial zone currently exists along the Hudson River waterfront from the Wheeler Road area north to the Albany City line. Pockets of general commercial, commercial services, and retail commercial zones exist along roadway corridors throughout Bethlehem including the Route 443, Delaware Avenue, and Route 9W corridors. The rural unzoned district accounts for nearly 20% of the Town and is prevalent in the southwest and southeast corners of the Town.

**A Comparison of Permitted Uses and Uses Requiring Site Plan Approval
within Residential Districts**

District	Uses																
	Single Family Dwelling	Church, library, school	School or college stadium	Museum or community bldg	Non comm-ercial park or play-ground	Golf course, polo field	Nurseries, orchards, greenhouses	Telephone exchange	Private club or lodge	Philanthropic institutions	Hospital or sanatorium	Bording house or lodging house	Public utility	Two-family dwelling	Three & four family dwellings	Multifamily dwelling	Cenetery
A	P	P	P	P	P	P	P	P	P				SP				SP
AA	P	P			P	P	P						SP				
AAA	P												SP				
AB	P	P	P	P	P	P	P	P	P					SP	SP		
AR*	P													SP	SP	SP	
B	P	P	P	P	P	P	P	P	P	P	P	P		SP	SP	SP	

*Additional permitted uses include the confinement of livestock, storage of farm produce, public buildings and home occupations.

'P' = permitted use. 'SP' = site plan approval.

The previous table provides a comparison of permitted uses and uses requiring a site plan approval within the residential districts found in Bethlehem's zoning. Bethlehem has five different residential districts. With the exception of the Residence AAA and Residence AR, many of the districts have similar permitted uses. A brief examination reveals that the Residence B district has the most permitted uses and uses requiring site plan approval. The largest residential districts in the town, Residence A and Residence AA, have much fewer permitted uses and neither allow for two-family, three-family or multifamily dwellings. The primary difference in permitted uses between the A and AA districts is that the A district permits a school stadium, museum or community building, a telephone exchange, and a private club or lodge.

Discussion of Needs

The Town's current land use regulations are outdated and often difficult to decipher. Land use regulations dictate the type and location of development that occurs in a community and should be clear as well as concise. In many cases, the actual land uses are inconsistent with the zoning. This is likely the result of outdated zoning. For example, within the large light industrial zoned area in the Town, there are very few light industrial land uses. As illustrated on the **Land Use Map**, the actual land uses vary from agricultural, residential, commercial, and recreation. The presence of such uses, which are legally permitted in the light industrial zone, makes it less likely that the primary intended use could locate there. The large percentage of acreage that falls within the rural unzoned district has the potential to greatly impact the character of the community. The significance of the rural unzoned district is that there are no limitations on land uses allowed in the district. There is no predictability regarding land use in this zone, which makes planning for growth over the long-term nearly impossible.

The Town also allows for planned commercial districts (PCD) and planned residential districts (PRD). The intent of these districts is to allow for more flexibility and creativity in site design and layout. These zoning options are used in many other communities as well. However, the use of PCD's and PRD's has not been widespread (only 4% of the town is within these districts) and does not seem to be resulting in

more creative design, but rather a conventional design. There is an opportunity to utilize these zones to improve upon the form of development currently taking place. The length of the process is likely a deterrent in utilizing these zoning options. Ensuring the land use regulations are consistent with the community's long-term vision in terms of where development should occur and what form that development should take is essential in achieving that vision.

There are many administrative concerns regarding the existing zoning code. The current procedures for site plan review and variances, for example, are not consistent with state statutory requirements. Clearer and more appropriate definitions and terms are necessary, as are performance standards regarding such factors as erosion control, protection of water supplies, noise, odors, and landscaping. Site plan criteria should be updated to provide for specifics regarding the placement of buildings and parking in relation to street access, points of ingress and egress, pedestrian walkways, and lighting fixtures. Standards should be developed for special permits as well. Such standards may include visual and aesthetic requirements, traffic, pedestrian and resident safety, protection of neighborhood character, protection of water supply, screening and buffering, and the protection of property values. Various other modifications and statutory-consistent updates are necessary regarding parking, erosion controls, home occupations, signage, cluster subdivision, planned unit development, and incentive zoning. Many existing procedures within the subdivision regulations do not meet state enabling statutes. These regulations should also be revised.

Build Out Analysis

To gain a better understanding of the growth pressures facing Bethlehem and the Town's ability to appropriately manage that growth, a build-out analysis was performed for the Town. A build-out analysis is a commonly used tool that identifies the total amount of residential and commercial development that could occur in the Town based on what is currently allowed under the existing zoning regulations. It is important to note that full build-out is highly unlikely to occur within the next twenty, thirty or even fifty years. However, an analysis such as this provides useful information about the location, type and amount of development that could occur in the future and allows the Town to decide whether or not that development is consistent with its vision for the future. If the development is not consistent with the Town's vision for the future, the Town might consider revising the current zoning regulations.

Assumptions. The build-out was based on existing zoning regulations and the following build-out assumptions were made:

- > Development cannot occur within 100 feet of a NYSDEC wetland.
- > Development cannot occur on slopes of 25% or greater.
- > Development cannot occur within a 100-year flood zone.
- > Minimum lot areas are based on single family minimums (not multi-family).
- > Floor-Area-Ratios (FARs) for non-residential buildings were estimated on maximum building height and the building coverage ratio.
- > Mixed use percentages were estimated based on existing ratios of residential and non-residential development in each zone.

- > An efficiency of 80% was used to accommodate land for infrastructure needs and land that is not developable due to parcel shape.
- > Dwelling units per building were equal to 1 except for the SCRD zone where multi-family dwelling units are encouraged and therefore dwelling units per building were set to 5.
- > Existing building locations were digitized from 2000-2003 digital orthophotography. Dwelling units for each building were calculated based on property classification codes from parcel data.
- > Minimum separation distances were based on 2x the minimum side yard depth
- > Setbacks from centerline of pavement are based on minimums for single family residences only.
- > Setbacks from centerline of pavement for the Heavy Industrial zone were based on the same setback as in the Commercial zone (40').
- > Setbacks from centerline of pavement for Planned Development Districts (PRD and PCD) were based on the minimum yard dimensions of exterior yards at district boundaries.
- > SCRD zone requires a minimum front yard setback of 100'. To accommodate for the distance between the road centerline and the right-of-way boundary, 20' was added for a total of 120'.
- > The UNZND zone setback from centerline of pavement was 50', similar to zones A, AB, and AR.

Methodology. The build-out analysis was conducted using Community VizTM, a specialized software tool used in conjunction with geographic information systems (GIS). Community VizTM not only generates build-out data, but also allows the user to graphically illustrate the data. All data was entered into the Community VizTM build-out program and the results were reviewed for accuracy.

Build-out Results. Over 19,000 acres of buildable land remain in the Town, representing more than half of the total acreage of the Town. Of these remaining buildable acres, more than half are found in exclusively residential zoning districts. The remaining buildable acres are found in various business, commercial, industrial or the rural unzoned districts. Residential development is permitted and likely to occur in most of these areas.

Approximately 38,000 additional residential units and several tens of millions of square feet of commercial space – 620,700,000 square feet – are theoretically possible under the current zoning. The number of potential new residents, based on the 38,000 potential additional residential units would be 96,000. (This figure is based on the 2000 Census multiplier of 2.53 persons per household.)

In comparison, Bethlehem had 12,459 housing units according to the 2000 Census. The build-out analysis clearly demonstrates that there is a significant amount of development that could occur in Bethlehem. This development, if allowed to occur unchecked, has the potential to add stress to the Town's sewer and water systems, the road systems, environmental resources and overall quality of life.

Land Use Map

Existing Zoning Map

Current Growth Trends and Patterns

Population

The Town of Bethlehem has been experiencing significant population growth over the past two decades. In 2000, the Town of Bethlehem had a population of 31,304. This represents a 28.8% increase in population from 1980 to 2000 and a 13.6% increase between 1990 and 2000. Bethlehem's rate of growth significantly exceeded Albany County's between 1980 and 2000 and between 1990 and 2000. It also the largest percentage increase of all adjacent municipalities. As illustrated in the table below, the suburban Town of Guilderland experienced similar residential growth. However, the City of Albany, Town of New Scotland, and Town of Coeymans all experienced a declining population from 1990-2000.

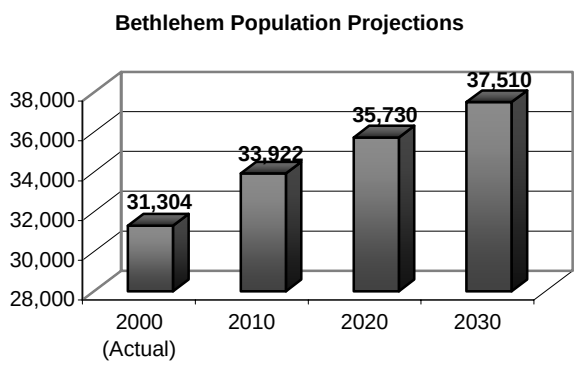
Population and Population Change 1980 to 2000					
Municipality	1980	1990	2000	Change 1980 - 2000	Change 1990-2000
Town of Bethlehem	24,296	27,552	31,304	28.8%	13.6%
City of Albany	101,727	100,031	94,301	-7.3%	-5.7%
Town of Guilderland	26,515	30,011	34,045	28.4%	13.4%
Town of New Scotland	8,976	9,139	8,626	-3.9%	-5.6%
Town of Coeymans	7,896	8,158	8,151	3.2%	-0.1%
Albany County	285,909	292,793	294,565	3.0%	0.6%

Source: U.S. Census.

The Capital District Regional Planning Commission (CDRPC) is tasked with developing population and household projections for the four-county Capital District Region. Utilizing 2000 Census data, CDRPC developed projections using a Population Projection Model. The first stage of the model included a quantitative stage that used a log-linear regression projection model on historic Census data and Census estimates. Log-Linear models are an excellent basis for population forecasts because they project average historic rates of change into the future in a manner consistent with the average changes in natural populations.

The second stage of the model involved a qualitative stage, which included non-quantitative judgments of the likelihood and extent of future population change within particular jurisdictions. There are many historic trends other than simple population which may give an indication of the direction and extent of future population change, including, but not limited to, average persons per household, persons in group quarters, building permit issuances, new home and apartment unit construction, immigration and emigration patterns, journey-to-work data, and labor force data. In addition, there may be new development opportunities or constraints for particular jurisdictions embodied in zoning and subdivision regulations, environmental regulations, economic development programs, and capital budgets for transportation facilities and water and sewer service extensions, to mention just a few possible sources. As much of this information as possible was considered in reviewing the projections and changes made as appropriate.

The CDRPC population projections have been relatively accurate in the past. Previous projections for the year 2000, for example, were slightly below actual population numbers for the Town of Bethlehem. According to *A Profile of the Capital District* (December 1999) published by CDRPC, year 2000 projections indicated a population of 30,524. Actual year 2000 Census indicated a population of 31,304 – approximately 780 persons higher than projected. Projections for Bethlehem are found in the graph below.



The 2030 population projections developed by the Capital District Regional Planning Commission (CDRPC) indicate an increase of approximately 6,200 persons by 2030 in the Town of Bethlehem, or approximately 206 persons per year over the next 30 years. This represents a 29% increase in population over a 30-year period. Bethlehem is projected to capture between 11% and 12% of Albany County’s population growth through 2030.

A four year annual average of 172 building permits for 205 residential units, indicates that the number of additional persons in the Town would be more than double the 2030 population projections when based on the 2000 Census factor of 2.53 persons per household. (205 residential units x 2.53 persons per household = 519 persons).

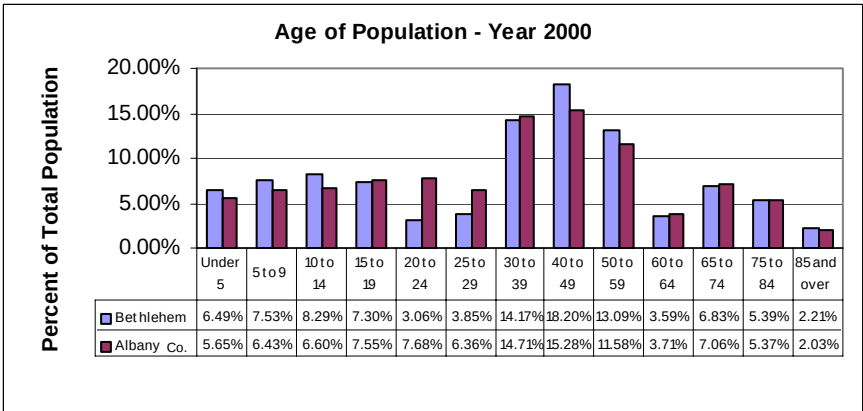
Discussion of Future Needs

Bethlehem will likely experience continued pressure from population growth. Rapid population growth often results in heightened pressures on public services, infrastructure and educational systems. Increased taxes often result from rapid population growth due to the need to pay for expanded schools and services. Community character and open spaces can also be threatened.

The Town is taking a proactive step in addressing these concerns through the comprehensive planning process and update of the zoning and subdivision amendments. The comprehensive plan will identify a vision for Bethlehem. It will also address where growth should occur and how the community can accommodate such growth.

Demographics

Examining the demographic characteristics of a community is important in understanding where the community is currently and the direction in which it is going. This demographic discussion will



describe existing conditions regarding age, educational attainment and median household income.

Age

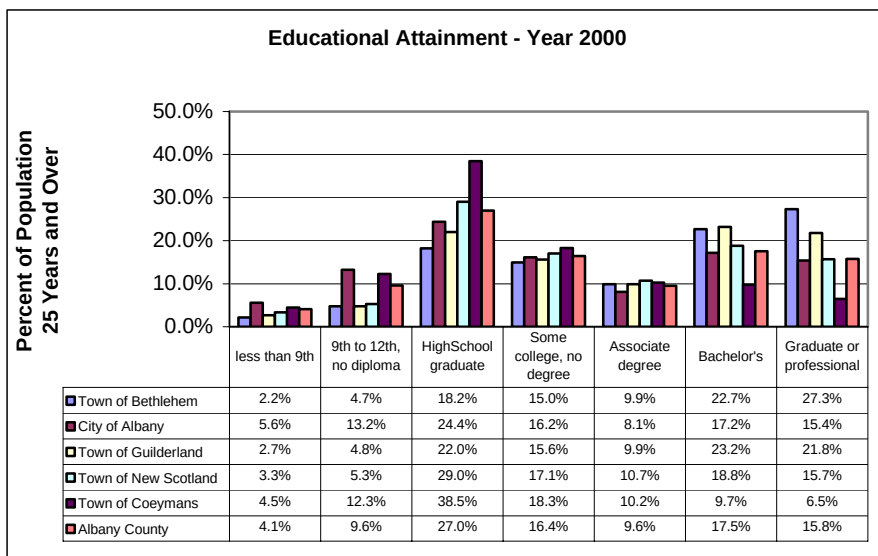
The age of the population within a community can dictate the level of services needed and the level of consumer activity. For example, a significant number of people over the age of 65 may indicate a need for additional senior programs or senior housing. A high number of people in their 20's may indicate a need for increased recreational activities or employment opportunities that target this younger generation.

According to the 2000 Census, the largest age group in Bethlehem was the 40-49 cohort capturing 18% of the total population. This is consistent with age distribution in Albany County. Fifteen percent (15%) of the County's population fell within this age cohort. The next largest age cohort in Bethlehem included the 30-39 and 50-59 capturing 14% and 13%, respectively.

The trend in age distribution from 1980 to 1990 is similar to the 2000 age distribution. According to data found in the LUMAC Study, persons in the age group 30 to 44 increased substantially from 1980 to 1990. In 2000, the 40 to 49 and the 30 to 39 age cohorts were the first and second largest in the Town, respectively. The 50 to 59 cohort was the third largest. The concentration continues among persons of child rearing age.

Educational Attainment

The next chart illustrates educational attainment as found in the 2000 Census. Over 27% of Bethlehem's population over the age of 25 had a graduate or professional degree. This represents a higher percentage than for Albany County and surrounding communities. In addition, 22.7% of Bethlehem's 25 and over population had a bachelor's degree and 18.2% were high school



graduates. A small percentage of residents claimed "some high school" or "less than 9th grade" as their highest educational attainment. Overall, residents of Bethlehem exhibit a higher level of educational attainment than residents in adjacent municipalities and the county as a whole.

Household Income

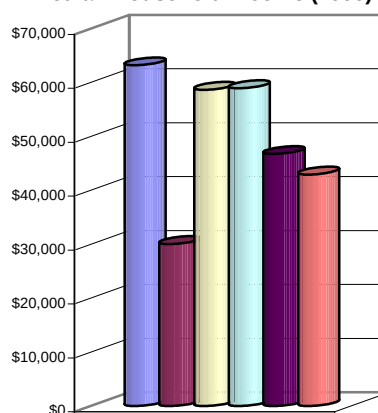
The Town of Bethlehem median household income reflects the high educational attainment of its residents. According to the 2000 Census, Bethlehem had a median household income of \$63,196. This figure is more than double that of the City of Albany (\$30,041) and is higher than any other adjacent community as well as Albany County (\$42,935). As illustrated in the table below, the Towns of Guilderland and New Scotland each had a median household income of over \$58,000. The Town of Coeymans had a median household income of \$46,742.

In Bethlehem, 2.3% of all families were below the poverty level in 1999. In comparison, 16% of families in the City of Albany were below the poverty level during that same time period. Educational attainment and poverty status often correspond with one another. Given the high educational attainment in the Town, this low poverty rate is expected.

Discussion of Future Needs

Educational attainment and median household income indicate that the Town is home to some of the region's most educated and successful individuals. In addition, Bethlehem, like many municipalities, will soon need to address the issues associated with an aging population. Access to basic services and medical care as well as affordable housing are issues to be considered.

Median Household Income (1999)



■ Town of Bethlehem	\$63,196
■ City of Albany	\$30,041
■ Town of Guilderland	\$58,669
■ Town of New Scotland	\$58,956
■ Town of Coeymans	\$46,742
■ Albany County	\$42,935

Residential Growth and Housing Needs

Residential growth mirrors the population growth trend in the Town of Bethlehem, as can be expected. Bethlehem has grown steadily in the past century. In comparison to Albany County and adjacent municipalities, Bethlehem has grown at a significantly faster pace. A community's housing stock and owner to renter ratio is a strong indicator of its stability. Typically a homeowner is more attentive to property maintenance than a renter or absentee landlord. A homeowner also tends to remain in their home for a longer period of time than a renter, reducing the amount of turnover within a neighborhood. These and other factors contribute to the level of investment in a neighborhood and ultimately contribute to the value and character as well. The following demonstrates that Bethlehem is a stable community.

Housing Units

The number of housing units in Bethlehem was 12,459 in 2000. This figure represents a 16.0% increase in housing units since 1990. As shown in the table above, all municipalities surrounding Bethlehem experienced an increase in housing units with the exception of the City of Albany. The Town of Guilderland, for example, experienced a 15.9% increase in the number of housing units. The decreasing number of housing units in the City of Albany is reflective of a migration of the population to its suburban neighbors, such as Bethlehem and Guilderland. This migration from an urban area to a more suburban area has been a common trend across the nation.

<i>Housing Units 1990-2000</i>			
Geographic Area	1990	2000	Percent Change
Town of Bethlehem	10,739	12,459	16.0%
City of Albany	46,199	45,288	-2.0%
Town of Guilderland	12,016	13,928	15.9%
Town of New Scotland	3,365	3,473	3.2%
Town of Coeymans	3,286	3,404	3.6%
Albany County	124,255	129,972	4.6%

Source: Census 2000

It is interesting to note that the change in housing units exceed the change in population. This is likely due to a shrinking household size. In 1990, Bethlehem had 2.61 persons per household. The household size decreased to 2.53 persons per household in 2000, according to the Census.

According to the 2000 Census, 71% of housing units are single family in Bethlehem. The breakdown of housing units by structure type is as follows:

<i>2000 Housing Units by Structure in Bethlehem</i>		
Structure	Number of Units	Percent of Total Units
Single-family, detached	8,845	71.0%
Single-family, attached	780	6.3%
2 units	928	7.4%
3 or 4 units	749	6.0%
5 to 9 units	498	4.0%
10 to 19 units	81	0.7%
20 or more units	421	3.4%
Mobile home	157	1.3%

A comparison with similar suburban communities in the region indicates that the type of residential units by structure in Bethlehem is consistent with regional trends. In the towns of Clifton Park, Guilderland, and Niskayuna, approximately 70%, 61%, and 83.1%, respectively, of their residential units are single-family detached units.

Housing Tenure

The Town of Bethlehem had the lowest housing vacancy rate in the area in 2000 at 2.8%. Guilderland and New Scotland also had relatively low vacancy rates as shown in the table below. The City of Albany had over a 10% vacancy rate, the highest in the area. The high vacancy rate in the City of Albany is a direct impact of the decreasing population.

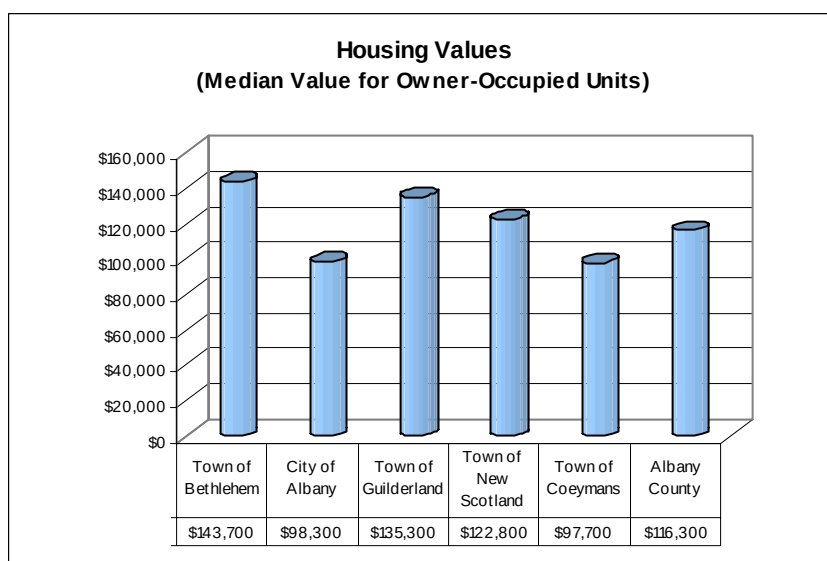
Bethlehem also had a high owner-occupancy rate in 2000 at 75.3%. The only community with a higher owner-occupancy rate was the Town of New Scotland with 81.7%. Owner-occupied housing and low vacancy rates are important to the long-term viability of Bethlehem's neighborhoods.

<i>Housing Tenure</i>			
Geographic Area	Occupied	Owner-Occupied	Vacant
Town of Bethlehem	97.2%	75.3%	2.8%
City of Albany	89.9%	37.6%	10.1%
Town of Guilderland	96.4%	66.6%	3.6%
Town of New Scotland	96.3%	81.7%	3.7%
Town of Coeymans	91.7%	68.5%	8.3%
Albany County	92.7%	57.7%	7.3%

Source: Census 2000.

Housing Values

Housing values in Bethlehem are the highest in the area. According to the 2000 Census, the median housing value of an owner-occupied home was \$143,700. This is significantly higher than Guilderland, which has the second highest median housing value of \$135,300. Given the population growth and subsequent demand for housing, continued high housing values are expected. Coeymans had the lowest median housing value in the area with \$97,700. The chart below illustrates housing values for Bethlehem and adjacent communities. As housing values rise, a community should consider options to provide for a mix of housing options such as senior housing and affordable housing.



Source: Census 2000.

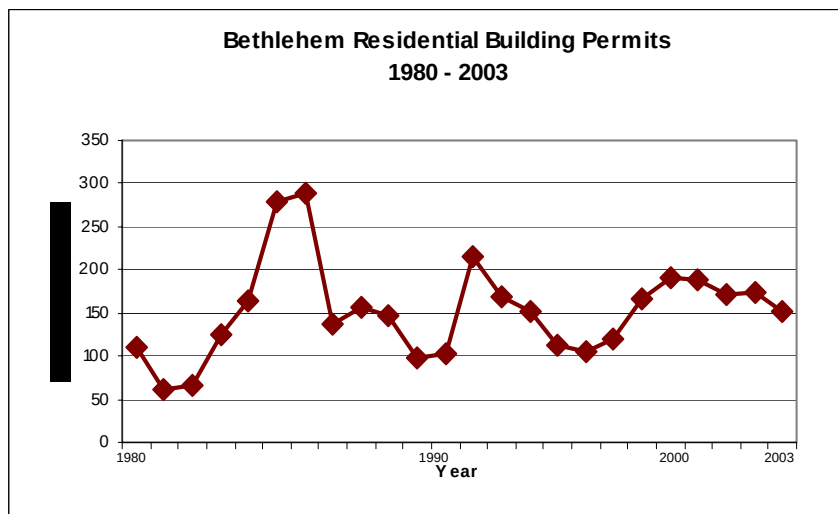
Building Permits and Future Growth

Residential building permit data obtained from the Capital District Regional Planning Commission (CDRPC) indicates fluctuations in approved building permits during the time period from 1980 to 2003. As illustrated on the graph below, a steep increase in the number of building permits began in 1982 and continued until 1987. Another peak occurred between

1990 and 1992. These peaks are consistent with regional peaks in building permits issued. High quality of life, a convenient commute to the City of Albany, and good schools all work to attract residents to Bethlehem.

Over the past several years, the number of building permits issued has remained relatively steady, even declining slightly in 2003. The built-out nature of the existing population centers in the Elsmere, Delmar, Slingerlands and Bethlehem Center areas may be one factor influencing the recent decline in permits. Regional and local economic factors are most likely a driving force as well. Despite the leveling off of building permits, the Town continues to issue many building permits each year. For example, Bethlehem issued an average of 172 building permits from 2000 to 2003 according to data compiled by CDRPC.

The number of building permits issued in the Town each year provides a sense of the actual amount of development occurring. However, examining the number of approved lots and lots in the pipeline can help to identify the potential for future residential growth in the Town.



As of July 2004, there were approximately 63 approved single family, multi family and mixed use residential projects with a total of over 1,000 approved buildable lots or units in the Town according to the Town Planning Department. Applications have been submitted to the Town Planning Department that could result in an additional 1,800 lots and/or units. However, these applications have been put on hold as a result of the recently passed residential moratorium. A moratorium is a temporary halt on development. The Town approved a moratorium for the duration of the comprehensive plan process.

Residential Building Permits		
Year	Total Permits	Total Units
2000	189	189
2001	171	180
2002	174	206
2003	152	245
Average 2000-2003	172	205

Source: Town of Bethlehem Planning Department

It should be noted that some of the subdivisions were approved many years ago and for a variety of reasons have not been developed. Land suitability for development, market demands and other factors could prevent the development of every approved lot. The adjacent chart shows the number of approved buildable lots and units from 2000 – 2003. As indicated in the chart, the number of units is not always equal to the number of building permits issued. This would represent a multi-family dwelling unit for which a single building permit has been issued. For example, in 2000 it is logical to assume that each residential

building permit issued was for a single-family dwelling since the total permits equals the total units. In comparison, in 2003 there were 152 building permits and 245 units approved. This would indicate that several of the building permits issued were for two-, three-, four-, or multi-family dwellings.

Discussion of Future Needs

The impact of developing all approved, available buildable lots and potential lots currently in the pipeline could be significant in terms of traffic, sewer and water services, schools and emergency services. For example, if a subdivision application has been submitted in an area that is lacking sewer and water infrastructure, the planning board should consider if that area has been identified by the comprehensive plan as an area to encourage residential development. The vision of the Town set forth in the comprehensive plan should be reflected throughout development review process. The ***Development Constraints Map*** found below might be a useful resource for Town staff and review boards.

Natural Environment

Within the Town of Bethlehem, the natural environment is just as important in shaping community character as the built environment. The ability of the natural environment to sustain development is inherently limited. There are constraints based on soils, slopes, wetlands, and a variety of natural features. When considering the type and intensity of development that could occur within a community, these natural constraints must also be considered.

Wetlands

Wetlands are among the world's most productive ecosystems. Wetlands are generally defined as areas covered with shallow water permanently or for periods long enough to support aquatic or semi-aquatic vegetation. Areas designated as wetlands may include bogs, swamps, marshes, wet meadows, flood plains, and water-logged (hydric) soils. Wetlands serve many important functions including: providing habitat for wildlife and plants, playing a role in storm water management and flood control, filtering pollutants, recharging groundwater, and providing passive recreational and educational opportunities.

Federal policy regarding wetlands is that there shall be no net loss. Under the most recent federal rules, which took effect in the fall of 2000, the U. S. Army Corps of Engineers regulates any disturbance of 1/10 of an acre or more of wetlands. Under the current Nationwide Permit #39 any disturbance of wetlands and waters of the United States between 0 - 1/10th of an acre will require post-construction notification. If the disturbance is between 1/10 and ½ of an acre, pre-construction notification is required with the possibility of mitigation. If the disturbance is more than ½ acre, an individual Army Corps Permit is required, along with an Individual 401 Water Quality Certification from the NYSDEC.

Federally regulated wetlands, because they are not mapped as such, can be difficult to identify and are sometimes overlooked in project reviews. It requires vigilance on the part of responsible landowners, and local review boards, to ensure that these smaller wetland areas are not destroyed as development occurs. Hydric soils are a strong indicator of the presence of wetlands.

New York State, through the Department of Environmental Conservation (NYS DEC), generally regulates all wetlands that are 12.4 acres or more. New York State regulated wetlands are mapped and are therefore more likely to be considered in project reviews. The ***Natural Resources Map*** shows NYS DEC regulated wetlands.

Development Constraints Map

Floodplains

Areas bordering on a stream, river, pond, lake or wetland that are periodically submerged by floodwater are considered to be floodplains. Floodplains serve two important purposes; they act as temporary natural water storage areas during periods of high water after heavy rains or melting snow, and they reduce peak flows during flooding, therefore limiting downstream bank erosion. Flood zones, as identified by the Federal Emergency Management Agency (FEMA) are shown on the ***Natural Resources Map***.

The Town currently participates in the Federal Flood Insurance Program. Many communities have regulations that prevent development from taking place within a floodplain or within a specific distance of a floodplain to ensure protection of these sensitive areas. Development within a floodplain can potentially impact the ability of a floodplain to accommodate floodwaters and can pose a risk to property.

Steep Slopes

Steep ravines are found throughout the Town, especially in the area near the Normans Kill. As shown on the Natural Resources Map, steep slopes (16% - 25%) in Bethlehem are located along the Normans Kill in the north, and west of the Selkirk Rail Yard in the southwest portion of the town. Other areas of steep slopes exist along ravines carved by streams flowing into Hudson River as well. Attempting to build on these slopes is not impossible, but it must be done with great care. Vegetated ground cover acts as a sponge, slowing down rainwater and snowmelt and allowing the water and nutrients to be absorbed into the soil. Careless development can expose the soil causing increased runoff and erosion, which can in turn increase sedimentation rates and nutrient loading in downstream waterways. Bethlehem has already experienced the impacts of severe soil erosion and landslides along the Normans Kill. Steep slopes in combination with certain soil conditions could lead to landslides.

Soils

The United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) classifies soils for a variety of purpose including but not limited to agriculture and development. Agricultural soils are classified as either *Prime Farmland* or *Farmland of Statewide Significance*. *Prime Farmland* is land having the best combinations of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops (*Albany County Agricultural and Farmland Protection Plan*, 2004). These soils have the growing season, soil quality, and moisture supply needed to produce sustained high yields of crops. Over 19% or 6,078 acres of Bethlehem's soil is consistent with this classification.

Farmland of Statewide Significance is land that is considered of statewide importance for the production of crops. These soils are important to agriculture in the state, but exhibit some properties that do not meet *Prime Farmland* criteria, such as seasonal wetness, and erodibility. Such land produces fair to good yields when managed appropriately. In Bethlehem, only 8.2% (2,606 acres) of the total land area is considered *Farmland of Statewide Significance*. The map of ***Agricultural Resources*** illustrates the location of these soils.

In addition, the **Soil Suitability Map** identifies areas where there are soil limitations for the development of dwellings and individual septic systems. A combination of factors were used to determine soil suitability including the ability of soil to drain well (or not drain well), hydric soils, soil stability, location of bedrock, and other factors. Soil data was obtained from the *Albany County Soil Survey*.

The **Soil Suitability Map** illustrates that the vast majority of soils in the Town are limited for dwellings and septic tank absorption fields. The areas shown with hatch marks are areas where the soil is severely limited for dwellings based on high water table, depth to bedrock, large stones, slope, shrink-swell potential, and the ease of excavation and construction.

In addition, areas of Bethlehem that do not have soils with suitable drainage for absorption fields are shown in the solid yellow color. Many parts of the Town are not currently serviced by public sewer and water. Therefore, the ability to properly site individual septic systems becomes a limiting factor to development. Septic systems must be able to function properly to avoid serious health issues.

Bethlehem also has areas of limestone soils, which can lead to the formation of karst topography. These areas are most notable in the southern portion of the Town. Limestone has a high calcium carbonate content and is easily dissolved by underground water. When limestone is dissolved, underground caves and channels result. This resulting underground topography is called karst topography and often leads to the development of sinkholes. Sinkholes, or dolines, are depressions that form when the underlying limestone is eroded. As a result, areas with karst topography are potentially unstable for the purposes of development.

In summary, an analysis of Bethlehem's soils indicates that much of the Town contains soil properties or site features that are very unfavorable for development from a site development perspective. Despite this, many areas limited by soils for development are currently zoned to allow for development. These areas could be developed if not constrained by other factors, such as wetlands, steep slopes, land use regulations, and etcetera. Special design and engineering, increases in construction costs, and increased maintenance would be necessary to develop in areas with soil limitations.

Natural Resources Map

Soil Suitability Map

Waterways and Habitat

The Town of Bethlehem has over 10 miles of waterfront along the west side of the Hudson River. The Hudson River became an American Heritage River in 1998. It is one of 14 designated American Heritage Rivers. The Hudson River is unique in that it is a freshwater river that experiences tidal flows. This tidal activity creates a unique estuary habitat for a variety of aquatic creatures. The entire Town of Bethlehem is located within the boundaries of the Hudson River Estuary.

The Hudson River region is one of our nation's most significant historic river corridors. English explorer Henry Hudson sailed up the Hudson in 1609. Prior to that voyage, however, the river was a travel route for Native Americans. The Hudson River once served as a primary trade route to Canada and the Great Lakes and continues to be an extremely prominent waterway.

Many smaller streams flow throughout Bethlehem, creating a varied landscape. These streams include the Onesquethaw Creek, the Normans Kill, and the Vroman Kill, among others. These provide additional habitat and recreational opportunities within the town. The streams are part of the Hudson River watershed.

Areas of the Town of Bethlehem provide an ideal habitat for a variety of species. According to the New York State Department of Environmental Conservation Natural Heritage Program, there are several endangered or threatened wildlife, fish and plant species located in the Town. The Natural Heritage Program is a systematic, scientific inventory of data on rare plants and animals that are native to New York. Ecological communities are also inventoried. The data assists in the facilitation of sound conservation, planning and natural resource management. In addition, the data helps to conserve ecological communities, plants and animals that represent New York State's natural heritage.

Correspondence received from the Natural Heritage Program in July of this year indicated that twenty-seven endangered, threatened and unprotected species exist. The unprotected species are species that have been identified in the area, but have not yet been placed on the level of endangered or threatened. Of these twenty-seven species, eight have extant rankings of poor to excellent. An extant ranking indicates that a species is still in existence. This ranking is based on an evaluation summarizing the condition, quality, viability and defensibility of the species occurrence. The remaining species are listed on the historical records list and have not had any recent field observation. The exact location and name of these species within the Town is considered ecologically sensitive information that must be treated in a careful manner. As a result, the location of species will not be addressed in this document.

Discussion of Future Needs

Bethlehem has tremendous natural resources that contribute significantly to its high quality of life. As development occurs, it will inevitably push the extent to which these resources are impacted. Impacts from future development should be carefully considered in areas of steep slopes, wetlands, and areas containing soils undesirable for development. The Department of Environmental Conservation Natural Heritage Program, for example, should be notified as development occurs on specific sites to ensure no conflicts with endangered or threatened species occur and to determine mitigation measures to reduce the potential impact on such species. By identifying important natural resources early in the development process serious, irreversible impacts can most likely be avoided.

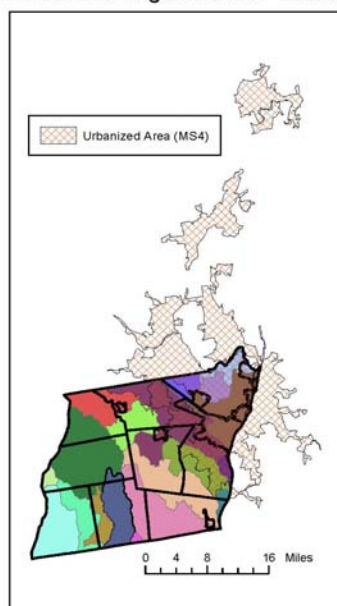
In addition, Bethlehem has experienced landslides in the recent past along the Normans Kill Creek in the northern part of town. Landslides are typically rock or earth flows on slopes as a result of gravity and can occur on any terrain given the right conditions of moisture, soil, and slope. Landslides redistribute soil and sediments in a process that can be in abrupt collapses or in slow gradual slides. This redistribution is important to the earth's surface geology. Landslides can be triggered by natural causes such as rains and floods, or by human-made causes, such as grading, slope cutting and filling, and excessive development. As a result, landslides can occur in undeveloped areas, developed areas, or in any area where the terrain has been altered for roads, houses, utilities, buildings, and even for lawns in one's backyard. The American Planning Association has developed a research program that focuses on planning for landslide hazards. Once complete, the research program will have developed a guidebook for planners to assist in planning and zoning for the hazards of landslides. The occurrence of landslides should be considered as development occurs.

Stormwater

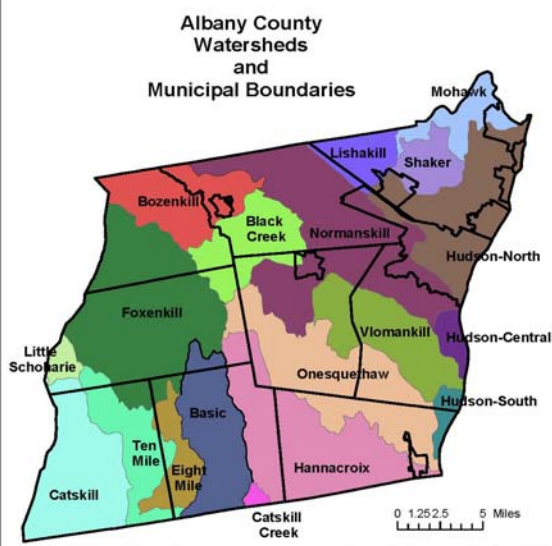
The U.S. Environmental Protection Agency (EPA), in an effort to protect and preserve the nation's water resources, has developed a stormwater management rule. Phase II of the Stormwater Rule is currently underway and is intended to institute controls on unregulated sources of storm water discharges that may cause environmental degradation. Municipal Separate Storm Water Systems (MS4s) located in Urbanized Areas (as defined by the U.S. Census) are automatically covered by a nationwide permit under the Phase II rule. Phase II represents an expansion of requirements set forth in Phase I. The MS4s are required to develop and implement a stormwater management program by 2008.

PHASE II Stormwater Regulations-Clean Water Act

Urbanized Area-Regulated MS4* Boundaries



Source: Albany County



*MS4-A municipality with a separate storm sewer system in an urbanized area. Urbanized=1000 people/sq mi

Agriculture

The southern portion of the Town of Bethlehem can be characterized by working agricultural landscapes. While fragmented, there are large sections of farmland that continue to be actively farmed. The ***Agricultural Resources Map*** identifies the location of agricultural districts, prime agricultural soils and soils of statewide significance.

Agricultural land is beneficial to the Town in many ways. First, agricultural land uses cost the Town and its residents less in terms of public services (such as fire, police, sewer, and education). In fact, numerous studies addressing the cost of public services indicate that residential development is often a fiscal drain on a community. According to organizations such as the American Farmland Trust, for every dollar of property tax revenue gained from agricultural land uses, the cost of providing public services is less than a dollar. Conversely, for every dollar gained in property tax revenue from residential land uses, the cost of providing public services is higher than a dollar.

The rural working landscape and scenic views in southern Bethlehem attract many to this community. The convenient location just minutes from the City of Albany, yet minutes from working farms, is a significant draw and has helped to shape the high quality of life residents expect in Bethlehem.

Agriculture also plays a vital role in the local and regional economy and food supplies. The agricultural industry contributes investments of money, tax base, and income in addition to providing employment. In addition, local farmstands provide a source of fresh, locally grown produce for nearby residents.

The number of farms in Bethlehem has decreased significantly in past years. In 1966, for example, there were 17 dairy farms and today there is one remaining dairy farm in the Town. This trend is consistent with national trends. Many reasons exist for the decline in agriculture in Bethlehem including low prices for products, increased production costs, an aging farm operator population, regulations, non-farm neighbor relations, distance to support services, availability of farm labor, and development pressures, among other factors.

Within Albany County, three agricultural districts exist. The New York State Legislature created the Agricultural Districts Program in 1971. The intent of the program is to address concerns of non-agricultural land-uses expanding into valuable farm areas. The voluntary program offers protections to farmers including differential tax assessment; protection against unreasonable local regulations; special review of proposed eminent domain takings; required agricultural impact statements for public projects; notification requirements to inform property buyers about surrounding farming practices; and limited protection against nuisance lawsuits. Agricultural districts are reviewed and, if necessary, boundaries are modified every eight years.

Agricultural Resources Map

The Town of Bethlehem is located within Agricultural District #3. This district also includes areas within the Town of Guilderland, Town of Colonie, Town of New Scotland, Town of Coeymans and a portion of the City of Cohoes. The table below shows that approximately 24,574 acres are included in District #3 with over 15,000 acres in farms and over 7,000 acres cropped (*Agriculture and Farmland Protection Plan, 2004*).

Within the Town of Bethlehem, there are over 4,680 acres enrolled in the Albany County Agricultural District #3. This represents approximately 15% of the Town's land area. (*Source: Cornell Cooperative Extension*)

Albany County Agricultural District #3 Statistics					
Agricultural District	# Acres in District	# Acres in farms	# Acres cropped	# Acres owned by farmers	# Acres rented by farmers
District #3	24,574	15,416	7,493	11,616	3,800

Source: Albany County Agricultural & Farmland Protection Plan, 2004.

Discussion of Future Needs

Albany County recently completed its *Agriculture and Farmland Protection Plan* (2004). The plan identifies the importance of agriculture in the county, the pressures impacting farming, and recommends strategies to protect farmland. A community with residential growth pressures, such as Bethlehem, has a higher risk of losing valuable agricultural land and losing a part of its rural character as well. Allowing property owners to gain a reasonable return on their investment as well as protecting working landscapes is a challenging balance that should be carefully considered as development pressures increase.

Infrastructure Capabilities

The capability of the town's infrastructure, such as sewer, water and transportation systems, to accommodate current development and to accommodate future development is a critical consideration. Improvements to existing infrastructure are constant and typically require significant financial resources. The addition of new or expansion of existing infrastructure requires public investment and can have dramatic impact on the character, function and safety of the town. Such expansion requires careful thought with regard to growth inducing impacts. The ***Infrastructure Capabilities Map*** illustrates the location of various types of infrastructure.

Water

According to the Town of Bethlehem Long-Range Water Supply Planning Study conducted in April 2003, the Town provides water to customers within Water District No. 1 from various sources and locations. Water District No. 1 serves approximately 90% of Bethlehem's population and 60% of its land area. This district also serves some areas in the Town of New Scotland.

The Town has three primary sources for its water supply. The first source is the New Salem Water Treatment Plant (WTP). The WTP draws water directly from the Vly Creek Reservoir. (The Vly Creek Reservoir is located in New Scotland.) Two groundwater wells in New Salem are connected directly to transmission mains downstream of the WTP. The New Salem WTP is a residential and commercial system. The second source is the Clapper Road Water Treatment Plant. This plant draws groundwater from an aquifer in the Schermerhorn Island area near Selkirk. The Clapper Road Plat is an industrial system. The third source is wholesale purchase from the City of Albany. The Town has a permit (signed in 1980) to take a maximum of 2 mgd from the City of Albany and an additional contract that allows for the withdrawal of 0.6 mgd for supplemental water. This additional supply supplements the Vly Creek Reservoir and New Salem Groundwater well supplies. The current contract with Albany for 0.6 mgd expires in 2007. A new proposal for 2 mgd was sent to Albany in 2001. At the time of the study, there has been no response from the City of Albany.

To cooperate in a more regional approach to water supply and strengthen the water distribution system, an emergency interconnect exists with the Town of Guilderland's water supply system in North Bethlehem (near Fleigel Avenue). This interconnect can deliver 1 mgd (million gallons per day). The Town's existing water supply permit authorizes the Town to withdraw up to that amount for emergency uses.

The available supply for the Vly Creek Reservoir and New Salem groundwater wells is 3.4 mgd combined, while the available supply from the Albany wholesale purchase is 0.2 mgd. Therefore, the total supply available for the residential and commercial system is 3.6 mgd. It is assumed within the water study that the Clapper Road WTP will adequately meet the future demands for the industrial system.

Current average day demands for the entire system is 6 mgd. This includes 3 mgd for the residential and commercial system and 3 mgd for the industrial system. Projected average day demand through the year 2030 is 5.7 mgd (5 mgd for residential and commercial system and 0.5 mgd for industrial use on the residential and commercial system). This projected demand is based on population projections developed within the water study. Alternatives to define new supply options are outlined within the following discussion of needs. Currently, the Town is contracting with the City of Albany to purchase water to meet supply needs to the year 2030.

Sewer

The Town of Bethlehem has an extensive sewer system. As illustrated on the ***Infrastructure Capabilities Map***, the sewer primarily serves the northern portion of the town with a line along the Vloman Kill that extends south to serve the hamlet of Selkirk. In addition, two wastewater treatment plants exist within the town. One is located in the Elsmere area and the second is located in the southern portion of Bethlehem near Cedar Hill. The location of sewer can dramatically impact the land use in a community. The growth inducing impacts of extending sewer, as well as water, services should be taken into consideration.

According to the Chief Wastewater Treatment Plant Operator at the Town of Bethlehem Department of Public Works, the capacity of the wastewater treatment plant is 6 million gallons per day (mgd). Average

flow for 2003 was 4.8 million gallons per day (MGD), which is below the current capacity. Average flow for the first six months of 2004 was 4.4 MGD. The addition of primary classification and added aeration capacity flow rating could increase treatment plant capacity to 8.0 MGD or higher.

Sludge production was 3.6 million gallons (MG) in 2003 and 1.95 MG for the first six months in 2004. Bio-oxygen demand (BOD) loading for 2003 was 4,100 pounds per day. During the first six months of 2004, BOD loading was 3,800 pounds per day.

A brief calculation has been made to determine if the current excess capacity of the wastewater treatment plant could accommodate the projected population growth in the year 2030. Using an average of 100 gallons per person per day, the 2000 Bethlehem population used approximately 3.13 million gallons per day (mgd). In comparison, the 2030 projected population would theoretically use 3.75 mgd. This equates into a 0.62 mgd increase in usage in the year 2030. The current 1.2 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 many are likely using individual septic systems and are not part of the public system.

Solid Waste

The Town of Bethlehem currently has a compost facility located on Feura Bush Road in Selkirk where yard waste is composted. A permit is required for town residents. This is a drop off facility, however, the Highway Department also picks up yard waste if properly prepared. The compost facility is open in the early spring until late fall.

The Highway Department also operates a Transfer Station and Construction and Demolition Landfill on Rupert Road. The transfer station and landfill are open all year, except on holidays. This facility is for town residents only and minimal rates are charged based on materials disposed. The location of these facilities is shown on the ***Infrastructure Capabilities Map***.

Discussion of Future Infrastructure Needs

While specific needs exist for both sewer and water infrastructure, it should be recognized that maintenance and repair of existing infrastructure is continuous. The community must consider the costs of on-going maintenance of existing facilities as well as the need for additional facilities.

Water Needs

In April of 2003, the Town and consultants O'Brien and Gere Engineers, Inc. completed the Town of Bethlehem *Long-Range Water Supply Planning Study* to identify existing conditions and projected need for water. In the study, average day demands for water by commercial and residential uses are projected based on population growth and existing capacities.

The Town will have a water supply deficit according to the projections found in the Water Study. The Study identifies twelve alternatives to address this projected water supply deficit. Each alternative is reviewed in detail regarding its potential effectiveness to meet needs, vulnerability of water quality,

potential environmental impacts, and cost. Of the twelve alternatives, five are viewed favorably according to the criteria set forth. Those alternatives include:

- Construct Stage IV and Raise Dike and Dam at Vly Creek Reservoir
- Purchase Finished Water from Albany
- Purchase Raw Water from Watervliet Reservoir
- Purchase Raw Water from Watervliet Reservoir (No intake or pumping station)
- Withdraw Water from the Mohawk River

Uncertainty associated with costs and future water agreements between the Town and other municipalities makes the selection of one alternative over another a difficult decision. However, the Water Study provides useful information that the Town can utilize to make an informed decision regarding future water supply. The complete Water Study is available for review at the Town Hall.

Sewer Needs

Bethlehem Tomorrow research indicates that the average use per person is 75-100 gallons per day. The Town's 2003 use of the wastewater treatment plant is below the current capacity by an excess of 1.2 mgd. Therefore, the need for additional capacity to accommodate immediate growth would be fulfilled by the existing treatment plant. The self-sufficient system also has the capabilities to be expanded to provide 8 mgd treatment capacity, if more capacity is needed over the longer-term. However, if rapid growth is anticipated the current treatment plant may need additional capacity. Again, a detailed engineering study would be needed to determine capacity.

While some areas of the community are served by public sewer, many areas use individual septic systems. When maintained properly and sited on the appropriate soils, these systems can function well. However, septic system failure is always a concern. Given the soil conditions throughout much of the community, Bethlehem may be prone to more system failures than other areas that have soils more suitable for septic systems. The failure of septic systems can cause environmental and human health problems. Septic system failure is especially common among older systems that have not been well maintained.

According to the Albany County Department of Health, there are two primary areas of concern in Bethlehem regarding failing septic systems – the Halter Road area in Glenmont and the Upper Parker Road area in Cedar Hill. The process for identifying problematic septic systems is dependent upon complaints received by the County. Typically, a neighbor will contact the County if there is an unusual odor or if sewage is visible. The County then evaluates the complaint and conducts a perk test. If a problem is found, the property owner is notified and must correct the problem within a given time period. The time frame for addressing the complaint is dependent on whether or not there is a minor health concern or an imminent health concern. There may be funding available to assist a property owner in correcting the problem.

Infrastructure Capabilities Map

Transportation Network

The charge to transportation planners in the preparation of a comprehensive plan and associated zoning and subdivision regulations is not to develop a full transportation plan, but to assure that transportation issues are analyzed and receive appropriate consideration in land use, and zoning and subdivision regulation decisions.

Existing Conditions

There have been several studies addressing transportation issues in the Town of Bethlehem in recent years, including Route 9W; the connection of the Slingerlands Bypass and Cherry Avenue Extension; and truck traffic on NYS Route 396 through the Hamlet of Selkirk and NYS Thruway Exit 22, among others. The most extensive was a Traffic Planning Strategy developed by CDTC in 1994 in cooperation with the Land Use Management Advisory Committee (LUMAC) study. The Strategy examined several scenarios for future town growth; simulated traffic generation and road use; evaluated capacity and congestion problems, and made recommendations for new roadways and improvements to existing roadways. While this was an intensive effort, it is recognized that this study is somewhat dated and any additional study should reflect the passage of time and new, emerging transportation issues.

The transportation considerations impacting land use planning decisions can be divided into two categories that may be thought of as external and internal. The former involve those that affect the delineation of town areas that are recommended for open space preservation, community stabilization, and development or redevelopment for residential, commercial, industrial or public use. They require consideration of different sub-area needs for connections to the entire town and region and the impact of different land uses on these connections. The latter is concerned with the layout of through and local transportation service within the different areas, and zoning and subdivision regulations that impact development as it occurs.

The ability of existing routes to accommodate future demand and the feasibility of new and improvements to existing routes should bear on the land use decisions. Planning for future town land use must consider, among other factors, the different needs for access and service of different types of land use. It must then evaluate the capacity of town and regional routes serving the different areas to provide those connections and service. This involves an assessment of major town routes, their capacity and existing and projected use. It also involves a generalized estimate of the transportation impact of land use alternatives. In addition to traffic capacity, connections to truck and transit routes, and bicycle / pedestrian networks will need to be evaluated.

In 1994, the Capital District Transportation Committee (CDTC) developed a *Traffic Planning Strategy* for Bethlehem. This *Traffic Strategy* was associated with the Town's Land Use Management Advisory Committee (LUMAC) study. The *Traffic Strategy* made forecasts of traffic volume based on three scenarios of Town growth: low, moderate and high population growth. The 2000 population forecasts ranged from a low of 31,818 to a high of 34,250. In fact, US Census results for 2000 showed 31,304 persons, less than that in the low forecast. This is reflected in traffic growth closer to the low estimates of

the 1994 CDTC Traffic Planning Strategy than to the high estimates. The lower than estimated population growth allows the town time to plan for future increases in population and necessary services, including transportation infrastructure.

Basic Travel Patterns

As in most communities, automobiles are the primary mode of transportation in the Town of Bethlehem and the Town of Bethlehem Highway Department maintains over 160 miles of streets and highways. Commuter traffic from the residential areas in the Town generally heads north toward Albany in the morning and returns home at night. As a result, the major routes, NYS Route 85, US Route 9W, and NYS Route 443 (Delaware Avenue), into Albany are becoming more and more problematic as traffic volumes increase and roadway widths and signals remain the same. It is important also to locate and address individual intersections that may be adding to the traffic congestion on these highly traveled routes. With the congestion on these major roadways, overspill of traffic onto local neighborhood streets is causing land use- traffic conflicts.

Transportation Corridor Congestion

NYS Route 85 carries extremely high volumes between the Albany City Line and the intersections with Blessing Road and New Scotland Avenue especially during P.M. peak hour. Compounding the fact that the traffic volumes exceed mainline capacity, the intersection of NYS Route 85 and New Scotland Avenue currently operates at a level of service (LOS) E during P.M. peak hour and the A.M peak hour at the intersection of New Scotland Avenue and Cherry Avenue Extension operates at a level of service LOS E. Level of service (LOS) is a measure of traffic flow. A LOS A is free flowing, while a LOS F is severely congested. This further illustrates the traffic problems generated by commuters to and from Albany.

US Route 9W is an integral part of the transportation system for the Town of Bethlehem. In addition to the obvious volume of vehicles that utilize this roadway, other issues exist that compound this problem. Awkward roadway design near the Delmar Bypass causes problems with the horizontal and vertical alignments. Vehicles traveling northbound must exit to the west onto Delmar Bypass creating a confusing traffic pattern that is difficult for vehicular and pedestrian traffic to negotiate. Volume on Route 9W is approaching capacity, especially during peak hour volumes between Delmar Bypass and Feura Bush Road. With an approximate AADT of 15,000 vehicles, the reserve capacity on Route 9W between Feura Bush and Wemple Road is becoming an issue. Between these two areas of concern lies the intersection of Feura Bush Road, Glenmont Road, and Route 9W. The southbound Route 9W approach to the intersection operates at LOS E during the P.M. peak hour and more importantly the overall reserve capacity at this intersection is nearly depleted. Recent improvements to accommodate the Bethlehem Center area (the Wal-Mart shopping plaza) may alleviate immediate problems on Route 9W at that location.

Elm Avenue and Cherry Avenue have considerable traffic and residential land use conflicts most understandably because of their close proximity to NYS Route 443 (Delaware Avenue), which is one of

the main routes into and out of Albany. The intersection of Elm Avenue and Cherry Avenue with Delaware Avenue (NYS Route 443) operates at a level of service E northbound at Elm Avenue.

Traffic and land use conflicts are present on Delaware Avenue from Rockefeller Road to Elsmere Avenue. Close proximity to Albany and traffic volumes compound the impact of the conflicts along Delaware Avenue.

Intersection Congestion

The intersections of Blessing Road, Schoolhouse Road and Russell Road with Krumkill Road present an awkward geometry that is causing the level of service to fall below acceptable standards. The P.M. peak hour traffic delays northbound on Blessing Road approaching Krumkill Road and southbound on Schoolhouse Road approaching Krumkill Road are reaching unacceptable levels.

The Kenwood Avenue and New Scotland Road intersection operates at a level of service F in P.M. peak hour on Kenwood Avenue approach. The intersection, which is in a residential and commercial neighborhood, has poor geometry and no pedestrian signal.

NYS Route 335 (Elsmere Avenue) is a major connector to NYS Route 443 (Delaware Avenue) and the Delmar Bypass. NYS Route 335 suffers from inadequate left turn capacity (LOS F) during P.M. peak hour from the westbound approach on Delaware Avenue to the intersection with Elsmere Avenue. The intersection of Delaware Avenue and Delaware Plaza also operates at an inadequate level of service.

The intersection of New Scotland Road and Route 85 is a major source of congestion. The planned extension of Route 85 to meet Cherry Ave Extension at the Price Chopper plaza should eliminate this problem. However, the layout of the new junction and the access provided to the plaza will affect the future functionality of the intersection of Cherry Ave Extension and Route 85.

Bicycle and Pedestrian Networks

The Town Highway Department maintains 32 miles of sidewalks throughout the Town. Currently sidewalks are provided along older neighborhood streets such as those in Elsmere and Delmar. Sidewalks provide connectivity to activity locations within the neighborhoods along Delaware Avenue and Kenwood Avenue, New Scotland Road in Slingerlands and NYS Route 396 in Selkirk. Meanwhile other important activity centers such as Elm Avenue Park, North Bethlehem Park, the South Bethlehem Park, commercial areas, and areas near schools lack sidewalk connections to local neighborhoods. Regarding bicycle facilities, there are no officially designated routes at this time in the form of either on-street bike lanes or separate biking trails. However, routes are planned along Fisher Boulevard, Elm Avenue, Delmar Bypass Extension and Van Dyke Road.

Transit Service

Four bus routes, operated by the Capital District Transportation Authority (CDTA) currently serve Bethlehem and provide transportation to and from Albany. These routes service approximately 160 bus stops and 2 park-and-ride facilities. One park-and-ride facility is located at Delaware Plaza and the second

is located at the intersection of Elm Avenue and Route 32. The bus routes follow NYS Route 85, New Scotland Avenue, Delaware Avenue, and the Delmar Bypass into Albany. Adirondack Trailways also operates peak hour service along Route US Route 9W. However, only about 3.5% of the Town's workforce commutes to work by bus.

In 2004 and 2005, CDTA will be developing a new Regional Transit Development Plan. A major planning effort will be conducted to reassess and reorganize its public transit services for the purposes of:

- o Increasing ridership;
- o Aligning service provision with service demand, with attention to new markets;
- o Providing input into our upcoming (2007-2011) fleet replacement in terms of quantity and type of required vehicles;
- o Improving efficiency and effectiveness of operations; and
- o Establishing service design guidelines and performance monitoring mechanisms to allow for future service improvements.

Truck Traffic

There is an excessive amount of truck traffic on Route 396 in Selkirk. There are no alternate truck routes in Southern Bethlehem that could substitute for Route 396. There is a conflict between the residential land uses in the area and the presence of truck traffic.

A solution to the truck traffic problem located on Route 396 is needed and has been discussed at length within the town and the Department of Transportation. Numerous alternatives have been considered for moving traffic away from the center of Selkirk. Generally, these alternatives involve routing trucks to Exit 22 either north or south of the hamlet on the west side of the thruway *or* over the NYS Thruway to Route 144 with or without a new interchanges on the Thruway between Exits 22 and 23.

Projects in the Pipeline

The Capital District Transportation Council's 2003-2008 Transportation Improvement Program (TIP) has scheduled several Bethlehem projects. The first phase of the Slingerlands Bypass, which included a left turn lane and signal upgrade at Blessing Road is complete. Design of Phase 2 of the Slingerlands Bypass is underway and involves extending Route 85 to Cherry Avenue. Design of Phase 3 is also underway for the Slingerlands bypass and consists of widening to four lanes from Albany City line to Blessing Road. There are plans for Delaware Avenue as well as Kenwood Avenue reconstruction. The CR 53 Bridge over the CSX railroad yard is on the books as well as plans for sidewalks to be placed in south Bethlehem.

Other projects that have been completed are the repaving Delmar Bypass and reconstruction of Cherry Avenue and Elm Avenue. Although these projects are a step in the right direction for the overall improvement of the traffic congestion in the Town of Bethlehem, these projects alone do not alleviate the ever-growing traffic problems.

Discussion of Transportation Needs and Solutions

A number of proposals were made in the CDTC Traffic Planning Strategy. Developing a new alignment that connects the Delmar Bypass from Van Dyke, goes through the intersection at Delaware Avenue (NYS Route 443) and continues to Fisher Boulevard would serve to alleviate some of the congestion problems at the intersection of Elm Avenue and Cherry Avenue with Delaware Avenue. This new alignment would provide needed improvements to Fisher Boulevard for the upgrade and improvement of substandard road width and alignment issues.

Another important concept that has been discussed involves moving Exit 22 of I-87 to a new alignment off Clapper Road. This new interchange and alignment could serve several purposes. First, I-87 would be more accessible and traffic might be encouraged to utilize I-87 on a more frequent basis. Second, it would alleviate truck traffic in southern Bethlehem by providing an alternative route to the Selkirk rail yards. Lastly, the new interchange might lessen the congestion at the northern end of Route 9W in the Town of Bethlehem.

The establishment of a walking and biking network, connecting the many Town recreational facilities to neighborhoods should be considered as new development occurs. Opportunities may exist to work with willing landowners to slowing gain ownership or access to property that can fit into a larger community-wide system. This would reduce vehicular dependence and also serve to reduce local traffic.

In addition, enhancing mass transit options throughout the Town should always be considered. Providing alternatives for the commute from Bethlehem to the City of Albany should be considered.

Economic Development Context

Regional Perspective

The Town of Bethlehem in Albany County is part of the broader Capital District Region. The Capital District includes Albany County, Rensselaer County, Saratoga County and Schenectady County. Situated at the confluence of the Hudson River and Mohawk River, the Capital District contains the New York State Capital, and with only 4.3% of the State's population, it has 21.7% of the State government jobs. Capital District residents fill the majority of these jobs. (*Comprehensive Economic Development Strategy for the Capital District – Vol. 2, Capital District Regional Planning Commission, October 2000.*)

Excellent transportation linkages exist in the Capital District including interstate highways, county and local roads, a public bus transit system, commercial and passenger rail, Albany International Airport, and the Port of Albany. These transportation networks link the Region to important metropolitan centers in the United States and Canada.

In addition to transportation networks, the Region's workforce is well educated and flexible. These characteristics are important as the regional, national and global economies are being redefined. The Capital District for example has historically been an economy reliant on heavy manufacturing industries and is currently witnessing a shift to lighter, more high-tech industries. Educational institutions in the Region, such as the University at Albany and the Rensselaer Polytechnic Institute (RPI), are providing necessary educational and research services that will assist the Region in positioning itself for a changing economy. In addition, cooperation among regional organizations, such as the Center for Economic Growth, the Capital District Transportation Committee (CDTC) – the Region's Metropolitan Planning Organization, the Capital District Regional Planning Commission (CDRPC), Empire State Development Corporation, for example, will continue to be important.

The Capital District is also part of a larger Tech Valley Chamber Coalition, which includes 17 chambers of commerce representing 18 counties in the Hudson Valley. The Chamber Coalition represents 18,000 businesses and organizations employing nearly 400,000 (*Bethlehem Industrial Development Agency Economic Development Forum II, October 2003*). The Chamber Coalition is working to position the Tech Valley as a receptor for new industries.

Local Perspective

The Bethlehem Industrial Development Agency and Chamber of Commerce are strong organizations that seek to highlight the Town of Bethlehem as a quality community that has the capacity to support both local and regional economic development. Bethlehem's highly educated population and convenient access to rail lines and the interstate create a welcoming environment for economic development. With an increasing population and increasing pressures on public services including school districts, economic development is needed to assist in relieving the tax burden placed on Bethlehem residents.

According to the 2000 Census, over 55% of those persons in the Town age 16 and over have occupations in management or some variety of professional-level work. This represents the occupation with the highest percentage of those in the workforce and is consistent with the high educational attainment of Bethlehem residents. Sales and office occupations have the second largest percent of persons with 24%. The farming, fishing and forestry occupations have the smallest percentage of persons in the workforce with 0.1%. The following chart illustrates the breakdown of the workforce by occupation.

<i>Bethlehem's Workforce By Occupation in the Year 2000</i>		
Occupation Type	Number of Persons (Age 16 and over)	Percent of Persons (Age 16 and over)
Management & Professional	8,666	55.3%
Sales & Office	3,813	24.3%
Service	1,553	9.9%
Production & Transportation	909	5.8%
Construction, extraction & Maintenance	704	4.5%
Farming, Fishing, & Forestry	17	0.1%

Source: U.S. Census

Town staff provided an inventory of known vacant and underutilized commercial buildings in the town. While few in number, the redevelopment of these sites would have a positive impact on the surrounding neighborhoods. The following table lists the location of the sites.

<i>Vacant and Underutilized Buildings* (as of November 2004)</i>			
Location	Lot Size	Available Square Footage	Comments / Description
376 Feura Bush Road	12.91 acres	166,073	Ames/Grand Union Plaza
20 Booth Road	No Data	1,470	Commercial house with office/retail
25 Delaware Avenue	420 x 304	5,400	Office with T-1 line
244 Delaware Avenue	80 x 153	2,400	Apartments, business
266 Delaware Avenue	0.65 acres	1,300	Office
785 Delaware Avenue	1.90 acres	3,700	Office
1251 New Scotland Rd.	13.0 acres	78,000	Former Blue Cross Building, Office
3 Normanskill Drive	2.00 acres	2,500	Office
345-347 Route 9W	1.14 acres	7,972	Business, Retail, Office
353 Route 9W	1.54 acres	2,044	Business, Restaurant, Office, Retail
158 West Yard Road	34.0 acres	354,000	Industrial, Former Daisytek Building
218 West Yard Road	20.65 acres	450,000	Industrial, Warehouse
345 Krumkill Road	9.21 acres	6,536	Other
105 South Albany Road	1.30 acres	9,500	Industrial, Warehouse
46 Bridge Street	3.20 acres	4,660	Office, Warehouse

*This information was compiled by Town of Bethlehem staff in November 2004 for the purposes of this analysis.

According to the Bethlehem Chamber of Commerce, the largest employers in the town include GE Plastics, the Bethlehem School District, Owens Corning, and Farm Family Insurance Company. In addition, Wal-mart, Lowe's and the Price Chopper's are large employers in the town as well. Professional Insurance Agents (PIA) and PSEG are also notable employers.

The recent trend in employment growth in Bethlehem has been in the retail sector. This can be attributed to the Wal-mart and Lowe's stores, as well as new restaurants such as Applebee's and Chili's.

Opportunities for employment in the town should be focused on retaining young residents. Attracting technology jobs, such as nano-technology operations, is the regional trend in attempting to retain the younger demographic.

Discussion of Future Needs

With many communities in the Capital District and larger Tech Valley region each seeking economic development, Bethlehem will need to distinguish itself as a business-friendly place if it wishes to encourage economic development. This could be accomplished in many ways, including working toward a more clear development process, identifying potential locations to site various types of economic development and continuing to create a labor force that can support a variety of occupations.

In addition, an emerging regional concern is that the region's educated young people are moving out of the region. Creating jobs that might keep the younger generation in the region is of great importance to the future of the region, and Bethlehem as well.

Communities, such as the Town of Bethlehem, can enhance the region's high technology initiatives by focusing on livability and quality of life. The trend for this type of development is to employ those considered part of the "creative class." Engineers, scientists, designers, and artists are considered a part of the creative class. This emerging creative class is demanding a higher quality of life in the communities within which they live. A higher quality of life includes convenient services; cultural and entertainment opportunities; easy access by car, foot or bike; and unique residential living.

Fiscal Conditions

Current Fiscal Environment

As the table below illustrates, the Town of Bethlehem property tax rates are lower than the City of Albany, higher than the Town of Guilderland, and on par with rates in the Town of New Scotland. The information shown is based on tax rate per \$1,000 assessed valuation for the fiscal year 2002 and was provided by the New York State Office of Real Property Services. As indicated in the table, the school district taxes are by far the largest component of the overall property tax rate.

<i>Overall Property Tax Rates for Selected Municipalities* – Fiscal Year 2002</i>							
Municipality	County	Town	City	School District Range	Total Overall Range	Equalization Rate	Total Full Range
Bethlehem	2.38	1.97	-----	17.82-23.85	22.17-28.20	1.0629	23.56-29.97
Albany (City)	2.61	-----	11.57	22.71	36.89	.9518	35.11
Guilderland	2.59	1.67	-----	18.62-22.11	22.88-26.37	.9591	21.94-25.29
New Scotland	2.62	1.36	-----	18.81-26.41	22.79-30.39	.9598	21.86-29.16

*Tax rates per \$1,000 assessed valuation. Source: NYSORPS, www.orps.state.ny.us

The following chart shows the Town's Municipal Expenditures for the 2002 Budget by category. The Fiscal Year 2002 was used as the baseline year in order to maintain consistency with data obtained from the New York State Office of the Comptroller. In 2002, the total expenditures were \$26,942,900. This total includes \$2,525,700 in annual debt service. The two largest categories of the municipal budget are utilities and transportation. Utilities typically include water and sewer maintenance and transportation typically includes road maintenance and related activities.

Municipal Budget Expenditure Categories FY 2002	Amount \$		
	Current Operating 2002	Equipment & Capital Outlay 2002	Total
General Government	\$ 2,900,700	\$ 432,900	\$ 3,333,600
Police	\$ 3,645,200	\$ 182,000	\$ 3,827,200
Fire	\$ 22,500	\$ -	\$ 22,500
Other Public Safety	\$ 1,332,500	\$ 19,900	\$ 1,352,400
Health	\$ 665,700	\$ -	\$ 665,700
Transportation	\$ 4,569,800	\$ 273,500	\$ 4,843,300
Economic Assistance	\$ 290,400	\$ 8,100	\$ 298,500
Culture-Recreation	\$ 1,211,100	\$ 101,400	\$ 1,312,500
Home and Community Services			
Utilities	\$ 6,892,600	\$ 675,500	\$ 7,568,100
Other	\$ 1,172,500	\$ 20,900	\$ 1,193,400
Total Expenditures	\$ 22,703,000	\$ 1,714,200	\$ 24,417,200
Annual Debt Service			\$ 2,525,700
Total Expenditures & Debt Service 2002			\$ 26,942,900

A comparison of the costs and revenues of residential and non-residential development within Bethlehem shows that residential development accounts for approximately 71% of the total share of costs and revenues, while non-residential development accounts for 29% of the share. Of the residential share, the majority of the costs and revenues (64%) are generated from single family residential development.

A look at the net fiscal impact of residential and non-residential development indicates that both forms of development have a positive net fiscal impact on the Town. The tables below illustrate the net fiscal impact of residential development by type of residential development such as single family or two-family. The non-residential fiscal impact is shown according to type of non-residential development such as agricultural or industrial. It is important to understand that this section examines only fiscal impacts and does not consider impacts on quality of life, transportation systems, the environment, etcetera. The greatest positive net fiscal impacts for residential development are produced by commercial living accommodations, seasonal homes, and two-and three-family dwellings. Industrial uses, vacant and commercial uses provide the greatest net fiscal impacts for non-residential development.

Net Fiscal Impact Per Acre of Residential Development

	Single Family	Two-Family	Three-Family	Rural Res.	Estate	Seasonal	Mobile Home	Multiple Res.	Commercial Living Accom.
Total Revenues Produced	\$9,547	\$106,949	\$104,689	\$4,663	\$5,369	\$191,303	\$40,393	\$35,117	\$472,850
Total Costs Produced	\$2,889	\$1,507	\$1,411	\$55	\$43	\$2,758	\$458	\$458	\$4,423
Net Fiscal Impact (per acre)	\$6,657	\$105,443	\$103,277	\$4,608	\$5,325	\$188,545	\$39,935	\$34,659	\$468,427

Net Fiscal Impact Per Acre of Non-Residential Development

	Ag	Vacant	Commercial	Recreation	Community Svc	Industrial	Public Svc	Park, Forest
Total Revenues Produced	\$5,249	\$6,226	\$250,690	\$12,161	\$133,174	\$173,612	\$145,542	\$56,422
Total Costs Produced	\$31	\$325	\$2,040	\$101	\$835	\$558	\$878	\$412
Net Fiscal Impact (per acre)	\$5,218	\$5,901	\$103,277	\$12,059	\$132,338	\$173,054	\$144,664	\$56,010

A comparison of the tax base composition by land use category related to neighboring suburban communities was conducted. The following chart shows the parcel count by broad use category according to the New York State Office of Real Property Services (NYSORPS) 2003 annual assessment rolls. As illustrated by the chart, the majority of assessed parcels in all of the neighboring suburban communities are residential properties. In fact, in the Town of Guilderland over 82% of the total parcels are residential properties. The Town of Colonie and Town of Bethlehem each had a high percentage of residential parcels in 2003 as well with 80.5% and 78.6%, respectively. Commercial and industrial properties made up a relatively small percent of the total parcel count.

2003 Parcel Count by Broad Use Category for Neighboring Suburban Communities						
Municipality	Residential Properties		Commercial Properties		Industrial Properties	
	Parcel Count	Percent of Total Parcels	Parcel Count	Percent of Total Parcels	Parcel Count	Percent of Total Parcels
Town of Bethlehem	10,157	78.6%	605	4.7%	29	0.2%
Town of Coeymans	2,065	68.3%	160	5.3%	21	0.7%
Town of Colonie	24,790	80.5%	1,884	6.1%	42	0.1%
Town of Guilderland	9,936	82.1%	415	3.4%	4	0.0%
Town of New Scotland	2,970	71.9%	135	3.3%	3	0.1%

**NYSORPS Municipal Profile - 2003 Annual Assessment Rolls*

This tax base composition is not uncommon in municipalities across New York State, especially suburban communities. In most suburban communities, people tend to work in one community and live in another. This is the reason why many suburban communities are called “bedroom communities.” In Bethlehem, this has resulted in a significant concentration of residential development. Residential land use is a significant consumer of public services. As more residential development occurs, more services are needed and the result is often higher taxes for residents. A more balanced and diversified tax base in communities such as Bethlehem, would likely alleviate the pressures of rising taxes.

The top 14 largest taxpayers in the Town for 2004 are identified in the chart below. The chart also indicates which school district the taxpayers in located within. It is interesting to note that 7 of the top 14 are located solely within the Bethlehem Central School District, 4 are located only within the Ravena-Coeymans-Selkirk District, and the remaining 3 are located in multiple school districts. These 14 taxpayers account for approximately 18% of the Town’s total assessed value.

Rank	Name	School District
1	Selkirk Cogen Properties, L.P.	Bethlehem
2	PSEG	Bethlehem
3	Niagara Mohawk Power Corp. Public Utility	Bethlehem/Ravena-Coeymans-Selkirk/Guilderland
4	CSX Transportation, Inc.	Bethlehem/Ravena-Coeymans-Selkirk
5	General Electric Plastics Manufacturing	Ravena-Coeymans-Selkirk
6	Albany Water Board Water Utility	Bethlehem/Ravena-Coeymans-Selkirk
7	Owens Corning Fiberglass Corp.	Ravena-Coeymans-Selkirk
8	Bethlehem Associates LLC (Wal-Mart)	Bethlehem
9	New York Realty Partners (Warehousing/Distribution)	Ravena-Coeymans-Selkirk
10	Windsor Associates (Price Chopper, etc.)	Bethlehem
11	Delaware Plaza Associates (shopping plaza)	Bethlehem
12	Lowe’s Home Centers, Inc.	Bethlehem
13	CSFB 1998 C1 Feura Bush Road LLC	Bethlehem
14	Warehouse Services, Inc.	Ravena-Coeymans-Selkirk

Source: M.David Leaffer, Town of Bethlehem Assessor, 2004.

Discussion of Future Needs

This discussion provides a snapshot in time of the Town's fiscal setting and highlights the net fiscal impact of various types of residential and non-residential development. Residential development within the Town represents a significant share of the costs and revenues for the municipal budget. The Town should take into account its fiscal setting as it considers the future vision for the community. Should the Town continue with the current distribution of costs and revenues, leaning heavily on residential development, or try to achieve a balance? To ensure future sustainability, the Town might consider achieving a better balance of municipal costs and revenues between residential and non-residential development. In addition to fiscal impacts, impacts on land use, community character, transportation systems and other factors should be considered. The model utilized to examine the fiscal setting is included at the end of this document.

Recreational and Cultural Resources

Parks

The Town of Bethlehem Parks and Recreation Department maintains and operates a series of parks and facilities. These facilities further enhance the quality of life in the community and provide opportunities for both passive and active recreation. Bethlehem has approximately 327 acres of public parks and recreation facilities.

In addition to town-owned properties, there are additional facilities located within the town including the Five Rivers State Environmental Education Center and the privately operated Bethlehem Soccerplex. The Five Rivers is located primarily outside of Bethlehem's town boundary in the Town



of New Scotland, but a segment is within the Town. Also, a newly acquired property located on Elm Avenue will soon be developed into a Town-owned public park. This will likely be a neighborhood park with playground facilities. In addition, the Town owns passive recreation land north of the Job Corps Facility off of River Road. The ***Recreational and Cultural Resources Map*** illustrates the location of state, town and private facilities.

Existing Town-Owned Parks				
Recreational Facility	Location	Number of Acres	Number of Visitors (In 2003)	Description
Elm Avenue Park	Elm Avenue, south of Delmar by-pass	221.5	177,920 (400 dog park permits issued)	Town's largest park includes pool, tennis, basketball, pavilions, fitness trail, fields, volleyball, shuffleboard, dog park (1.3 acres), and playground.
Henry Hudson Park	Route 144, Cedar Hill	63.35	21,675	Located along the Hudson River waterfront. Includes pavilion, boat launch, fishing area, picnic area, gazebo, softball field, playground, horseshoes and volleyball court.
North Bethlehem Park	Russell Road, near North Bethlehem Fire House	22.7	7,490	Includes picnic area, playground and basketball court.
South Bethlehem Park	South Albany Road at Wylie Lane	10.84	4,477	Includes picnic area, softball field, playground, basketball court and volleyball court.
Selkirk Park	Thatcher Street on Houk Drive	4.1	6,450	Includes playground, basketball court, tennis court and softball field.
Bethlehem Memorial Firefighters Park	New Scotland Road, Adjacent to Slingerlands Fire House	4.14	2,000	Pocket park.

Source: Town of Bethlehem Parks and Recreation Department 2003 Annual Report; Town of Bethlehem Assessor's Office; and www.townofbethlehem.org

Trails

While many unofficial biking and hiking trails likely exist in the community, there are few official trails and trails that are properly maintained. A fitness trail does exist within Elm Avenue Park. It should be noted that many unofficial trails exist on private property and trespass is an increasing concern throughout much of the Town. The significant number of unofficial trails may indicate a demand for bicycle and pedestrian connections. Also, steps have been taken to clearly identify bike lanes and bike routes on several roadways through pavement markings and signage.

The Hudson River Valley Greenway is currently examining trails located within its greenway communities. The Town of Bethlehem is a greenway community and as such, several potential trails are identified in the *Draft Hudson River Valley Greenway Trail Vision Plan*. While still in its draft stage, the Vision Plan strives to create links to communities throughout the region and the Hudson River corridor. The following map also illustrates potential trail connections.

Recreational and Cultural Resources Map

Historic Resources

The Town of Bethlehem is rich in historic resources. Incorporated in 1793, several properties in the Town still strongly reflect their heritage. Ten sites are listed on the National Register of Historic Places and dozens more are eligible. In 1996, a *Reconnaissance Level Survey of the Town of Bethlehem* was completed by Emily McGrath as a Senior Thesis project with guidance from the New York State Historic Preservation Field Services Bureau. This survey identifies listed National Register Sites, properties or districts that are eligible for listing, properties that appear to meet eligibility criteria and properties that may be deemed eligible upon further investigation. Recommendations for the protection of these resources are also described. Recommendations include an intensive level survey by the New York State Historic Preservation Field Services Bureau; submission of National Register nominations for specific properties; and the use of the reconnaissance level survey by the Planning Board in the land use planning process. It is important to protect the Town's heritage by recognizing its many historic resources.

The ten sites listed on the National Register of Historic Places are listed below and are also illustrated on the ***Recreation and Cultural Resources Map***.

<i>National Register of Historic Places – Town of Bethlehem</i>			
Site Name	Address	Location	Year Listed on Register
Bethlehem House	Dinmore Road, Cedar Hill	Selkirk	1973
U.S. Post Office	357 Delaware Avenue	Delmar	1988
Slingerlands House	36 Bridge Street	Slingerlands	1997
Patterson Farmhouse	47 Murray Avenue	Delmar	1997
District School No. 1	Route 144, Cedar Hill	Selkirk	1998
VanDerHyden House	823 Delaware Avenue	Delmar	2001
Schoonmaker House	283 Beaver Dam Road	Selkirk	2001
Bethlehem Grange	24 Bridge Street, Beckers Corners	Selkirk	2002
First Dutch Reformed Church	Church Road	Selkirk	2003
Babcock House	101 Lasher Road, Beckers Corners	Selkirk	2003

Source: *Town of Bethlehem Town Historian*, www.townofbethlehem.org/historian.html.

A comparison of recreational standards, although not recommended by the National Recreation and Park Association (NRPA), can be useful in loosely identifying recreational needs in the community. The following table shows surpluses and deficits for Town-owned recreational facilities.

<i>Town of Bethlehem Operated Recreation Facilities - A Comparison to National Recreation Standards</i>					
Type of Activity/Area	Standard (acres/1000 persons)	Need based on Standards (acres)	Existing Facilities	Estimated acres of existing facilities	Surplus / Deficit (acres)
Playgrounds & mini-parks	1.5	46.9	Firefighters Memorial Park	4.14	- 42.76
Neighborhood & community parks	5.5	172.15	Elm Avenue Park; Henry Hudson Park	284.85	+ 112.7
Field Sports Activities & Court Sports	1.70	53.21	North Bethlehem Park, South Bethlehem Park, Selkirk Park	37.64	- 15.57
Indoor Recreation Center	1/10,000 persons	3 centers	-----	-----	- 3
Hiking, camping or nature study	10	313.63	-----	-----	- 313.63

***Source: 'Assessing Recreation Demand', Metropolitan Area Planning Council, Boston sourced from 'Standards for New Urban Development', Urban Land Institute.*

It should be noted again that the National Recreation and Park Association (NRPA) no longer recommends the use of these standards. Instead, the NRPA recommends the use of guidelines based on a Level of Service analysis for each community. These calculations were determined only to provide a general sense of recreational needs in the community. No action should be taken until a proper analysis of recreational needs is conducted. In addition, these calculations do not consider private recreation areas, such as the Bethlehem Soccerplex, nor do they consider sports fields and playgrounds at schools or other nearby facilities such as the Five Rivers State Environmental Education Center or lands owned by the Albany County Land Conservancy or the Audubon Society.

Discussion of Recreational Needs

The National Recreation and Park Association (NRPA) recommends guidelines for parks, recreation, open space and greenways. The guidelines are intended to assist a community in determining its parks and recreation needs based on the community's unique situation. Utilizing the Level of Service (LOS) approach, the NRPA suggests a formula that establishes the recreation facility supply and recreation facility demand within a community. The LOS formula is based on a series of factors such as the number of users per day per facility, participation frequency, type of user, facility demand, population service requirements, and other factors. The resulting detailed analysis can effectively identify the surplus and deficit of recreational facilities in the Town. The complete LOS approach is found in NRPA recommended *Park, Recreation, Open Space and Greenway Guidelines* by James Mertes and James Hall.

Given the level of analysis required to complete a full recreation LOS, this discussion will only review the recreational needs as identified by the Town of Bethlehem Parks and Recreation Department and anecdotally through public meetings. The Community Survey conducted as part of this process will also provide insight into the desires of the town residents. The Town will need to determine if a more in-depth analysis should be considered in the future.

Immediate parks and recreation needs are focused primarily on capital projects such as the repair of the bulkhead at Henry Hudson Park, replacement of the septic system at Elm Avenue Park and connection to public sewer, and roof repairs at the pool complex and maintenance facility. In addition to the parks and recreation budget, there is a recreation reserve account that is funded when surpluses exist in the general Town fund. Funding for the reserve account must be specifically requested.

Facilities that have been identified through conversations with the Department of Parks and Recreation and through public meetings as possible long-term additions include a public golf course, a community center, a performing arts shelter at Elm Avenue Park, another pavilion for group picnics, more neighborhood parks and playgrounds, a lap swimming pool, and a water playground at Elm Avenue Park. While many of the facilities on this “wish list” are cost prohibitive in the near future, many are important to the quality of life in Bethlehem. The addition of more neighborhood parks that are easily accessible by walking or biking and a community center, for example, are important. The Parks and Recreation Department recognizes that a new YMCA facility might fulfill some of the needs of a community center.

Additional trail facilities are also desired. The Town currently collects fees in lieu of land to help purchase property that could eventually be connected for trail purposes. Recently, property along the Dowers Kill Creek has been set aside for such purposes. This is a long-term solution to creating and preserving trail opportunities as development occurs.

Community Services

Community Services within the Town of Bethlehem primarily include school systems, fire and emergency services, libraries, post offices, and senior services. In addition, the Department of Parks and Recreation offers a variety of programs as a service to the community.

School Systems

Residential growth in a community can impact the educational system as an influx of school age children places increased pressures on existing systems. This pressure is often passed onto residents through increased taxes. When examining the growth within a community, the impact on schools must also be considered.

Three schools districts are found in the Town of Bethlehem: the Bethlehem Central School District, the Ravena-Coeymans-Selkirk Central School District, and a small portion of the Guilderland Central School District. Geographically, the Bethlehem and Ravena-Coeymans-Selkirk Districts encompass 49% and

47.6% of the town, respectively as illustrated on the following **Community Services Map**. The Guilderland District encompasses only 3.4% of the town in the north Bethlehem area.

According to the *New York State District Report Card*, the Bethlehem District had a 2002-2003 enrollment of 5,034. The Bethlehem District also encompasses the majority of the populous in the northern half of the town. In the southern part of Bethlehem, the Ravena-Coeymans-Selkirk District had a 2002-2003 enrollment of 2,328. The Guilderland District had a 2002-2003 enrollment of 5,667 pupils.

The following chart illustrates financial data for each school district. As a smaller district, Ravena-Coeymans-Selkirk has a significantly lower outstanding debt than the larger districts and also generates less in revenues. The Guilderland District has the largest enrollment and, subsequently, the district also had the largest amount of outstanding debt and generates the most revenues.

2002 School District Financial Data				
District		Indebtedness (Total Outstanding Debt)	Revenues (Total)	Expenditures (Total)
Guilderland	Central	45,050,400	65,676,561	65,697,942
School District				
Bethlehem	Central	29,710,808	55,306,430	57,584,258
School District				
Ravena-Coeymans-Selkirk	Central School District	14,298,250	32,481,508	36,552,140

Source: NYSORPS, www.orps.stat.ny.us/MuniPro/

Interestingly, the distribution of graduates differs as well. Information gathered shows the percent distribution of 2002-2003 graduates from each district according to their post-graduation activities. The Bethlehem District had the highest percentage of graduates attending a 4-year college with 77%. Fourteen percent attended a 2-year college. The Ravena-Coeymans-Selkirk District graduates were more evenly dispersed between a 4-year college (45%) and a 2-year college (33%). In addition, 14% of the Ravena-Coeymans-Selkirk District graduates moved directly to employment. The Guilderland District had nearly a quarter (24%) of its graduate attend a 2-year college. Sixty-seven percent of Guilderland's graduates attended a 4-year college.

Enrollment projections provided by each school district for the 2004-2005 school year indicate modest increases in student enrollment. Bethlehem Central School District (BCS), for example, projects 5,164 students for the 2004-2005 school year and 5,388 by the 2009-2010 school year. BCS typically uses a three, six and eight-year cohort survival method to project student enrollment. In the past, the three-year cohort survival rates have been more consistent with actual enrollment figures. The three-year rates are typically higher than the six and eight-year rates.

Community Services Map

The Ravena-Coeymans-Selkirk School District and the Guilderland School District do not currently have long-term projections. These districts are, however, looking into developing long-term projections. The chart below illustrates the projections for each district.

Projected School Enrollment Grades K-12						
District	School Year					
	04-05	05-06	06-07	07-08	08-09	09-10
Guilderland	5,714	NA	NA	NA	NA	NA
Bethlehem	5,164	5,235	5,293	5,314	5,356	5,388
Ravena-Coeymans-Selkirk	2,500	NA	NA	NA	NA	NA

Source:BCS Long-Range Planning Report, January 2004; Communication with RCS Communications Director July 2004;Communication with GCS Public Information Office July 2004.

Fire and Emergency Services

The Town of Bethlehem has many fire and emergency services prepared to assist. Many of these services are volunteer-driven. There are seven fire departments serving Bethlehem including the Delmar Fire Department, North Bethlehem Fire Department, Elsmere Fire Company A, Slingerlands Fire Department, Selkirk Fire District #1, Selkirk Fire Company #2 and South Bethlehem Fire Department. In addition, the Bethlehem Volunteer Ambulance Service and the Western Turnpike Rescue Squad also provide services.

Discussion of Community Service Needs

As the school-age population continues to grow, it is increasingly important for the Town and school district to address educational needs from a fiscal, facility and programmatic standpoint. In addition, as the baby boom population reaches retirement age and the senior population expands, the Town needs to address specific senior housing, service and access needs. The trend among seniors is the desire to stay in their home. Access to medical care, social activities and basic life needs (such as grocery stores and pharmacies) as well as housing affordability often make this difficult. This is a growing concern that requires careful attention.

The impact on fire, police and emergency services should also be taken into consideration when new development occurs. Pressures on volunteer fire departments to appropriately staff calls and provide adequate service will invariably increase.

Section 8

Section 8 – Generic Environmental Impact Statement

For the purposes of compliance with the State Environmental Quality Review Act (SEQR), the Comprehensive Plan shall also serve as a Generic Environmental Impact Statement (GEIS). SEQR establishes a process requiring the consideration of environmental factors early in the planning stages of actions that are undertaken, approved or funded by state, regional or local agencies. This systematic approach allows adverse impacts to be avoided or mitigated. The “action” that requires SEQR review is adoption of the plan and related zoning and subdivision amendments by the Town Board. This GEIS describes the potential impacts of such adoption.

According to § 617.10 of 6 NYCRR Part 617 State Environmental Quality Review:

“Generic EISs may be broader, and more general than site or project specific EISs and should discuss the logic and rationale for the choices advanced. They may also include an assessment of specific impacts if such details are available. They may be based on conceptual information in some cases. They may identify the important elements of the natural resource base as well as the existing and projected cultural features, patterns and character. They may discuss in general terms the constraints and consequences of any narrowing of future options. They may present and analyze in general terms a few hypothetical scenarios that could and are likely to occur.”

The adoption of the Comprehensive Plan and Zoning and Subdivision Amendments will not have significant adverse environmental impacts on the Town. The plan and its recommendations carefully consider the environmental resources found within the Town. The Inventory and Analysis (see Section 7) clearly identifies these critical resources. The Comprehensive Plan should be viewed as a mitigation measure against the impact of development on environmental resources in Bethlehem. In addition, the Comprehensive Plan and Zoning and Subdivision Amendments strive to guide new development in a manner that will enhance the community in the future.

Environmental sustainability is one guiding principle that was determined early in the comprehensive planning process. The plan identifies environmental sustainability as “meeting the needs of the present without compromising the ability of our community to meet its needs in the future. Specifically, this involves managing our community’s natural resources for the benefit of this and future generations.” Balancing environmental sustainability, fiscal responsibility, and respect for property owners is an important approach that is evident when considering the plan recommendations and zoning amendments as a whole.

It is important to note that adoption of the Comprehensive Plan and Zoning and Subdivision Amendments will not result in the approval of any development activity, either private or public. As individual projects and activities are proposed and reviewed, environmental reviews may be necessary on a site-specific basis. Site-specific environmental reviews would be conducted under SEQR and should consider the scale of the proposed action and consistency with the concepts and vision outlined in the Comprehensive Plan.

Cross-Reference Table	
Elements that must be contained in a Draft EIS [according to 6 NYCRR 617.9 (b)(5)]	Location in this document
A concise description of the proposed action, its purpose, public need and benefits, including social and economic considerations;	Executive Summary Section 1 – Introduction Section 2 – Comprehensive Planning Process Section 3 – Vision and Goals Section 5 – Plan Recommendations Map Section 6 – Implementation and Action Plan Section 8 – GEIS
A concise description of the environmental setting of the areas to be affected, sufficient to understand the impacts of the proposed action and alternatives;	Section 1 – Introduction Section 5 – Plan Recommendations Map Section 7 – Inventory and Analysis Section 8 - GEIS
A statement and evaluation of the potential significant adverse environmental impacts at a level of detail that reflects the severity of the impacts and the reasonable likelihood of their occurrence. The GEIS should identify and discuss the following only where applicable and significant:	<i>(a) Short and Long Term Impacts, Cumulative Impacts:</i> Executive Summary Section 3 – Vision and Goals Section 4 – Plan Recommendations Section 5 – Plan Recommendations Map Section 6 – Implementation and Action Plan <i>(b) Adverse Impacts That Cannot Be Avoided or Adequately Mitigated:</i> Section 3 – Vision and Goals Section 4 – Plan Recommendations Section 5 – Plan Recommendations Map Section 6 – Implementation and Action Plan <i>(c) Irreversible or Irretrievable Commitment of Environmental Resources:</i> Section 3 – Vision and Goals Section 4 – Plan Recommendations Section 5 – Plan Recommendations Map Section 6 – Implementation and Action Plan <i>(d) Growth Inducing Impacts:</i> Executive Summary Section 3 – Vision and Goals Section 4 – Plan Recommendations Section 5 – Plan Recommendations Map Section 6 – Implementation and Action Plan <i>(e) Use and Conservation of Energy</i> Section 3 – Vision and Goals Section 4 – Plan Recommendations Section 6 – Implementation and Action Plan

	<i>(f) Solid Waste Management</i> Section 3 – Vision and Goals Section 4 – Plan Recommendations Section 6 – Implementation and Action Plan <i>(g) Public Acquisition of Lands/Agricultural Land</i> Section 3 – Vision and Goals Section 4 – Plan Recommendations Section 5 – Plan Recommendations Map
A description of mitigation measures	Executive Summary Section 3 – Vision and Goals Section 4 – Plan Recommendations Section 5 – Plan Recommendations Map Section 6 – Implementation and Action Plan Section 8 - GEIS
A description and evaluation of the range of reasonable alternatives to the action in sufficient detail to permit comparative assessment.	Executive Summary Section 1 – Introduction Section 3 – Vision and Goals Section 4 – Plan Recommendations Section 5 – Plan Recommendations Map Section 8 - GEIS
A list of any underlying studies, reports, EISs and other information obtained and considered in preparing the statement including the final written scope.	Scope of Services – list of existing materials to be reviewed including: Route 9W Corridor Study, Land Use Planning Reference Resource, Land Use Task Force Report, Planning Concepts of Rural Landowners of Bethlehem, Existing Zoning and Subdivision Regulations, Information from Bethlehem Tomorrow. Section 1 – Introduction Section 2 – Comprehensive Planning Process Section 5 – Plan Recommendations Map Section 7 – Inventory and Analysis Appendices B thru H [Results of public outreach, Public Hearing Minutes and responses]

8.1. IMPACT ON LAND

Adoption of the Comprehensive Plan and the Zoning and Subdivision Amendments by the Town of Bethlehem will likely impact land resources in the Town. Some areas that are currently not fully developed, but are served by public sewer and water, are proposed for more intensive uses in the plan. Conversely, it is recommended that those areas without public infrastructure are not developed or developed in a less intensive way. For example, the use of a conservation subdivision design technique is proposed and will serve to mitigate impacts related to development by allowing for development while

protecting important natural resources. This technique allows flexibility in lot size and bulk standards to ensure development is designed in a manner that is in harmony with the landscape. Land suitability and environmental constraints will be among the many factors considered during reviews of specific projects.

Key recommendations regarding land use include the following:

Hamlet Districts: The purpose of the hamlet district (§128-31), commercial hamlet (§128-32) and rural hamlet district (§128-33) is to encourage compact, mixed use commercial and residential development or redevelopment in identified hamlet centers. Hamlet zones are mixed use high-density zones of a variety of scales and designs. These zones encourage a variety of housing types and mixed-use buildings. Scale of development and pedestrian connections to neighborhoods is important. The different hamlet designations demonstrate the recognition that not all hamlets are the same.

Core Residential District §128-28: The purpose of the Core Residential District is to ensure that the general character of these mature residential neighborhoods are protected from pressures to convert residential structures to inappropriately sized nonresidential uses. The character of these neighborhoods generally includes tree-lined streets, sidewalks, smaller lot sizes, interconnected street patterns, moderately sized homes and some small-scale services. Core residential areas include high-density residential development (6 dwelling units (DU) per acre); traditional residential neighborhoods that border hamlet zones; public water and sewer; and encourage improved pedestrian amenities.

Residential A, B, C (§128-25, §128-26, §128-27): The purpose of these districts is to encourage diversity in residential development and to encourage the use of conservation subdivision design to preserve open space and viable agricultural lands. A medium density (3 DU per acre) is proposed in the Residential A district with a conservation design density incentive (4 DU per acre). Residential B has a proposed density of 5DU per acre and Residential C has a proposed density of 8 DU per acre with public sewer and water. Within these districts, public water and sewer required for new developments with existing developments grandfathered. Land divisions are also permitted.

Multi-Family Residential §128-29: The purpose of this district is to protect the existing high-density residential character from encroachment of inappropriate non-residential development. Areas in this district are those in which multi-family development currently exists. These areas are served by public sewer and water. A density of 8 DU per acre is proposed for this district.

Rural District §128-24: The purpose of this district is to encourage a variety of uses, including agriculture, forestry, mining, small-scale commercial and light industrial activity, and low-density residential development. Characterized by working landscapes and undeveloped lands, areas within this district contribute to the rural character of the community. Low density residential (1 DU per 2 acres) using a conservation design density incentive (1.25 DU per 2 acres) is proposed. Generally no public water and sewer is available in these areas. Land division is permitted and specific rural mixed uses are permitted as of right, while others are permitted but require special use permit.

Rural Riverfront District §128-30: The purpose of this district is to limit the density of residential development while encouraging tourism and recreational based non-residential development. Very low density residential (1 DU per 5 acres) using a conservation density incentive (1.5 DU per 5 acres) is proposed. Land divisions are permitted within this district. In addition, all rural uses are permitted. As with the Rural District, there is generally no public water and sewer.

Rural Light Industrial District 128-38: The purpose of the Rural Light Industrial district is to encourage the development of light industrial uses such as warehousing, minor assembly operations or manufacturing. Minor residential subdivision permitted, however major residential subdivision is not permitted. Specific light industrial uses are permitted and all rural uses permitted. This district is typically not served by public water and sewer. Buffering and setbacks are required when development occurs adjacent to a residential area.

Mixed Economic Development District §128-36: The purpose of this district is to encourage the consolidation of individual lots to allow the development of planned non-residential office and service businesses. This district allows for a mix of office, light industry, and technology business as primary uses. Secondary uses include high-density residential and neighborhood commercial uses. The proposed minimum lot size for non-residential uses is 1 acre. The proposed minimum lot size for mixed-use development is 2 acres.

General Commercial District §128-35: Areas of the Town designated under this district are those, which contain commercial and nonresidential services and businesses. The purpose of this district is to encourage the development of a variety of small scale and large-scale commercial retail and service businesses for the community. The proposed minimum lot size for non-residential uses is 1 acre.

Heavy Industrial District §128-37: The purpose of this district is to encourage the development of heavy industrial uses that require trucking or rail transportation to move goods and materials. The proposed minimum lot size for non-residential uses is 5 acres.

In addition to the zoning districts described above, there are other items recommended and proposed that address land use in a positive manner. Those items are as follows:

Land Division: This is allowed in residential, rural, riverfront rural and rural light industrial zones and permits a division of a parcel of not more than four lots during any ten-year period (excluding parent parcel). While there will be no minimum lot size for land divisions, land division will not be approved without appropriate Health Department approvals for well and septic systems.

Conservation Subdivision Design §128-42: This approach utilizes flexible lot sizes and density incentives to encourage conservation of land in subdivision design. The required open space set aside will be 50% of total site area in suburban residential zones (with public water and sewer) and 40% in rural and riverfront rural zones (no public water an sewer). In this approach, densities will be calculated against total unconstrained land. To make it easier to achieve or exceed the minimum open space set aside, and to

promote housing diversity in the town, a mix of attached housing types such as well-designed duplexes and townhomes will be permitted in conservation subdivisions in addition to detached single-family homes.

Grading, Erosion and Sediment Control §128-51: The intent of this section is to ensure all activities involving land clearing or land disturbance in the Town are carried out in a manner that maximizes benefits to the public and protects the natural and man-made environment by controlling soil erosion.

Incentive Zoning §128-43: Incentive zoning establishes density bonuses to encourage the preservation of open space as well as affordable housing under an approach that offers tiered levels of density bonuses for the provision of affordable housing opportunities.

8.2. IMPACT ON WATER

Adoption of the Comprehensive Plan and the Zoning and Subdivision Amendments will not have an adverse impact on water resources in the Town. The plan recommends and the zoning provides a tool for residential development to be located away from significant environmental features through the use of conservation subdivision design (as described in Section 8.1). Stream corridors, wetlands, and other surface water would, in most cases, be protected using this approach. By locating homes away from water bodies, potential erosion and sedimentation impacts of construction would be limited. Other forms of non-point source pollution would also be reduced.

In addition, the plan recognizes that the Town must comply with the Phase II Stormwater Management regulations. Under these regulations, all Municipal Separate Storm Water Systems (MS4s) must develop and implement a stormwater management program by the year 2008. The plan recommends close coordination with NYSDEC to ensure the Town is properly addressing the Phase II regulations.

The zoning amendments address this issue further in §128-51 Grading, Erosion and Sediment Control. The intent of this section is to ensure all activities involving land clearing or land disturbance in the Town are carried out in a manner that maximizes benefits to the public and protects the natural and man-made environment by controlling soil erosion.

Finally, §128-62 Lots Bordering Streams enhances the protections in §128-51 by further limiting construction activity within one hundred feet of the bank of specified streams in the Town, including: Normans Kill Creek, Vloman Kill Creek, Onesquethaw Creek, Phillipin Kill Creek, and Dowers Kill Creek (south of Route 32). Building permits will not be issued for any permitted or accessory use that falls within this stream buffer area.

8.3. IMPACT ON AIR

As a result of the potential increase in commercial and residential development in compact areas of the Town, minor adverse impacts to local air quality could be anticipated. However, these will not be of a type or magnitude that would adversely impact human health or the environment. In fact, the compact

hamlet areas are intended to encourage a pedestrian friendly environment. This could provide an alternative to vehicular travel and ultimately reduce air quality impacts. The use of conservation subdivision design is another method that protects open space while allowing for development. This open space will assist in improving air quality.

8.4. IMPACT ON PLANTS AND ANIMALS

Adoption of the Comprehensive Plan and Zoning and Subdivision Amendments by the Town will not significantly impact plant and animal resources in the Town. Where new development is proposed, existing vegetation will be removed and some wildlife may be displaced. However, the use of a conservation design approach will help to reduce the amount of vegetation to be removed and the conserved areas will help to establish wildlife corridors.

The New York Natural Heritage Program (of the NYS Department of Environmental Conservation Division of Fish, Wildlife and marine Resources) has identified multiple rare or state-listed animals, plants or significant natural communities, within the Town of Bethlehem. Information identifying the specific location of these rare species is designated sensitive and would require interpretation from experts at the Natural Heritage Program. As a result, the Comprehensive Plan suggests in Section 7 Inventory and Analysis that the Natural Heritage Program be notified as development occurs on specific sites to ensure no conflicts with endangered or threatened species occur and to determine mitigation measures to reduce the potential impact on such species. This will occur as project specific SEQR evaluations are completed.

The plan also suggests infill development and redevelopment of existing buildings and sites to minimize the impact of growth on greenfield sites, which might reduce disturbance to plants and wildlife.

8.5. IMPACT ON AGRICULTURAL LAND RESOURCES

Adoption of the Comprehensive Plan and Zoning and Subdivision Amendments by the Town will not adversely impact the agricultural resources in the Town. The plan supports current agricultural activities and suggests the promotion of local agriculture through education, a buy local program and an agricultural economic strategy. Participation in agricultural districts and right-to-farm and right-to-practice-forestry laws are also recommended.

The Rural, Rural Riverfront, Heavy Industrial and Rural Light Industrial districts allow for the continuation of agricultural practices as a use allowed 'by right.' The Residential districts (A, B, C) and the Multi-Family district permit existing agricultural uses 'by right' and require that new agricultural uses are subject to a Special Use Permit. Services that support agriculture, such as farm equipment sales are permitted in the Rural, Heavy Industrial and Rural Light Industrial districts. Also, §128-46 is specifically related to the support of agricultural uses and the right-to-farm.

8.6. IMPACT ON AESTHETIC RESOURCES

The intent of the recommendations found in the Comprehensive Plan and the Zoning and Subdivision Amendments is to enhance the aesthetic resources in the community. Protection of community character in both the developed and undeveloped areas of the Town is an important goal of the plan. Several recommendations assist in protecting community character including gateway enhancement, infill and redevelopment in developed areas of the Town, the use of conservation subdivision design, a focus on compact development within the hamlets, and the notion of design guidelines for commercial and mixed-use development. Streetscape design is also discussed within the hamlets. In addition, the plan recommends that hamlet master plans be conducted to address hamlet-specific issues including aesthetics and design.

The zoning amendments include design guidelines for many districts such as Hamlets, Rural, Residential (A, B and C), Core Residential, Rural Riverfront, General Commercial, Mixed Economic Development, Heavy Industrial and Rural Light Industrial. These design guidelines are intended to address site function, design and overall aesthetics.

8.7. IMPACT ON HISTORIC AND ARCHEOLOGICAL RESOURCES

Adoption of the Comprehensive Plan and Zoning and Subdivision Amendments by the Town will have no significant negative impact on historic and archeological resources in the Town. A preliminary study was conducted several years ago to identify these resources. The plan recognizes the importance of these resources and calls for a town-wide inventory of historic and cultural resources that could build from this earlier study.

The zoning amendments include a conservation subdivision design approach for residential development. This approach would allow the flexibility to locate development in a manner that protects historic or archeological resources on the site. Project specific SEQR regulations will also ensure that these resources are considered during the development review process.

8.8. IMPACT ON OPEN SPACE AND RECREATION

Adoption of the Comprehensive Plan and Zoning and Subdivision Amendments by the Town will have a positive impact on open space and recreation in the Town. The plan recommends the creation of a Farmland and Open Space Protection Program that may include the use of a variety of voluntary tools such as the purchase of development rights, fee-simple acquisition, or donation of conservation easements. In addition, the plan recommends considering a town-wide referendum to establish funding for the preservation of open space.

The plan also suggests the creation of a Citizens Advisory Committee on Conservation (CACC) to explore conservation projects with willing landowners. The members appointed to the committee, and tasks undertaken by the committee, would be specifically identified by the Town Board.

Relating to recreation, the plan recommends establishing a Park Master Plan to inventory existing parks and identify a community-based need for future facilities. The establishment of a mechanism to fund recreational trails is also recommended.

An incentive zoning mechanism is included in the amended zoning regulations to encourage the protection of open space and recreational facilities. Under this section of the zoning regulations (§128-43), the Planning Board is authorized to adjust maximum density requirements for applicants using the conservation subdivision approach in exchange for a specified incentive, such as a percentage of land dedicated for active or passive recreation.

Also, §128-60 discusses the Park Land Reservation and Fee Requirements. This section allows the Planning Board to ensure the park and recreation demands generated by new residential development are met.

Section 8.5 discusses plan recommendations and zoning amendments to promote the viability of local agriculture.

8.9. IMPACT ON CRITICAL ENVIRONMENTAL AREAS

According to the New York State Department of Environmental Conservation, there are no Critical Environmental Areas within Albany County. Therefore, adoption of the Comprehensive Plan and Zoning and Subdivision Amendments by the Town will have no impact on such areas.

8.10. IMPACT ON TRANSPORTATION

Adoption of the Comprehensive Plan and Zoning and Subdivision Amendments will likely have some impacts on transportation systems in the Town. The number of automobile trips may increase in the areas designated to receive additional development, such as the hamlets. However, the intent of the plan and zoning amendments is to offset the adverse transportation impacts by encouraging a bicycle and pedestrian friendly environment and improving public transit opportunities. Specific recommendations in the plan focus on establishing Delaware Avenue as a pedestrian friendly corridor. The hamlet district zoning along Delaware Avenue reinforces this notion. The plan also recommends a linkage study for the Delaware Avenue corridor.

In addition, the plan recommends additional study of key transportation corridors, such as Route 9W. An integrated planning approach that recognizes the link between land use and transportation is suggested. Such an approach could address traffic safety and congestion issues in the more developed portions of the corridor near Feura Bush Road and Route 32 in Glenmont. Funding has already been secured for this study through the Capital District Transportation Committee (CDTC) Linkage Program.

Enhancement of the community's gateways along major transportation corridors will serve to establish the Town's identity and enrich community character. Also, the establishment of an official map is a priority action identified in the plan. This would identify rights-of-way that should be reserved for future public infrastructure.

8.11. IMPACT ON ENERGY

Adoption of the Comprehensive Plan and Zoning and Subdivision Amendments by the Town will not have a significant impact on energy. While additional commercial and residential development may increase energy usage, the plan identifies ways in which this could be reduced. The focus on enhancing the pedestrian environment, encouraging bicycling and the development of recreational trails supports alternative modes of transportation, which reduces the reliance on automobiles. The use of conservation subdivision design is another manner that might serve to reduce the use of energy due to the fact that less roadways and infrastructure are required to serve these areas.

In addition, the plan includes recommendations for energy conservation such as promoting the use of renewable energy sources for public and private buildings and encouraging the use of Leadership in Energy and Environmental Design (LEED) standards for new commercial development and redevelopment.

8.12. NOISE AND ODOR IMPACTS

There will be no adverse impacts from noise and odor as a result of the adoption of the Comprehensive Plan and Zoning and Subdivision Amendments by the Town.

8.13. IMPACT ON PUBLIC HEALTH

Adoption of the Comprehensive Plan and Zoning and Subdivision Amendments by the Town will have no direct impact on public health. In fact, the enhancement of pedestrian facilities and development of recreational trails could serve to improve public health. While County Health Department approval has always been necessary, the plan specifically connects Health Department approval of well and septic systems to lot size requirements in areas not currently served by public sewer and water.

8.14. IMPACT ON GROWTH AND CHARACTER OF COMMUNITY OR NEIGHBORHOOD

The impact on community character will be positive. The Town of Bethlehem has been experiencing residential and commercial growth. Long time residents and more recent residents are drawn to the Town because of its high quality of life, convenient services, and rural character. The intent of the Comprehensive Plan and related Zoning and Subdivision Amendments is to protect those factors that make Bethlehem an attractive place to live and work. The plan and zoning achieve this through a balanced approach that focuses development in specific locations, conserves open spaces and working landscapes, and encourages economic development. In addition, the plan considers the fiscal responsibility associated with its recommendations.

By focusing development that is appropriately scaled and designed in the hamlet districts and the mixed economic development districts, for example, the Town can expand its economic base while maintaining the character of its less developed areas. The use of conservation subdivision design can also serve to protect community character while allowing for continued residential growth.

The zoning amendments include design guidelines for each zoning district, and illustrated design guidelines for the Hamlet and General Commercial Districts. The design guidelines are intended to address concerns raised during the comprehensive planning process about the aesthetic quality of development and its impact on community character. The guidelines will provide the Planning Board and potential applicants with a better understanding of what is desired in terms of new development in the community.

8.15. ALTERNATIVES

The Town of Bethlehem has three alternative actions that could be pursued. The first action is to adopt the Comprehensive Plan and Zoning and Subdivision Amendments as proposed. The second action is to adopt the Comprehensive Plan and Zoning and Subdivision Amendments with changes. The third alternative action is to not adopt the Comprehensive Plan and Zoning and Subdivision Amendments. The third alternative might also be referred to as the no action alternative.

The adoption of the Comprehensive Plan and Zoning and Subdivision Amendments by the Town of Bethlehem as proposed would provide the most appropriate balance of properly scaled growth and economic development, respect for property owners, open space protection and recreational opportunities, as well as enhancement of community character. The importance of this balance has been expressed by Town residents and is reflected in the vision and goals in the plan. This alternative would further the Town's goals and assist the Town in taking the necessary steps to achieve its vision. Therefore, this is the preferred alternative.

Adoption of the Comprehensive Plan and Zoning and Subdivision Amendments with changes, while an alternative that the Town could consider, is not the preferred alternative. The Town and the Bethlehem Planning Advisory Committee (BPAC) have devoted a significant amount of time and energy into developing a plan that reflects the needs and desires of all residents. This proposed plan and the zoning and subdivision regulations represent the results of an extensive public involvement process. To the greatest extent possible, the plan as proposed provides a balance of resident needs and desires. Alterations to the plan at this time may upset the balance that has been achieved.

The no action alternative would not further the Town's goals and would prevent the Town from achieving its full vision for the future. While existing federal, state and local regulations could be sufficient to protect natural and cultural resources, the benefit of the Comprehensive Plan is that it suggests a manner in which the Town can grow, while still enhancing community character and protecting the Town's valuable resources. The zoning and subdivision regulations support this vision and provide the specific tools to achieve it. This delicate balance can only be achieved through a deliberate and collaborative planning process. The absence of a plan, a program for implementation, and amended zoning and subdivision regulations will place the Town in a position of reacting to development instead of being proactive in its efforts.

Appendices
(Under Separate Cover)