



A VISION FOR THE 21ST CENTURY



2014 Comprehensive Plan

TOWN OF ITHACA NEW YORK



ADOPTED SEPTEMBER 2014

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TOWN OF ITHACA COMPREHENSIVE PLAN



ADOPTED 8 SEPTEMBER 2014
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TOWN OF ITHACA COMPREHENSIVE PLAN

CHAPTER 1 INTRODUCTION	1
1.1 Ithaca: the setting	3
1.1.1 Building on successes to shape the future	4
1.1.2 Creating a plan for the new century	5
1.1.3 Securing a sustainable future	6
1.1.4 Collaborating with neighboring municipalities	6
1.2 Plan development and organization	6
1.2.1 The importance of the Comprehensive Plan	6
1.2.2 The planning process	7
1.2.3 Concurrent planning initiatives	7
1.3 Community vision statement	8
CHAPTER 2 GOALS AND RECOMMENDATIONS	9
2.1 Land use and development	12
2.2 Housing and neighborhoods	16
2.3 Natural resources and environment	18
2.4 Energy and climate protection	22
2.5 Agriculture	26
2.6 Recreation (parks and trails)	29
2.7 Historical resources	31
2.8 Transportation	33
2.9 Municipal services and infrastructure	38
2.10 Community services	41
2.11 Economic development	43
CHAPTER 3 FUTURE LAND USE PLAN	47
3.1 Reserve areas	50
3.1.1 Natural / Open	50
3.1.2 Rural / Agricultural	51
3.2 Neighborhood areas	53
3.2.1 Semi-Rural Neighborhood	53
3.2.2 Established Neighborhood	55
3.2.3 TND Medium Density	57
3.3 Activity areas	59
3.3.1 Enterprise	59
3.3.2 Campus	61
3.4 Focus areas	63
3.4.1 TND High Density	63
3.4.2 Inlet Valley Gateway	65
3.4.3 Area of Special Concern	66
3.4.4 Area of Special Concern 1: Emerson Center	66
3.4.5 Area of Special Concern 2: Country Club	68
3.5 Future land use / character map	71
CHAPTER 4 IMPLEMENTATION	73
4.1 Land use (LU)	77
4.2 Housing and neighborhoods (HN)	79
4.3 Natural resources (NR)	80
4.4 Energy and climate protection (EC)	82

4.5	Agriculture (AG)	84
4.6	Recreation (RE)	85
4.7	Historical resources (HR)	86
4.8	Transportation (TR)	87
4.9	Municipal services and infrastructure (MS)	90
4.10	Community services (CS)	91
4.11	Economic development (ED)	92

APPENDIX A IMPLEMENTING BEST PRACTICES

A-1

A.1	Smart Growth	A-3
A.2	Traditional neighborhood development	A-8
A.3	Form- and transect-based codes	A-10
A.3.1	Form-based codes	A-10
A.3.2	Transect-based codes	A-11
A.3.3	The SmartCode	A-13
A.4	Unified development code	A-15
A.5	Institutional zoning	A-16
A.6	Design standards	A-16
A.6.1	Architectural standards	A-16
A.6.2	Site planning standards	A-17
A.6.3	Landscaping standards	A-18
A.7	Context sensitive solutions	A-18
A.8	Complete streets	A-18

APPENDIX B EXISTING CONDITIONS

B-1

B.1	Demographic profile	B-3
B.1.1	Population	B-3
B.1.2	Age and racial characteristics	B-6
B.1.3	Education	B-7
B.2	Land use	B-9
B.2.1	Development history and trends	B-9
B.2.2	Residential development	B-11
B.2.3	Commercial development	B-12
B.2.4	Industrial development	B-13
B.2.5	Agricultural development	B-14
B.2.6	Institutional development	B-15
B.2.7	Sprawl	B-20
B.2.8	Zoning	B-21
B.2.9	Land use regulations	B-27
B.2.10	Community identity	B-34
B.3	Housing	B-36
B.3.1	Households and household size	B-36
B.3.2	Housing units	B-38
B.3.3	Housing unit analysis: Town building permit records	B-39
B.3.4	Housing types	B-43
B.3.5	Structure age	B-44
B.3.6	Housing values and sales	B-45
B.3.7	Household income and affordability	B-46
B.3.8	Aging in place	B-46
B.4	Natural resources and environment	B-48

B.4.1	Topographic setting	B-48
B.4.2	Lakes and streams	B-51
B.4.3	Wetlands	B-54
B.4.4	Geology	B-56
B.4.5	Soils	B-60
B.4.6	Terrestrial ecology	B-65
B.4.7	Aesthetics and visual quality	B-72
B.5	Energy and climate protection	B-76
B.6	Agriculture	B-80
B.7	Parks and recreation system	B-82
B.7.1	Parks	B-82
B.7.2	Preserves	B-85
B.7.3	Trails and walkways	B-85
B.7.4	Recreational services	B-86
B.7.5	Future planning	B-87
B.8	Historical resources	B-88
B.8.1	Historical resources survey: structures and properties	B-88
B.8.2	Historical markers	B-90
B.9	Transportation resources	B-93
B.9.1	Demographics and transportation	B-93
B.9.2	Metropolitan Planning Organization	B-94
B.9.3	Existing road network	B-94
B.9.4	Traffic	B-97
B.9.5	Road maintenance	B-100
B.9.6	Automobile alternatives	B-102
B.9.7	Air, rail and freight	B-106
B.10	Municipal services and infrastructure	B-108
B.10.1	Water supply	B-108
B.10.2	Wastewater	B-112
B.10.3	Stormwater	B-115
B.10.4	Road maintenance	B-116
B.11	Community services	B-118
B.11.1	Fire protection and emergency services	B-118
B.11.2	Police	B-120
B.11.3	Town government facilities	B-120
B.11.4	Schools	B-121
B.11.5	Library	B-121
B.11.6	Solid waste management	B-122
B.11.7	Public health facilities	B-122
B.12	Economic development	B-123
B.12.1	General economy	B-123
B.12.2	Employers	B-124
B.12.3	Employment: major occupations	B-125
B.12.4	Commuters	B-126
B.12.5	Commercial and manufacturing profile	B-127

APPENDIX C RESIDENT SURVEY RESULTS

C-1

APPENDIX D PUBLIC AND FOCUS GROUP MEETING SUMMARIES	D-1
D.1 Focus groups	D-3
D.1.1 Neighborhood focus group	D-3
D.1.2 Agricultural focus group	D-4
D.1.3 Energy focus group	D-6
D.1.4 Housing focus group	D-7
D.1.5 Ecology focus group	D-8
D.1.6 Health focus group	D-9
D.1.7 Recreation/museum focus group	D-11
D.2 Public information meetings	D-12
D.2.1 Public information meeting 1	D-12
D.2.2 Public information meeting 2	D-16
D.3 Neighborhood meetings	D-18
D.3.1 West Hill	D-18
D.3.2 South Hill	D-21
D.3.3 East Ithaca	D-24
D.3.4 Northeast Ithaca	D-26
APPENDIX E POPULATION AND HOUSING PROJECTIONS	E-1
APPENDIX F GLOSSARY	F-1
F.1 Words and terms	F-3
F.2 Acronyms	F-9
APPENDIX G BIBLIOGRAPHY	G-1
APPENDIX H AGRICULTURE PLAN	H-1
APPENDIX I SCENIC RESOURCES INVENTORY AND ANALYSIS	I-1

CHAPTER 1

INTRODUCTION

INTRODUCTION

1.1 Ithaca: the setting

The Town of Ithaca is a mosaic of rural, suburban, and urban landscapes that surrounds the City of Ithaca. It is a college town, a farm town, a Finger Lakes community, and a tourist destination renowned for its scenic vistas, forested hillsides, gorges, waterfalls and Cayuga Lake. The Town is fortunate to have three State Parks nearby and many small Town parks and trails. It is a town where institutions of higher learning flourish, where comparatively stable employment centers reside, and where there is easy access to outdoor recreational opportunities, cultural events, shopping, eclectic restaurants, and a thriving arts and music scene. This mix of rural and small town charm with a cultural vibrancy and a nearby city vibe is what makes the Town distinctive. It's what residents value about living here and what attracts newcomers to visit and stay.

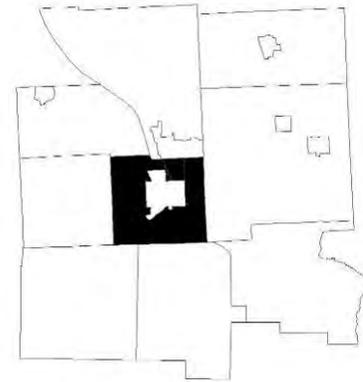
Ithaca's reputation for a high quality of life and for being one of the few expanding economies in upstate New York draw people here. This growth brings new businesses, new employers, and new ideas. An expanding population means a broader base to support the arts, culture, and our many non-profit organizations. The attractiveness of Ithaca has brought many positive changes but it also brings the challenge of accommodating more people well and in a sustainable fashion—preserving valuable farmland and open space, and ensuring that the quality of life that brought people here in the first place is not jeopardized.

Concerns about growth, and specifically where it should occur, was a central theme of the Town's first general land use planning document. The 1959 Ithaca Urban Area Plan was an intermunicipal undertaking by the City of Ithaca, Towns of Ithaca and Lansing and the Village of Cayuga Heights.

The 1959 Plan expressed deep anxiety over the increasing dispersion of the population into the more rural areas and away from an urban core and the potential impacts of that development pattern on the quality and character of the Ithaca area. That plan described the residential land use patterns around the urban fringes as having assumed “the characteristics of well-scattered confetti” and went on to state: “Most of the roads and highways in the Ithaca countryside have become, in effect, long drawn-out city streets. New homes have sprung up at random on large lots along the roadside and the overall effect is that of a loose cluster of houses clinging to the web of concrete and asphalt that holds them together.” Despite raising alarms, the proposed ideas and recommendations expressed in the 1959 Plan were not translated into concrete actions that remedied the ongoing development patterns in the Town.

It would take 30 more years for the Town to commit formally to implementing regulations and policies to curb the loss of open space. With the adoption of the 1993 Town of Ithaca Comprehensive Plan, protection of the Town's agricultural lands, natural areas, and environment was established as a high priority. The Plan's subsequent implementation has had many important successes. Conservation zoning (with its very low density requirements) was introduced in 1996 to reduce the development potential on 1,000 acres of sensitive watershed in the Six Mile Creek Valley. In recent years, conservation zoning has been expanded to other environmentally sensitive areas of the Town and now covers approximately 3,870 acres of land.

Town of Ithaca at a glance



Settled: 1794 (Forest Home area)

Founded: 1821 (split from the Town of Ulysses)

Area: 30.3 square miles (total), 29.1 square miles (land only)

Elevation: 382' to 1420'

Population (2010): 19,930

Households (2010): 6,988

Median household income: \$55,934
(US Census ACS 2005-2009)

Agricultural zoned lands have also expanded and now total approximately 4,150 acres. Agricultural zoning provisions feature both a low density provision (with mandated clustering) and a requirement for deed restrictions on the remaining large parent parcels; the intended purpose is to keep agricultural lands in agricultural production. Revisions to the Town Zoning Code as a result of the implementation of the 1993 Comprehensive Plan also included a right-to-farm provision. Also, the Town implemented a voluntary Purchase of Development Rights (PDR) program for preservation of agricultural lands.



Cayuga Lake

1.1.1 Building on successes to shape the future

Implementation of the 1993 Plan has provided a strong foundation for protecting the Town’s open space and working farmlands. To ensure continued protection of these valued resources and to accommodate a growing population, more attention now needs to be turned towards the built environment—to places where development is appropriate and where most future residents will live and work. Devoting more attention to the built environment and ensuring that land is used more efficiently and that development is done more thoughtfully and sustainably not only keeps open space preserved for future generations to enjoy, but also creates more viable places for people to live: places with intentional neighborhoods that are coherent, more economically sustainable, and more livable, allowing residents of all ages and socioeconomic backgrounds to call Ithaca “home”.

For far too long, development has been driven by the convenience of the automobile and by zoning regulations mandating strict separation of uses. Rather than emulating the mixed use, walkable neighborhoods found in many of

the notable historical villages of New York State, residential development over the last 50 years in the Town has been typified by physically disconnected subdivisions composed of single family houses on large lots—homogeneous and accessible only by automobile. Steady demand for new housing has extended beyond the Town’s borders bringing with it increased traffic without the potential for Town-directed mitigation. The Town's limited commercial development is vehicle-oriented and usually far beyond the walking distance of most residents. Although there is a growing system of recreational trails, sidewalks in residential and commercial areas are rare. The public transportation system is a tremendous asset to the area but does not serve low density, isolated developments; this makes most Town residents dependent upon motor vehicles for their transportation needs. Additionally, the lack of housing options fails to satisfy the preferences and needs of our increasing demographically and economically diverse residents. And, low density auto-dependent development comes at a high public cost with the long-term maintenance of lengthy roads and utilities, as well as high environmental costs associated with the long-term dependence on fossil fuels.

1.1.2 Creating a plan for the new century

A convergence of the social, environmental, economic, and technological forces that has taken place since the 1993 Comprehensive Plan was adopted is changing the way people view and interact with the places where they live, work, and play. With a new century comes a new sensitivity to the built and natural environment that surrounds us. The outcomes of development practices that were the norm through the second half of the 20th century are not necessarily appropriate for the Town in the 21st century. New practices in planning, development, civil engineering, and natural resource protection have emerged—along with more effective tools that better help communities shape the built environment and guide their destiny.



Ithaca Farmers' Market

Concepts such as Smart Growth, sustainability, new urbanism, light imprint development, and context sensitive design were not well-known when the previous plan was adopted 21 years ago.

Resident surveys and comments at neighborhood workshops conducted during the generation of this updated Comprehensive Plan reveal support for denser, more affordable, and more sustainable mixed use neighborhoods in the Town. There is a growing preference among homebuyers and renters for living in communities that are walkable, more compact, and more socially connected, rather than single family houses in low density suburban subdivisions. This can be seen locally in the revitalization of many older neighborhoods in the City of Ithaca. The Ithaca area is also a destination for a growing number of retirees who desire the uplifting social, intellectual, recreational, and cultural environment offered by college towns. As with young adults, the next generation of retirees also seeks communities where retirees will neither be physically or socially isolated nor dependent on a car for their day-to-day needs.

The 2014 Town of Ithaca Comprehensive Plan recognizes these trends and creates the mechanism for the Town to update and adjust its policies and regulations by using new planning concepts and tools to guide future development.

1.1.3 Securing a sustainable future

“Sustainability” means meeting the needs of today without compromising the ability of future generations to meet their needs. Prioritizing sustainability requires that we consider the way we grow and the effects on our people (equity), our planet (environment), and our prosperity (economy).

The 2014 Comprehensive Plan focuses on creating a sustainable community. It recognizes that resources are finite and that to best support a diverse and sustainable community, the Town must make wise choices about how to use its natural, social, and economic resources. The Town’s prosperity depends on its educational institutions, tourism, agriculture, and economic development consistent with Town goals instead of short-term, high-impact extractive industries.

This plan offers the Town a way to do things better with more choices for where and how to live. A more compact and more connected community can reduce the distances that people travel to work, to shop, or to find an affordable home—and can reduce our carbon footprint. It can offer more viable multimodal transportation options, reduce reliance on single occupancy vehicles, and increase connections to nearby employment centers and services. The Plan supports local food production that reduces our use of fossil fuel. The Plan also demands that we be good stewards of our natural resources so they remain available and plentiful for future generations.

This plan critically examines what works about Ithaca and what could be improved upon; the Plan consciously proposes shaping a future that takes into account the reality of a world of resources—energy resources, environmental resources, and financial resources—under growing strain.

As we look to the future and follow this Comprehensive Plan, we have an important opportunity to be more intentional about the next stages in Ithaca’s growth.

1.1.4 Collaborating with neighboring municipalities

Municipalities in Tompkins County have been leaders in intermunicipal cooperation; they have extensive experience in the mutual provisions of water, sewage treatment, municipal health insurance, property assessment, fire and emergency medical response, the bus system, dog control, recreation, and youth services. Existing cooperative relationships can be built upon to confront additional shared and challenging issues such as transportation, watershed protection, environmental protection, climate change, and economic prosperity; these issues are regional in scale and scope and need collaborative solutions. The Town of Ithaca—a keystone that is contiguous to the City and to all other towns in the County except one—can provide leadership to ensure that a platform for continued dialogue is maintained and that planning efforts are coordinated to benefit the collective future for the region.

1.2 Plan development and organization

1.2.1 The importance of the Comprehensive Plan

The Comprehensive Plan is a “living” document that guides the long-range physical development of the Town of Ithaca over the next 10 to 20 years. The Plan includes analyses of existing conditions and of past and future trends. It describes a vision for the physical, environmental, social, and economic characteristics of the Town, and it makes recommendations so that vision can become a reality. Although not a regulatory document, the Plan serves as the basis for policies and regulations regarding development and conservation. This Plan also serves as a tool to inform and guide Town staff, boards, and elected officials on actions and decisions about land use, transportation, the natural

environment, and economic development. Local residents can use the Comprehensive Plan to monitor whether development proposals and legislative initiatives conform to the vision and goals that have been set out in the Plan.

The Comprehensive Plan should be reviewed regularly to ensure that its goals and recommendations are still relevant. As the conditions upon which the document is based change, it is reasonable to assume that its contents also may need to be changed. Although intended to serve as a guide for the next 10 to 20 years, this Plan should be reviewed at least every five years, with a more formal revision process to occur at the end of the 10- to 20-year planning period.

A community and the policies that shape its built environment must respond and adapt to the changes taking place within and around it. For the Town of Ithaca to remain a livable, sustainable, and vibrant community in the 21st century, it should have a plan that reflects the realities of the new millennium.

1.2.2 The planning process

Development of this Plan was led by the Comprehensive Plan Steering Committee, which included: elected and appointed Town officials; liaisons from the Village of Cayuga Heights and City of Ithaca; and several Town residents. Support was provided by the Town's Planning Department.

Committee members (along with elected officials) toured the Town early in the planning process. Public information, neighborhood, and focus group meetings were held to obtain information from stakeholders on issues such as housing, transportation, environment, agriculture, education, and energy. Summaries of these meetings are included in Appendix D. Additionally, a telephone survey was conducted with the assistance of the Survey Research Institute at Cornell University. The survey focused on five main subject areas: quality of life; growth and development; municipal services; budget priorities; and laws and policies. The survey also included an opportunity for general comments and observations from residents. Results of the survey are summarized in Appendix C, and can also be found on the Town's website (www.town.ithaca.ny.us).

1.2.3 Concurrent planning initiatives

The Comprehensive Plan also draws from other local plans and studies from recent years. These include:

- Affordable Housing Needs Assessment, Tompkins County (2006)
- Cornell Master Plan for the Ithaca Campus (2008)
- Ithaca College Master Plan Report (2002)
- North East Subarea Transportation Study (1999)
- Route 96 Corridor Management Study prepared for Tompkins County Planning Department (2008)
- Tompkins County Comprehensive Plan (2004)
- Town of Ithaca Agriculture and Farmland Protection Plan (2012)
- Town of Ithaca Baseline 2009: Greenhouse Gas Emissions Inventory Report – Community (2011)
- Town of Ithaca Baseline 2009: Greenhouse Gas Emissions Inventory Report – Government (2011)
- Town of Ithaca Government Energy Action Plan (2011)
- Town of Ithaca Park, Recreation and Open Space Plan (1997)
- Town of Ithaca Scenic Resources Inventory (2010 draft)
- Town of Ithaca Transportation Plan (2007)
- Transportation-focused Generic Environmental Impact Statement (t-GEIS) prepared by Cornell University (2009)

1.3 Community vision statement

This Plan update is intended to provide ways for the Town of Ithaca to achieve its vision of where it wants to be in the next 10 to 20 years. The Steering Committee early in the planning process expressed its vision of where it sees the Town now and where the Town should be heading in the form of a vision statement that forms the core of the Plan. That vision statement has evolved through the planning process as a result of community participation and input. The goals, objectives, and recommended actions in the specific sections of the Plan are intended to guide the Town toward this common vision, expressed as follows:

The Town of Ithaca enjoys a diversity of urban, suburban, and rural characteristics including lakes, gorges, farms, forests, parks, and trails; locally produced agricultural products, and accessible cultural, dining, shopping, and recreational opportunities; a low unemployment rate, stable local major employers, dedicated town staff; and good health care and other professional services. The Town's West Hill includes innovative communities such as EcoVillage, quality affordable housing with spectacular views, and excellent medical facilities, all nestled in between the best farmland in the Town. South Hill is home to Ithaca College, natural features such as Buttermilk Falls, and affordable continuing-care institutions like Longview. East Hill includes a large portion of the region's other major educational institution, Cornell University, as well as small commercial centers and the largest part of the town's population. Town residents span a range of ages and cultures, are well educated, and benefit from seasonal influxes that affect their day-to-day experiences.

The Town wants its growth to be more sustainable and coordinated, focused in areas where appropriate services are available or can be provided efficiently, and planned in a way that is attractive, environmentally sensitive, and provides access to amenities where residents live, work, shop, and play. We want to encourage preservation of natural areas and natural resources, and promote the use of renewable energy. Residents of all income levels and backgrounds should enjoy a choice of housing and transportation options, including easy access to transit, walkways, interconnected parks and trails, and safe neighborhoods; they should feel connected to their neighborhoods and larger community and feel highly involved in decisions that affect the Town.

CHAPTER 2

GOALS AND RECOMMENDATIONS

GOALS AND RECOMMENDATIONS

Goals are broad statements that form the foundation of the Comprehensive Plan. Recommendations are more specific policies, programs, projects, and mechanisms that direct action toward achieving the goals. The goals and recommendations represent the values and priorities of the community, and serve as a guide for evaluating future planning decisions.

Goals and recommendations are organized into 11 policy areas:

- Land Use and Development (LU)
- Housing and Neighborhoods (HN)
- Natural Resources and Environment (NR)
- Energy and Climate Protection (EC)
- Agriculture (AG)
- Recreation (RE)
- Historical Resources (HR)
- Transportation (TR)
- Municipal Services and Infrastructure (MS)
- Community Services (CS)
- Economic Development (ED)

The goals and recommendations of this plan are intended to shape the Town in a way that will result in a vibrant, healthy, sustainable, and even more livable community with attractive, walkable, and socially inclusive neighborhoods, open scenic vistas, preserved natural and agricultural areas, thriving educational and cultural institutions, a modern transportation infrastructure that accommodates all users, a prosperous and diverse population, and a distinct sense of place. Goals and policies are based on best contemporary planning practice, Smart Growth principles, and the collective vision of the larger community.

2.1 Land use and development

The Town of Ithaca is committed to establishing land use practices that promote a strong sense of place for its residents. Land use and development practices provide the foundation for how a Town grows and changes, and molds the community's quality of life, character, and sense of place. The Town's land use and development goals anticipate a Smart Growth approach, encouraging pedestrian- and transit-oriented development by establishing walkable, mixed use residential, office, and commercial areas that are connected by a multimodal transportation system. These new areas will be interweaved with the Town's existing conventional suburban neighborhoods, commercial enterprises, and employment centers, and establish architectural standards in commercial, office, and industrial areas to promote community identity. The Town is committed to protecting and preserving open space, agricultural lands, and sensitive environmental lands from additional development. The Smart Growth approach will support an enhanced quality of life for Town residents, and will put into practice the Town's commitment to reduce energy consumption and to meet its climate protection and housing diversity goals.

An additional goal is to create new institutional zoning for Cornell University, Ithaca College, and other area institutions. The intention of this new zoning is to provide the institutions with the flexibility to plan and develop their facilities, while ensuring that surrounding areas are protected from negative impacts such as traffic, overshadowing buildings, noise, other externalities from laboratory and research facilities, and from expansion of institutional uses into residential areas.



Stapleton, Denver, Colorado (DT)

Goals and recommendations

Goal LU-1: Shape and improve the quality of the built environment by focusing growth to provide for the needs of Town residents while fostering a balanced mix of agricultural, open space and recreational, residential, commercial, institutional, and office/industrial uses.

- LU-1-A Avoid sprawl by focusing and promoting development in areas where adequate infrastructure and services already exist or can be easily upgraded.
- LU-1-B Preserve and protect lands that contain: steep slopes; Federal, State, or locally designated wetlands; environmentally important areas such as quality wildlife or plant habitat; forests and woodlots; agriculture; and areas listed on the inventory of Scenic Resources.
- LU-1-C Limit intrusion of non-agricultural uses into agricultural and conservation areas. Buffer farms from neighboring development.

- LU-1-D Limit low density residential uses to areas that have limited or no value as agricultural or conservation areas, and which are also not anticipated to be served by public sewer and water.
- LU-1-E Require development to take the form of cluster subdivision (also known as conservation subdivision) in environmentally, agriculturally, and visually sensitive areas.
- LU-1-F Establish more intensively developed mixed use neighborhood centers near large employers on East Hill and South Hill.
- LU-1-G Establish new mixed use neighborhoods in areas where they can be supported due to proximity to utilities and adequate transportation networks.
- LU-1-H Limit the acreage of land zoned for commercial and industrial uses in the Town to only the amount realistically needed to meet current and future demand. Discourage strip commercial zoning and speculative rezoning.
- LU-1-I Restrict frontage (“strip”) residential development.
- LU-1-J Redevelop or retrofit aging or abandoned industrial or commercial sites as mixed use, pedestrian-oriented development.
- LU-1-K Ensure that development is sensitive to the community’s scenic views (as identified in the Town’s Scenic Resources Inventory).

Goal LU-2: Create, reinforce, and respect a strong sense of place through the form of the built environment.

- LU-2-A Adopt architectural design requirements to promote high quality, human-scaled architecture. Encourage construction of efficient and environmentally sustainable buildings with a timeless visual appeal.
- LU-2-B Implement site planning requirements to promote human-scale development and social connectivity, and to discourage less attractive and less enduring alternatives (such as vehicle-oriented development where parking visually dominates the site).
- LU-2-C Establish standards for landscaping and screening.
- LU-2-D Revise sign requirements to ensure that the Town continues to be protected from visual pollution that results from excessive and inappropriate signs and clutter, while still providing adequate flexibility for agritourism and special community events. Ensure that sign regulations conform to current legal doctrine.

See also: NR-2-D (tree preservation)

Goal LU-3: Maintain and enhance the established character and sense of community of existing neighborhoods.

- LU-3-A Ensure that new development and uses in existing neighborhoods are compatible with the established character and scale of development.

- LU-3-B Encourage infill development and redevelopment opportunities that take full advantage of the existing infrastructure, yet respect the established character and scale of the built environment.
- LU-3-C Establish new and additional systems of communication between Town government and neighborhoods to ensure early awareness of and input into the Town's decision-making process regarding proposed developments and land use changes.
- LU-3-D Work with neighborhood groups to determine important characteristics of their community; maintain and enhance these characteristics.
- LU-3-E Encourage private initiatives to maintain or improve neighborhoods (such as neighborhood cleanups, tree plantings, supervision and maintenance of play areas, and adopt-a-park and adopt-a-road programs).
- LU-3-F Work with the City of Ithaca and other adjacent municipalities to connect and enhance the existing neighborhoods that cross municipal boundaries.

See also: RE-1-B (provision of parks and trails), TR-2-A (road design, speed, and traffic calming)

Goal LU-4: Require that new development in designated areas on the Future Land Use map take the form of traditional neighborhood development (TND).

- LU-4-A Scale new neighborhoods to be within a 5- to 10-minute walk ($\frac{1}{4}$ to $\frac{1}{2}$ mile) from a common destination. Define the edges of neighborhoods, but also provide for easy access to open space.
- LU-4-B Promote a wide cross-section of uses, densities, and building types in new neighborhoods. Site more intensive uses closer to a common destination; intensity and density generally should decrease with distance from the common destination.
- LU-4-C Require new neighborhoods to contain a mix of uses and recreation spaces that support the daily needs of residents. Locate mixed uses in the appropriate areas and in suitable building types.
- LU-4-D Ensure that a variety of housing types and prices are provided that support a broad range of household types, sizes, lifestyles, life stages, and household incomes in new neighborhoods.
- LU-4-E In new neighborhoods, require that civic uses be located in areas of high public visibility, prominence, and accessibility.
- LU-4-F Scale blocks to accommodate a variety of building types and to encourage walking.
- LU-4-G Site building types of like scale, massing, and uses to face one another on a given street. Face primary building entrances towards streets, open courtyards, or public spaces such as parks or plazas.
- LU-4-H Incorporate suitable sustainable development practices such as light imprint development, low impact development, and alternative energy production in the design and construction of new neighborhoods.
- LU-4-I Consider neighborhood identification and branding programs including gateway features, special signage, public art installations, and other features, to reinforce the identity and character of existing and new neighborhoods in the Town.

See also: TR-2-G (street design following traditional neighborhood development principles), TR-6-A (Complete Streets)

Goal LU-5: Recognize in the planning process the presence and character of Cornell University, Ithaca College, Cayuga Medical Center, and other large institutions.

- LU-5-A Implement institutional zoning to recognize and accommodate the unique land uses and built environment at colleges and universities. The intentions are: to allow institutions the flexibility to plan and develop their facilities; to promote best planning practice for institutional sites; and to protect the character of surrounding areas. Consider institutional zoning for other large institutions.
- LU-5-B Work with Cornell University, Ithaca College, Cayuga Medical Center, and other large institutions to ensure that their development plans conform to the Town Comprehensive Plan, while supporting the missions of their institutions.

Goal LU-6: Use contemporary, effective tools that reflect best current planning practice to guide the form of the Town's built and natural environments.

- LU-6-A Adopt a new zoning code that includes all aspects of land use and development regulations that are now located throughout the Town code into one document. Consider a unified development code.
- LU-6-B Require a form- or transect-based zoning code to guide the development (where appropriate) of new neighborhoods and the redevelopment and retrofitting (where appropriate) of existing neighborhoods. Consider including form-based regulations in a larger zoning or unified development code.
- LU-6-C Adopt new subdivision regulations that are suited to a growing community with a diverse range of land use patterns and physical environments. Consider including subdivision regulations into a larger unified development code.
- LU-6-D Review, revise, and add to as needed, all of the Town's development standards to ensure that they reflect current best planning practices and legal doctrine. Remove or revise standards that are barriers to implementing this Comprehensive Plan.
- LU-6-E Revise the zoning code to implement a simplified and more logical categorization of zoning districts, permitted uses, and siting requirements.
- LU-6-F Ensure that all land use regulations are written in clear, plain, and consistent language that will be easily understood by all users, including laypeople. Use tables, charts and illustrations where possible.
- LU-6-G Review the Comprehensive Plan and all land use regulations on a regular basis, to keep ahead of emerging land use trends, best planning practice, and potential legal issues.
- LU-6-H Work closely with adjacent municipalities, Tompkins County, Tompkins County Council of Governments (TCCOG), Ithaca-Tompkins County Transportation Council (ITCTC), and other appropriate regional agencies and organizations regarding land use planning and development decisions.

2.2 Housing and neighborhoods

A cornerstone of a community's quality of life is its housing and neighborhood opportunities. Citizens desire safe, secure, high-quality housing and neighborhoods. Although housing in the Town is largely a function of the private sector, the Town is responsible for assuring that housing provides for affordability and diversity, including special needs and multigenerational needs.

The Town of Ithaca is committed to fostering neighborhoods that are livable, affordable, walkable, transit-oriented, and sustainable. To meet that commitment, the Town's housing and neighborhood goals include a Smart Growth approach, which encourages more density, diversity, and mixed uses in existing neighborhoods.

The Smart Growth approach also promotes efficient, mixed use development with a variety of housing types, sizes, and prices that provide for a diversity of incomes, ages, and household types. Complementary services should be interspersed within new housing developments. Development will be located near and connected to existing multimodal transportation facilities (e.g. pedestrian and bicycle facilities, trails, and public transport) and employment centers. New residential mixed use development will be constructed with respect for and preservation of the natural features of any proposed development site. Finally, new development will be encouraged to locate within target areas designated as appropriate for such development.



Commonland Community

The housing goals also include promoting Universal Design for seniors and those who want to age in place, and adopting a multi-pronged approach to increase the supply of housing that is affordable to median income residents. While the supply of housing geared to low income residents has increased in recent years, housing affordable to residents in the median income range continues to be in short supply.

Goals and recommendations

See also: LU-1-B (protection of sensitive lands), LU-1-E (cluster/conservation development on sensitive lands), NR-2-D (tree preservation), EC-2-B (green building standards), EC-2-C (energy code)

Goal HN-1: Promote the availability of diverse, high-quality, affordable, and attractive residential neighborhoods.

HN-1-A Ensure that adequate amounts of suitable land in appropriate locations are zoned to meet the Town's share of regional housing needs.

- HN-1-B Focus new housing development closer to the City and in areas where public transit is available. Designate locations for new housing that will connect with the Town's existing and future planned neighborhoods, parks, trails, and transportation system.
- HN-1-C Explore future locations for senior housing that are located conveniently to commercial and professional services and public transit routes. Include both moderately priced units and market rate options for seniors. Encourage mixed-age housing and housing that accommodates Universal Design/Aging in Place principles in all developments.

See also: LU-1-F, LU-1-G (new mixed use neighborhood areas), LU-4-D (housing variety), HN-2-B (zoning and housing options)

Goal HN-2: Encourage a balanced blend of high-quality housing opportunities, including moderately priced housing to provide a range of prices to accommodate the local workforce.

- HN-2-A Require developers to provide a certain percentage of residential development as moderately priced housing affordable to households in the median income range (80% to 120% of Tompkins County median household income), and/or consider using density bonuses and other modifications of development standards (e.g., raise maximum building heights) to encourage developers to create moderately priced housing units. Moderately priced units should be indistinguishable in appearance and functionality from other housing and should not be isolated from other housing.
- HN-2-B Modify the Town's Zoning Code to allow smaller lot sizes and encourage smaller residential units and other strategies in residentially zoned areas to provide housing options that will not preclude moderately priced housing.
- HN-2-C Consider pursuing legal or other mechanisms to ensure that affordable and moderately priced housing remains affordable over the long term, while allowing opportunities for owners to take a modest advantage of increased equity. Strategies might include: zoning regulations; housing trusts; deed restrictions; internal subsidies of lower priced units by higher priced units within private developments; or other mechanisms that allow a reasonable profit as property changes hands, while keeping the resale price below market rate.
- HN-2-D Continue working with the major employers in the Town, including Cornell University and Ithaca College, to promote housing opportunities for their employees near their places of employment. Continue working with Cornell University on their commitment in the Cornell/Community Housing Initiatives program to fund housing programs and projects that will support moderately priced housing opportunities in the Town.
- HN-2-E Seek grants from Federal, State, and other agencies and foundations to fund housing that are affordable to those at or below moderate income ranges and also use strategies that do not depend primarily on Federal or State subsidies, means testing, or third-party agency involvement.
- HN-2-F Consider establishment of a housing trust fund or land bank that could be used to support housing projects in the Town that are affordable to families at or below median income. Consider ways that the Town can help provide funds to decrease development costs (density bonuses, assistance with infrastructure, housing trust fund programs, etc.).

See also: LU-4-D (housing variety in new neighborhoods)

2.3 Natural resources and environment

The Town of Ithaca is enriched by a wide diversity of natural features and open space. The abundance of woods, waterfalls, gorges, open fields and meadows, and lakeshore contribute greatly to the quality of life in the Town and serve as important habitat for plants and wildlife. Residents value the Town's natural areas and scenic resources. Ninety five percent of the respondents in the 2009 Resident's Survey stated that their quality of life was enhanced by the existence of natural areas; 91% stated the same for scenic views. However, our extraordinary natural heritage is challenged by changes to the landscape caused by development affecting the viability of the natural areas, water quality, and the Town's scenic beauty.



Coy Glen Creek

The Town of Ithaca is committed to the preservation and growth of diverse natural areas throughout the Town. The Town recognizes that natural areas need to be identified, designed, and preserved with an eye towards richness and diversity in native animal life, native plant life, and ecological communities. Sufficient land must be set aside for the range of needs of the specific native species that live in that ecosystem, with well-planned interconnecting natural corridors to allow for the natural migration of the flora and fauna. Natural areas should be developed with the needs of the plants and animals that inhabit them taking priority. We must ensure that these areas, features that attracted many of the Town's residents to move here in the first place, are also vibrant for future generations to enjoy.

Although the Town has achieved many of the goals in the 1993 Comprehensive Plan aimed at open space and natural resource protection, most notably the adoption of a Park, Recreation and Open Space Plan, there are still more challenges and work to be done if we are maintain the character and quality of life as it relates to the natural environment.

Goals and recommendations

Goal NR-1: Identify and target natural and environmental resources for preservation and protection.

NR-1-A Inventory, identify, and comprehensively map the Town's natural areas and open spaces, including riparian areas, gorges, biological corridors, forest cover, steep slopes, ecological communities, wetlands, wildlife habitats, etc. Expand the Town's knowledge of its valuable resources beyond basic existing land use information and known Unique Natural Area boundaries. Maintain and update the inventory over time.

- NR-1-B Establish criteria and a mechanism for classifying the significance and importance of natural areas and habitat types. Include rarity as a consideration as well as high-quality common habitat/plant communities/ecosystems, such as those especially large and contiguous, isolated from human activities, old, or lacking harmful invasive species, or those providing connections between other important habitats.
- NR-1-C Update the 1997 Park, Recreation and Open Space Plan to reflect new or expanded natural areas or open space targeted for protection (through purchase, easements, conservation zoning, etc.) subsequent to the inventory and classification process described above. Include possible new planning approaches and necessary funding mechanisms.
- NR-1-D Identify and designate additional natural and/or scenic resource areas that warrant Critical Environmental Area designation as a way to highlight them and to ensure that environmental impacts of proposed development will be thoroughly assessed.

Goal NR-2: Protect open space with appropriate land use regulations and development strategies.

- NR-2-A Establish buffer areas between development activities and large contiguous protected areas such as Buttermilk State Park, Robert H. Treman State Park, Eldridge Wilderness, Land Trust preserves (e.g., Lick Brook Nature Preserve) and Cornell University natural areas.
- NR-2-B Focus development to within targeted areas to protect against habitat fragmentation.
- NR-2-C Develop regulations for timber harvesting activities of a certain scale; such regulations should require the submission of a sustainable forest management plan that includes preservation of enough healthy, diverse species for an ongoing forest.
- NR-2-D Adopt standards for tree preservation, clearing, and replanting for development activities. Provide incentives for maintaining healthy, diverse species of trees. Require a tree inventory, replacement/planting plans, and construction standards to protect retained trees.
- NR-2-E Continue to ensure protection of Unique Natural Areas through the development review process and its associated environmental assessment (State Environmental Quality Reviews), conservation zoning, and other mechanisms.

See also: LU-1-B (protection of sensitive lands), LU-1-E (cluster/conservation development on sensitive lands), LU-2-C (landscaping standards)

Goal NR-3: Acquire or assist in the acquisition of open space throughout the Town.

- NR-3-A Partner with existing and future nature conservation groups on establishing permanent protection of environmentally sensitive areas in the Town.
- NR-3-B Use funding mechanisms such as the Purchase of Development Rights (PDR) or fee-simple land purchase to acquire or preserve important natural areas or open space.
- NR-3-C Encourage private property owners to establish conservation easements to protect environmentally sensitive lands and open space. Encourage land owners to donate to the Town or other entities, such as a land trust, environmentally important lands.

Goal NR-4: Support private and intermunicipal efforts to protect wildlife and open space.

- NR-4-A Promote incentives such as the Wildlife Habitat Incentives Program (WHIP), to encourage development or improvement of fish and wildlife habitat. [Note: The USDA Natural Resource Conservation Service administers WHIP and provides technical and financial assistance to landowners for the development of upland, wetland, aquatic, and other types of wildlife habitat].
- NR-4-B Support and collaborate on intermunicipal/regional efforts to develop protection plans for contiguous expansive areas of natural resources that extend beyond municipal boundaries. Such areas might include wildlife habitat, biological corridors, Cayuga Lake and other lakes and streams, wetlands, mature forests, and other important mixed ecosystems (e.g., the Emerald Necklace effort led by the Finger Lakes Land Trust).

Goal NR-5: Support and actively engage in efforts to control the threat of invasive species.

- NR-5-A Manually remove invasive species and where necessary allow the judicious use of herbicides and pesticides on Town-owned land following Integrated Pest Management (IPM) Program standards and tree harvesting, as needed. Develop management plans for invasive species on Town-owned lands. Monitor trends in invasive plants growing along Town roadways and on Town-owned property. Proactively plan for the consequences of a Town-wide invasive insect infestation and the resulting damage to trees and forests
- NR-5-B Encourage use of native diverse landscaping which includes a variety of plant species.
- NR-5-C Educate residents (through the Town newsletter, informational displays at Town facilities, brochures, etc.) about invasive species found in the Town or those likely to spread into the Town. Include how to identify these species, what can be done to prevent their spread, and what should be done if they are found. Include hands-on removal programs as appropriate.

Goal NR-6: Protect water resources and seek to improve water quality.

- NR-6-A Incorporate low impact development, light imprint development, and green infrastructure standards to reduce the amount of impervious surfaces and offsite stormwater runoff.
- NR-6-B Continue to support water quality testing and evaluation of major streams and Cayuga Lake to ensure protection of our area's water bodies.
- NR-6-C Monitor regulations, policies, and practices to ensure the health of Cayuga Lake and its value as a natural resource.
- NR-6-D Maintain Cayuga Lake as a natural area capable of supporting a diverse and healthy ecosystem and as a source of potable water.
- NR-6-E Acknowledge the "impaired water quality" designation and listing of the southern end of Cayuga Lake by the NYS Department of Environmental Conservation, and strive to improve water quality through policy making.
- NR-6-F Oppose using the waste water treatment plants to receive and handle large volumes of industrial or other hazardous waste products.

- NR-6-G Continue to help support and participate in organizations like the Cayuga Lake Watershed Intermunicipal Organization and the Stormwater Coalition of Tompkins County to share resources; work cooperatively with other municipalities to protect Cayuga Lake.
- NR-6-H Establish regulatory mechanisms to protect wetlands; place particular attention on those wetlands that are not currently addressed by State or Federal wetland protection laws.
- NR-6-I Reevaluate methods and policies related to the maintenance of roadside ditches, including decisions related to the closing/piping of ditches. [Note: Ditches are the dominant conveyor of stormwater and their role in water quality and stormwater runoff is a critical consideration.] Educate members of the public on the need to take responsibility for the care and maintenance of ditches on their property.

See also: RE-1-C (Cayuga Lake access), MS-4-A (stormwater management plan, stormwater-related laws)

Goal NR-7: Preserve scenic resources that contribute to the Town’s unique character.

- NR-7-A Finalize the Scenic Resource Inventory and Analysis Report which identifies, catalogues, and provides analyses of the Town’s significant scenic areas.
- NR-7-B Pursue protection of critical scenic resources by purchasing lands or acquiring conservation easements.
- NR-7-C Adopt development standards intended to protect scenic resources.
- NR-7-D Promote the appreciation of scenic resources through education by developing scenic overlooks and educational signage in parks, neighborhoods, and public spaces. Construct overlooks and signage in such a way that they are an enhancement and amenity to neighborhoods and other locations.

See also: LU-4-I (neighborhood branding)

Goal NR-8: Protect existing air resources and maintain the air quality for the health and safety of Town residents.

- NR-8-A Consider enacting regulations that address and reduce air quality impacts from outdoor wood burning. Such regulations might include: building permits for installation of outdoor wood boilers; setbacks from neighboring properties; prohibited use in residential zones; and mandated seasonal-only use.
- NR-8-B Enact regulation to limit the cumulative air quality impacts from industrial, diesel, or other similar operations.
- NR-8-C Explore adopting a motor vehicle idling law.

Goal NR-9: Protect neighborhoods from noise disturbances and pollution including the cumulative impacts of noise.

- NR-9-A Prevent noise pollution through ongoing enforcement of community noise regulations.
- NR-9-B Establish performance and design standards to address and reduce effects of noise pollution.

2.4 Energy and climate protection

The Town of Ithaca is committed to protecting and enhancing its economic, environmental and community resources, to benefit future generations while at the same time addressing the needs of today. The Town Board has endorsed sustainability and climate protection as overarching principles to guide long-term decision-making; elements of these principles are infused throughout this Comprehensive Plan.

The guiding principles for the Town's sustainability efforts are as follows:

- The Town leads by example through integrating energy efficiency, sustainability, and climate protection into its daily operations.
- The Town enacts and implements policies and regulations that integrate sustainability and climate protection into building and construction practices and land use planning.
- The Town engages in partnerships that strengthen sustainability efforts internally and community-wide.
- The Town provides education and outreach to its constituents to promote sustainable practices, energy efficiency, and conservation, and to encourage public participation.



Residential wind turbine, Town of Ulysses

The transition to a more sustainable future for the Town of Ithaca goes beyond the work of government. Residents, business owners, and organizations each have a part to play in creating the community we aspire to live in. Though the Town government cannot do it alone, it will provide leadership to the community as we move forward. The long-term goals articulated here support the guiding principles and provide a framework to advise future decision-making and policy development. The actions that accompany these goals are specific activities to be implemented to achieve the long-term goals.

Goals and recommendations

Goal EC-1: Incorporate sustainability and climate protection into long-term planning.

- EC-1-A Institutionalize sustainability in Town operations. Consider continuing a sustainability position and creating an internal sustainability committee. Distribute sustainability-related tasks to existing staff as necessary.
- EC-1-B Conduct greenhouse gas (GHG) inventories at regular intervals to assess emissions from government operations and from the community at large. Streamline and facilitate data collection.

- EC-1-C Implement the Government Energy Action Plan 2011 to achieve a 30% reduction in GHG emissions from government operations by 2020. Update the Energy Action Plan (EAP) on a regular basis and consider incorporating long-term actions in future Plans to meet the existing goal of reducing government GHG emissions 80% by 2050.
- EC-1-D Set short- and long-term goals for community-wide GHG emissions reductions. Develop and implement a Community EAP to meet reduction goals, and update Plan on a regular basis. Maintain a citizen committee to advise on the implementation and update of the community EAP and other sustainability-related issues.
- EC-1-E Maintain membership in ICLEI-Local Governments for Sustainability for continued access to climate action planning tools, technical assistance, training, and networking.

See also: LU-4 (mixed use/traditional neighborhood development), LU-6 (best planning practice)

Goal EC-2: Reduce energy consumption and GHG emissions in buildings and infrastructure.

- EC-2-A Consider using policy instruments and regulations to reduce energy use in existing buildings. For example, building owners could be mandated or encouraged to perform energy audits and energy efficiency improvements, and to track energy usage.
- EC-2-B Consider adopting a building code to require all new construction projects and major renovations to incorporate green building techniques and achieve specific energy efficiency standards.
- EC-2-C Partner with local organizations and businesses to create, promote and maintain incentives, financing options, and education and outreach campaigns that support energy efficiency in new and existing buildings. These products could be marketed to building owners, tenants, developers, builders, code enforcement officers, and other populations.
- EC-2-D Ensure municipal buildings and facilities act as a model of good energy efficient practices. Track energy usage on a regular basis. Conduct energy audits and implement recommended upgrades. Adopt a green building policy for all major renovations and new construction projects. Provide education for employees about behavior change to reduce energy use.
- EC-2-E When replacing lamps in municipal streetlights and traffic signals, investigate use of LED lamps or other high-efficiency equipment. When specifying replacement technologies, take into account the full life cycle costs, including energy and maintenance costs. Also take into account the spectrum of light produced, and its effect on visibility and aesthetics and the health of humans and wildlife. Encourage NYSEG to improve the efficiency of the streetlights it controls.

Goal EC-3: Reduce energy consumption and GHG emissions related to the treatment and distribution of water and wastewater.

- EC-3-A Conduct comprehensive energy audits of municipal water and wastewater treatment facilities and infrastructure, and implement recommended upgrades. When replacing equipment, use the most energy efficient equipment that is economically viable when taking into account full life cycle costs. Explore other changes to the water supply system in order to improve overall efficiency.

- EC-3-B Work with Southern Cayuga Lake Intermunicipal Water Commission (also known as Bolton Point) to establish a water rate structure that incentivizes consumers to reduce usage.
- EC-3-C Develop and implement an education and outreach program to encourage water conservation and efficiency community-wide. Consider using policy instruments and regulations as well.

Goal EC-4: Reduce energy consumption and GHG emissions in the transportation sector.

- EC-4-A Partner with local organizations and businesses to support programs that educate residents, businesses and Town government employees about cleaner operating and more efficient vehicles and vehicle use.
- EC-4-B Adopt a municipal green fleet policy that: includes a vehicle replacement plan that specifies vehicles that are smaller, more energy efficient, and well-maintained; reduces vehicle miles traveled by Town government vehicles through greater efficiency, planning, and cooperation; and reduces idling in municipal vehicles.

See also: LU-4-A (pedestrian sheds), LU-4-B (mixed uses in new neighborhoods), TR-2-G (street design following TND principles), TR-6-A (Complete Streets), TR-6-B (neighborhood design and automobile dependence), TR-7-B (automobile dependency)

Goal EC-5: Encourage and facilitate the production and use of renewable energy.

- EC-5-A Adopt renewable energy goals for the community and for government operations, to guide decision-making (e.g. meet a certain percentage of the Town government’s energy needs with renewable energy sources by 2025).
- EC-5-B Revise Town regulations to facilitate local renewable energy production and use (e.g. revise Town Code, streamline the permit process, reduce permit fees).
- EC-5-C Work with other municipalities, local utility companies, businesses and organizations to develop financial incentives for the installation and use of renewable energy systems. Explore models for community-owned renewables.
- EC-5-D Partner with local organizations and businesses to support programs that provide resources and information on renewable energy technologies, installation, and financing.
- EC-5-E Generate renewable electricity on Town property. Consider integrating renewable technologies in all new Town buildings and significant renovations; address this early on in the planning process. Consider using power purchase agreements (PPAs) or lease agreements to make solar photovoltaic installations on Town property more economically viable. Consider installing biomass systems when replacing boilers.
- EC-5-F Consider the purchase of renewable energy credits (RECs) to offset a portion of GHG emissions related to Town government electricity usage until Town-operated renewable systems can be installed. Encourage residents and businesses to purchase RECs.

Goal EC-6: Reduce GHG emissions related to waste generation and purchasing.

- EC-6-A Adopt a waste reduction policy for municipal operations to strengthen existing practices, and consider implementing a compost program in Town facilities.

- EC-6-B Partner with local organizations and businesses (e.g. Tompkins County Solid Waste and Finger Lakes ReUse) to support programs that encourage Town residents and businesses to reduce, reuse, recycle, and compost.
- EC-6-C Work in cooperation with other municipalities to eliminate duplicate recycling, reuse, and composting services.
- EC-6-D Adopt a sustainable purchasing policy for Town operations that calls for the procurement of products and services that have a reduced negative impact on human health and the environment as compared with their conventional counterparts, and are sourced from or provided by locally owned businesses when possible and legally permitted. Encourage local businesses to consider similar policies.

See also: CS-4-A (waste management and curbside composting), CS-4-B (demolition material reuse and recycling), CS-4-C (promote recycling and solid waste center)

Goal EC-7: Build a resilient community by preparing for and adapting to the unavoidable impacts and costs of climate change.

- EC-7-A Work with the Tompkins County Planning Department and other municipalities in the County to develop a county-wide climate change adaptation plan. Develop a climate change adaptation plan that provides specificity under the County-wide framework to prepare for the impacts and costs of climate change within the Town of Ithaca.
- EC-7-B Adopt new or modify existing policies so that the anticipated effects of climate change are considered when changes are made to Town infrastructure (e.g. increase the height of bridges over waterways and of pipe diameters of culverts and other stormwater conveyance systems).
- EC-7-C Require the planting of street shade trees in appropriate areas to counteract the urban heat island effect of parking lots and roads.

See also: LU-2-C (landscaping standards), NR-2-D (tree preservation), AG-3-B (community gardens)

2.5 Agriculture

Agriculture in the Town of Ithaca is very diverse. Agricultural enterprises include dairy, vineyard and winery, direct-marketed produce (via area farmers markets, u-pick operations, and roadside stands), field crops, forest crops, landscaping and nursery stock, Christmas trees, greenhouses, horses, beef, chickens, fiber, corn-maze sound gardens, and community-supported agricultural (CSA) operations. There are newly developing farm operations, farms 20-50 years old, and several multigenerational farms. Farming in the Town is concentrated in the western part of the Town along the borders of Enfield and Ulysses, and crosses these boundaries. Portions of South Hill are also actively farmed and Cornell University uses areas of East Hill for agriculture and agricultural research.



Farm in the West Hill area

Farmland, and the farmers who work it, make a major contribution to the well-being of all Town residents. In addition to the direct contribution to the local economy through the production of local products and employment of workers, local farmers also make significant indirect contributions to the local economy through the purchase of equipment and supplies, and through the relatively low demands on costly public infrastructure. The rural character, which is enjoyed by Town residents and is essential to the local tourist industry, is provided largely by local farmers and State parks. Perhaps most importantly, farmers in the Town of Ithaca have established a tradition of stewardship of the land and its resources.

Town farmers are committed to continuing farming and to keeping their land in agriculture. The Town needs to have a proactive approach to keeping agriculture viable and needs to work with farmers on issues that impede their ability to remain or become more profitable.

The Town of Ithaca Agricultural and Farmland Protection Plan outlines a vision for agriculture in the Town. The vision statement from the Plan is also the basis for the goals and recommendations that are found below. The Agricultural and Farmland Protection Plan vision statement declares that:

“The Town of Ithaca recognizes that agriculture is an integral part of the Town’s economy and environment, provides locally grown food and other agricultural products, and enhances the quality of life for Town residents. The Town proactively promotes a diversity of farm types; seeks the long-term preservation of the Town’s agricultural land resources; supports the economic viability of the farming community and the profitability of each farm; values the local public agricultural research and educational resources; and encourages the general public to understand and support local agriculture.”

Goals and recommendations

The Town of Ithaca Agricultural and Farmland Protection Plan contains a detailed list of recommendations under each of the goals listed below. The following recommendations were selected from that expanded list. The first five goals come directly from the overall Vision Statement for agriculture for the Town. The entire Agricultural and Farmland Protection Plan is included in Appendix I.

Goal AG-1: Ensure long-term protection of agricultural land resources for agriculture, open space, and scenic resources.

- AG-1-A Continue implementation of the Town's current agricultural conservation easement acquisition program (PDR) for appropriate agricultural parcels that have been targeted in the Policies and Procedures Manual for the Agricultural Land Preservation Program.
- AG-1-B Consider enlarging setbacks for non-farm residential dwellings in the agricultural zone to provide spatial and vegetative buffers between the houses and agricultural activities (such as crop production, animal pasturage, and hunting).
- AG-1-C Require vegetative buffers on non-agricultural land so that farm lands have maximum space and so that trespassing and movement of pesticides to and from farmlands is prevented and dust control is enhanced.
- AG-1-D Support the Town of Ithaca's Agricultural Committee.

See also: LU-1-A (infrastructure and development), LU-1-C (farmland encroachment and buffering)

Goal AG-2: Retain and encourage a diversity of economically viable farm types.

- AG-2-A Review and revise regulations pertaining to structures to accommodate farm operations (e.g., sprinkler law, use of rough-cut timber, property maintenance law).
- AG-2-B Encourage shared farm infrastructure development (storage and processing facilities, slaughter and processing facilities, mobile market, locations for CSA dropoff and pickup, etc.).

Goal AG-3: Promote the availability of locally grown foods and other agricultural products for all residents, including limited-income families.

- AG-3-A Accommodate farm stands, year-round farm markets, greenhouses, value-added product operations, home food production, u-picks, CSA, and agritourism sites.
- AG-3-B Require or encourage community gardens in larger new housing developments; provide community gardens, including raised beds, irrigation water, and other facilities to encourage participation of all residents, on Town lands and elsewhere.

Goal AG-4: Encourage public understanding and involvement.

- AG-4-A Continue support for agricultural and gardening programs for youth (e.g., community gardens, and 4-H Clubs).

AG-4-B Heighten public awareness through the use of the Town's website, newsletter, and signage regarding speeding and other traffic issues affecting farmers (e.g., animal and equipment movement).

AG-4-C Encourage household production of food (gardens, orchards, vines, and small food animals such as rabbits and hens).

AG-4-D Notify applicants for building permits of their adjacency to or location within the Town's agricultural zone and the County's agricultural districts, and provide them with a copy of the right-to-farm law.

Goal AG-5: Promote wise land use and agricultural waste management.

AG-5-A Encourage ongoing relationships between farmers and resources such as Cornell Cooperative Extension and Tompkins County Soil and Water Conservation District for farm management and sound farming practices.

Goal AG-6: Protect the environment and human and animal health from the negative impacts of large concentrated animal-feeding operations (CAFOs).

AG-6-A Lobby State and Federal legislatures to allow towns to regulate CAFOs through local laws and ordinances.

2.6 Recreation (parks and trails)

Recreational opportunities are important to the general health and welfare of the community.

The Town of Ithaca park and trail system consists of a wide variety of types and sizes of facilities. These facilities include many neighborhood parks, one developed community park, four nature preserves, three multiuse trails, and several walkways. The existing Town parks provide a range of recreational facilities including play structures, ballfields, playfields, sledding hills, picnic areas, nature trails, and even a community garden in one undeveloped Town park. The multiuse trails and walkways provide off-street alternatives for joggers, bikers, and walkers, as well as commuting paths to work, school or shopping.



Eastern Heights Park

The Ithaca area is also fortunate in having two large City parks, four State parks, Village parks, and the non-publicly owned open areas of Cornell University, Ithaca College, and the Finger Lakes Land Trust, as well as numerous other public and private recreational facilities within or near the Town of Ithaca. Both Buttermilk Falls State Park and Robert H. Treman State Park are located within the Town of Ithaca.

The recreational needs of the community are considered a priority. The Town has started to develop a network of parks and trails throughout the community; as the Town continues to grow, it must constantly reassess the recreational opportunities available for residents now and in the future.

Goals and recommendations

The 1997 Park, Recreation and Open Space Plan outlined goals and objectives regarding the development and maintenance of the Town's recreational opportunities. Many of these goals and objectives (or recommendations) are still relevant to the Town's future park and trails system, and have been carried over here with additions.

Goal RE-1: Provide an integrated system of parks, recreational facilities, and open space throughout the Town, with linkages among trails, parks, nature preserves, stream corridors, and utility rights-of-way.

RE-1-A Prepare and adopt an updated Park, Recreation and Open Space Plan, using the 1997 Plan as the foundation.

RE-1-B Continue to locate and develop a cost-effective and interconnected network of public parks and trails to provide active and passive recreational opportunities for Town residents. Continue the Town's support for the Black Diamond Trail, Gateway Trail, and extension of the South Hill Recreation Way. Coordinate park and trail development with the efforts of surrounding municipalities.

- RE-1-C Encourage increased public access to the recreational resources of Cayuga Lake.
- RE-1-D Consider future maintenance costs when planning the development of any new parks, trails, or preserves.
- RE-1-E Modify existing subdivision regulations to allow the required 10% reservation of park set-asides to be used in a variety of ways, including preserves, natural areas, or greenways in addition to the currently allowed small pocket parks or cash contributions. Establish an option for payment in lieu of a park set-aside, where legally allowed, including a formula for determining a fair payment amount to be held in reserve for park, open space, and recreational purposes, including the acquisition of property.
- RE-1-F Require new parks and common open space to be amassed into meaningful, quality spaces. Require parks and common open space to be contiguous to the maximum extent practicable, and located where they are visually and functionally part of the public realm.

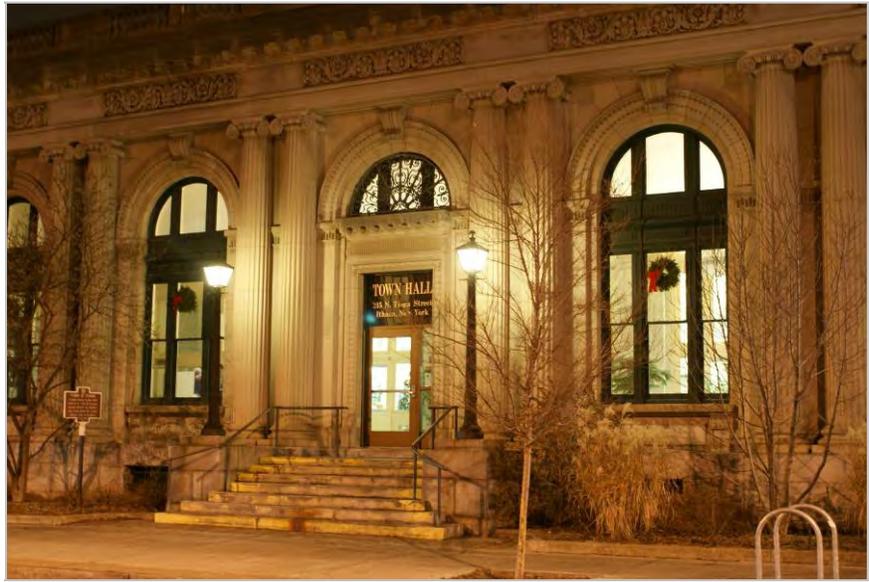
Goal RE-2: Provide recreational opportunities for all Town residents.

- RE-2-A Provide recreational opportunities near residents' homes and workplaces.
- RE-2-B Provide recreational activities and programs for Town residents.
- RE-2-C Maximize mutually beneficial intermunicipal cooperation and partnerships between the public and private sectors to deliver high-quality recreational services for Town residents.
- RE-2-D Aggressively pursue recreation-oriented grant opportunities.

See also: LU-3-E (private neighborhood improvement initiatives), RE-1-B (provision of parks and trails)

2.7 Historical resources

The Town of Ithaca has a rich history with many cultural and historic resources that contribute to the life of the community and a sense of place. The many old stately buildings of the late 1800s and early 1900s, built in such architectural styles as Gothic Revival, Federal, Italian Renaissance and Greek Revival, are community treasures and provide visual reminders of our past. These residences, schools, and businesses were built during a period when attention to the aesthetics and architectural details strengthened the community character—a trait often missing in today’s typical subdivisions and commercial



Town Hall

developments. Historical markers installed throughout the Town denote important landmarks, such as former Native American settlements, early farmsteads, and water-powered mills that once flourished throughout the Ithaca area. These connections to our past help us maintain our historical memory; they provide a link to our cultural heritage and a better understanding of the people and events that shaped the Town’s development.

As the Town grows and changes, the tangible evidence of our history becomes more threatened. The impact of traffic, utility, and infrastructure changes such as electrical wires, road materials and road widths, incompatible architecture, fragmented land uses, and other issues need to be evaluated and addressed carefully. Protecting historic and cultural resources through proactive planning efforts will ensure that the Town maintains and enhances its unique sense of place for current and future generations.

Goals and recommendations

Goal HR-1: Preserve, enhance, and promote the Town’s historical resources.

- HR-1-A Develop a historic preservation program using the inventory conducted by the Historic Preservation Planning Workshop at Cornell University and the recommendations outlined in their *Final Report for the Intensive Level Survey* (2005).
- HR-1-B Explore appropriate mechanisms or incentives to ensure that existing historic buildings, structures, and resources in the Town are preserved and protected. Explore grant opportunities to assist local residents in upgrading and improving historic structures that have come under disrepair.
- HR-1-C Consider developing and designating a local historic overlay district to protect local historic structures and sites.

HR-1-D Explore the benefits of participating as a Certified Local Government (CLG) under the program of the NYS Office of Parks, Recreation, and Historic Preservation. [Note: To participate in the CLG program, the Town is required to create and adopt a historic preservation ordinance designed to protect historic structures].

HR-1-E Work with historic preservation groups, such as Historic Ithaca, to coordinate protection of historic resources.

HR-1-F Ensure continued maintenance of existing Town-owned historical markers that are located throughout the town.

HR-1-G Promote awareness of local history, including Native American and other early settlements and industries.

See also: LU-4-I (neighborhood branding)



House in Forest Home neighborhood

2.8 Transportation

The Town of Ithaca adopted its Transportation Plan in 2007 which grew out of recommendations from the 1993 Comprehensive Plan and recognition of the need for a close look at the Town's transportation system. A number of other transportation studies have been completed since the 1993 Plan, including the Northeast Subarea Transportation Study (NEST, 1999), Forest Home Traffic Calming Plan (2007), Cornell University transportation-focused Generic Environmental Impact Statement (t-GEIS, 2008), and the Route 96 Corridor Management Study (2009).



Tompkins Consolidated Area Transit (TCAT) bus, Tower Road

It has become clearer than ever that consideration of the interrelationships among transportation, land use, housing, and energy consumption are critical to finding the best balance of sustainable growth and development in the Town. These issues also have to be examined on a regional scale and in cooperation with other municipalities in the area. A good example is the amount of commuter traffic; approximately 14,000 in-commuters originate from outside of Tompkins County and travel through the Town and City of Ithaca on a regular basis for work. Important in these efforts is the provision of choices to residents, commuters, and visitors.

Per the mission statement of the Town's Transportation Plan, the Town is committed to fostering a transportation system that enhances the quality of life in the Town. The Town, in collaboration with other municipalities and agencies, can start developing a multimodal transportation system that reduces the dependency on single occupancy motor vehicles (SOV) through carpooling, ride sharing, and perhaps park-and-ride lots, as well as making it easier for residents to choose walking, biking, and transit for their routine transportation. Walking, biking, and transit need to be planned as complete networks so that people see them as viable transportation options for getting to routine destinations, not just as recreation.

Long-term planning needs to shape development into patterns that make transporting people over large distances less necessary. Smart Growth zoning will reduce the amount of future sprawl development in our community and help organize our neighborhoods in a way that makes public transportation feasible. In addition, the Town must encourage development where it is needed, based upon proximity to employment centers, services and existing infrastructure—not just where it is inexpensive to build. Minimizing the need for automobile-based transportation is one of the most sustainable ways to solve our transportation problems. Segmentation of our community, where home, school, work, and recreation are separated, leads to increased car dependency. Low density housing is difficult to service with public transportation. Mixed use communities increase the potential for use of all alternatives to SOV trips.

Changes to land use regulations and the effects of their eventual implementation can take many years. In the meantime, the Town seeks to establish and implement policies and programs that will facilitate the provision of alternatives to automobile transportation. These policies, including bicycle and pedestrian facilities in road projects, facilitating transit access, and promoting alternatives to SOV use, can be developed in the near future and implemented concurrently as part of road improvements, site development, and future planning studies.

Goals and recommendations

Goal TR-1: Develop and maintain a multimodal transportation system that provides for the effective movement of people and goods.

- TR-1-A Develop a transportation system that serves the mobility interests of the Town's residents and businesses, while recognizing the interests of through traffic.
- TR-1-B Use the Bicycle and Pedestrian Corridor Maps in Volume II - The Appendices of the 2007 Transportation Plan to guide the development of bicycle and pedestrian facilities in the Town.
- TR-1-C Assume the costs of construction and maintenance of bicycle and pedestrian facilities that serve a broader population beyond the adjacent neighborhoods.
- TR-1-D Work with other entities to improve the safety, aesthetics, and convenience of walking and bicycle connections in priority locations in the Town.
- TR-1-E Continue to expand and improve the multiuse trail network in the Town and work with Ithaca-Tompkins County Transportation Council (ITCTC), Tompkins County, and other entities to expand the County-wide trail network.
- TR-1-F Work with TCAT, ITCTC, and major employers, to develop a park-and-ride system.
- TR-1-G Consider increasing funding to TCAT to ensure adequate levels of transit service in the Town. Work with TCAT to improve transit service frequency to underserved areas of the Town and rural areas of the County.
- TR-1-H Continue to provide funding for Gadabout to ensure continued service for senior citizens and the disabled in the Town.
- TR-1-I Encourage use of carpool, vanpool, and car share from the public and private sectors.
- TR-1-J Devise traffic demand management strategies to reduce peak hour demand on roadway capacity. Work with employers to provide incentives to reduce peak hour single occupancy vehicle use.

See also: RE-1-B (park and trail system)

Goal TR-2: Develop and maintain a transportation system that promotes livable, healthy, and attractive neighborhoods.

- TR-2-A Control traffic speed through road design standards, traffic calming, and reduction of road widths (street diets). Incorporate low-speed designs along residential and neighborhood streets when they are reconstructed.
- TR-2-B Work to beautify streetscapes, restore roadways to a human scale, and improve the character and livability of the neighborhoods through which they pass when modifying and rebuilding roads in residential areas.
- TR-2-C Consider the effects of traffic volume on the quality of life in new and existing neighborhoods.

- TR-2-D Use a context sensitive approach for road planning and design. Implement design standards that consider the purpose of a road, adjacent built and natural environment, and desired character, to ensure roads are in harmony with their setting. Work with New York State and Tompkins County to apply context sensitive design solutions when designing roadways.
- TR-2-E Work with TCAT to minimize disruptions caused by buses in residential neighborhoods, while nevertheless providing adequate transit service to the neighborhood.
- TR-2-F Address truck traffic patterns that route through residential areas; to do this, work with Tompkins County, New York State, the City of Ithaca, ITCTC, Cornell, local businesses and other regional stakeholders to minimize the impacts of truck traffic on residential neighborhoods.
- TR-2-G Require roads in new development to follow principles of traditional neighborhood design, with a grid of streets that provides a high level of connectivity rather than looping streets, permanent cul-de-sacs, pods, and other elements that make interconnectivity difficult. Where appropriate, require alleys to provide access to garages and loading areas, and a convenient location for utilities and trash collection.
- TR-2-H Require mitigation plans for projects likely to generate significant truck and heavy vehicle traffic, or require offsite worker parking and equipment staging areas.

Goal TR-3: Strive to provide a safe transportation system and to prioritize safety and security in the implementation of every transportation-related goal.

- TR-3-A Continue to evaluate intersections with poor sight distances; make improvements as necessary.
- TR-3-B Regularly request crash information from the Department of Motor Vehicles to update the crash database. Identify hazardous locations and take steps to mitigate problems, including notification to the owner of the road, if not the Town.
- TR-3-C Continue to petition the County and State for speed limit reductions in appropriate locations.
- TR-3-D Adopt access management requirements to control access points to the Town's streets. Ensure access management requirements are compatible with, or where legally permitted, stricter than County and State standards.

See also: TR-2-A (road design speed and traffic calming), CS-2-B (traffic enforcement)

Goal TR-4: Effectively maintain the transportation system.

- TR-4-A Strive to ensure that sufficient capital resources are available to maintain the transportation system.
- TR-4-B Preserve current rights-of-way for the transportation system. Identify and pursue planned rights-of-way needed to enhance connectivity.
- TR-4-C Require developers and subdividers to dedicate rights-of-way and construct portions of proposed collector roads and extensions that cross or touch their property.
- TR-4-D Update the 2007 Transportation Plan periodically to reflect changes within the transportation system and the consequent evolution of transportation-related problems, needs, and solutions.

TR-4-E Regularly update the Official Map. [Note: this map shows existing and planned roads, parks, and trails in the Town.]

TR-4-F Continue to allow the Public Works Department the flexibility to set its own schedule of roadway improvements, consistent with Highway Expenditure Agreement with the Town Board, practice preventive maintenance wherever possible to save money over the long term, and operate in an environmentally sensitive manner.

Goal TR-5: Coordinate with other local and regional organizations to promote a regionally coordinated transportation system.

TR-5-A Continue to explore opportunities for increased intermunicipal sharing of facilities, equipment, labor, knowledge, and expertise.

TR-5-B Support the establishment of community and regional pedestrian and bicycle facilities throughout the Town and County.

TR-5-C Continue the Town's strong level of participation in the ITCTC.

TR-5-D Continue to support the findings of Cornell University's t-GEIS and Transportation Impact Mitigation Strategies where appropriate. Continue to work closely with Cornell, ITCTC, TCAT, and other entities in supporting the Cornell/Community Transportation Investment Initiative Program.

Goal TR-6: Promote future development patterns that reduce the need for and use of automobiles and which encourage the use of alternative modes of transportation.

TR-6-A Design streets in accordance with Complete Streets principles – built and maintained in a way that accommodates not only motor vehicles, but also pedestrians of all ages, bicyclists, and public transportation vehicles.

TR-6-B Design neighborhoods to reduce automobile dependence and to encourage modal shifts to walking, cycling, and public transportation.

TR-6-C Examine the existing sidewalk and trail system and pursue opportunities to make connections within the system. Retrofit existing streets with sidewalks and/or bicycle lanes where practical. Explore the establishment of new multi-use pathways independent of the roadway network that would allow pedestrian and bicycle mobility away from motor vehicle traffic.

TR-6-D Consider transportation impacts when making land use decisions, and consider land use impacts in terms of land use patterns, densities, and designated uses when making transportation decisions.

TR-6-E Evaluate parking area requirements to reduce development of excessive pavement and to encourage multiple uses of paved areas.

TR-6-F Continue to work with TCAT and developers to ensure that new development in the Town is served by transit where possible; key issues are adequacy of access for buses in site plans, provision of bus stops and shelters, and route extensions or service enhancements where feasible.

See also: LU-3-A (development scale). LU-4-A (pedestrian sheds)

Goal TR-7: Protect the environment, including the significant natural, agricultural, scenic, and historic resources of the Town, when planning any changes to the transportation system.

- TR-7-A Consider the environmental consequences of transportation decisions; minimize negative impacts on the natural environment whenever reasonable and to the greatest possible degree.
- TR-7-B Work to reduce the negative effects of overdependence on motor vehicles, including detriments to open space and air quality, by reducing the total number of vehicle miles driven, the number of individual trips, and the average distance and duration of trips.
- TR-7-C Assess the need for wildlife crossings.

2.9 Municipal services and infrastructure

Municipal services and infrastructure are a vital but frequently less noticed part of the day-to-day life of the Town. Having high quality municipal services and reliable infrastructure, such as water, sewer, drainage systems, and roads, are essential to our community's quality of life and sense of safety. Meeting expectations for existing services and infrastructure is an ongoing challenge that requires constant attention and continued coordination with local partners. Costs for improving, expanding, and maintaining these services and infrastructure, as well as the facilities used to plan and carry out these functions, are ever increasing and



Town employees providing leaf collection service

necessitate the implementation of strategies to help control costs. Rising energy costs alone are likely to strain limited resources and require vigilant attention to incorporating sustainable approaches in the delivery of services and operation of infrastructure and facilities. This includes concerted efforts to promote, educate, and incentivize the conservation and wise use of resources by utility and service users.

The expansion of services and infrastructure to meet the needs of our growing community requires careful consideration. Expanding infrastructure to serve new areas has important fiscal implications and can have profound effects on the community character. Town land use policies can play a positive role in reducing the need to expand services and infrastructure. A policy that channels future development into areas with existing services and restricts new service to planned growth areas can avoid the ill effects of development in which demand is spread out to less dense areas, creating excessive costs that are ultimately shouldered by all service customers. The availability of reliable and high-quality services combined with rising energy and material costs are also motivating factors likely to direct and encourage development to concentrate in designated places.

Meeting the expectations for municipal services requires both short- and long-term planning. Capital planning and strategic asset management approaches are effective tools to help set goals and to ensure that scarce financial resources are properly allocated, and that consideration of the community expectations for services are evaluated in the decision-making process.

The Town is committed to continuing to provide high-quality and reliable services in a sustainable manner for the safety, comfort, and enjoyment of its residents, business owners, institutions, and visitors.

Goals and recommendations

Goal MS-1: Provide quality and reliable infrastructure and services in a cost-effective, sustainable, responsible, and efficient manner – meeting current needs and anticipating needs of the future.

- MS-1-A Continually update the five-year capital improvements plan (CIP) for financing the maintenance, repair, and rehabilitation of existing infrastructure and municipal facilities, as well as the construction of new infrastructure. [Note: The CIP is an important tool for planning, prioritizing and budgeting of capital needs for such things as buildings, utility systems, roadways, and heavy equipment.]
- MS-1-B Develop and adopt a long-range water and sewer master plan, consistent with the land use goals of the Comprehensive Plan, for the operation, maintenance, and extension of water distribution and wastewater collection facilities. The plan will document existing service conditions and identify short- and long-term water and wastewater servicing strategies and associated capital projects to serve the developed areas of the Town.
- MS-1-C Investigate additional opportunities for shared municipal services with other Tompkins County municipalities where not precluded by other existing agreements. Where desirable, consolidate municipal services and/or cooperate with other government agencies to limit the duplication of services and the costs of providing such services.
- MS-1-D Continue to seek and promote additional public and private funding sources for infrastructure repair/maintenance/development to offset the cost of improvements and construction. Examples might include bonding for long-term project funding needs and Federal, State, or private grant opportunities.
- MS-1-E Continue to work cooperatively on joint projects with the City of Ithaca and Town of Dryden concerning the Ithaca Area Wastewater Treatment Facility, Cayuga Heights concerning the Cayuga Heights Waste Water Treatment facility and with the four other members of the Southern Cayuga Lake Intermunicipal Water Commission on the Bolton Point Water System.

See also: LU-1-A (infrastructure and development).

Goal MS-2: Maintain, assess, and repair/replace/retrofit/rehabilitate existing public infrastructure, facilities, equipment, and services.

- MS-2-A Monitor and evaluate the water distribution system; assess and evaluate complaints by customers and annual system maintenance measurements.
- MS-2-B Monitor the wastewater collection system by conducting periodic flow measurements within the sewer system to determine adequate capacities and quantities.
- MS-2-C Continue the Town's proactive maintenance of Town roads, sidewalks, and trails through repair, snow removal, cleanup, and other appropriate activities, to the service levels identified by the Town Board.
- MS-2-D Perform annual pavement condition surveys of Town roads and determine necessary preventive and corrective maintenance measures to ensure safety and maximize pavement life.

See also: TR-2-H (mitigation plans for construction-related truck/equipment traffic)

Goal MS-3: Based on sustainable development principals that are consistent with the Comprehensive Plan, limit expansion of public infrastructure and services.

MS-3-A Limit extension of infrastructure into areas not designated for intensive development except when required for public health and safety. Ensure that extensions are consistent with the needs expressed in the Comprehensive Plan, sustainable development principals, and adopted Town policies or industry standards.

See also: TR-6-D (transportation impacts in land use decisions)

Goal MS-4: Ensure the capability of public and private stormwater management infrastructure and facilities to provide reasonable protection to property and natural systems from flooding and to minimize degradation to water quality by reducing contaminants in stormwater runoff.

MS-4-A Implement the Town's Stormwater Management Plan in compliance with New York State Department of Environmental Conservation (NYSDEC) Phase II Stormwater Regulations. Enforce, administer, and update as necessary the Town's Stormwater Management and Erosion and Sediment Control Law.

MS-4-B Maintain and update a comprehensive inventory of public and private stormwater management facilities and infrastructure; create a program for routine inspections and maintenance. Develop a strategy to assess infrastructure needs, and to prioritize solutions for the repair, upgrade, and improvement of the Town's stormwater infrastructure.

MS-4-C Ensure that landowners protect and maintain privately held stormwater infrastructure and facilities to established standards. Provide education and outreach programs to inform businesses, homeowner associations, and residents about the existence, purpose, and maintenance requirements of their stormwater infrastructure and facilities and the full range of green stormwater management options available, taking into consideration site specific conditions.

MS-4-D Provide appropriate staffing to enforce provisions of the Stormwater Management and Erosion and Sedimentation Control Law to ensure compliance with Federal, State and locally adopted programs and regulations.

MS-4-E Complete a Town-wide urban watershed model for use in assessing existing drainage issues and potential impacts from proposed new development on the stormwater collection and treatment system.

MS-4-F Establish Town policy that prescribes when and under what circumstances the ownership for stormwater facilities and infrastructure will become the Town's responsibility; keep in mind the practicality of long-term maintenance and operation for certain types of residential developments.

MS-4-G Pursue a permanent and equitable funding mechanism for the administration of the Town's stormwater management program. Study options such as inspection and permit fees, forming stormwater management districts, creating stormwater utilities, etc.

See also: NR-6-A (low impact development)

2.10 Community services

The community facilities and services available to Town residents are important factors in maintaining and enhancing a high quality of life in the Town of Ithaca. As development occurs, the strain on existing schools, libraries, parks, emergency services, and local government functions increases; these facilities and services often need to be expanded for new residents and businesses.



Rescue Engine 202, Village of Cayuga Heights (Village FD web site)

The Town of Ithaca requires and depends on a variety of public, volunteer, and private services for fire protection, public safety, and police services. The Town also relies on private services for its public health and educational facilities. It is important to encourage and maintain high- quality fire protection, public safety, and police services and public health facilities that provide excellent healthcare options for Town residents.

Quality schools and educational institutions that provide students of all ages with the skills necessary to be successful and productive are also a critical part of a thriving community. The Town is fortunate to be home to a university, a college, and a large public school system and a variety of alternative education options and is committed to engaging students in civic life. Work study, service learning and internship opportunities are consistently offered to students with staff, board, and committee members providing training and oversight. Secondary school students have benefited from educational materials developed with the Town to augment their study of government. The Town welcomes and encourages student engagement in its operations and at public meetings

The Town of Ithaca is committed to assuring that the required public safety, police, and fire services and facilities are available now and in the future to meet the needs of existing and future Town residents. The Town is also committed to supporting existing and future public health facilities, schools, and other educational institutions.

Goals and recommendations

Goal CS-1: Maintain and strive to improve the Town government's ability to serve its citizens.

- CS-1-A Encourage inter- and intramunicipal cooperation and communication to provide high-quality services at reasonable costs. Continue joint development of mutually beneficial services and facilities and cooperation with shared equipment with neighboring municipalities and the county.
- CS-1-B Ensure that Town residents are well informed in Town matters through continued distribution of the Town newsletter and regular updates on the Town website.
- CS-1-C Ensure that Town officials, boards, committees, and staff are well versed in the goals of the Comprehensive Plan, and support professional and educational development for all officials and staff to serve the community well.

CS-1-D Continue to support public libraries. Explore opportunities for local residents to use libraries at local educational institutions.

Goal CS-2: Ensure that fire protection, public safety, and police services in the Town of Ithaca are adequate.

CS-2-A Explore options for an increased presence of public safety officials in the Town.

CS-2-B Partner with existing public safety officials to ensure enforcement of vehicle safety and traffic laws in the Town.

CS-2-C Explore ways to reduce fire protection costs to residents, such as continuing negotiations for current fire contracts, establishing a Town-sponsored fire department, and investigating shared services with other non-partnered municipalities.

CS-2-D Update the Town's Zoning Code to reflect the most recent fire code regulation changes.

Goal CS-3: Integrate public school facilities planning with Town land use planning.

CS-3-A Work with the Ithaca City School District so that land can be reserved for schools when planning future development and so that school facilities will be in harmony with the Town's vision of future land use.

Goal CS-4: Minimize the impact of solid waste on Ithaca's residents, businesses, and the natural environment.

CS-4-A Continue coordination with the Tompkins County Solid Waste Management Division for the removal and management of the Town's solid waste. Implement a townwide program to test residential curbside composting in partnership with the Tompkins County Solid Waste Management Division.

CS-4-B Explore the option of a construction and demolition ordinance that requires the diversion from landfills of a proportion of all waste associated with construction, demolition, and renovation projects (e.g., shingles, ceramic tiles, sheetrock, toilets/bathtubs/sinks, treated wood, wallboard) either through recycling or reuse.

CS-4-C Promote use of the newly renovated Recycling and Solid Waste Center to help Tompkins County reach its goal of diverting 75% of waste from landfills by 2016 and 80% by 2030.

2.11 Economic development

Economic development is a means of enhancing the well-being of the community as a whole. It includes the creation and retention of jobs and support for workplace practices that promote broad-based economic prosperity with a focus on alleviating local poverty.

Local tax policy has minimal effect on the decision by corporations to locate or remain in a community. The quality of life, cultural and recreational opportunities, educated population, and natural attractiveness of the Ithaca area have consistently been cited as inducements to live here.

The Town welcomes the creation and growth of sustainable, locally focused businesses—ones that use local resources, employ local people, and create products and services to benefit the local market and beyond. The Town welcomes businesses that complement our community character, including those that take advantage of our farms to create value-added food products, our natural areas and parks to bolster tourism, and the high level of education in our local population to enhance technology and the green economy.

The Town values its entire labor force and the employers who respect the right of workers to organize and bargain collectively.



South Hill Business Campus

The Town recognizes the important contributions of our institutional and educational service employers, including research spinoff companies. The Town acknowledges that our local economic future will be even stronger if it is supported by a solid base of smaller companies and businesses that are locally owned and operated and which employ local construction workers and employees. Local businesses create a multiplier effect, in that the profits derived and the wages earned are likely to be invested locally. And businesses that are committed to the local economy have a greater stake and interest in the long-term viability of our community. The Town wants to focus on sustainable businesses that are committed to being part of the community over the long term and not short-term or extractive industries that create infrastructure demand and lingering costs to the community far beyond the life of the business.

Maintaining and encouraging job growth is also important to the Town. Our community is fortunate to have a relatively stable employment base with many well-paying jobs. Yet, we still have many who are underemployed or who must work more than one job. By continuing to support the creation of quality and diverse job opportunities—ones that provide benefits, prospects for advancement, and wages at or above a living wage—the Town can help to provide employment opportunities for residents across all skill levels and socioeconomic groups.

Goals and recommendations

Goal ED-1: Promote a stable, sustainable, and diverse local economy.

- ED-1-A Encourage the continued vitality of existing employers, full employment, wage levels that keep families out of poverty, and the incorporation of marginalized citizens into the economy.
- ED-1-B Foster a positive entrepreneurial environment for business start-up and expansion.
- ED-1-C Consider ways to streamline development review, permit processing, and code enforcement within shorter timeframes; clarify and simplify regulations; eliminate redundant layers of control; and ensure predictability (also discussed in the Land Use Section, Goal 6).
- ED-1-D Support workers in attaining fair labor practices.
- ED-1-E Support the mission of the Town's major public and non-profit institutions which: contribute to a diversified economy; bring living wage jobs, new activity and capital into the economy; develop and promote advanced technology; and provide substantial public benefits and needed services to area residents.
- ED-1-F Support artists, arts organizations, and institutions because of: their potential contributions to a healthy business climate; their role in creating a cultural environment that attracts other living wage employers, as well as tourists, to the region; and the substantial benefits they provide to the region's quality of life.
- ED-1-G The Town should lead by example by considering the local economic impact of layoffs, attrition, wage levels, and level of benefits and by giving priority in purchasing and contracting when legal and practicable to locally based business with positive employment practices.
- ED-1-H Work to increase communication among government agencies, businesses, organized labor, institutions, and other entities that might provide economic opportunities. The aim is to enhance the common understanding of issues related to employment growth, business competitiveness, public policy goals and program implementation. Promote partnerships between government and business.
- ED-1-I Support agricultural economic development, including a strong agritourism industry, based on the findings of the Town's Agricultural and Farmland Protection Plan.
- ED-1-J Support sustainable businesses rather than short-term, high-impact extractive industries.

Goal ED-2: Establish a cohesive and sustainable economic development policy for the Town of Ithaca.

- ED-2-A Articulate a socially equitable long-term economic development strategy that builds on local competitive advantages and promotes environmental stewardship and economic justice.
- ED-2-B Participate in a larger, regionally coordinated economic development planning strategy, which includes businesses, organized labor, institutions, Town officials, officials from neighboring communities, and area residents.

- ED-2-C Engage Tompkins County Area Development (TCAD) in cooperative efforts to develop viable economic incentives and initiatives tailored to the Town's unique conditions; adapt TCAD's major economic goals to fit the Town's needs.
- ED-2-D Work to reduce poverty by supporting economic development efforts that provide worker training and recruitment of businesses that offer employees the opportunity to be elevated.
- ED-2-E Promote regional industry clusters that will draw on local advantages to access local and wider markets.
- ED-2-F Evaluate publicly supported economic development programs and incentives on their long-term benefits and impacts, including long-term employment at living wages. Give weight towards projects that practice outstanding site and architectural design, promote redevelopment of brownfields and greyfields, and do not exacerbate urban sprawl.
- ED-2-G Ensure equitable public economic development investments, which prioritize infrastructure and supportive services that promote the vitality of all local businesses or an industry sector, rather than individual businesses.
- ED-2-H Support tax policies that encourage business development and growth based on the area's workforce, economic vitality, natural beauty, cultural attractions, and generally high quality of life, rather than tax breaks that shift funds from the general public to specific profit-making entities.
- ED-2-I Provide funding to nonprofit agencies contracting with the Town that encourages those agencies to employ staff at or above the living wage.
- ED-2-J Actively pursue increased financial support from prominent local tax-exempt institutions to substantially offset existing and future costs of infrastructure and beneficial services.

CHAPTER 3

FUTURE LAND USE PLAN

FUTURE LAND USE PLAN

The future land use plan establishes the framework for development as a general, conceptual guide. It designates desired development patterns based on the aspirations of this Plan.

The future land use plan is considered a guide for zoning and future development in the Town, and should be closely adhered to. However, each proposed development should be judged upon its merit, how it is compatible with and complementary of existing and future development, as well as other goals and policies set by this Comprehensive Plan. On the map, edges of each of the character districts should be interpreted as somewhat undefined. Parcel lines are intentionally not shown, to demonstrate the distinction between the comprehensive planning process and its implementation through zoning and neighborhood regulating plans.

This Plan defines ten character districts in four groups: reserve areas, neighborhood areas, activity areas, and focus areas. Character districts are areas that share a similar built and natural environment, including mix and intensity of land uses, type and prevalence of open space and natural features, and form of development.

Reserve areas

Natural / Open
Rural / Agricultural

Activity areas

Campus
Enterprise

Neighborhood areas

Semi-Rural Neighborhood
Established Neighborhood
TND Medium Density

Focus areas

TND High Density
Inlet Valley Gateway
Area of Special Concern

Character district descriptions below include the purpose or desired character of the district, criteria justifying its location, approximate location, mix of uses, approximate residential density, current zoning equivalent, and transect zone equivalent based on the rural-to-urban transect model described in Appendix A: Implementing Best Practices.

3.1 Reserve areas

Reserve areas are locations with natural and agrarian assets, viewsheds and/or rural character that should be protected from urbanization.

3.1.1 Natural / Open

Purpose:

The Natural/Open character district is intended for lands that should be kept in a natural or semi-natural state. The integrity of features such as wetlands, mature woodlands, watercourses, steep slopes and viewsheds will be preserved. To the maximum extent possible, structural improvements will be limited. Uses will be mainly of a passive nature, related to the aesthetic, educational, recreational, and scientific enjoyment of the land.

Criteria:

This character district is assigned to largely undeveloped and uncultivated areas that are deserving of special attention for preservation and protection. It includes land approximating or reverting to a natural state, environmentally sensitive lands, important natural areas, large parks and preserves, and land unsuitable for settlement or agriculture due to topography, hydrology, or soils condition.



Cascadille Creek near Pine Tree Road

Location:

Lands in this category are located throughout the Town, with the amount generally increasing with distance from the Ithaca city line.

Uses:

Parks (predominantly passive recreation), conservation areas, nature preserves, arboretums, open space, low impact recreation, natural sciences research and education, limited agroforestry and forest gardening, uses necessary for resource management and conservation, sparse residential development on a case-by-case basis.

Residential density:

≤1 unit (primary)/15 acres

Zoning districts with similar characteristics:

Current zoning code: C, AG, PDZ

Rural-urban transect: T1 (natural)

3.1.2 Rural / Agricultural

Purpose:

The Rural/Agricultural character district is envisioned to be a bucolic, sparsely settled area that may be cultivated or adapted for human use in an open or semi-natural state. Agriculture and other uses consistent with a rural setting will be the defining features of the landscape. The right to farm will be respected, and agritourism and related value-added operations will be encouraged to keep agricultural uses viable. New concentrated animal feeding operations (CAFO) should be discouraged.



Farm in the Town of Ithaca

Building footprints should be small in relation to the underlying lot, and clustered or grouped where appropriate to preserve contiguous open lands and rural vistas. Residential and non-agricultural buildings should be sparsely located, and sited in a pattern that honors environmental features and agricultural uses. Frontage subdivision should be greatly restricted.

Criteria:

This district is assigned to areas with a rural or agrarian character, where agriculture and related uses are prevalent or desired. It includes, but is not limited to, areas ideally suited to agricultural uses due to soils, topography, or microclimate.

Location:

Agricultural character districts are concentrated in the western part of the Town along the borders of Enfield and Ulysses, portions of the South Hill area, and agricultural, equestrian, and animal husbandry research areas at Cornell University.

Uses:

Agriculture, agritourism and secondary value-added operations, equestrian uses, agricultural and animal husbandry research and education, open space, low impact recreation, sparse residential development.

Residential density:

≤1 unit (primary)/12 acres, higher if tightly clustered.



Farm in the Town of Ithaca

Zoning districts with similar characteristics:

Current zoning code: C, AG

Rural-urban transect: T2 (rural)

3.2 Neighborhood areas

Neighborhood areas are locations where residents live, play, work, and interact with each other.

3.2.1 Semi-Rural Neighborhood

Purpose:

The Semi-Rural Neighborhood character district is intended to accommodate limited low-impact residential development in a semi-rural setting, while preserving the open character of the surrounding countryside. Desired development forms include larger lot development with significant preservation of open space; and clustered development with a variety of detached and semidetached housing close to urbanizing and developed areas where utilities exist and more frequent public transit service may be available.

Development should be integrated into the surrounding agricultural and natural landscape, and sited to have a low visual impact from arterial and collector roads and viewscape corridors. Large contiguous parcels of agricultural, forest and/or environmentally sensitive land in a development area should be preserved. Acreage lot development should be discouraged, and frontage subdivision greatly restricted. Public sewer and water service should be limited to cluster development close to urbanizing and developed areas, where their availability will not encourage or exacerbate acreage or frontage development.



EcoVillage

Criteria:

This district is assigned to areas with value as open space but which are subject to development because acreage or frontage development has taken place and infill opportunities are limited. Urban services such as public sewer and water, or frequent public transit service, are very limited or unavailable.

Location:

Lands in this category are located throughout the Town.

Principal uses:

Single household residences, accessory units, multiple household residences in cluster developments, open space.

Supporting uses:

Agriculture and agritourism, parks and recreation facilities, limited artisanal/cottage industrial uses, very limited low-intensity commercial and office uses, home occupations.

Residential density:

Average: 1.5 units/acre gross, may be higher if located near utilities, transit or employment centers *

Open space (public/common): $\geq 50\%$ of development site

* - density throughout a development, including open and civic space.

Density does not include accessory units or bonuses for affordable housing.



West Hill

Zoning districts with similar characteristics:

Current zoning code: LDR, AG, PDZ

Rural-urban transect: T1 (natural), T2 (rural), T3 (neighborhood edge)

3.2.2 Established Neighborhood

Purpose:

The Established Neighborhood character district is intended to acknowledge existing developed neighborhoods. No significant changes to the character of established neighborhoods are anticipated as a result of this plan. Infill and redevelopment sites should be developed at a density that takes full advantage of existing infrastructure, yet remains sensitive to the established character of its setting. Commercial uses should be limited. Sidewalks should be considered for areas where there is significant pedestrian traffic in competition with other modes of transportation within the roadway footprint. Bicycle lanes or shared lane markings should be established on arterial and collector streets where topography allows. Expansion of streets with limited or no interconnectivity is strongly discouraged.

Criteria:

This district is assigned to areas already developed primarily with single household residences, townhouses and apartment complexes; and associated civic and recreational uses.



Northeast Ithaca

Location:

Lands in this district are located throughout the Town, with the amount generally decreasing with distance from the Ithaca city line. The largest concentrations are in Northeast Ithaca, East Hill east of Slaterville Road, along the Cayuga Lake shoreline, and South Hill southeast of Ithaca College.

Principal uses:

Single household and multiple household residences, accessory units.

Supporting uses:

Schools, places of worship and assembly, limited low-intensity commercial and office uses where appropriate at prominent intersections, public and private parks and recreation facilities, home occupations.

Residential density:

Range within neighborhood: 1-10 units/acre gross *

Average for neighborhood: 2-4 units/acre gross *

Open space (public/common): ≥10% of neighborhood or development site

* - density throughout a development, including open and civic space.

Density does not include accessory units or bonuses for affordable housing.

Zoning districts with similar characteristics:

Current zoning code: MDR, HDR, LR, MR, NC, PDZ

Rural-urban transect: T3 (neighborhood edge), T4 (neighborhood general)



Forest Home

3.2.3 TND Medium Density

Purpose:

The TND Medium Density character district is intended to be the setting for compact mixed use neighborhoods based on traditional neighborhood development design principles. This includes a mix of housing types, lot sizes, and price ranges that appeal to a wide variety of households, built to create intentional, cross-generational neighborhoods with linkages and proximity to services, employment, nearby neighborhoods, public transit and recreational areas. Most residences will ideally be within a ten minute walk to a small mixed use center. Development will ideally incorporate human scale design; an interconnected street network providing a variety of routes for local traffic; visually prominent public spaces, and other features that foster a sense of community.

Criteria:

This district is assigned to areas that can support new neighborhoods due to proximity to utilities and adequate transportation networks. These areas also have large unsubdivided parcels of land that make land acquisition, and planning and development of a cohesive mixed use neighborhood much more feasible than in other parts of the Town where there the land ownership pattern is more fragmented.

Location:

Lands in this district are located in the West Hill area, the South Hill area in the vicinity of Ithaca College, outside of the South Hill Center district, and west of the Inlet Valley Gateway district.

Principal uses:

Mixed use: residences (single household and accessory units, bungalow courts and pocket neighborhoods, attached units, small apartment buildings, live-work space, elder housing), limited commercial and office development at planned neighborhood centers.



Serenbe, Georgia (UGardner, Creative Commons CC BY-NC 2.0)



Stapleton, Denver, Colorado (DT)

Supporting uses:

Schools, places of worship and assembly, parks and recreation facilities, limited artisanal/cottage industrial uses, limited agriculture, home occupations.

Residential density:

Range within neighborhood: 2-14 units/acre gross *

Average for neighborhood: 5-8 units/acre gross *

Open space (public/common): 10%-25% of neighborhood typical; more on case-by-case basis.

* - density throughout a development, including open and civic space.

Density does not include accessory units or bonuses for affordable housing.

Zoning districts with similar characteristics:

Current zoning code: MDR, HDR, PDZ

Rural-urban transect: T3 (neighborhood edge), T4 (neighborhood general), T5 (neighborhood center)



Highlands Garden Village, Denver, Colorado (DT)



Serenbe, Georgia (UGardner, Creative Commons CC BY-NC 2.0)

3.3 Activity areas

Activity areas are locations where larger groups of people gather to work, research, study, and learn.

3.3.1 Enterprise

Purpose:

The Enterprise character district is intended to be a location for industrial, office and research uses. Development should be in an attractive complex of related buildings. The amount of land zoned for industrial, office and research facilities should be limited to only the amount needed to realistically meet future demand.



South Hill Business Campus

Criteria:

The Enterprise character district is assigned to areas that are currently occupied by light industrial, office and commercial research facilities in a campus-like setting.

Location:

Lands in this character district include the Therm International facility site and South Hill Business Campus, both close to the city line in the South Hill area.

Principal uses:

Offices, research facilities, light and skilled manufacturing with little or no environmental impact beyond its site.



Therm International

Residential density:

Not applicable.

Zoning districts with similar characteristics:

Current zoning code: LI, PDZ

Rural-urban transect: SD (special district)

3.3.2 Campus

Purpose:

The Campus character district is intended for lands of large institutions developed in a campus-like setting. This includes areas with extensive coverage by buildings, parking lots, and other improvements; physical plant and support facilities; stadiums and athletic fields; and lawns, quads, and formally landscaped areas.



Odd Fellows Complex / Museum of the Earth

Development of institutional campuses, and adjacent lands controlled by the institution, should be guided by master plans that reflect best practice in campus planning and land stewardship. Institutional zoning should be implemented to replace the patchwork of zoning districts that now underlie the lands of Cornell University, Ithaca College and other large institutions.

Criteria:

The Campus character district is assigned to the core campuses and developed areas of college/university lands, and existing medical facilities and research organizations sited in a campus-like setting.

Location:

Lands in this character district include the more intensively developed areas of Cornell University and Ithaca College; and the sites of Cayuga Medical Center, Paleontological Research Institute/Museum of the Earth, and Finger Lakes School of Massage (Oddfellows Complex/I.O.O.F. Grand Lodge site).

Principal uses:

Colleges, universities and other institutes of higher learning; hospitals and supporting facilities; research and teaching museums.

Supporting uses:

Housing related to the institution.



Cornell University



Ithaca College

Residential density:

Density and location of student, faculty and other related housing should be established by an approved campus plan.

Zoning districts with similar characteristics:

Current zoning code: C, AG, C, LDR, MDR, HCR, NC, CC, OPC, PDZ

Rural-to-urban transect: SD (special district)

3.4 Focus areas

Focus areas are locations with unique characteristics and opportunities for development and redevelopment.

3.4.1 TND High Density

Purpose:

The TND High Density character district is intended to be the setting for dense mixed use neighborhoods based on the rural-to-urban transect and traditional neighborhood development design principles. This includes a mix of higher density housing types that appeal to a wide variety of households, built to create an intentional neighborhood with linkages and proximity to services, employment, public transit and recreational areas. Most residences should be within a ten minute walk to a mixed use area. Development should incorporate human scale design; an interconnected street network; visually prominent public spaces; and other features that foster a sense of community.

EAST HILL CENTER

East Hill Plaza, surrounding outparcels, and areas west of East Lawn Cemetery and the Cornell Equestrian Center should be redeveloped or retrofitted into a dense, more pedestrian friendly mixed use neighborhood. A proposal for redevelopment of the East Hill Plaza area is described in the 2008 Cornell Master Plan for the Ithaca Campus document. While that plan incorporates some of the design principles described above, it should not be considered an officially endorsed plan or regulating document.

SOUTH HILL CENTER

The area south of Ithaca College should be developed as a denser mixed use neighborhood. Existing vehicle-oriented strip commercial development should be redeveloped or retrofitted into a more pedestrian friendly form over time.



Crocker Park, Westlake, Ohio



Highlands Garden Village, Denver, Colorado

Criteria:

This district is assigned to areas that are ideally suited for substantial mixed use development due to proximity to utilities, key thoroughfares, and major activity centers.

Location:

East Hill Center: This district is centered on the intersection of Pine Tree Road and Ellis Hollow Road, about 0.5 miles east of the Ithaca city line.

South Hill Center: This district is centered on the intersection of Danby Road (NY 96B) and King Road.



Stapleton, Denver, Colorado

Principal uses:

Mixed use: residences (single household and accessory units, bungalow courts and pocket neighborhoods, attached units, small apartment buildings, live-work space, elder housing, student housing), commercial and office development at planned neighborhood centers.

Supporting uses:

Schools, places of worship and assembly, parks and recreation facilities, limited artisanal/cottage industrial uses, home occupations.

Residential density:

Range within neighborhood: 6-30 units/acre gross *

Average for neighborhood: 8-16 units/acre gross *

Open space (public/common): 10% - 20% of neighborhood typical; more on a case-by-case basis.

* - density throughout a development, including open and civic space.

Density does not include accessory units or bonuses for affordable housing.

Zoning districts with similar characteristics:

Current zoning code: HDR, MR, NC, CC, LC, PDZ

Rural-to-urban transect: T4 (neighborhood general), T5 (neighborhood center), T6 (town center)

3.4.2 Inlet Valley Gateway

Purpose:

The Inlet Valley Gateway district is intended to be a setting for a mix of office, small-scale retail, hospitality, and tourism and agritourism uses, with low-impact light industrial, artisanal industrial, and skilled trade uses.

The scale, architecture and landscaping of future development will need to be carefully designed and articulated. This area should retain a semi-rural character, with deep setbacks from arterial streets, wide spacing between uses, landscaped front yards, and vehicle parking sited on the side and/or rear of structures. Shared curb cuts will reduce potential conflicts with highway traffic. Sidewalks should follow streets, with connections to adjacent areas planned for residential development. Architectural design, landscaping, and site planning regulations should apply to all uses in this area, including industrial uses.

Agglomeration of mechanical commercial uses, and incremental expansion of commercial zoning resulting in strip commercial development, will be strongly discouraged.

Criteria:

This district is assigned to an area along a high-traffic area of Elmira Road (NY 13/34/96) that now includes a range of commercial and semi-industrial uses.

Location:

The district includes parcels fronting on Elmira Road between Seven Mile Drive and Five Mile Drive, and parcels immediately to the north that access Elmira Road.

Principal uses:

Commercial, lodging/hospitality, incidental trade uses, artisanal/cottage industrial uses, agritourism.

Supporting uses:

Skilled trades, custom industry, light industry, outdoor entertainment.

Residential density:

Not applicable



Elmira Road, Town of Ithaca (Pictometry)

Zoning districts with similar characteristics:

Current zoning code: C, LDR, NC, LI, PDZ.

Rural-urban transect: T3 (neighborhood edge), SD (special district)

3.4.3 Area of Special Concern

Areas of Special Concern are specific sites that do not easily fit into other character districts. They have intrinsic features, uses, and/or conditions that present unique challenges and opportunities in planning for development and/or conservation.

3.4.4 Area of Special Concern 1: Emerson Center

Purpose:

The Emerson Center Area of Special Concern is intended to be a setting for redevelopment of the Emerson Power Transmission facility as a mixed use complex that would include apartments, live-work space, studios, retail uses, and office space. Light industrial uses would be appropriate for former manufacturing portions of the site. An abandoned railroad bed traversing the west side of the facility is proposed as part of a two mile multi-use trail (Gateway Trail) that would connect the Black Diamond Trail with the Town's South Hill Recreation Way. The Town and City of Ithaca share jurisdiction over the Emerson facility, and must work in concert for planning efforts to be successful. Development would be dependent on remediation because the site is listed as a class 2 site in the State Registry of inactive hazardous waste sites (list of Super Fund sites); a class 2 designation represents a significant threat to public health and/or the environment and requires action.



Emerson Power Transmission Facility (Pictometry)

Criteria:

This subdistrict is assigned to the former Emerson Power Transmission (formerly Morse Chain) facility located on South Hill.

Location:

The Emerson Center site is located in both the City and Town of Ithaca, immediately adjacent to city neighborhoods and near the Ithaca Commons and Ithaca College. The site is accessed from Aurora Street (NY 96B).

Principal uses:

Mixed residential, live-work space, retail, offices and light industrial.

Residential density:

Location and density of housing should be established by an approved redevelopment plan. Density should take full advantage of the site's location near central Ithaca.

Zoning districts with similar characteristics:

Current zoning code: PDZ

Rural-urban transect: T5 (neighborhood center), T6 (town center)

3.4.5 Area of Special Concern 2: Country Club

Purpose:

The Country Club Area of Special Concern is intended to be a setting for the Country Club of Ithaca, with provisions for preservation or redevelopment of the site if the club relocates or closes.

The preferred use for this site is that it continues as a public or private golf course with related sports and hospitality facilities. Otherwise, it should be considered for acquisition as public open space and parkland. Redevelopment for more intensive uses should only be considered if all efforts to preserve the site as a golf club, parkland, or open space have failed, or if they are not feasible or economically realistic.

If the site is to be redeveloped, it should occur as a clustered residential neighborhood, incorporating traditional neighborhood design principles described elsewhere in this Plan. Residential development should include a mix of housing types, lot sizes, and price ranges that appeal to a wide variety of households, and be located to take advantage of Community Corners as a neighborhood center. A small inn or hotel could take advantage of the site's location near Cornell University. A large portion of the site should be preserved as public open space and parkland. Contiguous open space should connect the Cornell University golf course to the east with unique natural areas to the west, preserving a wildlife migration corridor.

A small part of the Country Club site is in the Village of Cayuga Heights. The Town and Village need to cooperate on any preservation, acquisition or redevelopment plans or proposals.



Ithaca Country Club

Criteria:

This subdistrict is assigned to the Country Club of Ithaca property in Northeast Ithaca.

Location:

The Country Club site is located between Pleasant Grove Road and Warren Road north of the Cornell University campus.

Principal uses:

Golf course, accessory sports and hospitality facilities, open space.

Supporting uses:

If the site is redeveloped:

Mixed residential: single household and accessory units, bungalow courts and pocket neighborhoods, attached units, small apartment buildings, elder housing; lodging/hospitality

Residential density:

If the site is redeveloped:

Range within neighborhood: 2-12 units/acre gross *

Average for neighborhood: 4-6 units/acre gross *

Open space: $\geq 50\%$ of development site (natural areas, parks, golf course)

* - density throughout a development, including open and civic space.

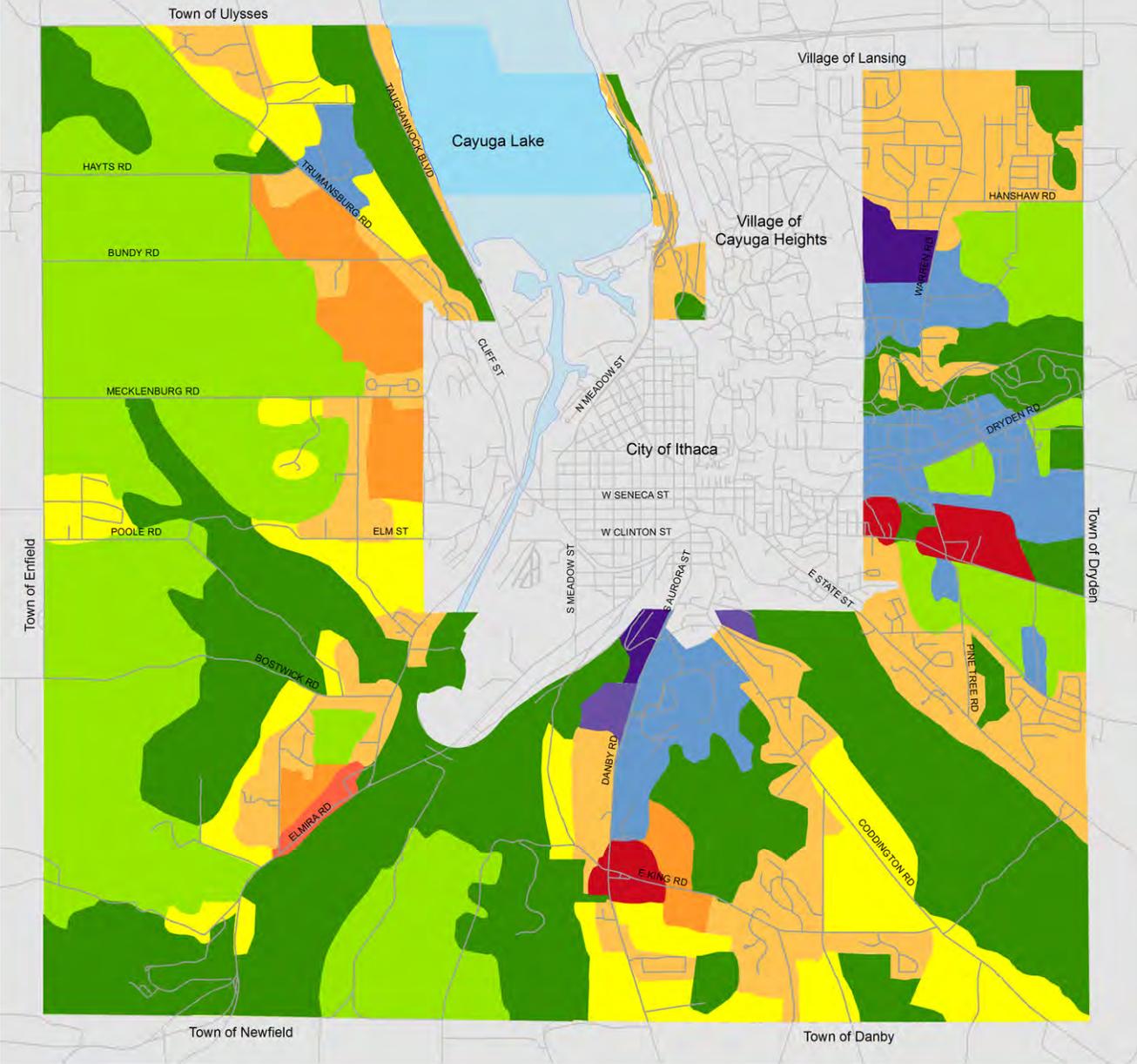
Density does not include accessory units or bonuses for affordable housing.

Zoning districts with similar characteristics:

Current zoning code: LDR

Rural-urban transect: T3 (neighborhood edge), T4 (neighborhood general)

3.5 Future land use / character map



Character districts - land use categories

- | | |
|--|---|
|  Rural/Agricultural |  TND High Density |
|  Natural/Open |  Enterprise |
|  Semi-Rural Neighborhood |  Campus |
|  Established Neighborhood |  Inlet Valley Gateway |
|  TND Medium Density |  Area of Special Concern |

Produced by Town of Ithaca Planning Department, 31 July 2014
 Data: Town of Ithaca Planning Department, Tompkins County
 Information Technology Services GIS Division



CHAPTER 4 IMPLEMENTATION

IMPLEMENTATION

For this comprehensive plan to be realized, the goals and recommendations included in Section 3 must be implemented. Some actions must be implemented immediately, while others can be accomplished over the next ten years.

The implementation strategy provides a framework for completing each action. The following action plan tables categorize each of the policy areas, goals and recommendations according to the type of action that each will take to implement, and list the relative priority and timing of actions. It provides guidance for allocating necessary resources, and assists in tracking progress.

Policy areas

The action plan tables are organized by the following policy areas, each including all the goals and recommendations from Chapter 2.

- 4.1 Land use and development (LU)
- 4.2 Housing and neighborhoods (HN)
- 4.3 Natural resources and environment (NR)
- 4.4 Energy and climate protection (EC)
- 4.5 Agriculture (AG)
- 4.6 Recreation (RE)
- 4.7 Historical resources (HR)
- 4.8 Transportation (TR)
- 4.9 Municipal services and infrastructure (MS)
- 4.10 Community services (CS)
- 4.11 Economic development (ED)

Action

Types of actions are:

- **Decision:** recommendations and policy decisions made by Planning staff, other Town employees, volunteers, appointed officials, and elected officials serving on boards and committees dealing with issues addressed in this plan.
- **Regulation:** writing and adopting new laws, or modifying or reforming existing laws.
(DC): Creation/adoption of a new unified development code and zoning map to replace the existing zoning code, subdivision code, sign code, and other land use regulations found throughout the municipal code.
- **Plan:** initiating, adopting and implementing neighborhood, corridor or subject-specific plans. Descriptions of specific planning actions follow.
- **Project:** achieved by one or more temporary endeavors. A project may be a physical (e.g. new infrastructure) or analytical (e.g. a report or inventory) concern.
- **Program:** establishing formal long-term programs that carry out one or more goals and recommendations of the plan. A program may be the foundation for carrying out multiple projects.
- **Cooperation:** forming partnerships, intergovernmental agreements, and other joint efforts with neighboring communities, public agencies, Tompkins County, New York State, Cornell University, Ithaca College, and other organizations.

A single action—regulation, plan, project, program or cooperative effort—may address many of this plan's goals and recommendations.

Action types may reference specific recommended action items, which should be implemented as soon as possible to ensure land use actions and decisions are aligned with this plan's policies. These include the following:

Priority

Priorities are time frames for implementing actions.

- **Immediate:** initiated before or immediately following the adoption of this plan.
- **High:** initiated and realized shortly after plan adoption, through 2014-2016.
- **Medium:** initiated and realized between 2016 and 2019, or after high-priority items are completed.
- **Open:** initiated and realized any time, but action to be taken by 2019-2024 if not before.
- **Continuous:** ongoing actions with no set initiation or completion date, generally decisions and long-term projects and programs.
- **Completed:** actions that have been completed.

4.1 Land use (LU)

LU-1: Shape/improve the built environment by focusing growth, balancing agricultural, open space and recreational, commercial, institutional and office/industrial uses.		
Goal/recommendation	Action	Priority
LU-1-A: Concentrate development in areas with adequate infrastructure and services.	Regulation (DC) Decision	Regulation: High Decision: Continuous
LU-1-B: Preserve/protect environmentally important and scenic lands.	Regulation (DC) Decision	Regulation: High Decision: Continuous
LU-1-C: Limit intrusion of non-agricultural uses into agricultural/conservation areas.	Regulation (DC) Decision	Regulation: High Decision: Continuous
LU-1-D: Limit low density residential to areas with limited/no value as agricultural/ conservation areas, unlikely sewer/water.	Regulation (DC) Decision	Regulation: High Decision: Continuous
LU-1-E: Require development to take a cluster/conservation form in environmentally, agriculturally and visually sensitive areas.	Regulation (DC) Decision	Regulation: High Decision: Continuous
LU-1-F: Establish more intensively developed mixed use neighborhoods near employment centers. (South Hill, East Hill)	Regulation (DC) Decision Plan	Regulation: High Decision: Continuous Plan: Open
LU-1-G: New mixed use neighborhoods where they can be supported due to proximity to utilities and adequate transportation networks.	Regulation (DC) Decision Plan	Regulation: High Decision: Continuous Plan: Immediate
LU-1-H: Limit commercial/industrial zoned land to what is needed, discourage strip commercial and speculative rezoning.	Regulation (DC) Decision	Regulation: High Decision: Continuous
LU-1-I: Restrict frontage residential development.	Regulation (DC) Decision	Regulation: High Decision: Continuous
LU-1-J: Redevelop/retrofit aging/abandoned industrial/commercial sites as mixed use, pedestrian-oriented development.	Regulation (DC) Cooperation	Regulation: High Cooperation: Continuous
LU-1-K: Ensure development is sensitive of scenic resources.	Regulation (DC) Decision	Regulation: High Decision: Continuous

LU-2: Create, reinforce and respect a unique sense of place.		
Goal/recommendation	Action	Priority
LU-2-A: Adopt architectural design requirements.	Regulation (DC)	High
LU-2-B: Implement site planning requirements.	Regulation (DC)	High
LU-2-C: Establish landscaping and screening standards.	Regulation (DC)	High
LU-2-D: Enhanced sign requirements.	Regulation	Immediate

LU-3: Maintain and enhance established character and sense of community of existing neighborhoods.		
Goal/recommendation	Action	Priority
LU-3-A: New development compatible with existing development.	Regulation (DC) Decision	Regulation: High Decision: Continuous
LU-3-B: Infill development takes advantage of existing infrastructure.	Regulation (DC) Decision	Regulation: High Decision: Continuous
LU-3-C: Establish new and additional communication systems between Town and neighborhoods regarding development.	Program	Medium
LU-3-D: Work with neighborhood groups to determine, preserve important neighborhood characteristics.	Program	Open
LU-3-E: Private initiatives to maintain and improve neighborhoods.	Program	Open
LU-3-F: Work with adjacent communities to connect neighborhoods sitting on municipal boundaries.	Cooperation	Continuous

LU-4: Require new neighborhoods to take the form of traditional neighborhood development (TND).		
Goal/recommendation	Action	Priority
LU-4-A: Scale new neighborhoods around pedestrian sheds. Define neighborhood edges.	Regulation (DC)	High
LU-4-B: Variety of uses, densities and building types; more intensive in neighborhood center.	Regulation (DC)	High
LU-4-C: Mix of uses and recreation spaces to meet daily needs of residents.	Regulation (DC)	High
LU-4-D: Variety of housing types and price ranges for various household types.	Regulation (DC)	High
LU-4-E: Civic uses in prominent locations.	Regulation (DC)	High
LU-4-F: Scale blocks for variety of building types, pedestrian traffic.	Regulation (DC)	High
LU-4-G: Site similar buildings across from each other. Face entrances towards public spaces.	Regulation (DC)	High
LU-4-H: Sustainable practices such as light imprint development, low impact development, alternative energy production in neighborhood design.	Regulation (DC)	High
LU-4-I: Neighborhood identification and branding programs.	Program	Medium

LU-5: Recognize the presence and character of the Town's large institutions in the planning process.		
Goal/recommendation	Action	Priority
LU-5-A: Implement institutional zoning.	Regulation (DC)	High
LU-5-B: Ensure campus/institutional development plans conform to Town plan.	Cooperation	Continuous

LU-6: Use contemporary tools that reflect best planning practice.		
Goal/recommendation	Action	Priority
LU-6-A: Adopt new zoning code, consider unified development code.	Regulation (DC)	High
LU-6-B: Require form/transect-based zoning where appropriate.	Regulation (DC)	High
LU-6-C: Adopt new subdivision regulations, consider unified development code.	Regulation (DC)	High
LU-6-D: Revise/amend development standards to reflect best planning practice.	Regulation (DC)	High
LU-6-E: Simplified/more logical categorization of zoning districts, uses, siting standards.	Regulation (DC)	High
LU-6-F: Plain English regulations, using tables, charts, and illustrations where possible.	Regulation (DC) Decision	Regulation: High Decision: Continuous
LU-6-G: Review comprehensive plan regularly to ensure conformity with best practice.	Program	Continuous
LU-6-H: Work with adjacent municipalities, other agencies regarding planning and development decisions.	Cooperation	Continuous

4.2 Housing and neighborhoods (HN)

HN-1: Promote diverse, high quality, affordable and attractive neighborhoods.		
Goal/recommendation	Action	Priority
HN-1-A: Suitable land in appropriate locations to meet housing needs.	Regulation (DC) Decision	Regulation: High Decision: Continuous
HN-1-B: Concentrate new housing development closer to city and where public transit is available.	Regulation (DC) Decision	Regulation: High Decision: Continuous
HN-1-C: Locate senior housing close to services and transit. Encourage housing that accommodate aging in place principles.	Regulation (DC) Decision	Regulation: High Decision: Continuous

HN-2: Encourage a balance of quality housing opportunities, including workforce housing.		
Goal/recommendation	Action	Priority
HN-2-A: Require percentage of, offer incentives for affordable housing in new developments. Affordable housing should be indistinguishable from market rate.	Regulation (DC) Program	Regulation: High Program: Medium
HN-2-B: Allow smaller lot sizes in zoning regulations.	Regulation (DC)	High
HN-2-C: Pursue mechanisms that would ensure long term supply of affordable housing.	Regulation (DC) Program	Regulation: High Program: Medium
HN-2-D: Work with major employers for provision of workforce housing near places of employment.	Cooperation Program	Cooperation: Continuous Program: Open
HN-2-E: Seek grants to fund affordable housing.	Program	Continuous
HN-2-F: Establish a housing trust fund to support affordable housing projects to families at or below median income.	Program	Open

4.3 Natural resources (NR)

NR-1: Identify and target natural and environmental resources for preservation and protection.		
Goal/recommendation	Action	Priority
NR-1-A: Inventory open/natural areas. Expand knowledge of resources beyond land use and unique natural areas.	Project	Medium
NR-1-B: Establish criteria for classifying natural areas and habitat.	Project	Medium
NR-1-C: Update 1997 Park Plan to reflect new inventory of open/natural areas.	Plan	Medium
NR-1-D: Identify/designate natural/scenic resources that warrant Critical Environmental Area designation.	Project	High

NR-2: Protect open space with appropriate land use regulations and development strategies.		
Goal/recommendation	Action	Priority
NR-2-A: Establish buffers between development activities and large contiguous sensitive/protected areas.	Regulation (DC) Decision	Regulation: High Decision: Continuous
NR-2-B: Focus development in urbanizing areas to protect against habitat fragmentation.	Regulation (DC) Decision	Regulation: High Decision: Continuous
NR-2-C: Timber harvesting regulations.	Regulation	Immediate
NR-2-D: Tree preservation regulations	Regulation (DC)	Regulation: High
NR-2-E: Protect Unique Natural Areas through development review process, other mechanisms.	Decision	Continuous

NR-3: Acquire or assist in acquisition of open space in the Town.		
Goal/recommendation	Action	Priority
NR-3-A: Partner with nature conservation groups.	Cooperation	Continuous
NR-3-B: Use funding mechanisms to acquire or preserve important natural/open space.	Program	Medium
NR-3-C: Encourage conservation easements and donations.	Program	Medium

NR-4: Support private and intermunicipal efforts to protect wildlife and open space.		
Goal/recommendation	Action	Priority
NR-4-A: Promote incentives like the Wildlife Habitat Incentives Program.	Program	Medium
NR-4-B: Collaborate on intermunicipal /regional efforts to develop protection plans for expansive natural resource areas.	Cooperation	Continuous

NR-5: Support and engage in efforts to control invasive species.		
Goal/recommendation	Action	Priority
NR-5-A: Remove invasive species following IPM. Develop management plans. Plan for consequences of Ash Borer, other insects.	Program	High
NR-5-B: Encourage use of native species in landscaping.	Regulation (DC)	High
NR-5-C: Educate residents about invasive species.	Program	High

NR-6: Protect water resources and seek to improve water quality.		
Goal/recommendation	Action	Priority
NR-6-A: Low impact development and green infrastructure standards.	Regulation (DC)	High
NR-6-B: Support water-quality testing of major streams, Cayuga Lake.	Decision	Continuous
NR-6-C: Monitor regulations, policies, practices to ensure health of Cayuga Lake.	Decision	Continuous
NR-6-D: Maintain ability to support a diverse ecosystem in Cayuga Lake.	Decision	Continuous
NR-6-E: Acknowledge impaired water quality designation, improve water quality through policy making.	Decision	Continuous
NR-6-F: Oppose treatment of industrial waste using waste water treatment plants.	Decision	Continuous
NR-6-G: Support/participate in organizations protecting water quality.	Cooperation	Continuous
NR-6-H: Wetland protection regulations, emphasis on areas not addressed by state or federal laws.	Regulation	Medium
NR-6-I: Reevaluate policies/methods related to ditch maintenance/closing.	Decision	Continuous

NR-7: Preserve scenic resources that contribute to the Town's unique character.		
Goal/recommendation	Action	Priority
NR-7-A: Complete Scenic Resource Inventory and Analysis Report.	Plan	Immediate
NR-7-B: Purchase land, conservation easements to preserve critical scenic resources.	Program	Medium
NR-7-C: Adopt development standards to protect scenic resources.	Regulation (DC)	High
NR-7-D: Promote scenic resources through signage, educational programs.	Program	Medium

NR-8: Protect air resources and maintain air quality.		
Goal/recommendation	Action	Priority
NR-8-A: Regulate outdoor wood burning.	Regulation (DC)	High
NR-8-B: Regulate air quality impacts from industrial operations.	Regulation (DC)	High
NR-8-C: Vehicle idling law.	Regulation	High

NR-9: Protect neighborhoods from noise pollution.		
Goal/recommendation	Action	Priority
NR-9-A: Enforce noise regulations.	Decision	Continuous
NR-9-B: Performance/design standards to address noise pollution.	Regulation (DC)	High

4.4 Energy and climate protection (EC)

EC-1: Incorporate sustainability and climate protection into long-term planning.		
Goal/recommendation	Action	Priority
EC-1-A: Institutionalize sustainability in Town operations.	Program	Open
EC-1-B: Conduct GHG inventories regularly.	Program	Continuous
EC-1-C: Implement Government Energy Action Plan (EAP). Update on regular basis.	Plan	Continuous
EC-1-D: Develop and implement Community EAP. Establish sustainability committee.	Plan	Continuous
EC-1-E: Maintain ICLEI membership.	Decision	Continuous

EC-2: Reduce energy consumption and greenhouse gas emissions in buildings and infrastructure.		
Goal/recommendation	Action	Priority
EC-2-A: Policy, regulations for energy use reduction in existing buildings.	Regulation	High
EC-2-B: Require green building techniques and energy efficiency standards in new commercial buildings.	Regulation	Medium
EC-2-C: Partner with organizations/businesses to support incentives and options for energy efficiency. .	Cooperation	Continuous
EC-2-D: (Various municipal building/facility recommendations.)	Program Decision	Program: open Decision: continuous
EC-2-E: (Various streetlight recommendations.)	Program Decision	Program: open Decision: continuous

EC-3: Reduce energy consumption and greenhouse gas emissions related to treatment and distribution of water and wastewater.		
Goal/recommendation	Action	Priority
EC-3-A: (Various water/wastewater system recommendations.)	Program Decision	Program: open Decision: continuous
EC-3-B: Water pricing based on use.	Program	Open
EC-3-C: Water conservation education/outreach program, regulations.	Program Regulation	Medium

EC-4: Reduce energy consumption and GHG emission in transportation.		
Goal/recommendation	Action	Priority
EC-3-A: Support programs to educate residents on efficient/clean vehicles.	Cooperative	Continuous
EC-4-B: Municipal green fleet policy.	Program Decision	Program: high Decision: continuous

EC-5: Encourage and facilitate production and use of renewable energy.		
Goal/recommendation	Action	Priority
EC-5-A: Adopt renewable energy goals.	Plan	High
EC-5-B: Revise regulations to facilitate renewable energy production.	Regulation Program	Regulation: high Program: open
EC-5-C: Work in partnership to provide incentives for renewable energy systems.	Cooperation	Continuous
EC-5-D: Partner with organizations/businesses to support programs providing resources, information on renewable energy.	Cooperation	Continuous
EC-5-E: (Various recommendations regarding renewable energy generation at Town facilities)	Program Decision	Program: medium Decision: continuous
EC-5-F: Consider REC purchase to offset GHGs related to Town government operations. Encourage RECs for others.	Decision Program	Decision: High Program: open

EC-6: Reduce GHG emissions related to waste generation and purchasing.		
Goal/recommendation	Action	Priority
EC-6-A: Waste reduction policy, compost program for municipal operations.	Project Program	Project: open Program: open
EC-6-B: Partner with local organizations/businesses to support recycling/compost programs.	Cooperation	Continuous
EC-6-C: Work with other municipalities to eliminate redundant recycling/composting programs.	Cooperation	Continuous
EC-6-D: Sustainable purchasing policy for Town operations. Encourage businesses to consider similar policies.	Project Program	Project: high Program: open

EC-7: Build a resilient community by preparing for and adapting to impacts of climate change.		
Goal/recommendation	Action	Priority
EC-7-A: County-wide climate adaptation plan in cooperation with other municipalities and agencies.	Cooperation	Open
EC-7-B: Update policies to consider impacts of climate change on infrastructure.	Decision	Open
EC-7-C: Plant shade trees.	Regulation (DC)	High

4.5 Agriculture (AG)

AG-1: Ensure long-term protection of agricultural land resources for agriculture, open space, and scenic resources.		
Goal/recommendation	Action	Priority
AG-1-A: Continue agricultural conservation easement program.	Program	Continuous
AG-1-B: Spatial and vegetative buffers between non-farm dwellings in ag zone and agricultural activities.	Regulation (DC)	High
AG-1-C: Vegetative buffers on non-agricultural land to shield from farming (dust, pesticides) .	Regulation (DC)	High
AG-1-D: Support Town Agricultural Committee.	Program	Continuous

AG-2: Retain and encourage a diversity of economically viable farm types.		
Goal/recommendation	Action	Priority
AG-2-A: Review/revise regulations regarding agricultural structures.	Regulation (DC)	High
AG-2-B: Encourage shared farm infrastructure.	Program	Medium

AG-3: Promote availability of locally grown foods and other agricultural products for all residents including limited income families.		
Goal/recommendation	Action	Priority
AG-3-A: Better accommodate farm stands, year-round farm markets, greenhouses and value-added product operations.	Regulation (DC)	High
AG-3-B: Require community gardens in new development.	Regulation (DC)	High

AG-4: Encourage public understanding and involvement.		
Goal/recommendation	Action	Priority
AG-4-A: Support agricultural and gardening programs for youth.	Cooperation	Open
AG-4-B: Public awareness of vehicle traffic issues affecting farmers.	Program	Open
AG-4-C: Encourage household food production.	Regulation (DC) Program	Regulation: High Program: Open
AG-4-D: Awareness of right-to-farm law when building near/in ag zones.	Program	High

AG-5: Promote wise land use and agricultural waste management.		
Goal/recommendation	Action	Priority
AG-5-A: Encourage relationships between farmers and resources such as Cooperative Extension and Soil and Water Conservation District.	Cooperation	Open

AG-6: Protect the environment and human and animal health from large concentrated animal feeding operations.		
Goal/recommendation	Action	Priority
AG-6-A: Lobby state/federal legislatures to allow towns to regulate CAFOs through local ordinances.	Cooperation	Open

4.6 Recreation (RE)

RE-1: Provide an integrated, interconnected system of parks, recreational facilities, and open space throughout the Town.		
Goal/recommendation	Action	Priority
RE-1-A: Update 1997 Park, Recreation and Open Space Plan.	Plan	Medium
RE-1-B: Develop network of parks to serve current and future needs of Town residents.	Program	Continuous
RE-1-C: Encourage public access to Cayuga Lake.	Decision	Continuous
RE-1-D: Consider maintenance costs when planning new parks, trails or preserves.	Decision	Continuous
RE-1-E: Allow required park setbacks to be met in a variety of ways.	Regulation (DC)	High
RE-1-F: Require new parks to be amassed into meaningful spaces, functionally part of the public realm.	Regulation (DC)	High

RE-2: Provide recreational opportunities for all Town residents.		
Goal/recommendation	Action	Priority
RE-2-A: Recreational opportunities near residences and workplaces.	Regulation (DC)	High
RE-2-B: Recreational programs to residents.	Project	Open
RE-2-C: Intermunicipal cooperation and public-private partnerships in providing recreational services.	Cooperation	Continuous
RE-2-D: Pursue grant opportunities.	Decision	Continuous

4.7 Historical resources (HR)

HR-1: Preserve, enhance and promote the Town's historical resources.		
Goal/recommendation	Action	Priority
HR-1-A: Develop a historic preservation program using the inventory conducted by Historic Preservation Planning Workshop at Cornell University and recommendations of the final report (2005).	Plan	Medium
HR-1-B: Ensure preservation of existing historical buildings and resources. Pursue grant opportunities.	Decision	Continuous
HR-1-C: Local historic overlay district and ordinance.	Regulation	Medium
HR-1-D: Participate as a Certified Local Government under the program of the NYS Office of Park, Recreation, and Historic Preservation. Requires preservation ordinance.	Cooperation	Medium
HR-1-E: Coordinate protection of historic resources with preservation groups.	Cooperation	Continuous
HR-1-F: Maintain historic markers.	Decision	Continuous
HR-1-G: Promote awareness of local history, including pre-European period.	Program	Open

4.8 Transportation (TR)

TR-1: Develop and maintain a multimodal transportation system that provides effective movement of people and goods.		
Goal/recommendation	Action	Priority
TR-1-A: Develop transportation system that serves mobility interests of residents and businesses, considers through traffic.	Decision	Continuous
TR-1-B: Base pedestrian/bike facilities on Bicycle and Pedestrian Corridor Maps of 2007.	Decision	Continuous
TR-1-C: Assume costs of construction/maintenance of bicycle and pedestrian facilities serving a population beyond adjacent neighborhoods.	Decision	Continuous
TR-1-D: Work with other entities to improve ped/bike connections in priority locations.	Cooperation	Medium
TR-1-E: Expand multiuse trails, work with ITCTC/county/others to expand countywide trail system.	Cooperation Project	Open
TR-1-F: Work with TCAT/major employers to develop a park-and-ride system.	Cooperation Program	Open
TR-1-G: Consider increasing funding to TCAT for adequate transit service levels.	Decision	Continuous
TR-1-H: Continue funding Gadabout.	Decision	Continuous
TR-1-I: Encourage carpooling/vanpooling/car sharing.	Program	Open
TR-1-J: Traffic demand strategies to reduce peak hour demand on roadway capacity.	Program	Medium

TR-2: Develop and maintain transportation system that promotes livable, healthy and attractive neighborhoods.		
Goal/recommendation	Action	Priority
TR-2-A: Control traffic speed through road design standards, traffic calming, and street diets. Incorporate low-speed designs when reconstructing roads.	Program Regulation (DC)	Program: open Regulation: high
TR-2-B: Streetscape beautification, human scale roadways, improve character of roads when rebuilding.	Decision	Continuous
TR-2-C: Consider effects of traffic volume in new/existing neighborhoods.	Decision	Continuous
TR-2-D: Context sensitive approach for road planning and design.	Decision Regulation (DC)	Decision: continuous Regulation: high
TR-2-E: Work with TCAT to minimize bus disruption in residential neighborhoods while maintaining adequate service.	Cooperation	Continuous
TR-2-F: Minimize through truck traffic in residential neighborhoods.	Cooperation	Continuous
TR-2-G: Road networks in new developments to follow TND principles.	Regulation (DC)	High
TR-2-H: Require traffic mitigation plans for large projects.	Regulation	High

TR-3: Provide a safe transportation system, and prioritize safety and security for all modes.		
Goal/recommendation	Action	Priority
TR-3-A: Evaluate and improve intersections with poor sight distance.	Program	Continuous
TR-3-B: Maintain vehicle crash database.	Program	Continuous
TR-3-C: Petition State/County for speed limit reductions in certain areas.	Cooperation	Continuous
TR-3-D: Access management requirements that are compatible with County and State standards.	Regulation (DC)	High

TR-4: Effectively maintain the transportation system.		
Goal/recommendation	Action	Priority
TR-4-A: Sufficient funding to maintain transportation system.	Decision	Continuous
TR-4-B: Preserve/reserve current and future rights-of-way.	Decision	Continuous
TR-4-C: Require developers to dedicate ROW, construct portions of proposed collector roads.	Regulation (DC) Decision	Regulation: High Decision: Continuous
TR-4-D: Update 2007 Transportation Plan.	Plan	Medium
TR-4-E: Update Official Highway map.	Project	Continuous
TR-4-F: Public Works flexibility to schedule road improvements/maintenance.	Decision	Continuous

TR-5: Coordinate with other local and regional organizations to ensure a regionally coordinated transportation system.		
Goal/recommendation	Action	Priority
TR-5-A: Explore intermunicipal sharing of facilities, labor, knowledge, expertise.	Cooperation	Continuous
TR-5-B: Support establishment of community/regional pedestrian/bicycle facilities.	Regulation (DC) Program Cooperation	Regulation: High Program: Medium Cooperation: Continuous
TR-5-C: Participate in ITCTC.	Cooperation	Continuous
TR-5-D: Support findings of t-GEIS, TIMS where appropriate. Cornell/Community Transportation Investment Initiative Program.	Decision	Continuous

TR-6: Promote future development patterns that reduce vehicle dependency and encourage alternate modes of transportation.		
Goal/recommendation	Action	Priority
TR-6-A: Design streets using Complete Streets principles.	Regulation (DC)	High
TR-6-B: Neighborhood design that reduces automobile dependence.	Regulation (DC)	High
TR-6-C: Interconnected sidewalk and trail system. Retrofit existing streets with sidewalks, bicycle lanes.	Decision	Continuous
TR-6-D: Consider transportation impacts in land use decisions, vice versa.	Decision	Continuous
TR-6-E: Evaluate parking requirements to reduce excessive pavement, other uses of paved areas.	Regulation (DC)	High
TR-6-F: Ensure transit service for new development.	Cooperation	Continuous

TR-7: Protect the environment when planning any changes to the transportation system.		
Goal/recommendation	Action	Priority
TR-7-A: Consider environmental consequences of transportation decisions.	Decision	Continuous
TR-7-B: Reduce vehicle dependence, trip distance/duration/number.	Decision	Continuous
TR-7-C: Assess need for wildlife crossings.	Regulation Decision	Regulation: open Decision: continuous

4.9 Municipal services and infrastructure (MS)

MS-1: Provide quality infrastructure and services in a cost-effective and sustainable manner, meeting current and anticipated needs.		
Goal/recommendation	Action	Priority
MS-1-A: Update Capital Improvement Plan.	Plan	Continuous
MS-1-B: Draft/adopt water and sewer master plan.	Plan	Medium
MS-1-C: Investigate shared municipal services with other communities.	Cooperation	Continuous
MS-1-D: Seek/promote funding sources for infrastructure to offset improvement and construction costs.	Decision	Continuous
MS-1-E: Joint projects with City, other communities concerning water and wastewater treatment systems.	Cooperation	Continuous

MS-2: Maintain, assess, and repair/replace/retrofit/rehabilitate existing public infrastructure, facilities, equipment and services.		
Goal/recommendation	Action	Priority
MS-2-A: Monitor/evaluate water distribution system.	Decision Program	Decision: Continuous Program: Medium
MS-2-B: Monitor wastewater collection system.	Decision	Continuous
MS-2-C: Preventative maintenance of Town infrastructure.	Decision	Continuous
MS-2-D: Annual pavement condition surveys of Town roads.	Program	Continuous

MS-3: Based on sustainable development principals that are consistent with the Plan, limit expansion of public infrastructure and services.		
Goal/recommendation	Action	Priority
MS-3-A: Limit development of infrastructure to areas not designated for intensive development.	Decision	Continuous

MS-4: Ensure the capability of stormwater management facilities to provide reasonable protection to property and the natural environment.		
Goal/recommendation	Action	Priority
MS-4-A: Implement the Town's Stormwater Management Plan.	Decision	Continuous
MS-4-B: Inventory of stormwater management facilities.	Program	Medium
MS-4-C: Ensure maintenance of private stormwater infrastructure. Public education about stormwater infrastructure.	Program	Continuous
MS-4-D: Appropriate staffing to enforce stormwater management laws.	Decision	Continuous
MS-4-E: Complete a townwide urban watershed model.	Project	Medium
MS-4-F: Policy for ownership of stormwater facilities.	Project	High
MS-4-G: Funding mechanism for stormwater management program.	Project	Medium

4.10 Community services (CS)

CS-1: Maintain and improve Town government's ability to serve its citizens.		
Goal/recommendation	Action	Priority
CS-1-A: Encourage inter-jurisdictional cooperation and communication for providing services and continue mutually beneficial shared services.	Cooperation	Continuous
CS-1-B: Keep residents informed on Town matters.	Program	Continuous
CS-1-C: Ensure officials are versed in the Comprehensive Plan.	Program	Continuous
CS-1-D: Support public libraries.	Decision	Continuous

CS-2: Ensure adequate fire protection, public safety and police services.		
Goal/recommendation	Action	Priority
CS-2-A: Explore options for increased police presence.	Project	Open
CS-2-B: Partner with law enforcement to enforce vehicle safety and traffic laws.	Cooperation	Continuous
CS-2-C: Explore ways to reduce fire protection costs.	Project	High
CS-2-D: Update Town's Zoning Code to reflect fire code changes.	Regulation (DC)	High

CS-3: Integrate public school facilities planning with Town land use planning.		
Goal/recommendation	Action	Priority
CS-3-A: Work with Ithaca City school district to reserve land for schools, site schools in conformance with this plan.	Cooperation	Continuous

CS-4: Minimize impact of solid waste on Town residents, businesses and the natural environment.		
Goal/recommendation	Action	Priority
CS-4-A: Coordinate with TCSWD for removal and management of solid waste.	Cooperation	Continuous
CS-4-B: Explore option of a construction and demolition recycling/reuse ordinance.	Regulation	Medium
CS-4-C: Promote use of the newly renovated Recycling and Solid Waste Center; goals of diverting waste from landfills.	Program	High

4.11 Economic development (ED)

ED-1: Promote a stable and diverse local economy.		
Goal/recommendation	Action	Priority
ED-1-A: Support continued vitality of existing employers.	Cooperation	Continuous
ED-1-B: Positive entrepreneurial environment for new and expanding businesses.	Decision	Continuous
ED-1-C: Streamline development review, land use regulations.	Regulation (DC)	High
ED-1-D: Support workers in attaining fair labor practices.	Decision	Continuous
ED-1-E: Support major public and non-profit institutions.	Cooperation	Continuous
ED-1-F: Support artists, arts organizations.	Decision	Continuous
ED-1-G: Preference to local businesses for purchasing, contracting.	Decision	Continuous
ED-1-H: Improve communication among government agencies, businesses, institutions.	Program	Open
ED-1-I: Support agriculture economic development, including a strong agritourism industry.	Program	Open
ED-1-J: Support sustainable businesses rather than short-term extractive industries.	Decision	Continuous

ED-2: Establish a cohesive and sustainable economic development policy for the Town of Ithaca.		
Goal/recommendation	Action	Priority
ED-2-A: Long term investment strategy based on local competitive advantages, social equity, environment.	Program	Medium
ED-2-B: Regional economic development strategy.	Cooperation	Continuous
ED-2-C: Engage with TCAD in cooperative efforts to develop incentives tailored to the Town's unique conditions.	Cooperation	Continuous
ED-2-D: Work to reduce poverty by supporting efforts that provide worker training and business recruitment.	Decision	Continuous
ED-2-E: Industry clusters drawing on local advantages.	Program	Open
ED-2-F: Evaluate ED programs based on long-term benefits, not short-term job or revenue gains.	Decision	Continuous
ED-2-G: ED efforts equitable, promote vitality of industry sector, not focused on individual businesses.	Decision	Continuous
ED-2-H: Support tax policies that encourage business development based on local assets, rather than shift funds from public to profit-making entities.	Decision	Continuous
ED-2-I: Provide funding to nonprofits contracting with the Town that encourages agencies to pay their staff a living wage.	Decision	Continuous
ED-2-J: Pursue financial support from local tax-exempt institutions.	Cooperation	Continuous

APPENDIX A IMPLEMENTING BEST PRACTICES

IMPLEMENTING BEST PRACTICES

Land development and regulatory practices form the foundation for implementing a comprehensive plan, and establishing the future direction, character, and sense of place of the community. This appendix includes demonstrated and proven best practices in planning that are recommended for implementing the goals and policies of this plan. Implementation of the plan should not be limited to these practices alone, though.

A.1 Smart Growth

In the Town of Ithaca, there is growing concern that the current development pattern, dominated by what some call "sprawl", is no longer in the long-term interest of the community. Though supportive of growth, residents and community leaders are questioning the economic and social costs of continued vehicle-oriented low density development.

Smart Growth is a planning strategy with the goal of accommodating development and growth, while also considering and addressing its negative effects, to create more livable, sustainable and humane communities.

There are many definitions of "Smart Growth." Perhaps the most encompassing comes from the City of Austin, Texas Neighborhood Planning Glossary.

"A perspective, method, and goal for managing the growth of a community. It focuses on the long-term implications of growth and how it may affect the community, instead of viewing growth as an end in itself. The community can vary in size; it may be as small as a city block or a neighborhood, or as large as a city, a metropolitan area, or even a region. Smart Growth promotes cooperation between often diverse groups to arrive at sustainable long-term strategies for managing growth. It is designed to create livable cities, promote economic development, and protect open spaces, environmentally sensitive areas, and agricultural lands."

The American Planning Association adopted the following definition of smart growth.

"Smart Growth is the planning, design, development and revitalization of communities to promote a sense of place, the preservation of natural and cultural resources, and the equitable distribution of the costs and benefits of development. Smart Growth enhances ecological integrity over the short and long term and improves quality of life by expanding the range of transportation, employment, and housing choices in the region in a fiscally responsible manner."

Spurring the Smart Growth movement are demographic shifts, a strong environmental ethic, increased fiscal concerns, and more nuanced views of growth. The result is both a new demand and a new opportunity for smart growth.

The United States Environmental Protection Agency identifies the following ten principles of Smart Growth:

- 1) Create a range of housing opportunities and choices.
- 2) Create walkable neighborhoods.
- 3) Encourage community and stakeholder collaboration.
- 4) Foster distinctive, attractive communities with a strong sense of place.
- 5) Make development decisions predictable, fair and cost effective.
- 6) Mix land uses.
- 7) Preserve open space, farmland, natural beauty and critical environmental areas.

- 8) Provide a variety of transportation choices.
- 9) Strengthen and direct development towards existing communities.
- 10) Take advantage of compact building design.

The Town of Ithaca has little control over whether its population will grow. However, it can control how it grows. Smart growth introduces new, sound planning principles that will help make the Town a more livable, desirable and sustainable community.

Smart Growth principles

Create a range of housing opportunities and choices.

Many young adults are finding they can't afford to buy a home in the City or Town of Ithaca, and are resorting to lower-priced housing in distant communities with long commutes. Many senior citizens, now empty nesters or living alone, can no longer maintain or heat homes that were originally built to accommodate a large family.

Providing quality housing for people of all generations, income levels and social groups is an integral component in a smart growth strategy. Housing is a critical part of the way the Town grows, and constitutes a significant share of new construction and development. More importantly, it is a key factor in determining households' access to transportation, employment, retail and social amenities, schools, and consumption of natural resources. By using Smart Growth techniques to create a wider range of housing choices, the Town can mitigate the environmental costs of auto-dependent development, use its infrastructure more efficiently, ensure a better jobs-housing balance, and generate a strong foundation of support for public transportation, mixed use neighborhood centers, and other amenities.

Create walkable neighborhoods. Walkable communities are seen as desirable places to live, work, and play. Residential areas in the City of Ithaca, and pedestrian-oriented neighborhoods in other Upstate New York cities, are experiencing renewed life and increasing real estate values. Walkable neighborhoods are seen as desirable, because housing, retail and entertainment uses, and places of employment are conveniently located an easy and safe walk from each other. Walkable communities also make pedestrian activity possible, thus expanding transportation options, and creating a streetscape that better serves pedestrians, bicyclists, transit riders, and automobiles.



Prospect New Town, Longmont, Colorado. (Prospect New Town)



Shaker Square, Cleveland, Ohio. (DT)

Development in the Town of Ithaca is dispersed and largely auto-dependent, built under design practices that reduce pedestrian activity. A conventional zoning ordinance makes mixed land use development difficult. It would be impossible to recreate historic Upstate villages such as Skaneateles, Cazenovia, or East Aurora today. Land use and community design play a pivotal role in encouraging pedestrian environments. By enabling development with multiple destinations within close proximity, where the streets and sidewalks balance all forms of transportation, the Town will have the basic framework for encouraging walkability.

Encourage community and stakeholder collaboration. Growth can create great places to live, work and play, if it is channeled into a community's own sense of how and where it wants to develop. Each of the Town's "hills" has different needs and will emphasize some smart growth principles over others.

Citizen participation can be time-consuming and frustrating. Encouraging community and stakeholder collaboration, though, can lead to creative resolution of development issues and greater understanding of the importance of good planning and the "big picture." Plans and policies developed without strong citizen involvement will, at best, have no staying power; at worst, they will be used to create unhealthy, undesirable communities. When stakeholders feel left out of the planning process, they will be less likely to become engaged when tough decisions need to be made. Involving the community early and often in the planning process improves public support for Smart Growth and often leads to innovative strategies that fit the unique needs of each community.

Foster distinctive, attractive communities with a strong sense of place. Retail architecture conforming to corporate prototype design, and residential development in a conventional subdivision of large lots and cul-de-sacs, dilute the identity and character of a community.

Smart Growth encourages communities to craft a vision and set standards for development that responds to community values of architectural beauty and distinctiveness, as well as expanded choices in housing and transportation. It seeks to create interesting, unique communities that reflect the values and cultures of the people who live there, and foster physical environments that supports a more cohesive community fabric. Smart Growth promotes development that uses natural and man-made boundaries and landmarks to create a sense of defined places. It encourages construction and preservation of buildings that contribute to the unique look and feel of a community.

Guided by a vision of how and where to grow, the Town is able to identify and use opportunities to make new development conform to their standards of distinctiveness and beauty. Contrary to the current mode of development, Smart Growth ensures that the value of development is determined as much by its accessibility as its physical orientation to and relationship with other buildings and open space. By creating high-quality communities with architectural and natural elements that reflect its character, there is a greater likelihood that buildings, and their surrounding neighborhoods, will retain their economic vitality and value over time.

Make development decisions predictable, fair and cost effective. For Smart Growth to be successful, it must be embraced by the



Main Street, Williamsville, New York. (DT)

private sector. Only private capital markets can supply the large amounts of money needed to meet the growing demand for smart growth developments. If investors, bankers, developers, builders and others do not earn a profit, few Smart Growth projects will be built. Fortunately, the Town can help make Smart Growth profitable to developers. Since the development industry is highly regulated, the value of property and the desirability of a place are largely affected by regulation and investment in infrastructure. Sound infrastructure and regulatory decisions will foster fair, predictable and cost effective smart growth.



Shalebrook Farm, Town of Ithaca.

Despite regulatory and financial barriers, developers have been successful in creating examples of Smart Growth. The process to do so, however, requires them to get variances to existing codes; often a time-consuming and costly requirement. For Smart Growth to flourish, the Town must make an effort to make development decisions more timely, cost-effective, and predictable for developers. By creating a fertile environment for innovative projects, local government can provide leadership for smart growth that the private sector should support.

Mix land uses. Zoning emerged as a response to the unregulated nature of land use in the early 20th century, and the noxious character of many businesses and industries of the time. Early zoning codes were intended to protect homeowners from uses such as slaughterhouses, tanneries, and glue factories, which would be a nuisance that could devalue residential properties. Today, some contemporary zoning codes prevent the mixing of residential and commercial uses, even for a well-planned project where the threat of a nuisance is nonexistent.

Smart Growth supports the integration of mixed land uses into communities as a critical component of achieving better places to live. By putting uses in closer proximity to one another, alternatives to driving, such as walking or biking, once again become viable. Mixed land uses also provide a more diverse and sizable population and commercial base for supporting viable public transit. Mixed uses can enhance the vitality and perceived security of

an area by improving the attitude and increasing the number of people on the street.



Elmwood Village, Buffalo, New York (DT)

Not all mixed use is desirable; for example, storage of heavy equipment or operation of construction yards on residential property, as occasionally seen in rural areas. Well planned mixed use development helps streets, public spaces and pedestrian-oriented retail again become places where people meet, attracting pedestrians back onto the street and revitalizing community life. Smart Growth provides a means for the Town to alter the planning context that now renders mixed land uses illegal.

Preserve open space, farmland, natural beauty and critical environmental areas. Development pressure and the impact of urbanization on agricultural uses are threats to the Town's remaining farmland. With large lot residential development increasingly commonplace, it now takes fewer people and houses to occupy a section of land than in the past.

Smart Growth uses the term "open space" broadly to include natural areas that provide important community space, habitat for plants and animals, recreational opportunities, farm and nursery land, places of natural beauty, and critical environmental areas. Open space preservation supports Smart Growth goals by protecting the character of rural and semi-rural communities, preserving critical environmental areas, improving the region's quality of life, and guiding new growth into existing communities and areas where there will be less impact on the natural environment.

Protection and maintenance of open space provides fiscal benefits that include increasing local property value, encouraging tourism, and reducing the cost of providing new infrastructure. Preservation of open space benefits the environment by combating air pollution, attenuating noise from busy highways, providing erosion and wind control, moderating temperatures, and protecting watersheds and pristine rivers.

Provide a variety of transportation choices. Traffic congestion is an issue in some parts of the town. Although the Ithaca area doesn't face the same traffic woes that beset many North American cities, increasing urban sprawl is resulting in longer commutes and increased travel times.

Providing people with more choices in housing, shopping, communities, and transportation is a key aim of Smart Growth. Communities are increasingly seeking these choices, particularly a wider range of transportation options with supportive development patterns, to help improve beleaguered transportation systems.

Strengthen and direct development towards existing communities. Smart Growth directs development towards established communities already served by infrastructure, seeking to use resources that existing neighborhoods offer, and conserve open space on the urban fringe. Development in existing neighborhoods also represents an approach to growth that can be more cost-effective, and improves the quality of life for its residents. By encouraging development in established cities and villages, they benefit from a stronger tax base, closer proximity to a range of jobs and services, increased efficiency of already developed land and infrastructure, reduced development pressure in edge areas, and stronger rural and estate communities.

The ease of greenfield development remains an obstacle to encouraging more development in existing neighborhoods. Nevertheless, some communities are recognizing the opportunities presented by retrofitting and infill development.

Take advantage of compact building

design. Smart Growth provides a way for the Town to incorporate more compact

building design as an alternative to conventional, land consumptive development. Compact building design suggests



Fairview Village, Portland, Oregon. (Brett VA/Creative Commons license)

that communities be designed in a way which permits more open space to be preserved, and that buildings can be constructed to make more efficient use of land and resources.

Compact building design is necessary to support wider transportation choices because a minimum level of density is required to make public transit networks viable. It also provides cost savings for localities, because it is less costly to provide and maintain services like water, sewer, electricity, and other utilities in more compact communities.



Village of East Aurora, New York. (DT)

A.2 Traditional neighborhood development

In his book *A Better Place to Live: Reshaping the American Suburb*, Philip Langdon described East Aurora, a village of about 7,500 residents 15 miles southeast of Buffalo, as a "nearly complete", "compact and walkable" community where "nearly everything the inhabitants needed, except a full range of employment, was close to home."

Traditional neighborhood development (TND) or neotraditional development is a form of development that takes its inspiration from the "nearly" complete communities of the past; villages like East Aurora, and urban and suburban neighborhoods built between World Wars I and II. TND includes a range of housing types, network of interconnected streets, human-scaled public spaces, and amenities such as shops, schools, parks, and places of worship within walking distance of all residences.

There is growing support for creating denser, more walkable and interconnected neighborhoods in the town, with housing and amenities that appeal to a broader range of households, lifestyles, life stages, and income ranges. TND can better accommodate this than the collections of disconnected subdivisions, cluster developments, semi-rural frontage development, and apartment complexes now prevalent.

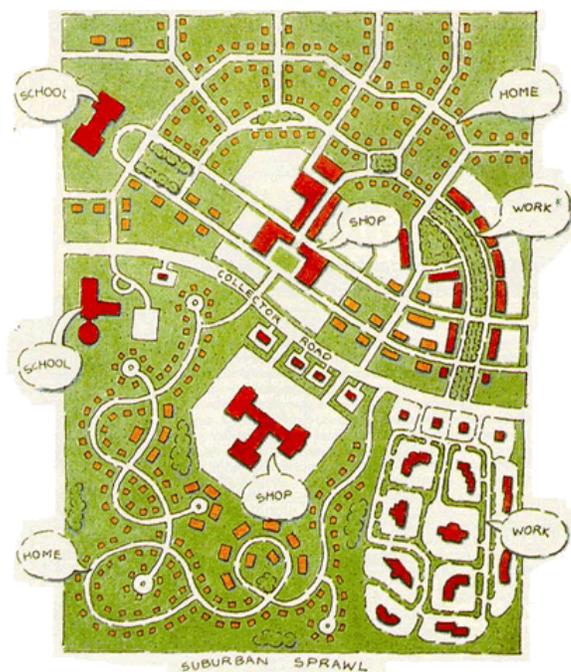
Major differences between TND and conventional suburban development include:

Traditional neighborhood development	Conventional suburban development
Street networks are interconnected, with multiple routes between destinations.	Street networks are dendritic, or take a "loop and lollypop" form, with limited routes between destinations.
Some mixed use: e.g. apartments above storefronts, accessory offices at intersections, different types of housing may share a block.	Different uses and building types are segregated into pods.
Range of housing types in close proximity, providing for a variety of income ranges and life stages.	Very limited variety of housing types, separated into physically disconnected pods with limited or no access between them.
Anchored by a village center or commercial district, located within walking distance of most residents.	Commercial districts isolated in strips along busy roads, usually beyond walking distance of most residents.

Traditional neighborhood development	Conventional suburban development
Commercial districts built on a pedestrian scale; building entrances and storefronts face the street and front the sidewalk.	Commercial districts built on a vehicular scale; buildings are placed behind a parking lot, and building entrances often do not face the street.
Civic uses (town halls, post offices, places of worship, schools) are placed in or near a neighborhood or village center, or in prominent but accessible locations.	Civic uses are scattered throughout the community with no regards to accessibility; often in areas outside of neighborhoods.
Gathering places are in the public realm (main street, sidewalks, squares, etc).	Gathering places are in the private realm (shopping centers, subdivision and apartment building common buildings, etc).
Parks are located in prominent locations, and front on public streets.	Parks and open space are placed on remnant parcels, often in linear corridors behind back yards.
Streets are narrower, and designed to accommodate pedestrians and vehicles.	Streets are wide, designed mainly for efficient, high-speed traffic flow.
On-street parking is accommodated in all areas.	Off-street parking is preferred. Commercial areas have no on-street parking.
Buildings are placed closer to the sidewalk.	Buildings are placed as far away from the street as possible, distancing occupants from street life and their neighbors.
A neighborhood conveys a strong sense of place.	A subdivision could be anywhere.

A comparison of traditional neighborhood development to conventional suburban development. (Post, Nadine M., "Putting Brakes on Suburban Sprawl," Engineering News-Record, May 9, 1994, pp. 32-39.)

- **Reduced sprawl and farmland conversion.** TND is more compact than conventional suburban development, and will slow the conversion of agricultural land and open space to urban uses. Compact development also uses land, energy, water, and materials more efficiently and wisely than conventional suburban development.
- **Lower service costs.** TND services a similar number of residences with far less infrastructure. Development and maintenance costs are lower because the same length of road and utilities can serve more residences.
- **Expanded housing choice.** TND accommodates a wider range of housing types than conventional suburban development. It addresses a disconnect between the supply of housing in the town (development catering mainly to traditional families with children, and low-moderate income households) and demand (growing percentage of households comprising professional singles, childless couples, single parents, empty nesters, retirees, and non-traditional households). Housing can be made more affordable through increased density rather than expensive subsidies or lowered standards.
- **Appeal to younger adults and a new generation of retirees.** Those who belong to Generation X and Generation Y (born between 1965 and 1995) have a marked preference for living in more walkable, compact and diverse neighborhoods compared to previous generations. Such neighborhoods may also appeal to recent retirees, who are increasingly choosing to settle in culturally vibrant college towns such as Ithaca instead of age-segregated communities or Sunbelt destinations.



A comparison of traditional neighborhood development (top) to conventional suburban development (bottom). (Nadine Post, "Putting Brakes on Suburban Sprawl," Engineering News-Record, May 1994.)

- **Safer public spaces.** Parks, streets, and civic spaces are safer and more defensible, because they are more accessible and visually prominent, and get more use.
- **Community for the carless.** Residents who cannot drive, including children and many senior citizens, can more easily take part in the day-to-day life of the community, and not be physically or socially isolated. TND also increases the viability of public transit by providing a simple street network, increased population density, and an environment that makes a walk to a bus stop more interesting.
- **Reduced vehicle trips.** Providing some retail and commercial services within walking distance of residents will reduce the need to drive outside of the neighborhood to find those services.
- **Healthier living.** Likelihood of obesity and health issues due to a sedentary lifestyle is reduced by having a mix of uses and services within walking distance.

TND should be the preferred form of development in the Town of Ithaca, as opposed to conventional subdivisions, frontage development, and podded cluster development.



Stapleton: traditional neighborhood development in Denver, Colorado. (DT)

A.3 Form- and transect-based codes

A.3.1 Form-based codes

Form-based codes regulate development of the built environment by placing an emphasis on guiding the form that development takes, rather than focusing on land use as with traditional zoning. Form-based codes are intended to create a more predictable physical outcome than traditional zoning, and achieve a specific urban form.

Form-based codes usually include the following elements:

- **Regulating plan:** shows the locations where different building form standards apply.
- **Public space standards:** specifications for the built environment in the public realm; types of streets, street profiles, planting areas and landscaping, sidewalks, light poles, drainage, and so on.



Celebration, Florida. (DT)

- Building form standards: regulations controlling the configuration, features, and functions of buildings that shape the public realm. This also includes architectural design, signage, lighting, landscaping, and drainage requirements. Building type may also be regulated.

Major differences between conventional zoning and form-based codes include:

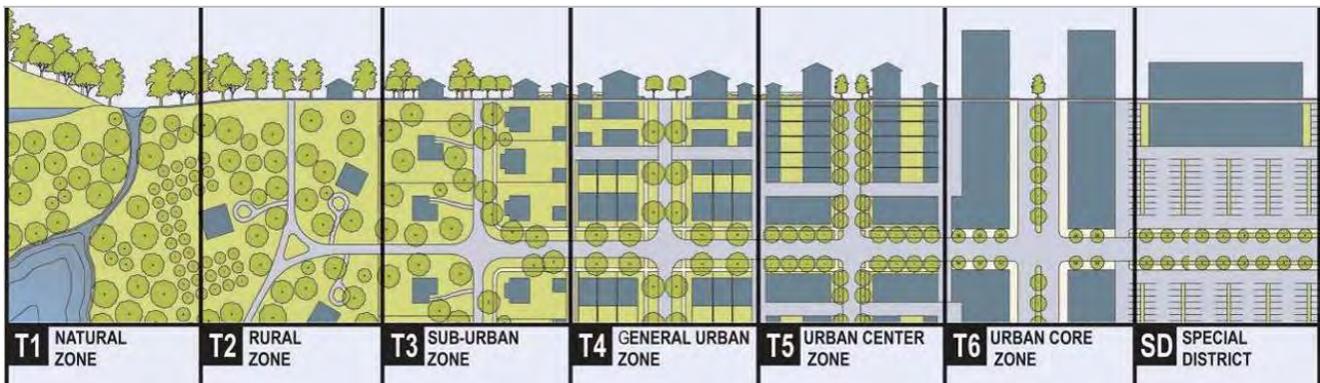
Form-based code	Conventional zoning code
Implements a comprehensive plan by regulating the physical character of specified areas.	Implements a comprehensive plan by limiting types of uses to specified areas.
Intended to address development issues of the present; avoid effects of sprawl, create sense of place, create neighborhoods, provide housing diversity.	Intended to address development issues of the past; tenements and urban overcrowding, noxious and intrusive nuisances, growing automobile ownership.
Focuses on the form of a building as it relates to the street and adjacent uses.	Focuses on the use and development of individual lots.
Regulates with primary emphasis on form (buildings and their relationship to the street and each other), secondarily on use and management.	Regulates with primary emphasis on use (separation of uses), secondarily on management and form.
Placement of buildings on the lot is regulated by build-to lines, which specify building location relative to lot lines.	Placement of buildings is governed by uniform minimum setbacks that create a building envelope. The location and form of a building in a building envelope is unpredictable.
Street standards vary based on the regulating plan and the desired character for a street.	Street standards are independent of zoning districts and land use.
Regulates parking design in understanding that poorly designed parking undermines pedestrian activity and interest in a place. Parking is placed behind buildings to develop walkable streetscapes.	Location and form of parking is usually not regulated.
Required parking is based on reasonable need, also considers availability of on-street parking.	Required parking is based on worst-case scenarios; e.g. Black Friday at the peak of an economic boom.
Street standards are designed so that pedestrians feel safe and to encourage walkability.	Street standards are designed primarily to maximize auto volume and speed.
Physical outcomes and building placement are predictable.	Physical outcomes and building placement are unpredictable, especially if there is a large building envelope.
Permitted uses are based on building form, street type, and an underlying regulating plan.	Permitted uses are based on underlying zoning.
Compatibility of uses is achieved through design and building orientation.	Compatibility of uses is achieved through grouping of similar uses, strict separation of uses, and buffers.
Form-based codes accommodate development that is compact, mixed use, and pedestrian friendly.	The structure of traditional zoning codes makes it difficult to accommodate pedestrian-oriented and mixed use development.
Development standards are prescriptive, ensuring a predictable design and approval process.	Development standards are sometimes negotiable (site plan review, local laws, vague planned unit development standards), prolonging the design and approval process.
Regulates to create places.	Regulates to create buildings.

A.3.2 Transect-based codes

A transect-based code is based on the ecological concept of a transect; a cross-section of the environment showing a range of different habitats. A transect-based code establishes a number of transect zones, each distinguished by its density and shared character. Transect zones that form the foundation of most transect-based codes usually include:

- **T1:** lands approximating or reverting to a wilderness condition, including lands unsuitable for settlement.

- **T2:** sparsely settled lands in an open or cultivated state.
- **T3:** lower density residential areas next to higher density zones that have some mixed use.
- **T4:** mixed use but primarily medium density residential urban/prewar suburban fabric.
- **T5:** higher density mixed use buildings that accommodate retail, offices, rowhouses, and apartments.
- **T6:** highest density and height, with the greatest variety of uses, and civic buildings of local importance.

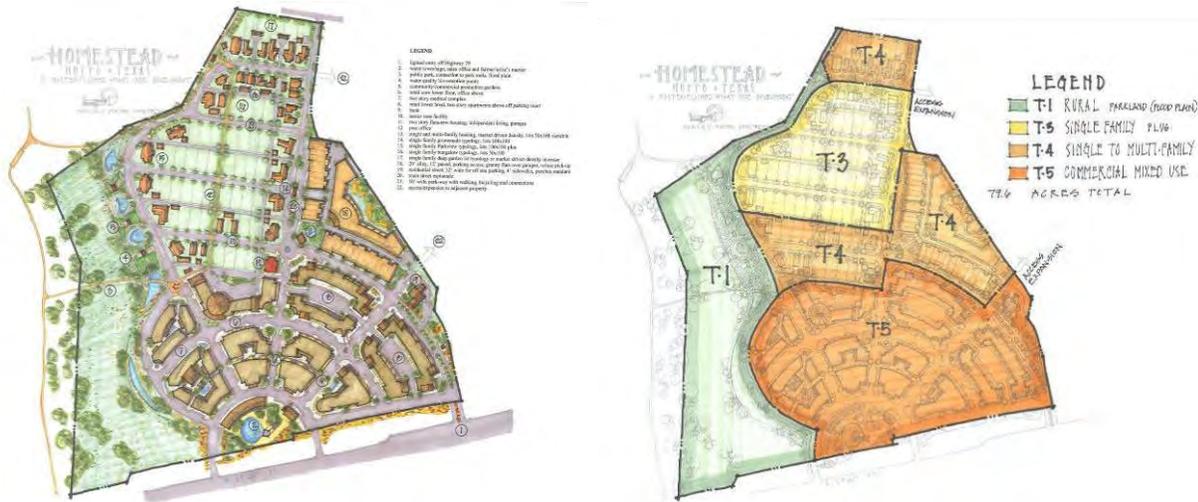


Rural-to-urban transect. (Duany Plater-Zyberk and Company)

The scope of transect zones is less granular than conventional zoning districts, where there may be only minor differences in minimum setbacks or permitted uses. Transect zones are intended to be balanced in a neighborhood structure based on pedestrian sheds, or areas where every resident in a neighborhood is a short walk from any other habitat, such as a village center, civic space, or farmland.

All transect-based codes are form-based codes, because they are based on the physical form of the built and natural environment. Major differences between conventional zoning and form-based codes include:

Transect-based code	Conventional zoning code
Implement a comprehensive plan by create communities with a range of human habitats, from most rural to most urban.	Implements a comprehensive plan by limiting types of uses to specified areas.
Regulates with primary emphasis on form (buildings and their relationship to the street and each other), secondarily on use and management.	Regulates with primary emphasis on use (separation of uses), secondarily on management and form.
Development is structured into neighborhood patterns (clustered land development, traditional neighborhood development, and town center development).	Development is not intentionally structured into particular patterns, and there is no goal of creating coherent neighborhoods.
Requires a mix of housing types and sizes in a walkable neighborhood.	Most standards are applied across all zones as one-size-fits-all regulations.
Districts are based on shared character.	Districts are based on shared use.
All zones are mixed use to some degree.	Most zones prohibit mixed uses. A planned unit development is necessary to build a mixed use development.
Requires a mix of uses within a walkable neighborhood.	Allows development of vast areas of a single land use. Walking distance to other uses is not a factor.
Creates a diverse variety of immersive environments, ranging from the most rural to the most urban.	Mostly low density suburban residential development is scattered among natural areas and agricultural land, creating homogenized or contradictory environments.
Requires development of connected street networks.	No specific street layout requirements. Allows development of dendritic street networks.



Transect-based development under the SmartCode. (Marley Porter of Living Architecture for the City of Hutto, Texas Planning Department.)

A.3.3 The SmartCode

The SmartCode is an open source, form-based and transect-based land development code. The SmartCode is designed to create interconnected, walkable neighborhoods across the spectrum of human settlement, from the most rural to the most urban, incorporating a transect of character and intensity within each. The SmartCode is intended to be calibrated to local and desired conditions by professional planners.

The SmartCode regulates development based on a nesting relationship of the town or city, neighborhood, transect zone, and building lot.

- **Regional scale:** growth sectors contain designated types of community units.
- **Neighborhood scale:** community units contain designated ratios of transect zones.
- **Transect zones** contain the building elements and functions appropriate to them.
- **Lot / building scale.**

Regional scale

A regional scale plan designates growth sectors, each establishing the location where certain types and intensities of community units (PND or pocket neighborhood development, CLD or clustered land development, TND or traditional neighborhood development, and TCD or town center development) are permitted.

The regional scale plan applies only to development under the SmartCode. This system addresses development and open space preservation on a townwide scale. Sector locations are well defined on a transect development guidance plan, and follow tax parcel lines and other fixed boundaries.

Neighborhood scale

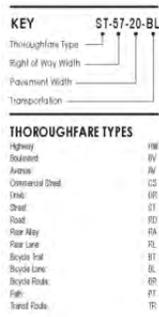
Growth sectors permit one or more types of community units. The type and allocation of transect zones permitted in a community unit varies, depending on the underlying growth sector. There can be more than one community unit in

a development, even of different types, each based on a pedestrian shed, an area that is centered on a common destination. A community unit should be a five to 10 minute walk from the common destination to the edge. The SmartCode also regulates street layout, and types and placement of open space in a community unit.

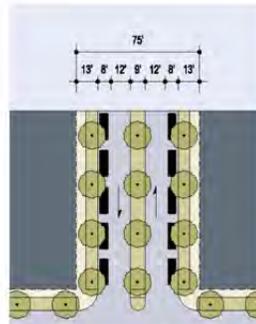
A regulating plan is an approved, legally binding plan that shows how a specific area will develop. It includes explanatory text and maps showing community unit areas, transect zones, civic areas, and thoroughfare network.

Transect scale

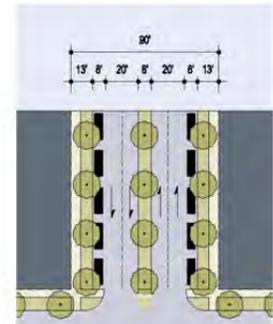
Transects are described in the previous section. Transect zones include standards that encourage diversity similar to that of organically evolved settlements.



Thoroughfare Type	
Transect Zone Assignment	
Right-of-Way Width	
Pavement Width	
Movement	
Design Speed	
Pedestrian Crossing Time	
Traffic Lanes	
Parking Lanes	
Curb Radius	
Walkway Type	
Planter Type	
Curb Type	
Landscape Type	
Transportation Provision	



Avenue	
Right-of-Way	75 feet
Pavement Width	48 feet total
Movement	Slow Movement
Design Speed	25 MPH
Pedestrian Crossing Time	5.7 seconds - 5.7 seconds
Traffic Lanes	2 lanes
Parking Lanes	Both sides @ 5 feet marked
Curb Radius	18 feet
Walkway Type	6 foot Sidewalk
Planter Type	7 foot continuous Planter
Curb Type	Curb or Grade
Landscape Type	Trees at 20' o.c. Avg.
Transportation Provision	BR, TR



Avenue	
Right-of-Way	90 feet
Pavement Width	58 feet total
Movement	Slow Movement
Design Speed	25 MPH
Pedestrian Crossing Time	5.7 seconds - 5.7 seconds at corners
Traffic Lanes	4 lanes
Parking Lanes	Both sides @ 5 feet marked
Curb Radius	18 feet
Walkway Type	6 foot Sidewalk
Planter Type	7 foot continuous Planter
Curb Type	Curb or Grade
Landscape Type	Trees at 20' o.c. Avg.
Transportation Provision	BR, TR

Public space standard for public streets from the SmartCode 9.0 template.

Lot/building scale

Charts and tables in the SmartCode regulate the type, bulk, placement, and frontage features of buildings on a lot.

Regulating form

Tables and illustrations in the SmartCode regulate different attributes of development in each of the transects; including base residential density, block size, thoroughfare types, lot dimensions, building envelopes, and other attributes. The SmartCode also includes architectural design standards, signage requirements, and additional modules that can be modified to reflect desired community character.

Regulating use

The SmartCode regulates specific functions and uses, but unlike conventional zoning it's not the basis of the code. A table in the SmartCode identifies functions that are permitted by right and special permission in each transect, their intensity, and their permitted location on a block. The general function of a building is determined upon site plan approval. A use may be permitted in a transect, but only in designated buildings or sites on the community plan. A regulating plan may also designate mandatory and recommended retail frontages along certain blocks, or confine retail uses to designated frontages.

Uses are grouped into broader categories than in a conventional zoning code. For example, the SmartCode may permit a retail building under certain circumstances, while conventional zoning codes typically include a long list of various retail uses.

Adoption strategy

Most communities that adopted some form of the SmartCode have not abandoned traditional zoning. Different approaches have been taken, such as making SmartCode mandatory for certain neighborhoods or corridors, making it an option for new development, or requiring it for new projects of a certain size or scope. Some communities have incorporated elements of the SmartCode into a hybrid zoning code. Only a few communities have completely replaced their old zoning codes with the SmartCode.

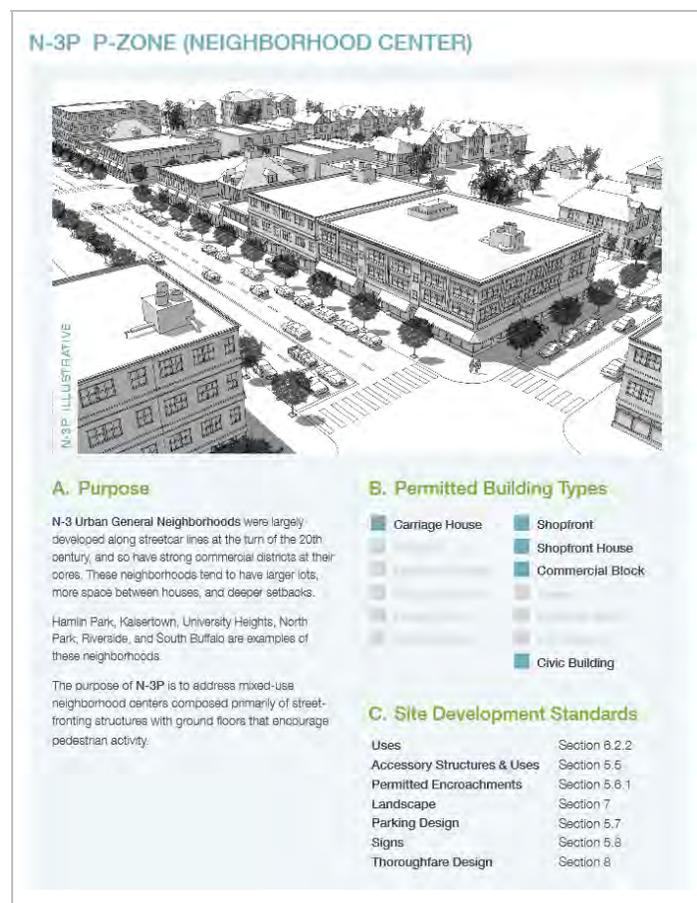
A.4 Unified development code

Laws governing planning and land use should be transparent, accessible, and comprehensible by all town residents. When land use regulations are scattered among disparate chapters of the Town Code, as is the case for the Town of Ithaca, they can be difficult for town employees to administer and interpret; and for officials, appointed board members, and citizens to understand and easily reference. There can be conflicts or duplication with the provisions of other chapters.

A growing number of communities are enacting unified development codes, which consolidate all regulations regarding development, land use and the built environment into one code. The advantages of a unified development code over separate chapters among a larger municipal code include:

- More efficient administration of land use regulations and the development review process, because all involved parties only need to be familiar with one set of standards. The approval processes for all types of development are regulated in one code, not several.
- The lack of redundant, conflicting, and/or inconsistent provisions found in land use control systems made up of separate codes covering zoning, subdivision, environmental requirements, and accessory uses. It reduces the likelihood for error by staff or applicants.
- A more manageable document that can easily accommodate amendments without creating conflicts with other code chapters.
- The opportunity to create a modern code that presents existing land use standards in tables, graphics, and plain English, without using complicated legal jargon or wordy prose. It also allows the opportunity to perform a "deep cleaning" to remove or amend outdated standards; and to integrate updated standards and new requirements for site planning, landscaping, architectural control, and other aspects of the built environment into the Town's land use regulations.
- Full disclosure of all regulations that can affect a proposed development. This leads to a more predictable development process for all involved parties.

A unified development code can consolidate the Town's land use standards into a single, consistent, user-friendly document. A unified development code can also integrate elements of both traditional zoning and form-based codes to create a hybrid document that better regulates the form of the built environment, but that remains familiar to those who have worked with standard zoning codes for years.



Green Code, the new form-based unified development code of Buffalo, New York.

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A.5 Institutional zoning

Many communities with college campuses, including the City of Ithaca, use some kind of institutional zoning. Institutional zoning is intended to give large institutions the flexibility to plan and develop their facilities, while ensuring that surrounding areas are protected from impacts such as traffic, overshadowing buildings, noise, and other externalities from laboratories and research facilities, and from expansion of institutional uses into residential areas.

Much like a planned unit development, development in an institutional zone is guided by an approved district plan based on the institution's master plan. Approval of development in institutional zones with an approved district plan may be administrative or through a more formal development review process. Some implementations of institutional zoning allow the option of formal development review for all development on campus if there is no approved district plan. Institutional zoning districts can also include standards on building bulk and siting, parking and circulation, lighting, landscaping, screening, and signage.

A.6 Design standards

Design standards are intended to convey a sense of the preferred quality for a place. They supplement basic regulations of building setbacks, height, lot coverage, parking, and signage with standards for other elements of the built environment such as architecture, building orientation, and landscaping. (The Town of Ithaca now has basic standards for signage, lighting, and wireless facilities.)

A.6.1 Architectural standards

Architectural regulations are one of the tools a growing number of communities use to reinforce community identity, prevent placelessness resulting from buildings constructed with the same standard design as in hundreds of other communities, reinforce a human scale, and create a built environment that will maintain a timeless appeal.

Architectural regulations are one of the tools a growing number of communities use to reinforce community identity, prevent placelessness resulting from buildings constructed with the same standard design as in hundreds of other communities, reinforce a human scale, and create a built environment that will maintain a timeless appeal.

Architectural regulations for commercial, industrial and civic buildings usually address the following:

- Building materials, color and texture.
- Building height, bulk, and roof line.
- Building proportions.
- Openings in the façade: doors, windows, and garage doors, and their location, amount, size and proportions.



Four-sided design. Architectural details on the front of a building are repeated on all sides. Independence, Ohio. (DT)

- Type and slope of roof.
- Wall projections and recesses.
- Architectural details.

Architectural regulations for residential structures can also include standards to prevent "snout houses" with protruding, visually predominant garages; and ensure variety in design to avoid a "cookie cutter" effect in a new development.

Architectural regulations should be quantitative, with well-defined and enumerated standards that are not arbitrary or subject to interpretation. Contemporary architectural regulations are intended to help produce quality structures, regardless of architectural style. Regulation of architectural style (e.g. Craftsman, Queen Anne, Greek Revival, etc.) may discourage creativity and individuality, and perpetuate the kind of monotony that the standards are intended to prevent.



Bold colors used as accents rather than as dominant features. The Domain, Austin, Texas. (DT)

A.6.2 Site planning standards

Conventional zoning codes usually establish bulk requirements: minimum building setback lines and envelopes, maximum building height, maximum lot coverage, and/or floor-area ratio. Bulk requirements are intended to prevent overcrowding, reduce potential conflicts between adjacent uses, and allow adequate light and air to reach all parts of a lot or building. However, the ultimate location and form of development inside a building envelope can be unpredictable.

Site planning requirements address the unpredictability of basic bulk requirement by supplementing them with standards for arranging compositional elements and improvements on a site. Site planning requirements may address the following:

- Orientation of buildings towards the street, walkways, or other features.
- Arrangement of buildings in a development.
- Placement and amount of walkways, open space, and/or plazas.
- Placement of buildings to take advantage of and preserve views and solar access.
- Placement and internal arrangement of parking areas, access drives, and circulation routes.
- Placement and screening of service and loading areas.
- Requirements for public art, water features, public transit stops, and other amenities.
- Grading and preservation of natural topography.
- Creation of defensible space through Crime Prevention Through Environmental Design (CPTED) strategies, which includes natural territorial reinforcement, natural surveillance, and natural access control.

Site planning standards are more prescriptive than basic bulk requirements, but generally less prescriptive than building form standards in a form-based code.

A.6.3 Landscaping standards

Landscaping regulations help to integrate the built environment with the natural environment, and can reinforce the identity of the Town of Ithaca as an environmentally aware community that is close to nature.

Landscaping regulations usually address the following:

- Amount and location of required plant materials (trees, shrubs, groundcover) for a residential, commercial and industrial site.
- Required landscaping buffers and islands.
- Permitted and prohibited plant materials.
- Proper installation and maintenance of landscaping.
- Tree preservation, removal and replacement.



Landscaping area and walkway in a shopping center parking lot. Georgetown, Texas. (DT)

A.7 Context sensitive solutions

Context sensitive solutions (CSS) is a holistic road design practice that considers the context of the built, natural, and social environments along the route of a road. Rather than a one-size-fits-all approach to road design that emphasizes movement of vehicle traffic above all other considerations, CSS considers that a road should fit into its surroundings, preserving any scenic, aesthetic, historic, cultural and environmental resources, and respecting the character of developed areas it passes through.

CSS also includes collaboration and consensus with stakeholders throughout the entire planning and design process, with the goal of arriving at a consensus that addresses the needs of both the transportation agency and all affected stakeholders.

A.8 Complete streets

Most roads and streets in the Town of Ithaca are designed only with vehicles in mind. Although there is a growing network of recreation trails in the town, accommodation of bicycles and pedestrians on town roads is rare, and usually an afterthought where they exist. Single use streets limit transportation choices by making walking, bicycling, and taking public transportation inconvenient and even unsafe.

Complete streets are roads that are designed to accommodate all users, including motor vehicles, public transportation vehicles and passengers, bicyclists, and pedestrians of all ages and abilities. Design elements of complete streets include:

- Pedestrian infrastructure such as sidewalks, defined crosswalks, accessible pedestrian signals, and seating at regular intervals
- Traffic calming measures to lower driving speeds and better define the road edge, including narrower streets, shorter curb return radii, roundabouts, on-street parking, street trees, and planter strips.
- Bicycle accommodations, such as marked bicycle lanes or shoulders, or shared lane marking.
- Public transportation accommodations, such as shelters and accessible pads at bus stops.

Complete streets policies exclude roads where the cost of accommodation would be too disproportionate to the need or expected use, and roads where accommodation is unnecessary. For example, a short residential street may need sidewalks, but not bicycle lanes or pads for bus stops.

Benefits of complete streets include improved safety for all users of a street, improvement of public health by providing more places to walk and bike, and fostering stronger, more engaged communities by allowing all people to feel safe and comfortable using the town's roads.

The New York State Complete Streets Act (S05411, A 8366) requires consideration of all road users—motor vehicles, public transportation, cyclists, and pedestrians—in any transportation project that uses state and federal funds.

APPENDIX B EXISTING CONDITIONS

EXISTING CONDITIONS

B.1 Demographic profile

This section provides a snapshot of the Town of Ithaca's existing demographic characteristics, with a specific focus on population distributions/concentrations, age distribution, racial characteristics, and education.

Unless otherwise noted, all data comes from the United States Census, either the most recent 2010 Census or earlier Census counts. Data has also been extracted from the American Community Survey (ACS), an on-going nationwide survey sponsored by the Census that produces demographic estimates. The ACS is conducted annually for a sample of the U.S. population, particularly municipalities with a population of 20,000 persons or more. Depending on a municipality's population size, analysis of the data is provided in annual, three-year, or five-year estimates. The most recent ACS data available for the Town of Ithaca covered the five-year period between 2008 and 2012.

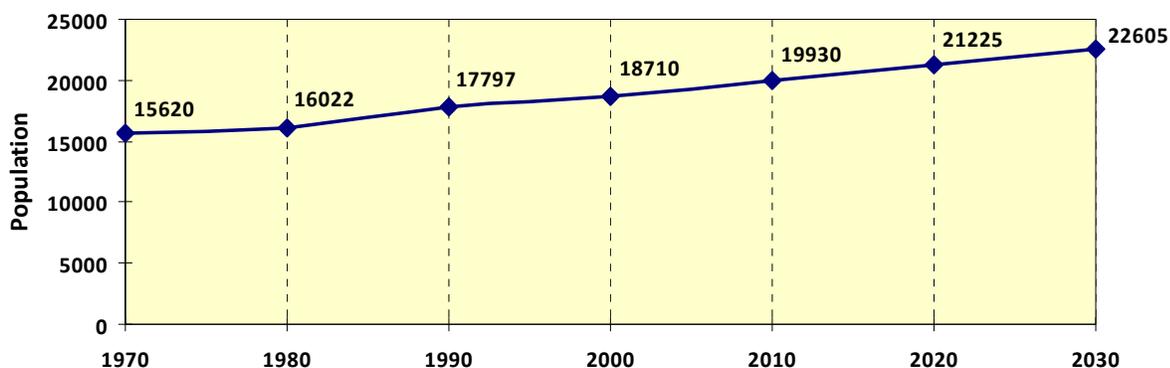
B.1.1 Population

The Town of Ithaca, including the Village of Cayuga Heights, has a current population of approximately 19,930 persons. The Town's population has grown steadily in the last 40 years, with an average increase of 6.75% each decade between 1970 and 2010; a growth rate of approximately 0.7% per year. The most recent Census information indicates that the Town grew another 6.5% between 2000 and 2010, an increase that is consistent with past trends.

Population projections

Generally, population projections are based on two assumptions: (1) that the rate of change is equally divided across a period of time (usually 10 year increments), and (2) that population will grow at the same rate as it has in the past.¹ In reality, however, population growth rates vary from year to year and are affected by many social and economic factors. Therefore, population projections should only be considered guidelines to gauge potential future conditions.

Historical and projected population 1970-2030 | Town of Ithaca



Source: United States Census Bureau

Assuming that the Town of Ithaca continues to grow at the same general rate as the last forty years, the Town of Ithaca total population in 2030, including the Village of Cayuga Heights, would be approximately 22,605 persons, or

¹ Lab No. 3: *Population Projections and Scale*, Ines M. Miyares, Department of Geography, Hunter College. <http://geo.hunter.cuny.edu>

an additional $\pm 2,675$ persons in the next 20 years.² The previous chart illustrates the historical and projected population for the Town of Ithaca (including the Village of Cayuga Heights).

College student population characteristics

The percentage of college students has remained relatively consistent throughout the years (39% in 1980, 38% in 1990, 35% in 2000).³ Recent data obtained from the ACS suggests that college students account for nearly 40% of the total population in the Town between 2008 and 2012.

The large percentage of college-age persons in the Town of Ithaca has historically been attributed to the presence of area educational institutions of higher learning, particularly Cornell University and Ithaca College. According to the Town's 1993 Comprehensive Plan, Ithaca College had a total enrollment of 6,200 students in 1990 (98% undergraduate). More recently, the Ithaca College Office of Institutional Research reported a fall 2010 enrollment of 6,949 students (93% undergraduate).⁴

The 1993 Comprehensive Plan also noted that Cornell University had a total enrollment of nearly 18,000 graduate and undergraduate students (around 70% undergraduate), whereas the Cornell Office of Institutional Research reported a fall 2010 enrollment of 20,939 students (67% undergraduate).⁵ According to Cornell's 2010 Enrollment Report created by the Office of Institutional Research, the fall 2010 undergraduate and graduate/professional school enrollments were at an all-time high.

Population concentration/distribution

The Town's population has historically been concentrated on East Hill, although this has shifted in recent years. The 1993 Comprehensive Plan attributed the proliferation of residential subdivisions and concentration of population on East Hill to the presence of nearby Cornell University.

Interestingly, Census block and tract information between 1990 and 2010 shows that the Town's population has been shifting more to South Hill, such that the South Hill population now exceeds the East Hill population.

Residential subdivision developments occurring in the late 1980s and the 1990s (such as the Deer Run and Chase Farm Subdivisions) most likely contributed to the increase in population on South Hill, while the reduction of vacant available land on East Hill has contributed to the negligible population increase. Development of the Linderman Creek Apartments, the Overlook Apartments, and EcoVillage in the 1990s and mid-2000s contributed to the increase in population on West Hill.

² Based on a population projection formula that is found in Appendix E

³ According to 1980, 1990, and 2000 Census figures.

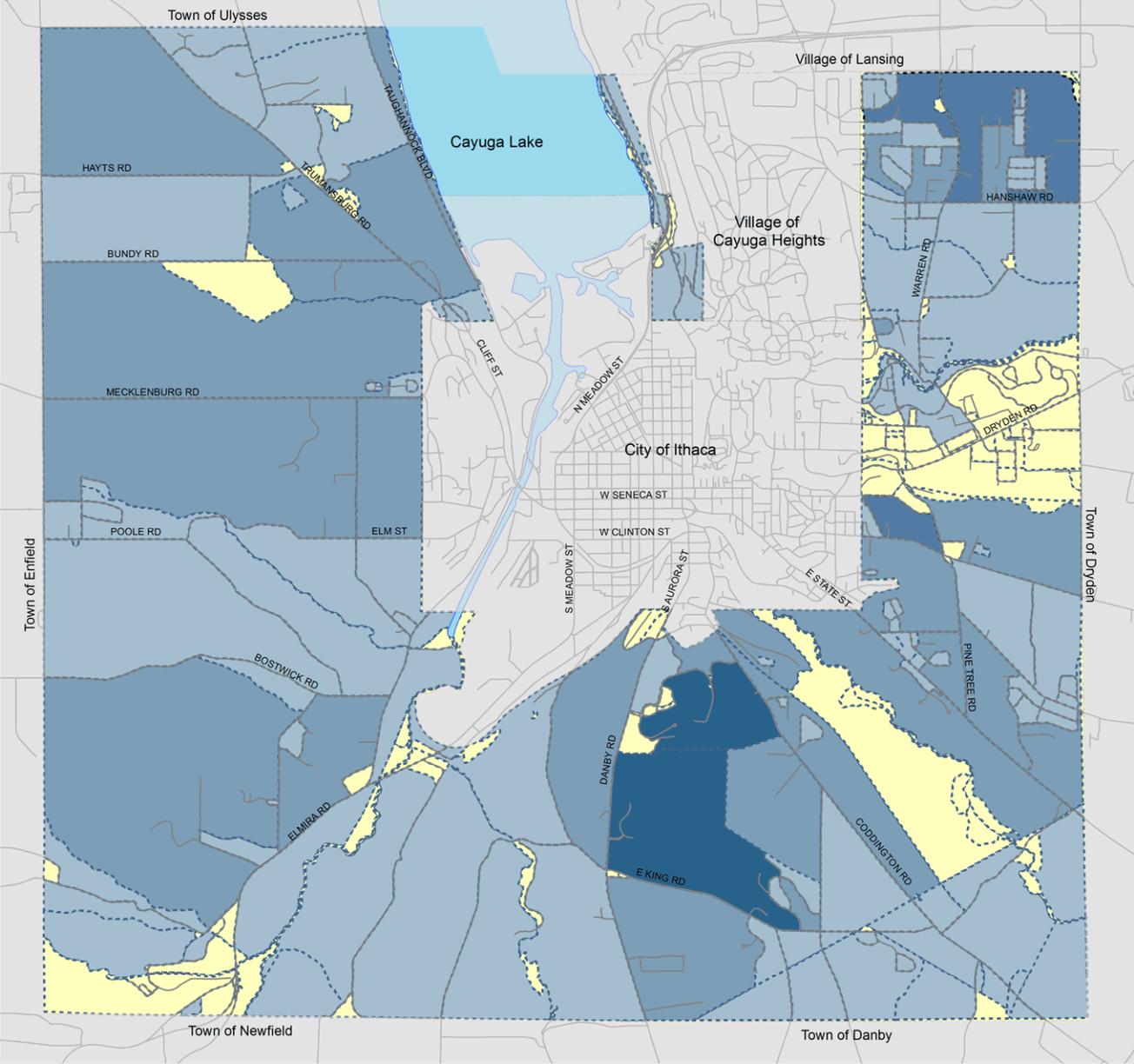
⁴ Ithaca College Office of Institutional Research, *Ithaca College Facts in Brief 2010-11*,.

http://www.ithaca.edu/ir/facts/Ithaca_College_Facts_in_Brief_2010-11.pdf, accessed 1 August 2011.

⁵ Cornell University Office of Institutional Research and Planning, *Enrollments by College, Ithaca Campus, Fall 2010*.

<http://dcb.cornell.edu/documents/1000172.pdf>, accessed 1 August 2011.

Population by Census block 2010 | Town of Ithaca



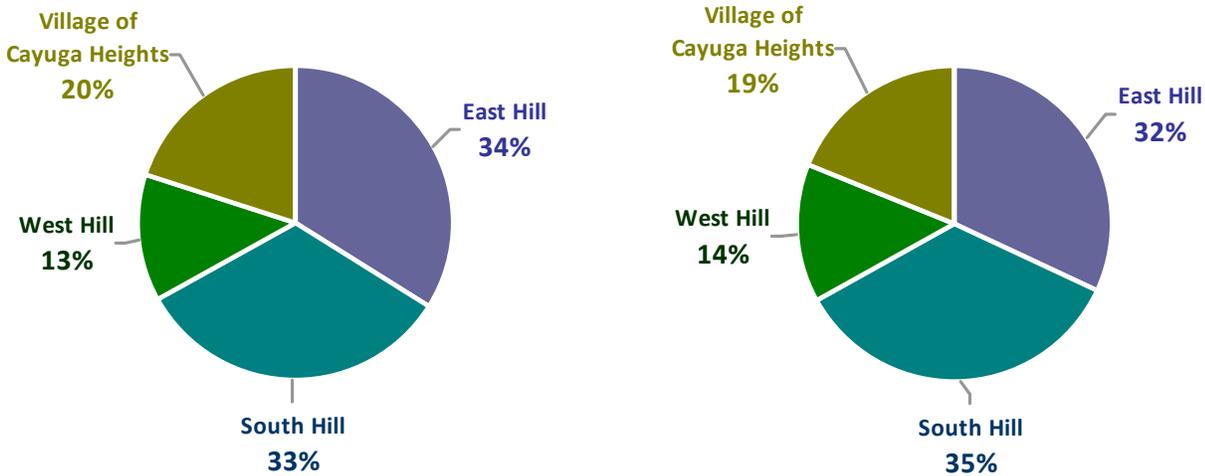
- 0 people
- 1 - 100 people
- 101 - 500 people
- 501 - 1000 people
- 1000 - 4000 people

Produced by Town of Ithaca Planning Department, 5 March 2014
 Data: US Census Bureau, Tompkins County Information
 Technology Services GIS Division



The pie charts and the table below illustrate the shifts in population distribution in the Town of Ithaca between 2000 and 2010. The 2010 Population by Census Block map on the following page shows the distribution of the Town's population as of the 2010 Census.

Population distribution 2000-2010: Town of Ithaca



Town population distribution: 2000

Town population distribution: 2010

Population distribution 1990-2010 Town of Ithaca					
Location	1990 population	2000 population	2010 population	% change 1990-2000	% change 2000-2010
East Hill	6,412	6,389	6,409	-0.4%	+0.3%
South Hill	5,654	6,210	6,904	+9.8%	+11.2%
West Hill	2,274	2,373	2,888	+4.4%	+22%
Village of Cayuga Heights	3,457	3,738	3,729	+8.1%	-0.2%
Total: Town of Ithaca	17,797	18,710	19,930	+5.1%	+6.5%

Source: United States Census Bureau

The population on South Hill grew 11.2% between 2000 and 2010, whereas the population on East Hill only increased 0.3% between 2000 and 2010. Although the West Hill area of the Town is the least populated, it experienced the largest increase in population, with a 22% increase between 2000 and 2010.

B.1.2 Age and racial characteristics

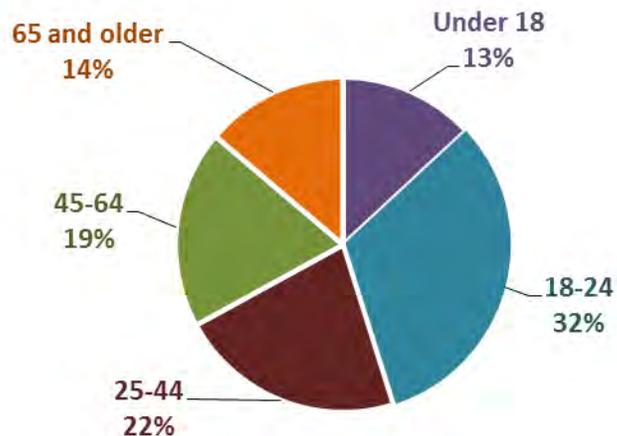
Age

The 18 to 24 year age group has historically been the largest age group in the Town of Ithaca. The most obvious reason for this has been the presence of local institutions of higher learning, particularly Cornell University and Ithaca College. The most recent ACS data indicates that 18 to 24 year-olds are still the largest age group in the Town of Ithaca, followed by those aged 25-44 years, and those aged 45-64 years.

The chart below shows the general age distribution characteristics of the Town of Ithaca, which are typical of the Town's historical age distribution patterns.⁶

⁶ 2008-2012 American Community Survey

Age distribution 2008-2012: Town of Ithaca



Source: 2008-2012 American Community Survey

The highest growth rate noted in the 1993 Comprehensive Plan was for the group aged 65 years or older; the proportion of which nearly doubled between 1970 and 1990. The 1993 Plan also anticipated that the elder population would continue to grow, thereby increasing the need for specialized housing and care (with even more services needed by elders over 80 in the future).

Indeed, the senior population, mainly 75 to 84 years old, had the greatest increase in numbers from Census 1990 to Census 2000 (62% change). The 85-year old plus group also significantly increased between 1990 and 2000 (54% change). These figures have mirrored county, state, and national trends. According to the Tompkins County Office for the Aging, seniors aged 85-plus now constitute the fastest growing segment of the senior population - a trend that is projected to continue.⁷ Additionally, the baby-boom generation (those born between 1946 and 1964) is beginning to reach retirement age and will contribute to future specialized service needs. The Town might need to develop additional services in the future to accommodate the needs of these continuing aging segments of the community.

Race

According to the Census, the race/ethnicity breakdown in the Town has historically been similar to that of Tompkins County and the Southern Tier region. The Town has lower racial and ethnic diversity (with the exception of the Asian population) than New York State and the United States as a whole. The 2010 Census showed that nearly 80% of people reporting one race alone in the Town of Ithaca were White/Caucasian, whereas 11% were Asian, 4% were Hispanic, 4% were Black/African American, 1% were Some Other Race, and 0.1% were American Indian, Alaska Native, Native Hawaiian, or Other Pacific Islander.

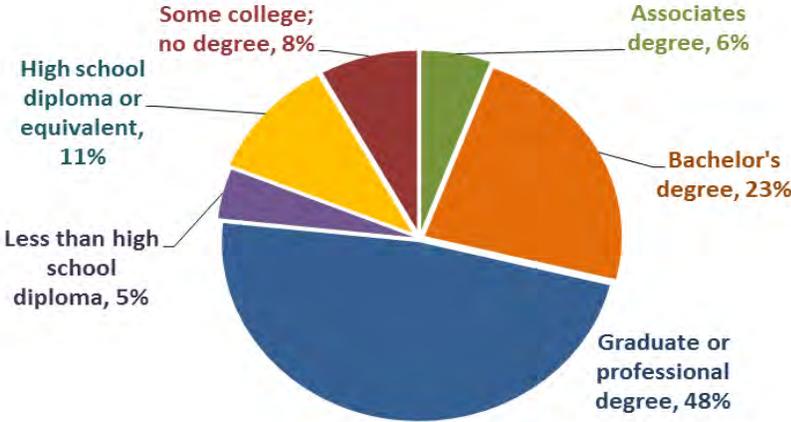
B.1.3 Education

The 2008-2012 ACS recently reported that nearly 9,500 children in the Town of Ithaca were enrolled in school. That is, 423 children (ages 3 and older) were enrolled in nursery school or kindergarten, just over 1,600 were enrolled in elementary or high school, and more than 7,400 were enrolled in college or graduate school. This is consistent with past Census figures for the Town of Ithaca and for Tompkins County.

⁷ *Overview of Millenium Project*, Tompkins County Office of the Aging, <http://www.tompkins-co.org/cofa/intro.pdf>

Regarding those aged 25 years and older, the Town of Ithaca contains a highly educated community, with much higher education attainment levels than New York State as a whole. Local educational institutions of higher learning have tended to draw a large number of persons seeking undergraduate, graduate, and post-graduate degrees. 95% of those in the Town aged 25 and older at least graduated high school, with 71% attaining a bachelor's degree or higher.⁸ The chart below, excerpted from the 2008-2012 ACS, illustrates the levels of education achieved by Town of Ithaca residents aged 25 years and older.

Educational attainment 2008-2012 | Town of Ithaca residents



Source: 2008-2012 American Community Survey

⁸ 2008-2012 American Community Survey

B.2 Land use

This section provides an evaluation of existing conditions, emerging development patterns, the current zoning scheme and land use regulations in the Town.

B.2.1 Development history and trends

Land use distribution

The Town of Ithaca, including the Village of Cayuga Heights, encompasses an area of 30 square miles (19,370 acres)⁹. This does not include Cayuga Lake, with an additional 836 acres of the Town. The most prevalent land uses found in the Town are:

- Undeveloped forest, meadow, and brush (covering 49% of the Town)
- Residential (covering 19% of the Town)
- Agriculture (covering 18% of the Town)

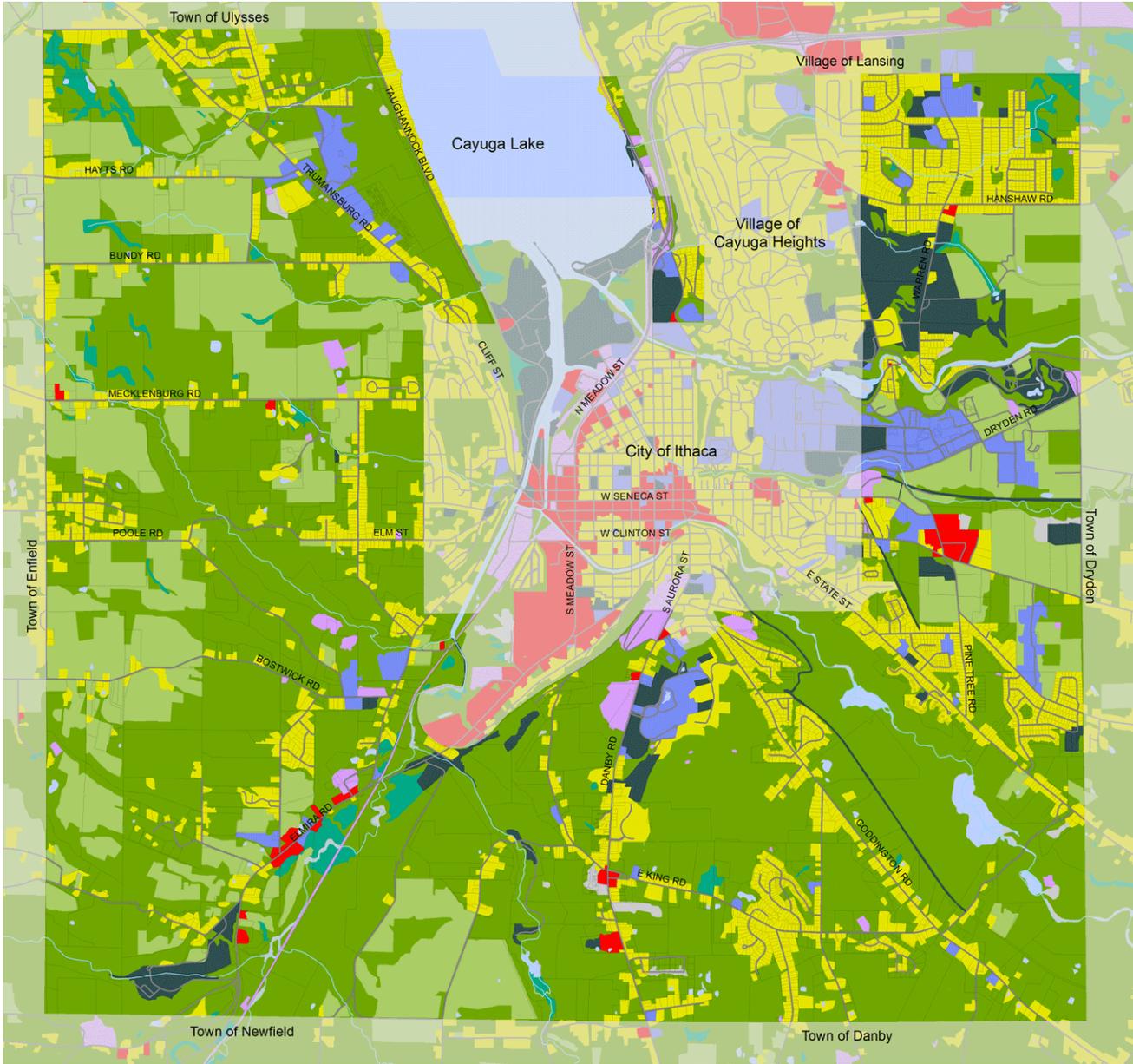
The following tables and maps further outline the variety of land uses found in the Town.

Land use distribution Town of Ithaca			
Land use category	Acres	Square miles	% of town area
Agriculture	3412.24 ac	5.34 mi ²	17.61%
Commercial	123.71 ac	0.19 mi ²	0.64%
Community services/institutions*	594.02 ac	0.92 mi ²	3.07%
Light industrial/utilities	217.39 ac	0.34 mi ²	1.12%
Residential	3609.42 ac	5.64 mi ²	18.63%
Disturbed or barren land	98.25 ac	0.15 mi ²	0.51%
Outdoor recreation: public and private	675.59 ac	1.06 mi ²	3.49%
Undeveloped: forest/meadow/brush	9557.9 ac	14.94 mi ²	49.33%
Waterbody	836.00 ac	1.31 mi ²	4.31%
Wetlands	252.66 ac	0.39 mi ²	1.30%
*Does not include Cornell Plantations, ancillary or land-based research facilities at Cornell University, or open and natural space on the Ithaca College campus.			

With largely half of the land being undeveloped forest and meadows, the balance of land uses in the Town of Ithaca consist of a variety of residential development with associated parks and recreational trails, agriculture, commercial and retail establishments, educational institutions, offices and light industrial uses. Town residents can enjoy the associated urban amenities of living close to the City of Ithaca, with international cuisine, theatre and arts, cultural events, and live music, as well as nearby local and State Parks, natural areas, and recreational trails, many of which are found within the Town limits.

⁹ Data based on GIS query; may not be exact.

Land use | Town of Ithaca



- Agriculture
- Commercial
- Institutions/community services
- Disturbed or barren land
- Light industrial/utilities
- Outdoor recreation - public and private
- Residential
- Undeveloped forest/meadow/brush
- Waterbody
- Wetlands

Produced by Town of Ithaca Planning Department, 17 January 2014
 Data: Tompkins County Planning Department, Tompkins County Information Technology Services GIS Division



B.2.2 Residential development

Until the 1950s, the most densely populated portions of the Town of Ithaca were the hamlet of Forest Home, where settlement began in 1794, and the Village of Cayuga Heights, which was incorporated in 1915. The remainder of the Town contained scattered residential development, mostly on East Hill, in the area north of Hanshaw Road. In the 1950s, postwar prosperity, growth at Cornell University and the area's factories, fueled demand for housing outside of the city limits. New subdivisions were built in Northeast Ithaca and East Hill areas, in close proximity to Cornell University, particularly in the areas just south of the Village of Lansing and between Ellis Hollow Road and Six Mile Creek. Lot splits and frontage residential development occurred throughout the Town, obstructing what were once pristine rural vistas and giving once-rural collector roads a more residential character.

The relocation of Ithaca College from downtown in the City of Ithaca to South Hill in the Town of Ithaca in the early 1960s created a shift in the Town's development patterns. Residential development on South Hill was relatively limited until the 1980s, when large housing projects such as Deer Run, Chase Farm, and College Circle were constructed. South Hill has since seen more housing development than East Hill.

The Village of Cayuga Heights (located within the Town of Ithaca boundary) is nearly fully built out. The Village is primarily residential, with the exception of the Community Corners commercial plaza. A recent notable development in the Village is the Kendall at Ithaca senior independent and

assisted living community. Construction of the 406,000 square foot facility located near the Village of Lansing border began in 1995, with significant additions completed in 2000.



Ecovillage at Ithaca.

The last frontier of residential development in the Town of Ithaca is the West Hill area. The past 20 years has seen the beginning of what could be the transformation of the West Hill area from a predominantly agricultural area. In 1996, the first residents moved into the Ecovillage at Ithaca cohousing development, located on a 176-acre West Hill site. Two conventional apartment complexes, one with subsidized housing for low to moderate income households, the other providing affordable housing for senior citizens, were built soon afterwards. Carrowmoor, a planned carbon-neutral, medieval-themed mixed use development with 350 to 400 residential units, is proposed for a site on Mecklenburg Road (NY 79W).

In the Town of Ithaca, post-WWII residential development tended to have a rural, low density character, rather than the more manicured form of suburban development found in larger Upstate cities, with relatively large lots on streets lined by deep roadside ditches instead of curbs, gutters and sidewalks. As a result, many of the Town's existing housing developments are homogenous, lacking in variety and efficiency, have largely conventional lot layouts, and contain homes and lots that are similar in size, style, and price. Most housing developments were built with little consideration for the topography or environmental sensitivities of the land on which they sit, have little walkability, and are not connected to existing employment centers, services, commercial areas, or multi-modal transportation systems.

However, there are a few developed areas in the Town that contain a mix of interesting housing styles, sizes, and types, and that are also connected to existing employment centers, services and the Town's emerging parks and trails system. The Commonland Community, located off of Slaterville Road (NY 79E) on the Town's East Hill, contains a mix of single and two-family attached homes in a cluster arrangement; adjacent to the Six Mile Creek natural area and hiking trails. The Commonland Community is served by three public bus routes that run regularly to downtown Ithaca, Cornell University, and outlying areas along Slaterville Road towards the Town of Caroline and Ellis Hollow Road towards the Town of Dryden.



This streetscape in the South Hill area is typical of conventional residential development in Ithaca. Note the very low density and lack of curbs and sidewalks.



The Overlook at West Hill, a suburban-style apartment complex in the West Hill area.

The Summherhill Apartment and Ellis Hollow Apartment complexes, also on East Hill, are located immediately adjacent to the East Hill Plaza shopping center, with Cornell University located nearby. The Ellis Hollow Apartment complex includes senior apartment units, so seniors can be easily connected to grocery stores, pharmacies, banks, offices, and other services within the shopping plaza. East Hill Plaza is also very well served by public transit, with many daily routes to Cornell, Ellis Hollow, and downtown Ithaca.

The historic hamlet of Forest Home is a former water-powered mill community that developed in an organic arrangement around Fall Creek. Today, it is a compact residential neighborhood, with most houses dating from the early 19th and 20th centuries. Completely surrounded by lands belonging to Cornell University, it is within walking distance to the Cornell campus, Cornell Plantations, and a variety of walking trails. Many TCAT buses travel through the hamlet every day, en route to northeast Ithaca, the Shops at Ithaca mall in the Village of Lansing, the Village of Cayuga Heights, the hamlet of Etna in Dryden, and the Tompkins County Regional Airport.

There is growing support for creating denser, more walkable, and interconnected neighborhoods in the Town.

B.2.3 Commercial development

The Town of Ithaca is fortunate in that, unlike many peer communities, it has no strip commercial development. The Town does not have a major shopping district, or village or hamlet commercial center. The Town also does not have a large surplus of undeveloped land with commercial zoning. An abundance of vacant commercial land can depress its value, making it more attractive for low-end businesses.



Rodeway Inn on Elmira Road, Inlet Valley area.



East Hill Plaza.

Clusters of commercial development in the Town include:

- **East Hill:** the intersection of Ellis Hollow Road and Pine Tree Road, about one half mile south of the Cornell University School of Veterinary Medicine, includes the 110,000 square foot East Hill Plaza building, the 60,000 square foot East Hill Office building, and a Best Western hotel. The East Hill Plaza building contains a supermarket, laundromat, liquor store, casual restaurants, and offices for Cornell University. There are also several banks, dental offices, and a gas station on the overall property. Development in this area started in the late 1970s and continued through the 1990s.
- **South Hill:** the intersection of Danby Road (NY 96B) and East King Road near Ithaca College includes a Country Inn and Suites hotel, furniture store, some small restaurants, a gas station and a convenience store. College Crossing, a 19,000 square foot neighborhood shopping center at the corner of Danby Road and King Road, has received final approval. This area emerged as a small commercial center in the 1970s. To the north, one and a half miles on Danby Road, is Rogan's Corners adjacent to the city line. This small commercial site, constructed in the early 1980s, consists of a gas station, convenience store, a restaurant and several specialty stores.
- **Inlet Valley:** the area lining Elmira Road (NY 13/34/96), from Five Mile Drive to Seven Mile Drive, includes a scattered assortment of motels, light industrial facilities, and small businesses, including the Ithaca Beer brewery. Most development in this area took place between the 1960s and 1980s.

There is no retail center or commercial development in the more heavily populated Northeast Ithaca area of the Town of Ithaca. However, the adjacent Village of Cayuga Heights contains the Community Corners shopping center, which consists of cafes, restaurants, florist, salons, apparel shops and other services.

B.2.4 Industrial development

In the not-too-distant past, the City and Town of Ithaca were known for more than their institutions of higher learning and enlightened residents. Like many small cities and towns in Upstate New York, Ithaca was home to an assortment of factories that employed many of the area's residents. Three plants were established in the South Hill area, taking advantage of proximity to the now-departed Delaware, Lackawanna and Western Railroad.

Morse Chain, a developer of chain and power-transmission equipment, was incorporated in 1898, and moved onto their South Hill site in 1906. Morse Chain was acquired by Borg-Warner in 1929. In the 1980s, automotive-related manufacturing operations eventually moved to a new facility on Warren Road in the Town of Lansing. The 760,733 square foot South Hill plant now known as Emerson, where the industrial products division remained, closed in 2010.

Morse Chain eventually began building adding machines, a venture that was bought by National Cash Register (NCR) in 1943. NCR built their regional manufacturing plant further south off Danby Road (NY 96B) in 1957,

where they manufactured adding machines until the 1970s. The 271,000 square foot facility was eventually taken over by Axiohm Transactions Solutions which closed all but its office functions in the early 2000s.



South Hill Business Campus.

Therm Incorporated, a manufacturer and supplier of turbine blades, was established on South Hill in 1937. The company remains in business to date in its 130,000 square foot facility located off Hudson Street Extension.

The Town of Ithaca does not have any industrial parks, or a large surplus of undeveloped land with industrial zoning. Clusters of industrial development in the Town include:

- **South Hill:** east of Danby Road, straddling the city/town boundary, the former Morse Chain/Emerson facility sits idle. South of Morse Chain, across from Ithaca College, the former NCR facility is now the South Hill Business Campus. Therm Incorporated is northeast of Ithaca College on a site accessed from Hudson Street.
- **Inlet Valley:** a small cluster of construction and trades-related uses are located in the Inlet Valley are near Five Mile Drive. Zoned as LI (light industrial), industrial development took place in an unplanned manner, with utilitarian metal structures, outdoor storage, continuous curb cuts, and a lack of landscaping or other aesthetic amenities. Further south, at the Town line, is a propane storage facility on an LI-zoned parcel.

College towns throughout the United States are centers for innovation, with research facilities and advanced industry piggybacking on the presence of research universities. The Cornell Business and Technology Park, hosting local, national and international research firms, is located in the Town of Lansing. South and east of Cornell University, where land is dedicated to land-based research activities, athletic fields, and equestrian facilities, there is limited opportunity to create a similar university-centered office/research park in the Town.

B.2.5 Agricultural development

Agriculture was a major economic sector and the predominant land use in the Town before World War II. Despite the barriers to farming presented by terrain, soils, and climate, the Town produced and exported significant amounts of wheat and other agriculture products beginning around 1800. Through the 19th century, potatoes, hay, tobacco, grain, fruit, and dairy and meat products were sent to market from the numerous farms dotting East Hill, South Hill, Inlet Valley, and West Hill. Today, agricultural areas are concentrated in the western part of the Town along the

borders of Enfield and Ulysses. Some farms are also active in the South Hill area, and much of the countryside campus of Cornell University on East Hill is dedicated to agricultural research.

The 24 farms in the Town of Ithaca range from small-scale fruit and vegetable producers, livestock farmers, and ornamental horticultural businesses to larger-scale dairy and commodity field crop production. Farm operations in the Town occupy 3,412 acres, about 18% of the Town's total land area. Relative to other towns in the County, the Town of Ithaca ranks second lowest in terms of land in farms, but it is also the most developed town.

The (draft) *Agricultural and Farmland Protection Plan* will address agricultural land use issues.

B.2.6 Institutional development

In 2009, USA Today recognized Ithaca as being the best college town in the United States with a population under 250,000. Ithaca was named the nation's best college town in the American Institute for Economic Research 2010-2011 College Destinations Index. Of 75 metropolitan areas in the College Destinations index, the Ithaca metro had the highest concentration of college students; 276.9 for every 1000 residents.



Baker Farm.

Ithaca is unusual for its size in being the host community for two distinguished institutes of higher learning; Cornell University and Ithaca College. The educational mission of each school is quite different, as well as their physical setting, built environment, and interaction with and impact on the surrounding community. Cornell University and Ithaca College are centers of employment and major traffic generators, and create demand for housing and commercial uses off-campus catering to students.

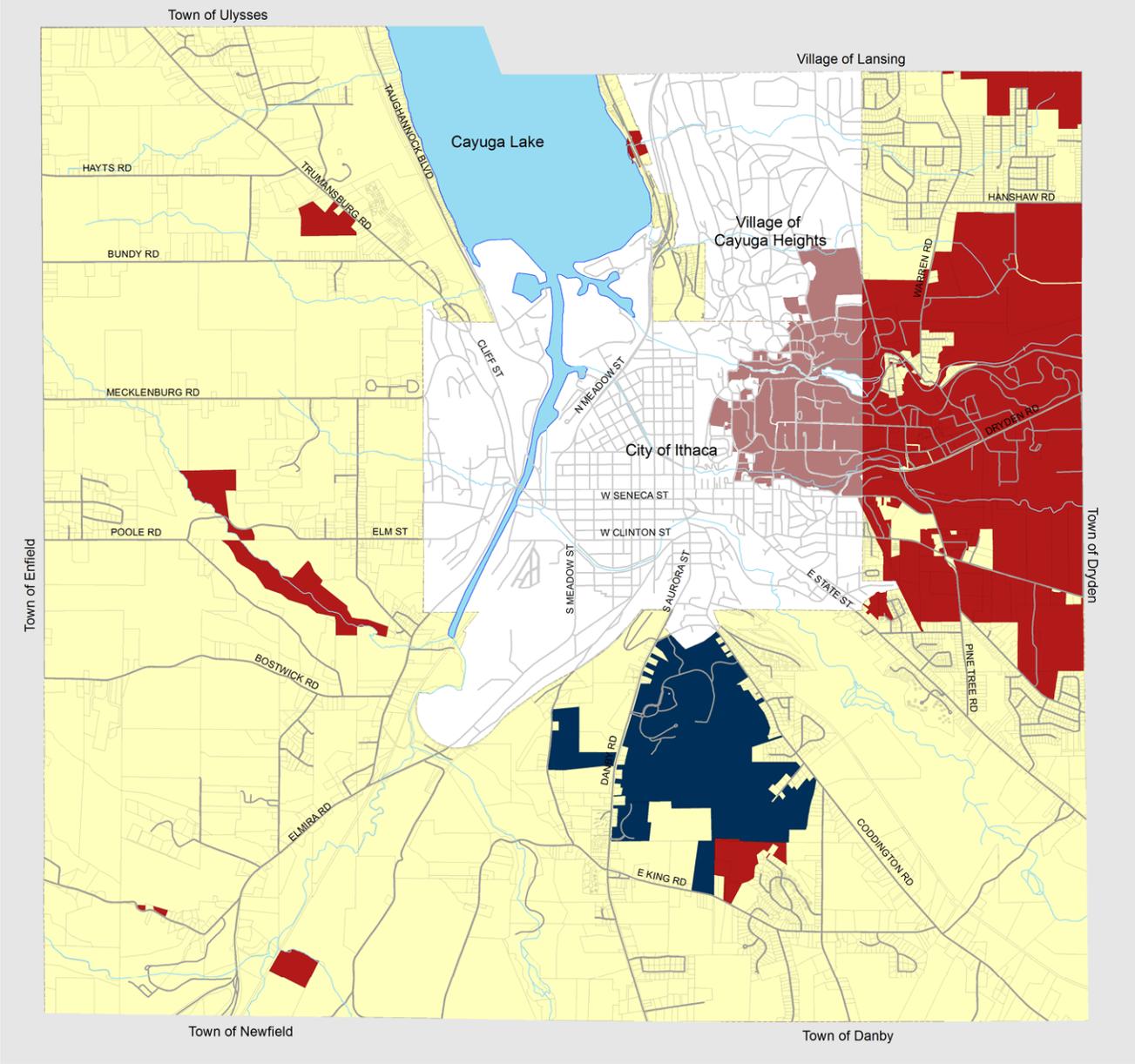
Cornell University

A large portion of the main campus of Cornell University, a private Ivy League and federal land grant research university that also includes four state contract colleges among its colleges, is in the Town of Ithaca. Cornell University was chartered by the state in 1865, and opened to students in 1868. The 745 acre Ithaca campus, with approximately 21,000 students, 9,734 academics and staff (including 1,587 faculty and 1,073 non-faculty academics), is situated on a high plateau northeast of downtown Ithaca.¹⁰

Throughout the 20th century, the built-up area on the Ithaca Campus grew to the east. While the academic core remains in the City of Ithaca north of Collegetown, somewhat less than half of the core campus lies in the Town of Ithaca, including the School of Veterinary Medicine, and a graduate student housing complex. The campus' built environment and "outdoor rooms" of the quads becomes less coherent further to the east, as it transitions from the historic academic core to the newer Judd Falls and Vet Quad areas, and beyond to Cornell Plantations and agricultural research areas. Cornell University also has extensive land holdings throughout the Town away from the main campus, including East Hill Plaza.

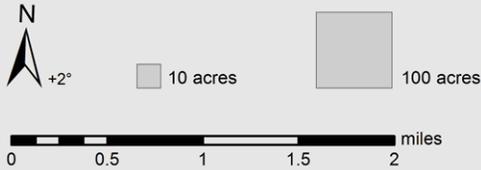
¹⁰ Cornell University, Office of Institutional Research and Planning URL: www.irp.dpb.cornell.edu/tableau_visual/academic-workforce-at-a-glance and www.irp.dpb.cornell.edu/tableau_visual/non-academic-workforce-at-a-glance

Cornell University and Ithaca College lands | Town of Ithaca



- Cornell University land in town
- Cornell University campus in City of Ithaca, Village of Cayuga Heights
- Ithaca College land

Produced by Town of Ithaca Planning Department, 5 March 2014
 Data: Tompkins County Department of Assessment, Tompkins County Information Technology Services GIS Division



These areas outside of the main campus form an integral part of the East Hill neighborhood. Dryden Road (NY 366), Warren Road, Forest Home Drive, Pine Tree Road, Ellis Hollow Road, and Mitchell Street all cross through portions of the campus or university-owned tracts. Road connectivity between the campus and surrounding town is well-developed, but pedestrian accommodations decrease with distance from the core campus.

The 2008 Cornell Master Plan for the Ithaca Campus is an ambitious 422 page document that lushly illustrates a 30 to 60 year vision for the campus and outlying properties in the City and Town of Ithaca. Goals of the plan affecting the Town include:

- Manage the rural land base.
- Protect and enhance the gorges and creek systems.
- Respect and enhance surrounding communities.
- Reinforce the relationship between the campus and its natural setting.
- Protect outdoor teaching and research facilities.
- Cluster administrative uses at crossroads and near gateways.
- Broaden housing options on and close to Core Campus.
- Provide high-quality recreation and athletics complexes.
- Transform the East Hill Plaza area into East Hill Village.

The Cornell Master Plan calls for future development to take place in the existing campus footprint, with no new land acquisition. The intensification of this new development could bring more vehicle traffic, additional demand for off-campus student housing in the Town, and increased development pressure in the East Hill and Northeast Ithaca areas.

One objective of Cornell's Master Plan is to broaden housing options on and close to the core campus. The Master Plan recommends 1,000 new on-campus beds for undergraduate students. However, the university still expects that most graduate students will find housing off-campus, with a goal of providing housing to 25% of graduate students, compared to less than 15% today. Much of this new graduate student housing is expected to be provided in a new East Hill Village neighborhood center. Even with increased housing provided by the university, the impact of student rentals on Ithaca's neighborhoods and housing market will be an ongoing issue well into the future.



The broad missions and diverse range of the built and natural environment found at Ithaca College and Cornell University campuses make campus zoning a challenge.

Ithaca College

Ithaca College is a private college located completely within the Town of Ithaca on South Hill. As of 2010, the college had about 6,949 students, 724 faculty, and 973 staff.¹¹ Ithaca College was founded by in 1892 as a music conservatory. Through the 1960s, Ithaca College was relocated from scattered buildings in downtown Ithaca to a new centralized campus on South Hill, which now comprises 669 acres.

Physical development of the campus is guided by the 2002 Ithaca College Master Plan Report. Highlights of the plan include:

- Concentrating academic functions at the campus core, with all buildings a 10 minute walk from each other.
- Relocating existing parking lots from the campus core to its periphery, with consideration of parking garages to reduce surface area consumed by parking.
- Siting of buildings in "three-sided quadrangles", with one side unbuilt to provide vistas of Cayuga Lake.
- An academic "main street" corridor.

The Ithaca College 2008 Institutional Plan includes a short section on facilities, the first goal of which is to develop a new campus master plan.

Unlike Cornell University, the built-up core of the Ithaca College campus is physically segregated from the surrounding neighborhoods. The campus reflects institutional planning practice of the 1960s and 1970s, having a densely developed central core encircled by a loop road, parking lots, athletic fields, and open space. With no sidewalks along Coddington Road and Danby Road, it is very difficult to walk safely from the campus to surrounding neighborhoods or downtown Ithaca. The college has four points of vehicle access; two entrances from Danby Road (NY 96B) to the west, and two from Coddington Road (County Road 119) to the north. College Circle Apartments, a large suburban-style apartment complex adjacent to the south end of the campus, was recently purchased by the college and incorporated into the campus as student housing.

Ithaca College owns a 51 acre parcel that is not contiguous to the main campus. The long-term build out plan does not anticipate expansion to the exclave.

An equivalent of a Collegetown-type neighborhood never emerged near Ithaca College, partly because of Ithaca College's policy of requiring freshmen, sophomores and juniors to live on-campus, an open space buffer around the built-up campus core, and limited access points, poor pedestrian access, and a zoning and land use pattern that inhibited the creation of a new large, high density neighborhood adjacent to the college. The presence of Ithaca College can be a catalyst for a new neighborhood center in the South Hill area.

Concerns about the effects of off-campus student rentals have usually focused on the impact of Cornell University. However, off-campus housing occupied by Ithaca College students has, over time, changed the character of parts of the South Hill neighborhood near the college. With the exception of the College Circle Apartments, the South Hill neighborhoods in the Town have no high-end or high density off-campus student housing adjacent to the Ithaca College campus. Many low-end, utilitarian buildings designed as student housing, most with two to six dwelling units, have been built in the area immediately south and east of the Ithaca College campus on Coddington Road, Hudson Place, Pennsylvania Avenue, and Kendall Avenue. Many single-family houses in this area have also been converted to student rental units. Permanent residents have reported issues with poor property maintenance, loud parties, and other disruptive or destructive activities.

¹¹ *Ithaca College Facts in Brief 2010-11*, Ithaca College Office of Institutional Research webpage, http://www.ithaca.edu/ir/facts/Ithaca_College_Facts_in_Brief_2010-11.pdf, accessed 1 August 2011.



Off-campus student rentals in adjacent neighborhoods near Ithaca College.

A 2006 memorandum by the Town's planning staff revealed that the Town of Ithaca Zoning Board approved at least 25 variances to increase occupancy limits in this area, which normally limits the number of unrelated residents that live together to three. The Zoning Board decisions were not based on a legitimate hardship, and contrary to the intent of the occupancy law and comprehensive plan, which had the goal of developing a variety of housing styles and "neighborhoods that are quiet" by "establishing zoning standards, e.g. occupancy standards and usage limits, to minimize the negative effects of dwelling units occupied by students."

Other institutions

Cayuga Medical Center (CMC) is the primary health care facility in the area and the 5th largest employer in Tompkins County. The Medical Center is located off of Trumansburg Road (NY 96), on the Town's West Hill. CMC sits on a 45 acre property and contains a 204 bed facility, with more than 200 staff physicians and a total health care team of over 1,200 members.¹² CMC has a 24 hour emergency room that was expanded in 2005, along with comprehensive inpatient and outpatient services. The hospital has been undergoing a series of expansions to its main campus in recent years, as part of a master plan to guide the future development of the hospital in an environmentally sustainable way.¹³



Cayuga Medical Center.

The largest addition constructed to date has been the "southwest addition," a 53,000 square foot addition that includes the new and expanded emergency room, intensive care unit, and other site improvements. This addition received LEED Silver certification for its sustainability and energy saving elements. Other additions expected to receive some form of LEED certification include the recently approved 14,000 square foot surgical addition and the 16,000 square foot laboratory additions.

The Cayuga Medical Center recently acquired a nine acre site adjacent to their hospital property. The former Tompkins County Biggs Complex contains a large building surrounded by landscaping and parking areas. Future

¹² *Overview: History, Mission, Core Values*, Cayuga Medical Center website, <http://www.cayugamed.org/content.cfm?page=mission>, accessed 23 August 2011.

¹³ *Cayuga Medical Center Main Campus*, Sustainable Sites Initiative website, : <http://www.sustainablesites.org/cases/show.php?id=18>

plans for this parcel have not been developed, but it is hoped that the building could be used for additional professional or medically related offices.

Adjacent to the Cayuga Medical Center to the south is another popular area institution. Founded in 1932, the Paleontological Research Institution (PRI) has programs in research, collections, publications, and public education. PRI cares for a collection of two to three million specimens, one of the 10 largest in the United States, some of which are on public display in the Museum of the Earth.¹⁴ The Museum of the Earth was added on to the PRI building in 2003 and provides the public with an opportunity to explore Earth through a mix of natural history displays, interactive science features, and art exhibitions. The main PRI building and museum are located on a 6.5 acre site. In recent years, the Institution has purchased two adjacent parcels to the south of their property, totaling an additional ± 10 acres. These parcels, along with the parcel that houses PRI and the Museum of the Earth, comprise a portion of the Odd Fellows Complex, once owned by the International Order of OddFellows. Representatives of PRI have indicated the desire to create a “campus-like” center, although no formal master plan has been developed.

B.2.7 Sprawl

A simple definition of sprawl is "the use of more land than is necessary to expand out cities." According to Robert Burchell of Rutgers University, ten traits of urban sprawl include:

1. Unlimited extension of new development
2. Low density residential and commercial settlements, especially in new growth areas
3. Leapfrog development
4. Fragmentation of powers over land use among many small localities
5. Dominance by private vehicles
6. No centralized ownership of land or planning development
7. Great variances in the fiscal capacities of local governments, because revenue-raising capabilities are strongly tied to the property values and economic activities within their own borders
8. Widespread commercial development along major roadways
9. Major reliance upon the filtering or trickle-down process to provide housing for low income families
10. Spatial segregation of different types of land uses through zoning regulations



South Hill area, Town of Ithaca. (Pictometry)

¹⁴ Paleontological Research Institution website *About* page, [://www.museumoftheearth.org/about.php](http://www.museumoftheearth.org/about.php)

The Town of Ithaca exhibits the patterns of sprawl described by many planners and educators throughout the United States. Through traditional Euclidian zoning, the Town of Ithaca has developed like many other suburban communities situated outside of a central city, with conventional subdivisions that have little walkability or connectivity to each other or to existing services or commercial areas. Lower density residential development and commercial strip development outside of the urban, village and hamlet centers in Tompkins County has resulted in sprawl patterns, contributing to fragmentation and loss of farmland, forests, wildlife habitats, and other open space resources. Sprawl has also added to traffic congestion on our streets, increasing the cost to provide of public services and infrastructure.

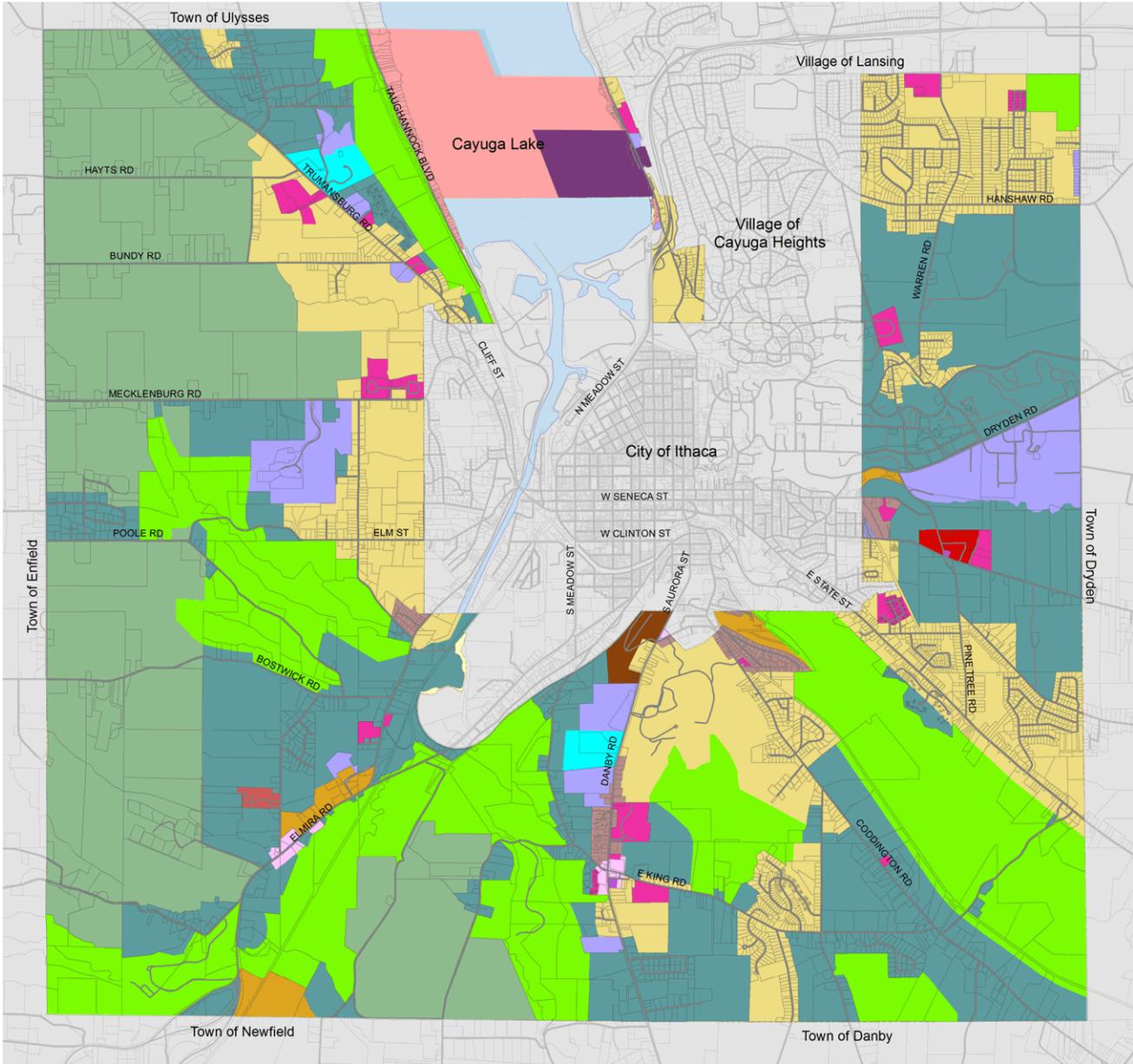
B.2.8 Zoning

Zoning is the primary form of land planning control for local communities in North America. Zoning codes are comprehensive cookbooks for day-to-day development decisions in a community. They expand on the information in the comprehensive plan by providing parcel-specific regulations for the location of different land uses, regulation of those uses, and detailed specifications for the site planning and design of proposed development.

The Town of Ithaca adopted its first zoning code in 1954, followed by overhauls in 1968 and 1976. The Town's current zoning code was adopted in 2003. Despite its recent vintage, the form it takes makes it a relic of decades past, with legal English and dated terminology, and regulation of land uses based on a large number of very specific definitions. The code includes very few provisions that allow contemporary best practices in planning, such as Smart Growth concepts, traditional neighborhood development, light imprint development, landscaping requirements, and architectural and site planning standards.

Zoning district distribution Town of Ithaca			
Zoning district	Acres	Square miles	% of town area
C – Conservation	3872.7 ac	6.05 mi ²	21.2%
AG – Agricultural	4148.3 ac	6.48 mi ²	22.7%
LR – Lakefront Residential	610.0 ac	0.95 mi ²	3.3%
LDR – Low Density Residential	4752.4 ac	7.43 mi ²	26.0%
MDR – Medium Density Residential	3302.0 ac	5.16 mi ²	18.1%
HDR – High Density Residential	136.2 ac	0.21 mi ²	0.7%
MR – Multiple Residence	236.4 ac	0.37 mi ²	1.3%
MHP – Mobile Home Park	18.0 ac	0.03 mi ²	0.1%
LC – Lakefront Commercial	153.7 ac	0.24 mi ²	0.8%
NC – Neighborhood Commercial	37.8 ac	0.06 mi ²	0.2%
CC – Community Commercial	33.5 ac	0.05 mi ²	0.2%
OPC – Office Park Commercial	107.0 ac	0.17 mi ²	0.6%
VFR – Vehicle Fueling and Repair	3.0 ac	0.005 mi ²	0.02%
I – Industrial	52.1 ac	0.08 mi ²	0.3%
LI – Light Industry	159.7 ac	0.25 mi ²	0.9%
P – Planned Development (PDZ)	615.7 ac	0.96 mi ²	3.4%

Zoning - December 2013 | Town of Ithaca

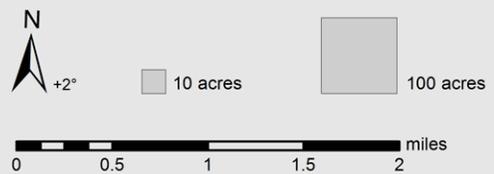


Zoning districts as of December 10 2013

- | | |
|---|--|
|  AG: agricultural |  LC: lakefront commercial |
|  C: conservation |  NC: neighborhood commercial |
|  LDR: low density residential |  CC: community commercial |
|  MDR: medium density residential |  OPC: office park commercial |
|  LR: lakefront residential |  LI: light industrial |
|  HDR: high density residential |  I: industrial |
|  MR: multiple residence |  VFR: vehicle fuel and repair |
|  MHP: mobile home park |  P: planned development zone |

Produced by Town of Ithaca Planning Department, 4 March 2014
 Data: Town of Ithaca Planning Department, Tompkins County Information Technology Services GIS Division

This is not the official Town of Ithaca zoning map.



Rural zoning districts

There are two rural zoning districts in the Town: AG - Agricultural, and C - Conservation.

AG zoned land, comprising 4,148 acres, or about 23% of the Town, is concentrated in the West Hill and South Hill areas. The AG-Agricultural zoning district permits an assortment of agrarian land uses, including farms, nurseries, equestrian facilities, kennels, and timber harvesting. Retail sales related to agricultural operations, veterinarians, places of worship, golf courses, hunting preserves, ski centers, composting facilities, and mining are allowed with a special permit.

Single- and two-household residences, and accessory elder cottages, are also permitted in the AG district. Residential lot sizes may range from one to two acres, with a maximum density of one residential lot per seven acres. Decreasing the density to one residential lot per 12 acres or more, and allowing smaller lots where technically possible, can slow the conversion of agricultural land to residential uses, and shift demand for housing towards new neighborhoods.

C-Conservation zoned land, areas where natural features and environmentally sensitive areas are intended to be preserved, makes up about 3,872 acres, or 21% of the Town; the bulk at the south end of the Town. Permitted uses include farms, nurseries, forest resource uses, roadside stands, and single- and two-household residences.

Minimum lot size in the C district is seven acres. Increasing the minimum lot size to 15 acres or more, and requiring clustered development, can preserve the character of natural areas.



Coy Glen, C zoning.



Ferguson Farm, AG zoning.

Residential zoning districts

The zoning code includes six residential zoning districts: four single family residential districts (LR Lakefront Residential, LDR Low Density Residential, MDR Medium Density Residential, HDR High Density Residential), one multiple family residential district (MR Multiple Residence), and one mobile home residential district (MHP Mobile Home Park). Together they comprise about 8,800 acres or 48% of the Town. The bulk of residential zoned land is undeveloped, underdeveloped, or occupied by non-residential uses.

The LR–Lakefront Residential zone is intended to accommodate residential development along the east and west shorelines of Cayuga Lake, with consideration of the area's steep slopes and small legacy lots. The district comprises 610 acres, or 3.3% of the Town, although most of that area is in Cayuga Lake itself. The district includes special provisions for boat lifts and docks, and garages that may need to be placed in front of the lot.

The LDR–Low Density Residential zone is intended for detached residences and rural lifestyle uses such as small farms and equestrian facilities. LDR zoned land makes up 4,752 acres, or 26% of the Town; more acreage than any other zoning category. Minimum lot size is 30,000 square feet (1.45 lots per net acre). Much of the land zoned LDR is undeveloped, or occupied by the Cornell University campus and research facilities.

Despite its name, the MDR – Medium Density Residential district has a very low maximum density, with a minimum lot size of 15,000 square feet (2.9 lots per net acre). MDR zoned land amounts to 3,302 acres, or 18.1% of the Town. MDR zoned land includes much of the Ithaca College campus, and undeveloped land in the West Hill area, along with developed areas in Northeast Ithaca, Forest Home, East Hill, and South Hill.

The HDR–High Density Residential zone accommodates detached and semi-detached (duplex) residences in a medium density setting, with a minimum lot size of 9,000 square feet (4.84 lots per net acre). Only 136 acres, or 0.7% of the Town, is zoned HDR. Most HDR-zoned land is located south of the Therm Incorporated facility in South Hill, in an area with a growing number of student rental units.



Amber Lane, LDR zoning.



Overlook at West Hill, MR zoning.

The MR–Multiple Residence district is intended for apartment complexes in a suburban setting, with a maximum density of one unit per 3,500 square feet (12.4 units per acre). While the MR district allows detached and duplex residences, most buildings on MR-zoned sites have four or more units. MR zoned land comprises 236 acres, or 1.3% of the Town. Pockets of MR development are located throughout the Town, with most rezoning activity, proposals, and inquiries about rezoning to MR in the Northwest Ithaca/West Hill area.

The MHP–Mobile Home Park district, totaling 18 acres, underlies the one mobile home park in the Town, on Seven Mile Drive in the Inlet Valley area.

A reduced, simplified, and more logical categorization of permitted uses in residential districts is considered good planning practice, would make the zoning code easier to use, and is more accommodating of emerging development trends without complicated amendments. District names typically do not reflect their permitted density or desired character. The density of a development can be measured over an entire site, rather than considered on a lot-by-lot basis. Density bonuses should be offered for development that preserves large amounts of open space and farmland. Lot and yard dimensions, and bulk and siting requirements for primary buildings and accessory structures, should also be revisited.

Commercial zoning districts

The zoning code includes five commercial zoning districts, but they cover only 336 acres of the Town, or less than 2% of the area of the Town.

The LC–Lakefront Commercial district comprises 154 acres or 0.8% of the Town, with most of that area in Cayuga Lake. The LC district is intended for the East Shore Marina and Merrill Sailing Center. The only permitted uses are boat harbors, marinas, and small wind energy facilities.

On dry land, the NC–Neighborhood Commercial and CC–Community Commercial districts make up the bulk of commercial zoned land; 38 acres of NC and 34 acres of CC, together about 0.4% of the Town. The CC zoning district permits the same retail uses as the NC district, with a larger floor area permitted by right or special permit. Uses permitted in the OPC – Office Park Commercial zone that are only permitted by special permit in the NC district are permitted by right in the CC district.

OPC–Office Park commercial districts, located at Cayuga Medical Center and South Hill Business Park, total 107 acres or 0.6% of the Town. Permitted uses include banks, offices and medical offices; special uses include hospitals, municipal facilities, laboratories, and art galleries and studios.



East Hill Plaza, CC zoning.

The VFR–Vehicle Fueling and Repair zone is a floating semi-industrial district that permits only gas stations, vehicle repair, car washes and wind energy facilities. Gas stations are permitted only in the VFR district. There are only three parcels zoned VFR, totaling 3 acres or 0.02% of the Town. Most contemporary zoning codes allow gas stations

in some commercial districts subject to special review or use approval, rather than create a dedicated single use district.

A reduced, simplified, logical and consistent categorization of permitted uses in commercial districts is considered good planning practice, would make the zoning code easier to use, and is more accommodating of emerging uses without complicated amendments.

Industrial zoning districts

The zoning code includes two industrial zoning districts: I–Industrial and LI–Light Industry. Together, they comprise about 212 acres, or 1.2% of the Town. The only parcel zoned I is the former Emerson/Morse Chain facility. LI zoned sites include the Therm Incorporated facility, the Cornell University Central Heating Plant, much of the land fronting the west side of Elmira Road (NY 13/34/96) between Five Mile Drive and Seven Mile Drive, and a parcel fronting the east side of Elmira Road at the far south end of the Town.

Planned development zoning districts

Planned unit development (PUD) zoning, called planned development zoning (PDZ) in the Town of Ithaca, is intended to be a flexible zoning tool used to create development with a mix of residential, commercial, industrial, or other land uses. PUD zoning is intended to customize the development standards to the specific parcel under consideration, and allow innovative development that may not be possible under conventional single-use zoning districts, with the result being a project where the whole is greater than the sum of its parts.

PDZ zoning has not seen extensive use in the Town of Ithaca. Only 616 acres, or 3.4% of the Town, is subject to an underlying PDZ zone. The two largest PDZ districts include a part of the Cornell University campus (Precinct 7) and EcoVillage at Ithaca.

The Town's PDZ regulations are vague about what is expected from a developer who proposes a planned community, except that "yard, height, building coverage, lot size, and any performance standards shall be as set forth in the legislation rezoning the area to a Planned Development Zone" (§270-177). The Town's PDZ regulations place far greater importance on the process than the product.

Typical PUD legislation usually includes clear development standards that go beyond the bulk requirements found in a basic zoning code, such as that for the Town of Ithaca. The standards are intended to provide visual unity and consistency in a PUD, and help it function as a truly integrated development. At a very least, standards should include specific aesthetic, landscaping, signage, lighting, site planning, utilities, and open space standards that would apply to the entire site. Such development standards are not a part of the Town's current PDZ regulations. Specific regulations can limit flexibility while offering better guidance to a developer, making the PDZ conceptualization and review process more predictable for both the applicant and Town. This could make a PDZ a more attractive option for many developers.

The two acre minimum lot size for a PDZ can encourage inappropriate spot or contract zoning. Most contemporary zoning codes require a much higher minimum acreage for PUDs, so they are not abused as a way to circumvent existing zoning.

Zoning at Cornell and Ithaca College

Underneath Cornell University and Ithaca College lie more than steam tunnels and utility lines, but also a patchwork of zoning districts that regulate development on the campuses. Ithaca's colleges are not exempt from the Town's

zoning requirements. However, the intent of the districts usually does not reflect the reality of the underlying use. The bulk of the Cornell University campus in the Town, including Cornell Plantations and much of the countryside campus, is zoned LDR, while the most of the Ithaca College campus is zoned MDR. Institutions of higher learning are permitted subject to special review in the LDR, MDR, HDR, and LC districts, under the same provisions that permit public schools and day care centers. Variance requests for proposed buildings and uses on campuses are common.

Zoning in the Town of Ithaca regards college and university campuses as a collection of discrete parcels, even though the campus functions as a single entity. While conventional zoning considers that uses in a particular district will be static and seldom change, postsecondary institutions are dynamic, vibrant organizations, with evolving missions and ever-changing needs for its buildings and properties. The Town's traditional zoning regulations, with very limited provisions for institutions of higher learning, do not adequately address the realities of development at Cornell University and Ithaca College; the schools' mixes of uses, activities, densities, and arrangements of developed and open spaces; and impacts on the surrounding community. Institutional zoning is one tool used by many communities to address the unique environment of colleges and universities.

B.2.9 Land use regulations

Land use regulations are currently scattered throughout the Town Code. The Town Code includes separate chapters for the following:

- Adult uses (chapter 100)
- Environmental quality review (chapter 148)
- Outdoor lighting (chapter 173)
- Signs (chapter 221)
- Stormwater management (chapter 228)
- Subdivision (chapter 234)
- Zoning (chapter 270)
- Zoning: special land use districts (chapter 271)

Uses regulated by a topical chapter may not be regulated to that chapter. For example, regulations for signs are not limited to the sign code chapter, but are also included throughout the zoning code chapter. Some building code standards are also intermingled among the various chapters; for example, mobile home anchoring requirements in the zoning code. When land use regulations are scattered among disparate chapters of the Town Code, they can be difficult for Town employees to administer, and for officials, appointed board members and citizens to understand and easily reference. There may be conflicts or duplication with the provisions of other chapters.

New land use regulations can avoid the disorganized approach of current laws. For example, a unified development code can consolidate all regulations regarding development, land use, and the built environment into one code—easing administration and interpretation, and ensuring regulations thoroughly reflect the goals of the Town's comprehensive plan.

B.2.9.1 Subdivision regulations

Subdivision regulations govern the division and consolidation of land, the adjustment and elimination of property lines, and include standards for design and layout of lots, streets, utilities, open space, and other improvements. The Town of Ithaca's subdivision code was adopted in 1956, when it was still a predominantly rural community. Incremental amendments and provisions for cluster development have been added through the years. The Town has

changed considerably in the intervening 55 years, and the subdivision code now does not reflect or accommodate contemporary good practice in planning and land development.

Procedural and administrative issues

Public meetings for all subdivision activity: Subdivision regulations require Planning Board approval for all lot divisions and adjustment activity, including those with little or no impact such as boundary line adjustments, lot consolidations, or subdivision to accommodate utilities, entry features and other minor improvements. Modern subdivision regulations generally include provisions for types of subdivision activity that can be approved administratively, without a formal public hearing.

Major and minor subdivisions: Unlike most modern subdivision regulations, the Town of Ithaca's subdivision code does not distinguish between a minor subdivision (subdivision into a very limited number of lots, usually two to four) and major subdivision (subdivision into more than a certain number of lots). There are no provisions for vacating plats and rights-of-way.

Performance guarantees: The subdivision code has no formal provisions for performance guarantees. A performance guarantee is a bond or letter of credit that guarantees all public improvements will be completed. When all required public improvements are properly completed, the local government will release the guarantee, and record the final plat. If the developer does not complete all of the improvements, the local government will use the guarantee to pay for their completion.

Application requirements: Application requirements such as checklists, number of copies of certain documents, and paper sizes, are now coded into the subdivision code as law. Most modern land use

regulations now publish application requirements as a separate guide. This allows for much greater flexibility in administration of the subdivision review process, and better accommodates electronic submittal, and paperwork reduction efforts.

Mingling of subdivision and land use requirements: Provisions for cluster subdivisions in the subdivision code include land use regulations that would normally be found in a zoning code. This includes regulation of lot size, building height and setback requirements, building type, buffer yards, and occupancy. The mingling of such regulations in a subdivision code, rather than a zoning code where they would normally be found, can be confusing for applicants, and make administration more difficult for Town staff.



Example of a complete street in Hamburg, New York. (National Complete Streets Coalition)

Design issues

Design standards: Street design standards in subdivision regulations will usually include classifications for types of streets, requirements for rights-of-way and pavement width, geometric standards (grade, curb, and curve radius), intersection design, and requirements for sidewalks. The Town of Ithaca's subdivision regulations include only very basic design standards, with no street classification, minimum and maximum street widths, or requirements for pedestrian or bicycle accommodation. The prevalence of roads in urbanized areas with a rural profile, with no curbs, open ditches, and no sidewalks, are one result of the Town's incomplete street design standards. Street standards intended for rural areas are one barrier to curbing sprawl.

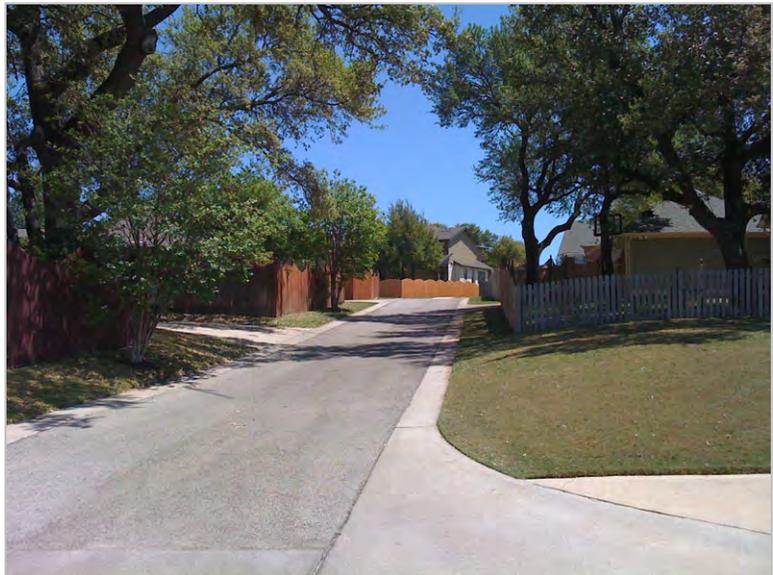
Interconnectivity: Current street standards in the Town subdivision regulations encourage development with cul-de-sacs and a meandering street pattern and very long blocks. The resulting street network can make travel between or within residential areas difficult and/or cumbersome. Town subdivision regulations require stub roads to undeveloped parcels, but a pattern of looping streets hinders connectivity.

A trademark of New York's traditional villages, hamlets, and small towns, as well as contemporary traditional neighborhood development, is a highly interconnected street pattern. Greater connectivity promotes mobility and reduces congestion by providing options for people to enter and exit their subdivision. Traffic concentration on a small number of streets—a problem with a hierarchical street network—is less of an issue with a more interconnected street grid. Increasing the number of possible routes to a destination helps public safety services save time reaching a scene of an emergency. Connectivity also promotes a greater sense of community; residential areas are more integrated into the larger community, rather than isolated as pods.

Street classification: In modern subdivision regulations, streets are classified according to their function in the street network. Functional categories usually include alleys, local streets, collector streets, and arterial streets. These classifications are often broken down into subcategories, such as minor arterials and major arterials. Modern subdivision regulations will include designated standards for rights-of-way width, pavement width, number of lanes and lane width, curb and gutter, medians, on-street parking, tree lawns, sidewalks, bicycle lanes, lighting, and other



Pedestrians walk on a road in Northeast Ithaca built only for cars.



Alley in a TND in Georgetown, Texas. (DT)

features for each classification. Form-based codes base street classifications on the type and size of buildings that are planned to front the street, and their location in the rural-to-urban transect.

Rights-of-way and pavement widths: The Town's subdivision regulations have only very basic requirements for rights-of-way widths: 60 foot minimum for streets, 20 feet for alleys. There are no requirements for street pavement widths. New standards for rights-of-way and street pavement widths should consider the street classification, and the amount and type of expected traffic. Wider streets were favored in the recent past, because of engineering practices that favored the fast, unobstructed movement of motor vehicles over other street users; and preferences by emergency responders for streets wide enough to allow ladder trucks to be deployed with room for one or more large vehicles to pass to the side. Narrower streets are now considered to have many advantages over wider streets: traffic calming, lower stormwater and brine runoff, the opportunity to grow a full tree canopy, improved safety for pedestrians and cyclists, and lower costs for construction and maintenance. Improved interconnectivity in a neighborhood can address concerns about the ability to access a site from emergency responders.

Alleys: Subdivision regulations now prohibit alleys in residential areas "unless the subdivider produces evidence satisfactory to the Planning Board of the need ...". However, alleys play an important role in emerging forms of residential development such as traditional neighborhood development and bungalow courts. Alleys reduce the prevalence of driveways and garages on residential streets, decrease impervious surface by replacing wide individual driveways with a shared route to garage entrances, and provide a more convenient and less disruptive location for utility location and trash collection. Modern alleys include landscaping, snow storage areas, drainage provisions, and defensible space, and have little resemblance to the cramped, utilitarian, and threatening passages of old.

Pedestrian and bicycle accommodations: The Town's subdivision regulations consider sidewalks to be luxuries, not necessities. Sidewalks are very rare in the Town of Ithaca, and have only recently been added as a requirement in the Town's subdivision regulations. The lack of sidewalks limits the mobility of those who cannot drive—mostly children and the elderly—and creates a dangerous environment for pedestrians using streets. The lack of sidewalks also exacerbates a sedentary lifestyle that can lead to obesity and other health issues. Cycling is very popular in the Ithaca area, but there are no dedicated bicycle lanes in the Town, and no requirements for lanes or pavement marking in the subdivision regulations. Current regulations undermine the ability to create streets that serve all potential users, not just vehicles.

Curb radius: Subdivision regulations now require a very wide curb radius of 20 feet or more. A wide curb radius encourages high-speed turns, and increases the likelihood of vehicle accidents with pedestrians and cyclists. Smaller curb radii reduces turning speeds, shortens street crossings, and improves sight distance between drivers and motorists.

Frontage development: Much of the subdivision activity in the Town of Ithaca involves the splitting of lots along collector streets at its periphery. Lots are created by splitting parcels fronting the road from a larger parcel, often a farm. This type of development, called frontage development, ribbon development, or residential strip development, has dramatically changed the character of some parts of the Town through the past four decades, harming much of the rural ambience that initially attracted residents. Roads where frontage development is most evident include Hayts Road, Bundy Road, Mecklenburg Road, and Westhaven Road in the West Hill area; Coddington Road and Ridge Road in South Hill; and Slaterville Road in East Hill.



Frontage development, Westhaven Road, West Hill area. (Pictometry)

There are many disadvantages to frontage development, including the following:

- It is subsidized by the Town, county or state. Unlike subdivisions with new roads, developers do not have to pay to build new roads or infrastructure for frontage lots. Cost of development shifts from the builder, who would normally be required to build roads in a subdivision, to the agency that maintains the road where the lot fronts.
- It harms the character of rural areas. With continued splitting and development of frontage lots, the viewscape of collector roads changes from a rural or agrarian landscape to a continuous procession of houses, occasionally interrupted by a farm entrance or the rare unsubdivided parcel.
- Lots that were created from frontage development are often underused; too large to mow but too small to farm. The rear end of the lot, which may have been in agricultural production, often reverts to scrub forest.
- Resubdivision to facilitate infill development or open space preservation is very difficult.
- Individual driveways create conflict points that make the road less safe for pedestrians, cyclists and drivers.

Minimum lot sizes for frontage lots that are larger than the standard in the underlying zoning district, and a width-to-depth ratio, can prevent the creation of narrow but deep "bowling alley lots" that hinder future development. Front yard setbacks on collector roads should also be increased. Dense landscape buffers, such as a stand of canopy and understory trees, can reduce the visual impact of frontage development and restore a semi-rural visual character. Many communities limit frontage development by restricting resubdivision, for example, by only allowing one or two lots new lots to be divided from "original lots", intact lots that existed at the time subdivision regulations were first enacted. Further subdivision is either prohibited or requires a more formal major subdivision review process.

More flexible street design standards to allow narrower rights-of-way and pavement widths for streets that will serve few houses can provide a financially attractive alternative to frontage development for landowners.

B.2.9.2 Site planning

Commercial site planning is guided only by the building setback, parking, and very limited landscaping requirements in the Town's zoning code. The resulting development usually takes the form of a commercial building placed at the far rear end of the lot, separated from the street by a large, featureless parking lot, much of which usually stands empty.

Site planning standards should require commercial buildings to front on a sidewalk, with parking at the rear of a building, and retail villages, where many buildings are oriented towards an internal drive or road network that recreates the feel of a village street.

Reducing the number of parking spaces required for a use, and designating a maximum amount of required off-street parking instead of a minimum, will reduce the amount of impervious surface area dedicated to parking that is seldom or never used, and enable more efficient, compact development. Standards should promote a pedestrian-friendly environment inside shopping centers, requiring internal plazas, a walkway system connecting buildings and parking areas on the site, and pedestrian connections between buildings and the sidewalk. Retrofitting of existing auto-oriented shopping centers and commercial districts into walkable, pedestrian-oriented mixed use neighborhood centers, should be encouraged.

B.2.9.3 Architectural design

Currently, the Town has no regulations governing the appearance of residential, commercial, or industrial buildings. Most commercial and industrial buildings in the Town are designed with lowest cost as the primary consideration, and they often have a very utilitarian appearance. That land is cheaper, businesses have less money to invest in a structure, or that incomes are lower than in more affluent areas are not justifiable excuses for poor architectural design

National chains establishing a location in an area with no architectural regulations will usually build a default "prototype" building. Such buildings usually have little architectural detailing, and are designed to reinforce corporate identity and function as a sign, regardless of its compatibility with community character. National corporations will forego their prototype buildings and build a structure that better respects local character—but only if they are required to do so.

Architectural design and anti-monotony regulations are tools used by a growing number of communities to address concerns about standardized corporate architecture, prefabricated structures, low-quality building materials, and inappropriate utilitarian design.



Human scaled architectural details at a shopping center, Woodmere, Ohio. (DT)



Bank in East Aurora, New York. (DT)

B.2.9.4 Signs

The Town of Ithaca seeks to have a sign ordinance that reduces visual clutter, protects the character of the community, and enhances community identity. The Town currently has a sign law that is under consideration for updating because it is too restrictive in some ways and too lenient in others.

The Town's existing law prohibits large signs in residential areas, billboards, signs that physically or visually impair vehicular and pedestrian traffic, signs that contain streamers, spinners, fluorescent/reflective materials, motion-activated elements, flashing, intermittent, rotating or moving lights, fiber-optic or other luminous tubing or strings of lights, and any illumination that could cause glare reflection constituting a nuisance or traffic hazard.

However, the law also has limited design review criteria, is unfriendly to the Town's agricultural operations, and allows for some signs at heights that are inappropriately scaled for pedestrian-oriented areas. Additionally, new signs require approval by the Planning Board; a process that can be cumbersome for those who want to display smaller signs that conform to the sign law.

B.2.9.5 Landscaping

Basic landscaping regulations are scattered throughout the zoning code. The regulations require buffer yards between designated uses and/or structures, and minimum usable open space in certain districts. The form of the landscaping is not specified. Benefits of mandatory landscaping include:

- Shade and climate control.
- Air purification and control of airborne particulates
- Provision of wildlife habitat.
- Erosion and stormwater runoff control.
- Promotion of native and/or adaptive plants.
- Preservation of existing trees and vegetation.
- Provision of an attractive appearance in areas of public use or view.
- Reinforcing a pedestrian friendly environment.



Monument sign with landscaping, Independence, Ohio. (DT)



The Domain, Austin, Texas. (DT)

The Town does not yet have tree preservation and removal regulations. However, the Town is currently drafting timber harvesting regulations, to require best management practice for timber harvesting so environmental damage to the property and adjacent lands and waters is minimized.

B.2.9.6 Outdoor lighting

The Town's outdoor lighting law, adopted in 2006, addresses the issue of nighttime glare and lights that trespass onto neighboring properties. The law includes requirements for shielding of most types of outdoor lights, along with specific regulations dealing with outdoor advertising signs, recreational facilities, lighting under roof overhangs and canopies, and for spotlights and floodlights. The regulations do not include standards for the design and dimensions of light poles and attached light fixtures, which have been adopted by many other communities.

The Town's lighting regulations are also currently separate from other development regulations.

B.2.9.7 Wireless facilities

Regulations for wireless facilities were adopted by the Town in 2005, in response to a rapidly growing number of cell towers nationally resulting from increased ownership of cellular telephones, concerns over the visual impacts of towers, and the Telecommunications Act of 1996, which requires local governments to reasonably accommodate wireless facilities in their jurisdictions.

Regulations do not accommodate emerging types of wireless infrastructure, such as microcells, picocells, and mesh-based networks. Screening and landscaping requirements are also vague. Regulations for telecommunications facilities are incorporated into the zoning code.

B.2.10 Community identity

What makes the Town of Ithaca unique? What characteristics make the Town stand out from its neighbors, the city it surrounds, or its peers throughout the Northeastern United States? There is a growing national trend of increasing concern about the homogenization of the built environment, the decreasing influence of local culture and traditions, and a lack of rootedness and emotional attachment to a place.

The identity of the Town of Ithaca is closely associated with the city of the same name that it surrounds, and the area's dominant institutions; Ithaca College and Cornell University. The Town does not have a clearly identifiable center, or hamlets with a commercial core. It is difficult or impossible to travel from one neighborhood to another without leaving the Town or following a circuitous path. The Ithaca Town Hall is located in the downtown of the City of Ithaca, close to the geographic center of the combined City and Town. Ironically, this location makes Town Hall more convenient to all parts of the Town than if it were located outside of the City.



"Welcome to Ithaca" sign: town, city or region?

Compared to unzoned neighboring communities, the Town's development pattern is more orderly, without the visual blight often associated with the lack of land use regulations—a difference that is noticeable as one crosses into the Town from these communities. The difference is less noticeable as one crosses into Ithaca from Ulysses or Dryden, which both have zoning. The built environment in the Town of Ithaca ranges from the suburban-style subdivisions of Northeast Ithaca, South Hill, and Snyder Hill, to the cozy and historic hamlet of Forest Home, to placeless residential frontage development in otherwise bucolic semi-rural areas, to the farms of the western portion of Town. Connecting these disparate neighborhoods and forms into a unified whole is one challenge in reinforcing community identity and sense of place.

Town boundary lines are identified with small metal signs facing incoming traffic at the boundary along major roads. There are also several large signs reading "Welcome to ITHACA AND TOMPKINS COUNTY" signs along state roads, which can cause some confusion about the location of the City and Town boundaries.

Community branding can help reinforce a distinct identity, and identify and market the Town much like a product. Rather than a metal highway sign, distinctive and tasteful welcome signs, accompanied by landscaping areas, can greet drivers crossing the Town line. Signs can identify neighborhoods in the Town, allowing them to maintain their identity while associating them with the larger community. Street name signs can break from the mold of a standard green rectangular metal sign, and incorporate mixed case lettering (as now required by Federal Highway Administration regulations when signs reach the end of their service lives), the Town seal or a simpler logo, and the neighborhood name. Public art by local artists, with themes reflecting local culture and customs, may be considered at gateways and strategic intersections.

B.3 Housing

The Town's housing stock is a blend of older and newer homes, of which nearly half were built before 1970. Housing types include single- and two-family homes, conventional and clustered single- and two-family subdivision developments, apartment complexes, senior housing, modular and mobile homes, and townhouse developments. A significant portion of the residential neighborhoods in the Town are located on East Hill, near Cornell University, the largest employer in Tompkins County. South Hill, home of the County's second largest employer, Ithaca College, contains the second highest concentration of residential neighborhoods found in the Town.

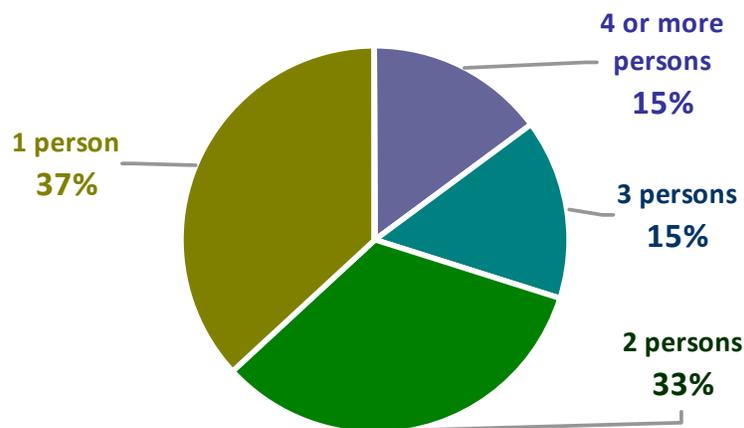
This section provides a snapshot of the Town of Ithaca existing housing characteristics: housing distributions/concentrations, types and location of housing, household income, value, and affordability. Along with the most recent Census and ACS data, Town of Ithaca building permit records between 1980 and January 2010 were used for some of the housing distribution and concentration information.

B.3.1 Households and household size

According to Census definitions, a *household* includes all of the people who occupy a housing unit. The number of households in the Town has increased over the years; however, rate of increase has lessened each decade since 1960.¹⁵

The 2010 Census estimated that there were 6,988 total households in the Town of Ithaca, not including the Village of Cayuga Heights. Families made up around 52% of all households, and non-family households accounted for 48% of all households. Most of the non-family households were people living alone, but some were composed of people living in households in which no one was related to the householder (e.g., students). The chart below shows the number of people in households in the Town as a percentage of all households (family and non-family households). The *Number of households by Census block: 2010 map* shows the general distribution of households in the Town based on 2010 Census information.

Household size 2010 | Town of Ithaca

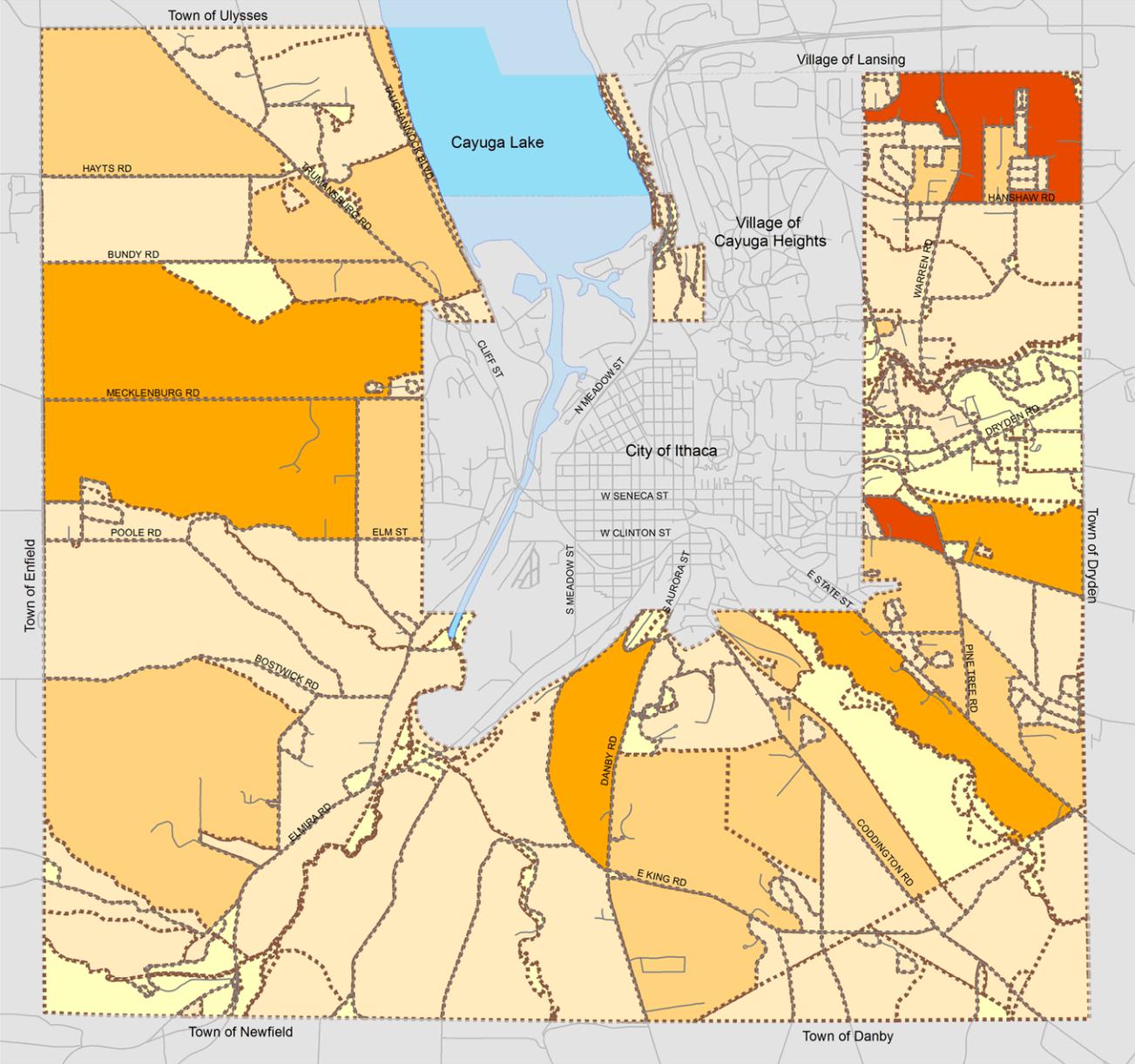


Source: 2010 Census

Like the number of households, the average household size has been declining in the last fifty-plus years. The average household size in the Town reported by the 1970 Census was 3.0 persons, but the 2010 Census reported an average household size of 2.15 persons. The average family size was 2.82 persons.

¹⁵ Comparison of Census years 1960-2010

Households by Census block 2010 | Town of Ithaca



- No households
- 1 - 50 households
- 50 - 130 households
- 130-250 households
- 250 - 400 households

Produced by Town of Ithaca Planning Department, 5 March 2014
 Data: US Census Bureau, Tompkins County Information
 Technology Services GIS Division



Group quarters and student housing

People not living in households are classified as living in group quarters. Group quarters include two general categories of people: institutionalized and non-institutionalized populations. The institutionalized population includes people under formally authorized, supervised care or custody (e.g., correctional institutions, juvenile institutions, or nursing homes). The non-institutionalized population includes all people who live in other types of group quarters, such as college dormitories, military quarters, or group homes. The 2010 Census reported that 25% of the Town's total population was housed in group quarters and that 96% of those in group quarters were in college/university housing.

Ithaca College, which lies entirely within the Town of Ithaca municipal boundary, considers itself a residential college - requiring undergraduate students to live on-campus until their senior year. As a result, nearly 100% of Ithaca College freshmen and around 70% of degree-seeking non-freshman undergraduate students traditionally live in on-campus housing in residential halls, the Terrace apartments, or the Circle Apartments (located adjacent to and connected to the Ithaca College campus).¹⁶ Ithaca College upperclassmen also live in apartments and homes in the surrounding South Hill residential neighborhoods.

Cornell is a much larger, more complex institution that is partially located within the Town and includes undergraduate, graduate, and graduate/professional schools. 100% of Cornell freshmen and 57% of degree-seeking non-freshman lived in on-campus housing in 2010.¹⁷ Most of Cornell's undergraduate dormitory housing is located within the City of Ithaca. However, Cornell housing for graduate students is located in the Town of Ithaca in the Hasbrouck, Pleasant Grove, and Maplewood apartment complexes. Both graduate and undergraduate Cornell students can also be found in sorority and fraternity houses and co-ops located adjacent to campus, along with apartments and homes in the area's surrounding residential neighborhoods.

B.3.2 Housing units

A housing unit is a house, apartment, mobile home, a group of rooms, or a single room occupied as separate living quarters. The occupants may be a single family, one person living alone, two or more families living together, or any other group of related or unrelated people who share living quarters.

According to the 1993 Comprehensive Plan, there was a dramatic growth in the number of housing units in the Town (including the Village of Cayuga Heights) between 1960 and 1990, with the total number increasing from 2,770 to 6,197 units in that thirty-year period. The largest growth appears to have happened between 1960 and 1970, where the number of housing units grew 51% in that decade.

The 2010 Census reported 7,526 total housing units in the Town (including the Village of Cayuga Heights), a 10% increase from the Census 2000 figure and representing 18% of all housing units in Tompkins County. Although the number of housing units has grown in the past fifty-plus years, the rate of increase has lessened each decade since 1960.

The Census reported 538 housing units in the Town, or about 7%, are vacant. Among those vacant units, 126 (23%) are for seasonal/recreational/occasional use, while 122 (22%) are classified as "all other vacants", which includes vacant units that may not be for sale or rent.

¹⁶ Ithaca College Office of Institutional Research, Common Data Set 2010-11 and 16 June 2010 phone discussion with Office of Residential Life

¹⁷ Cornell University Division of Planning and Budget, Common Data Set 2010-11

The vacancy rate of year round housing in the Town is about 3%; 1.4% for owner-occupied units (3,616 units, 50 vacant for sale), and 5.5% for rental units (3,662 units, 202 for rent). This includes units that may not available for general occupancy, such as student housing, income/age qualified housing, and accessory units.

A Downtown Housing Strategy in the City of Ithaca (2011), a report commissioned by the Downtown Ithaca Alliance, found a 0.5% vacancy rate for 75 selected market rate and tax credit apartment buildings and complexes in the downtown Ithaca effective market area (EMA), which includes both the City and Town of Ithaca. (The report did not include subsidized developments.) Among the buildings and complexes, 61 (81.3%) report no vacancies, accounting for 60.7% of the total units. Only four buildings and complexes (5.3%) had occupancy rates below 98%.¹⁸



Summerhill Apartments

Of occupied housing units, 51% are owner-occupied while 49% are renter-occupied. This is consistent with 1990 and 2000 Census figures.

Housing projections

Housing projections are similar to population projections, in that: (1) the rate of change is assumed to be equally divided across a period of time (typically 10-year increments), and (2) the number of units is assumed to grow at the same rate as in the past.¹⁹ Therefore, projections are best used as a guideline for potential future conditions. Social and economic conditions can easily influence the local housing market, which then could result in varying rates of growth from year to year.

According to Town of Ithaca building permit records, the number of new housing units between 2000 and 2010 increased 24% (539 units to 669 units), resulting in a growth rate of around 2.4% per year. Assuming that the number of housing units continues to grow at a rate of around 2.4% per year, the Town could expect an additional $\pm 1,859$ new housing units by 2030.²⁰ What follows is a more detailed analysis of housing development in the Town, using Town building permit records.

B.3.3 Housing unit analysis: Town building permit records

Town of Ithaca building permit records in the last thirty years show a total of 2,039 new housing units between 1980 and 2010 (including independent senior units but not assisted living, nursing home, hospice units, or student

¹⁸ *A Downtown Housing Strategy in the City of Ithaca, New York*, p 3-10, Datner Company LLC for the Downtown Ithaca Alliance, 2011. http://www.tompkins-co.org/planning/housing_choices/documents/ApartmentAnalysisdowntownfinal_8_2012.pdf

¹⁹ *Lab No. 3: Population Projections and Scale*, Ines M. Miyares, Professor and Chair, Department of Geography, Hunter College. <http://geo.hunter.cuny.edu>

²⁰ Based on a housing projection formula described in in Appendix E.

housing). Specifically, there were 831 total new housing units in the Town between 1980 and 1989, 539 total new housing units between 1990 and 1999, and 669 total new housing units between 2000 and 2010. This amounts to an increase of about 68 new housing units in the Town per year since 1980.

1990 to 1999

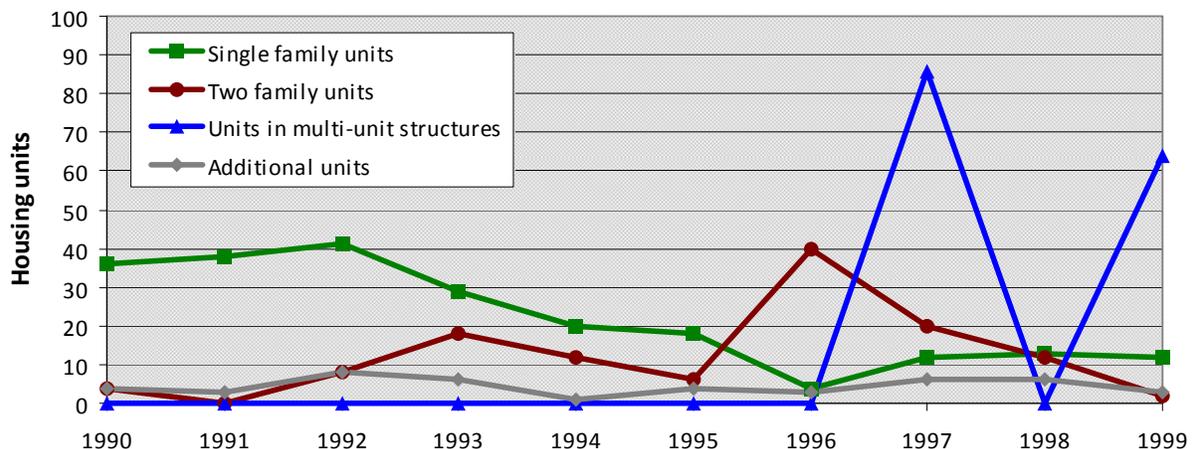
Nearly 63% of the 539 new housing units built in this decade were single or two-family homes, particularly in subdivisions like Deer Run and Chase Farm son South Hill; Sanctuary Drive, Birchwood Drive, and Briarwood Drive on East Hill; and Saponi Meadows, the Ecovillage First Neighborhood (FRoG), Woolf Lane subdivision, and Evergreen Lane in the West Hill/Inlet Valley area.

Town building permit records also showed the development of senior housing: the Ithacare/Longview senior apartment building on Danby Road (80 independent apartment units and ±100 assisted-living units), the Sterling House/Sterling Cottage/Alterra senior assisted-living building on Mecklenburg Road (78 assisted living units), and the Hospicare six-bed hospice facility on East King Road.

The table below lists the number of building permits issued between January 1990 and December 1999, not including senior assisted living or university/college residential housing.

Building permits issued January 1990 - December 1999 (number of units) Town of Ithaca					
Year	Single family units	Two family units	Units in multi-unit structures	Additional units	Total
1990	36	4	0	4	44
1991	38	0	0	3	41
1992	41	8	0	8	57
1993	29	18	0	6	53
1994	20	12	0	1	33
1995	18	6	0	4	28
1996	4	40	0	3	47
1997	12	20	86	6	124
1998	13	12	0	6	31
1999	12	2	64	3	81
Total	223	122	150	44	539

Building permits issued January 1990 - December 1999 (number of units) | Town of Ithaca



2000 to 2010

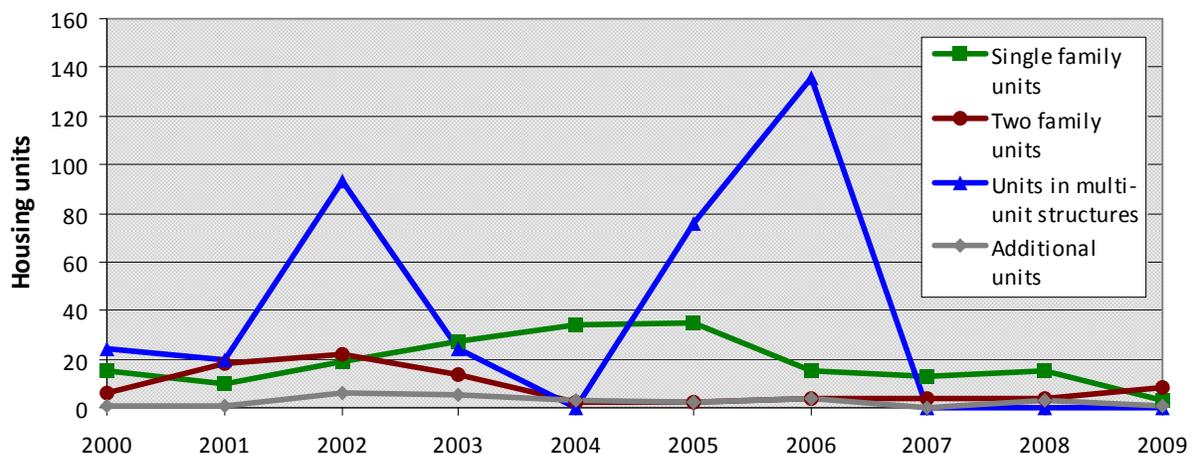
Town of Ithaca building permit records in the last ten years showed a total of 669 new housing units; 270 of those units were single- and two-family homes. Contrary to the previous decade, single- and two-family units only accounted for 40% of the total new units in the Town between 2000 and January 2010. Also, units in multi-unit housing accounted for 44% of the total new units. Most of the single- and two family units built between 2000 and 2010 occurred in subdivisions like Southwoods and Westview Subdivisions, along with Pennsylvania Ave, East King Road, Troy Road, and Saunders Road on South Hill; Park Lane, Fairway Drive, and Briarwood Drive on East Hill; and Ecovillage Second Neighborhood (SoNG), Bostwick Road, West Haven Road, and Hayts Road on West Hill/Inlet Valley.

Senior housing constructed in the last decade includes the Conifer Village Senior Apartments (72 units), Ellis Hollow Senior Apartment addition (four units added to 100 existing units), Ithacare/Longview Senior Assisted Living addition (32 units), and the Claussen Home Health/Old Hundred Nursing Home (seven bed facility).

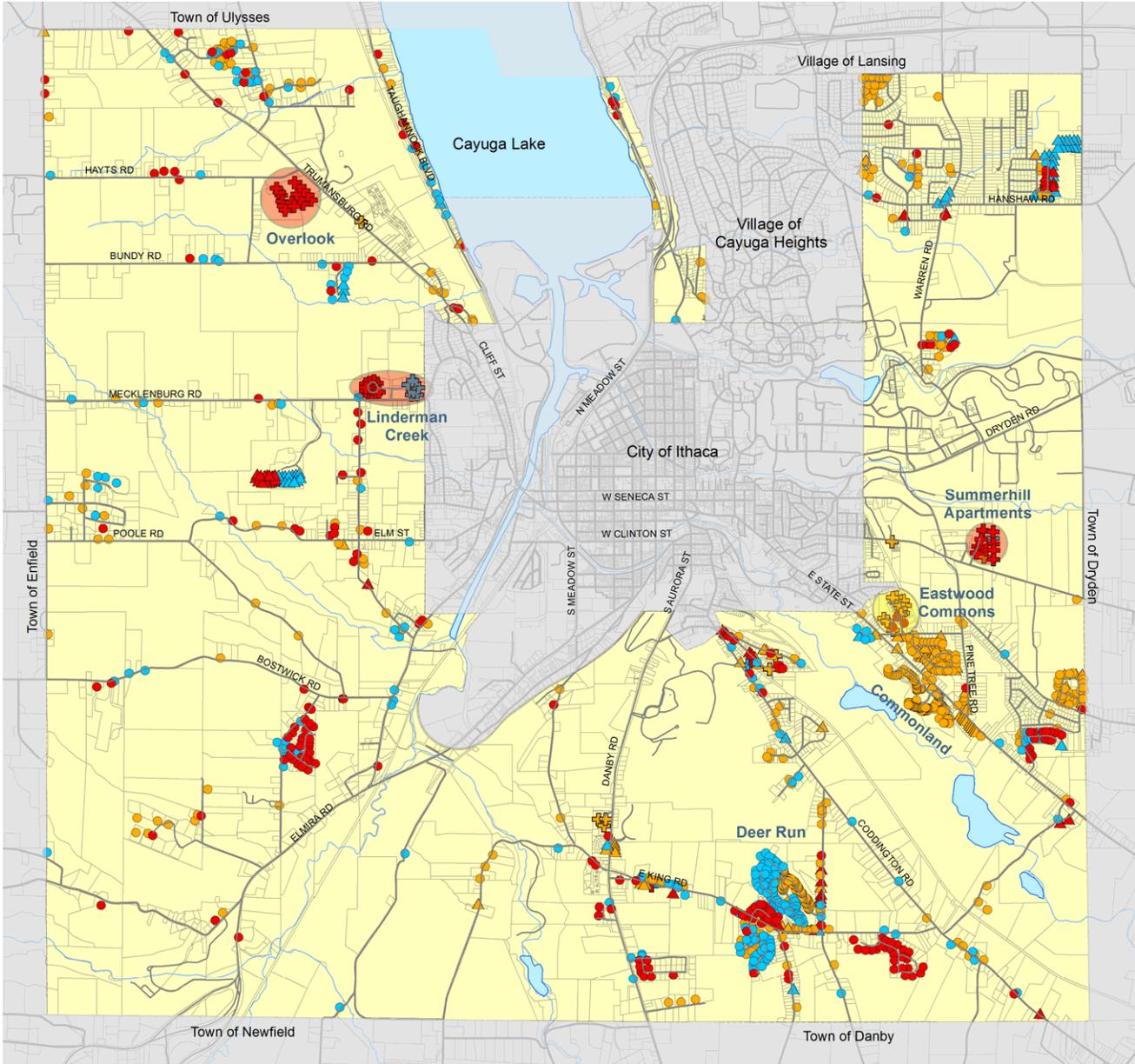
The table below lists the number of building permits issued between January 2000 and December 2009, not including senior assisted-living or university/college residential housing.

Building permits issued January 2000 – December 2009 (number of units) Town of Ithaca					
Year	Single family units	Two family units	Units in multi-unit structures	Additional units	Total
2000	15	6	24	1	46
2001	10	18	20	1	49
2002	19	22	93	6	140
2003	27	14	24	5	70
2004	34	2	0	3	39
2005	35	2	76	2	115
2006	15	4	136	4	159
2007	13	4	0	0	17
2008	15	4	0	3	22
2009	3	8	0	1	12
Totals:	186	84	373	26	669

Building permits issued January 2000 – December 2009 (number of units) | Town of Ithaca

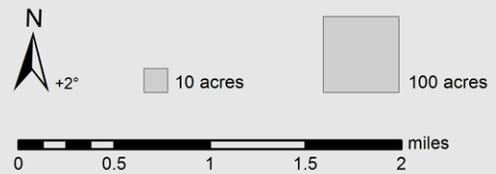


Residential development 1980-2010 | Town of Ithaca



Single family units	Two family units	Multi-family units
● 1980-1989	▲ 1980-1989	⊕ 1980-1989
● 1990-1999	▲ 1990-1999	⊕ 1990-1999
● 2000-2010	▲ 2000-2010	⊕ 2000-2010

Produced by Town of Ithaca Planning Department, 4 March 2014
 Data: Town of Ithaca Planning Department, Town of Ithaca Building Department, Tompkins County Information Technology Services GIS Division



Housing distribution/concentration

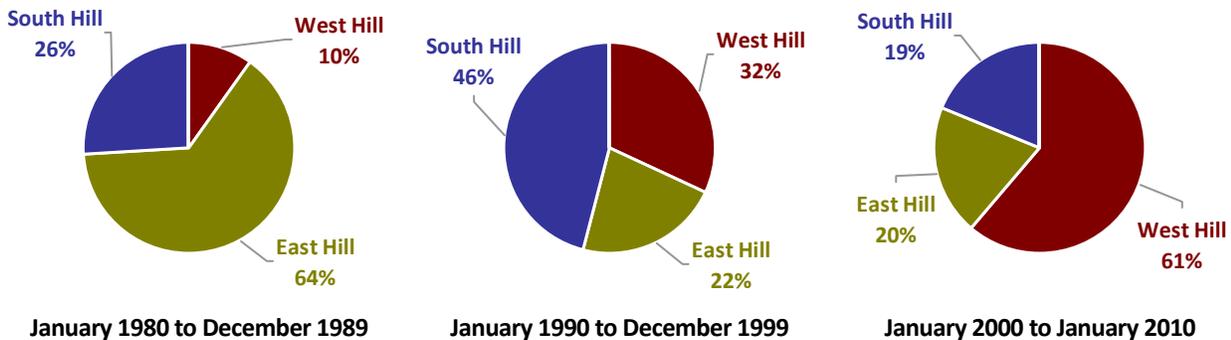
Like the population distribution statistics, East Hill has historically contained the majority of new housing units (64% of the new housing units between 1980 and 1990, followed by South Hill at 25% and West Hill at 11%). However, the 1993 Comprehensive Plan a noted that since the 1960's, residential development has been shifting from East Hill to South Hill.

Town building permit records between 1980 and 2010 concur with the 1993 Comprehensive Plan, showing that East Hill contained 38% of the total new housing units in that 32-year period (2,039 total units), West Hill contained 33% of the total new units, and South Hill contained 29% of the total new housing units. This is a significant, but not surprising shift in housing distribution, because South and West Hills have had much more vacant land and development potential than East Hill.

The following charts show the percentage of the total number of housing units (2,039 total units from Town building permit records) per location, broken down into 10-year segments. Similar information is shown on the *Residential development 1980-2010* map from the previous page.

According to the charts and the map, the housing distribution in the last thirty years suggests that the population has indeed been shifting to the South Hill and West Hill areas of the Town.

Location of new housing units January 1980 – January 2010 | Town of Ithaca



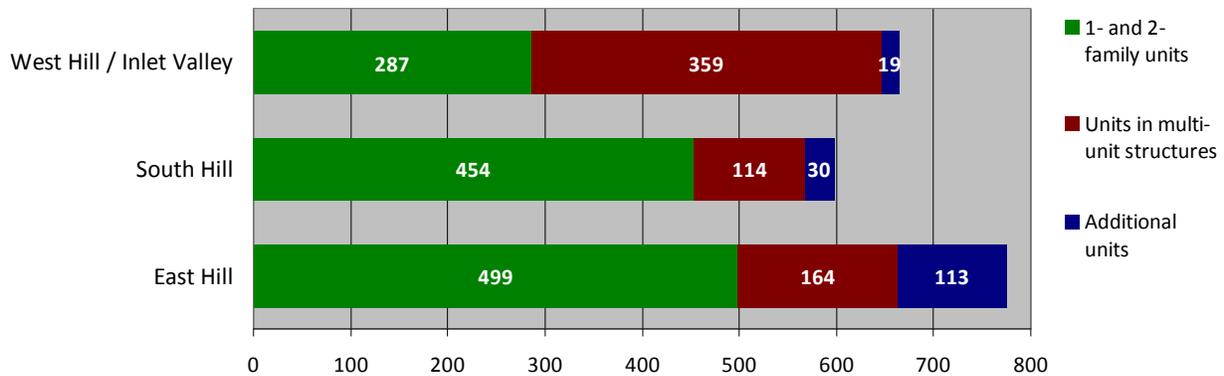
B.3.4 Housing types

The 2000 Census reported that single- and two-family homes were the most prominent types of housing in the Town of Ithaca, although the largest increase noted were apartment buildings with three or more units. Building permit records from 1980 to January 2010 concur with Census data: single- and two-family homes made up 61% of the total new housing units, followed by units in multi-unit structures (31%).

Location

The chart below illustrates the types of new housing units located in the East Hill, South Hill, and West Hill areas of the Town between 1980 and 2010. (Group quarters, such as university or college residential housing, were not included in the calculations for new multi-unit structures. "Additional" units refers to units added to existing single-, two-family or three-family structures.)

Housing types by location December 1980 – January 2010 (new unit total: 2,039) | Town of Ithaca



According to the chart, East Hill contains the largest number of single- and two-family units, while West Hill contains the highest number of units in multi-unit structures.

East Hill

Between 1980 and 2010, East Hill contained 40% of the new single family and two-family housing units in the Town and 26% of the new multi-unit development. Although East Hill has seen a decline in new single- and two-family home construction since the 1960s, it has contained the majority of new "additional" units; specifically the addition of smaller apartment units to existing single-family homes. East Hill captured 70% of those new additional units in the Town in the last thirty years.

South Hill

South Hill contained 37% of the new single- and two-family units in the Town in the last thirty years. South Hill also contained 18% of new multi-unit structures and 19% of the new additional units in the Town. As stated earlier, most of the single- and two-family housing development on South Hill occurred in subdivision developments like Deer Run, Chase Farm, Southwoods, and Westview.

West Hill

The West Hill/Inlet Valley area contained 23% of new single family and two-family units between 1980 and January 2010. West Hill also accounted for 56% of the new multi-unit structures and 12% of additional units in the Town. All of the new units in multi-unit structures on West Hill were the result of the development of Linderman Creek Apartments Phases I-III, Conifer Senior Apartments, and the Overlook at Westhill complex.

B.3.5 Structure age

The Town of Ithaca contains a mix of older homes and new construction. 46% of the total housing stock in the Town was built before 1970.²¹ Another 42% was built between 1970 and 1999, and around 11% was built in 2000 or later.²² The table below shows the distribution of housing units built within various year ranges.

²¹ 2008-2012 American Community Survey

²² Ibid

Age of housing structures Town of Ithaca		
Year built	Number of units	% of units
2010 or later	6	.1%
2000 to 2009	815	11%
1990 to 1999	886	12%
1980 to 1989	1,014	13.7%
1970 to 1979	1,244	16.8%
1960 to 1969	1,009	13.6%
1950 to 1959	896	12.1%
1940 to 1949	392	5.3%
1939 or earlier	1,145	15.5%

Source: 2008-2012 American Community Survey

B.3.6 Housing values and sales

The 1993 Comprehensive Plan reported that the median home value in the Town increased 127% between 1980 and 1990, from \$62,200 to \$141,200. Similarly, the 2000 Census reported that the median home value in the Town of Ithaca was \$140,000; and the largest single percentage of homes valued between \$100,000 and \$149,999.

The most recent American Community Survey estimated the median home value to be \$229,000 for the years between 2008 and 2012, with more than one-third of homes valued between \$200,000 and \$299,999.

The table below shows the number of housing structures within each value range listed in the American Community Survey, with the median value and largest percentage range highlighted:

Value of housing structures		
Value	Number of units	% of units
Less than \$50,000	98	2.6%
\$50,000 to \$99,999	135	3.6%
\$100,000 to \$149,999	474	12.6%
\$150,000 to \$199,999	703	18.6%
\$200,000 to \$299,999	1,280	33.9%
\$300,000 to \$499,999	857	22.7%
\$500,000 to \$999,999	173	4.6%
\$1,000,000 or more	51	1.4%
Total	3,771	100%

Source: 2008-2012 American Community Survey

The Tompkins County Assessment Department reported slightly lower median home values than the Census and ACS figures, noting that the median home value in the Town of Ithaca in 2009 was \$195,000 (still a 39% increase from the Census 2000 median value).²³ However, the Assessment Department also reported the 2009 average home value in the Town of Ithaca to be \$219,352, which coincides with the largest range of home values noted in the table above. The County Assessment figures accounted for one-, two-, or three-family homes in the Town of Ithaca located on lots less than 10 acres.

²³ 2010 phone conversation with Tompkins County Assessment Department

The Tompkins County Assessment Department also reported information on home sales since 2000. According to their information, 1,657 homes were sold in the Town of Ithaca between 2000 and 2009.²⁴ Average sale price for a home in 2000 was \$122,954, compared with \$213,031 in 2009. That amounts to a 73% increase in home sale prices in nine years.

B.3.7 Household income and affordability

Cost of home ownership in the Town of Ithaca has increased in the last twenty years. The Town's 1993 Comprehensive Plan asserted that housing built in the Town between 1950 and 1970 was usually more affordable, even when brand new.

The need for housing that is affordable, particularly to those in the median-income range, has become increasingly important to the Town of Ithaca. The *Tompkins County Affordable Housing Needs Assessment* (prepared in 2006 by Economic and Policy Resources, Inc., for the Tompkins County Planning Department) indicated that more housing was needed at all cost levels; but that the gap between supply and demand was most critical for housing that is affordable to families in the "median income" range.

The U.S. Census definition of *median income* is the amount which divides the income distribution into two equal groups - half having income above that amount and half having income below that amount. As of the 2010 Census, the Town of Ithaca median household income was \$55,934. The 2010 median sale price for a house according to the Ithaca Board of Realtors Multiple Listing Service was \$209,500.

According to United States Housing and Urban Development standards, the definition of 'cost burden' considers the percentage of household income spent for mortgage costs or gross rent. Families who pay more than 30 percent of their income for housing are considered cost burdened, which means that they may have difficulty affording necessities such as food, clothing, transportation, and medical care. The Affordable Housing Needs Assessment study noted that a household making 100% of the County median household income in 2004 (\$42,899) could afford a home that cost \$127,959—which was less than both the median price and the average sales price for a home in both the Town of Ithaca and in Tompkins County at that time. This means that households at 100% of the County median household income in 2004 could not afford the average single-family home in the County, and were therefore considered *cost burdened*.²⁵

Rental costs are slightly more affordable to more households than homeownership costs. According to the Affordable Housing Needs Assessment study, roughly 90% of the renter units in the County were affordable to households at or below 100% of the County median household income - although renters at the lower end of the income spectrum experienced more affordability difficulty than renters at the higher income levels. On the other hand, the report analysis also indicated that nearly one-third of non-student renters spent more than 50% of their income on rent.

The Housing Goals and Objectives section explores strategies that will increase the supply of rental and homeowner housing that is affordable to median-income residents.

B.3.8 Aging in place

The Demographics section noted that the senior population had the greatest increase in numbers in the Town of Ithaca in the last 20 years. This is a national trend that is expected to continue. The senior population will require

²⁴ Multiyear county housing sales chart produced by Tompkins County Assessment Department, <http://www.tompkins-co.org/assessment/yrsales.pdf>

²⁵ Information from the Tompkins County Assessment Department.

specialized services as they continue to age, particularly the baby-boom generation that is beginning to reach retirement age.

The Town may need to develop additional services in the future to accommodate the needs of the aging segments of the community. In terms of housing, the Town can promote Universal Design principles in new home construction. Universal Design includes installing universal features in homes, like wider entranceways and wider doors that can accommodate wheelchairs, flat entrances, and door and drawer knobs that don't require twisting or gripping. Universal Design also involves constructing homes so that first-floor spaces can be easily converted into additional bedroom and bathroom facilities. These basic construction techniques can provide seniors with the option to keep their homes longer and therefore age in place.

B.4 Natural resources and environment

The quality of life in the Town of Ithaca is inextricably linked to its natural environment. These rich physical, biological, ecological, geological, and scenic resources have long been recognized as assets that the Town needs to protect. The following provides a brief inventory of important natural features found in the Town of Ithaca.

B.4.1 Topographic setting

Sculpted by retreating glaciers thousands of years ago, the Town is bisected by the deep valley of the southern end of Cayuga Lake and its major tributary, the Cayuga Inlet. Flanked by numerous gorges incised along the steep hillsides, the valley steadily rises up to a hilly mid-plateau that continues to rise gradually beyond the Town's borders. This deep cut valley and the smaller Six Mile Creek valley define three major areas of the Town: East Hill, West Hill and South Hill. The *Slope* map provides a vivid graphic illustrating the town's topographic variability along with its associated geographic divides.



Bostwick Road

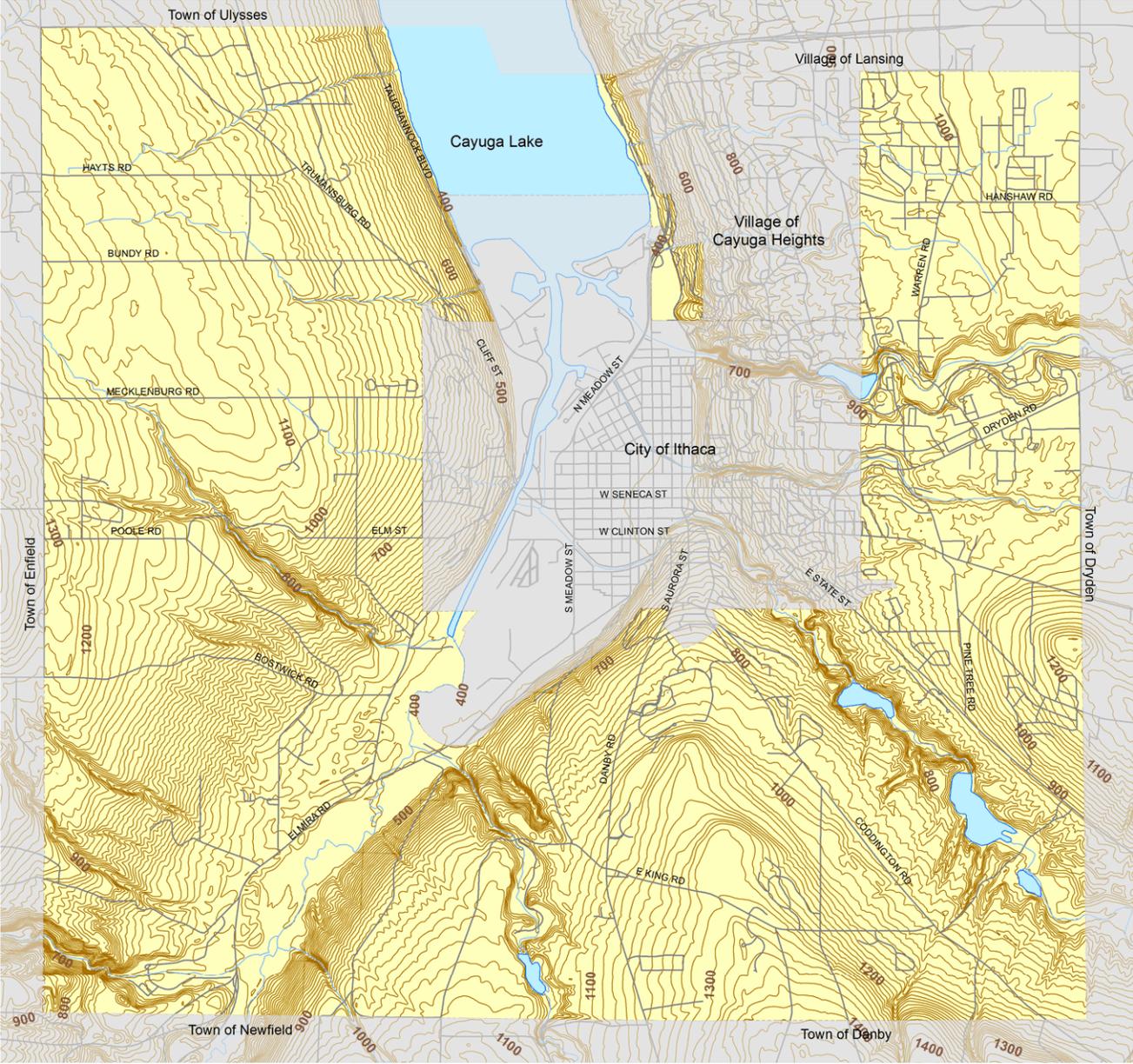
The town varies from a topographic low point of approximately 390 feet above mean sea level (MSL) along the valley floor of the Cayuga Inlet, to a topographic high point of approximately 1,420 feet above MSL on South Hill near Ridgecrest and Troy Roads, where the Town of Ithaca meets the Danby town line. As shown on the *Slope* map, slopes greater than 20% can be found along steep hillsides of gorges and valleys, and tend to become gentler as elevations rise.

Topography and slope influence many important aspects of land use and site planning. Topography and slopes affect the flow of surface water, patterns of erosion and sedimentation, soil formation, and vegetation growth. Consideration of the slope of the land is essential in land use planning. As slopes become steeper, grading and the provision of infrastructure become more difficult and expensive, and risks from natural hazards such as flooding and slope failure are of greater concern. The cumulative effects of

development on steep slopes include loss of scenic amenities, decreased water quality, increased downstream runoff and flooding problems, loss of sensitive habitats, high utility costs, access challenges (especially for emergency vehicles) and high maintenance costs of public infrastructure.

Many communities have adopted regulations to protect against the costs and environmental degradation caused by hillside and steep slope development. The Town of Ithaca currently has no regulations, but should consider enacting protective measures. Zoning regulations aimed at protecting hillsides include reducing allowable development densities and establishing overlay zones in the areas of concern. Other regulatory controls generally either prohibit or carefully monitor construction on steep slopes, typically defined as anywhere between 10% and 25%.

Topography/elevation | Town of Ithaca

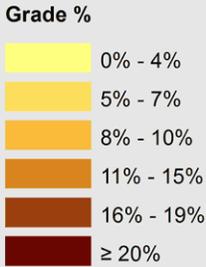
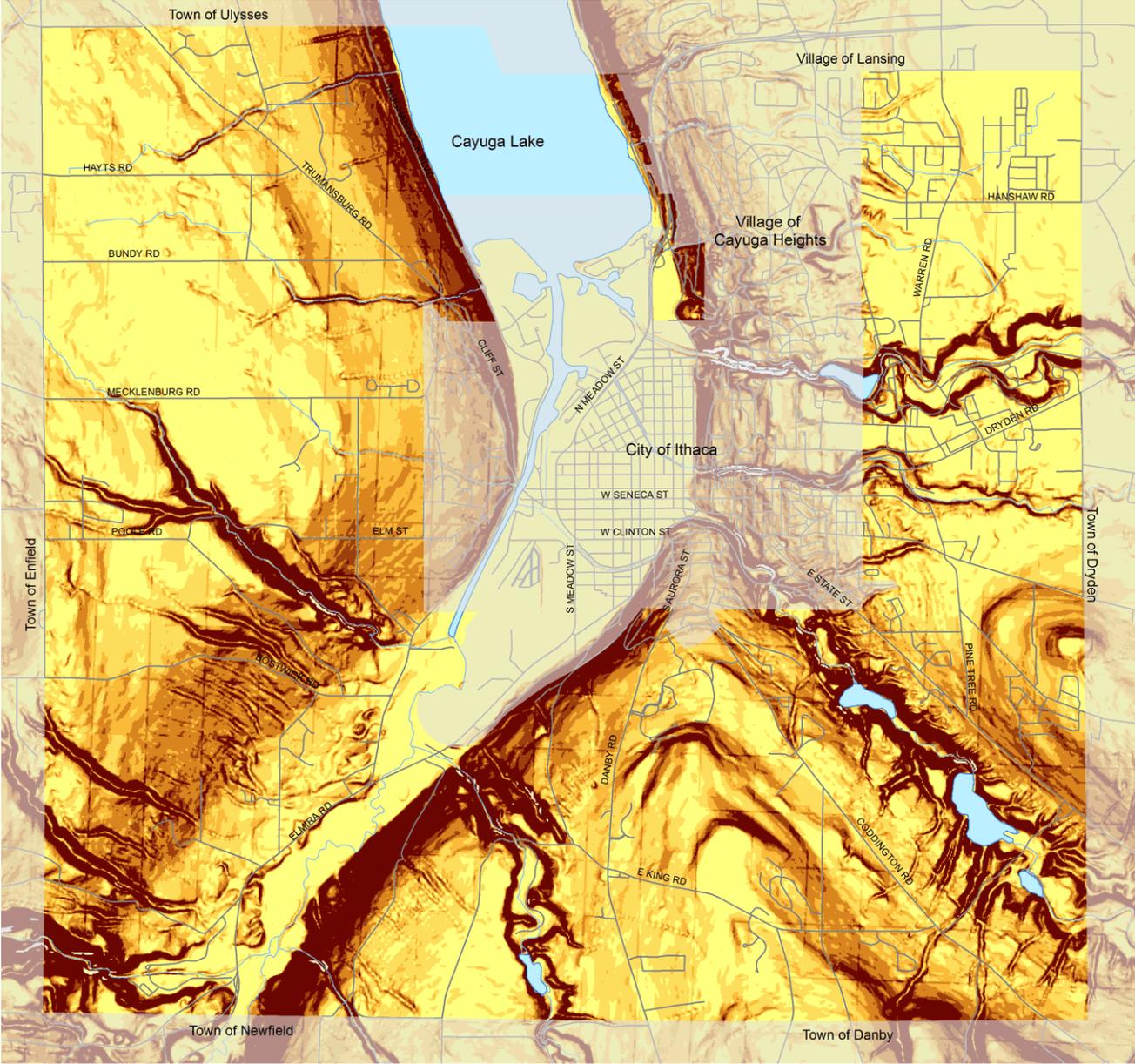


 20' contour interval (feet above sea level)

Produced by Town of Ithaca Planning Department, 4 March 2014
 Data: Tompkins County Information Technology Services GIS Division



Slope | Town of Ithaca



Produced by Town of Ithaca Planning Department, 7 March 2014
 Data: Tompkins County Information Technology Services
 GIS Division



B.4.2 Lakes and streams

Cayuga Lake



Cayuga Lake

The longest of the Finger Lakes, Cayuga Lake is a treasured resource enjoyed for its scenic and recreational amenities by residents and visitors alike. The Lake also serves as the source of drinking water for many residents of the Town and numerous other communities throughout the watershed. The Town of Ithaca boasts having 680 acres of the southern end of Lake at its north-central border, including approximately 2.9 miles of shoreline. With the exception of the 0.3 acre East Shore Park, which is leased to the Town via an agreement with Cornell University, all of the shoreline within the Town is privately owned.

Cayuga Lake ultimately drains into Ontario Lake via the New York State Canal System, a system of canals and waterways forming an extensive navigable transportation network that crosses upstate New York. Water levels in the Lake are regulated by the New York State Canal Authority through a series of locks within the canal system. Mud Lock, located at the north end of Cayuga Lake, allows the Authority to draw down lake levels just before winter to reduce ice damage to properties and to maximize storage capacity for the anticipated spring runoff. The Erie Canalway National Heritage Corridor encompasses New York's canal system and the communities along its shores. As part of the Canalway, the Town can benefit from State funds used for projects and programs intended to protect and celebrate the corridor's distinctive sense of place and its tourism, recreational opportunities, and water quality.

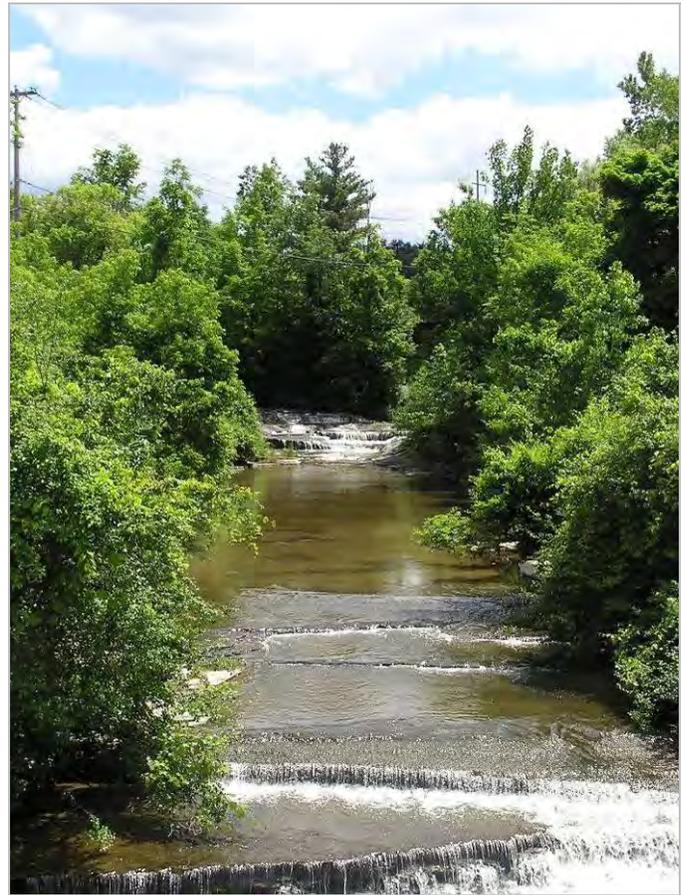
The water quality in the southern end of Cayuga Lake within the Town is considered "impaired" as reported by the New York State Department of Environmental Conservation (DEC).²⁶ The report states that swimming and other recreational uses in the southern end of the Lake are affected by pathogens, nutrients, silt, and sediment. Water supply uses are also considered to be threatened and aesthetic concerns, including nuisance algal blooms, extensive rooted aquatic plant growth, and odors from decaying plants, discourage recreational use of the lake. The sources of these pollutants are reported as being "numerous," occur throughout the watershed, and include the presence of multiple municipal wastewater discharges, urban/stormwater runoff, agricultural activity, increasing development, and stream and roadbank erosion. Mandated by the Clean Water Act, the Total Maximum Daily Load (TMDL)

²⁶ Oswego River/Finger Lakes Basin Waterbody Inventory/Priority Waterbodies List Report. Final Draft Report, February 2008.

program requires quantifiable goals to be set for water bodies not meeting water quality standards. No TMDLs have yet been developed for Cayuga Lake.

Streams and waterbodies

Seven major streams and innumerable smaller tributaries traverse through the Town of Ithaca (see *Water resources* map). The major streams are Buttermilk Creek, the Cayuga Inlet, Cascadilla Creek, Enfield Creek, Fall Creek, and Six Mile Creek. All of these streams are within the Cayuga Lake watershed, meaning the Lake is the ultimate receiver of the water that flows through these tributaries. Many of these streams had a great impact on the early development of the Ithaca area by providing water power to support the growing industrial development in the 1800s and early 1900s. Today, in addition to serving as important natural areas, many of these creeks and/or their associated reservoirs also provide significant economic benefits. Recreation and tourism are centered around the gorges, cascading waterfalls, and established swimming areas associated with Buttermilk Creek (Buttermilk Falls State Park) and Enfield Creek (Robert H. Treman State Park). Six Mile Creek remains a water supply for the City of Ithaca Water System which serves most City residents, and Fall Creek is the source of water supply for the Cornell University Water System. In addition, the Cayuga Inlet is a regionally popular fishing stream, for which the New York State Department of Environmental Conservation has secured public fishing rights easements along its banks on a broad stretch of reach within the Town.²⁷



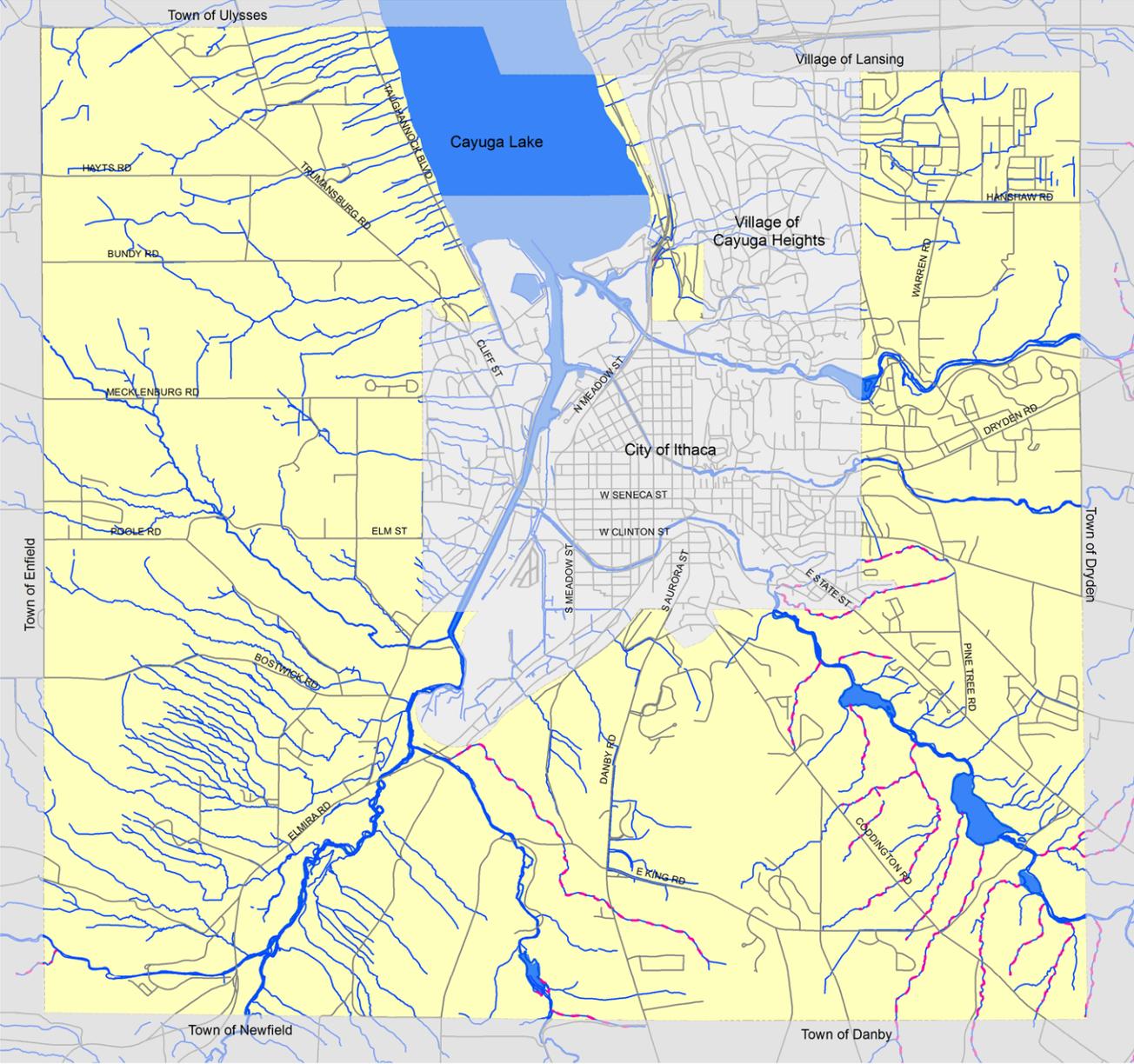
Cascadilla Creek

Certain *Waters of the State* are protected by the DEC due to their importance as drinking water supplies, fish habitat, or recreation. The *Water resources* map identifies those streams in the Town that are classified as protected. Any proposed activity that would result in disturbance to the bed or bank of a protected stream requires a permit from the DEC.

Streams and waterbodies are greatly affected by land uses and development activities that occur within the watershed. Conversion of naturally vegetated lands in the watershed to urban and agricultural uses results in serious degradation to streams and their aquatic inhabitants and to the ultimate receiving water (Cayuga Lake). The proliferation of impervious surfaces associated with urbanization increases the frequency and severity of flooding and causes increased erosion, decreased base flow in streams from reduced natural filtration of water, and negative effects on stream health and ecology.

²⁷ NYS DEC website, http://www.dec.ny.gov/docs/fish_marine_pdf/r7cayinlpfr.pdf, accessed 9 August 2011.

Water resources | Town of Ithaca



- Protected streams (NYS classified A, B, or Bt)
- Streams
- Lakes and reservoirs

Produced by Town of Ithaca Planning Department, 5 March 2014
 Data: Tompkins County Information Technology Services
 GIS Division



To address and mitigate the impacts to our area's waterways, including Cayuga Lake, the Town enacted a Stormwater Management and Erosion and Sedimentation Control Law in 2008. This law requires the implementation of erosion control measures for construction sites and requires new developments to install permanent onsite stormwater facilities and/or implement natural infiltration measures to slow runoff and filter out pollutants prior to its release into to area waterways. The Town also enacted a Stream Setback Law in May 2012 that requires development to be set back a specified distance from streams and protects existing vegetative corridors growing along streams in the Town. These action, along with continued support of initiatives aimed at monitoring water quality, educational and outreach programs on water awareness and other intermunicipal efforts, are vital to protect this essential resource.

B.4.3 Wetlands

Wetlands are important components of our landscape. Wetlands are amongst the most productive ecosystems, providing food and habitat to a wide variety of plants, insects, amphibians, reptiles, birds, fish, and mammals. Wetlands lessen the magnitude of flood events by acting as natural sponges that trap and slowly release flood waters, and wetlands protect water quality by serving as filters that remove pollutants and nutrients and by trapping sediment from surface and stormwater. Wetlands also provide important recreational opportunities, such as bird watching, hunting, and fishing.

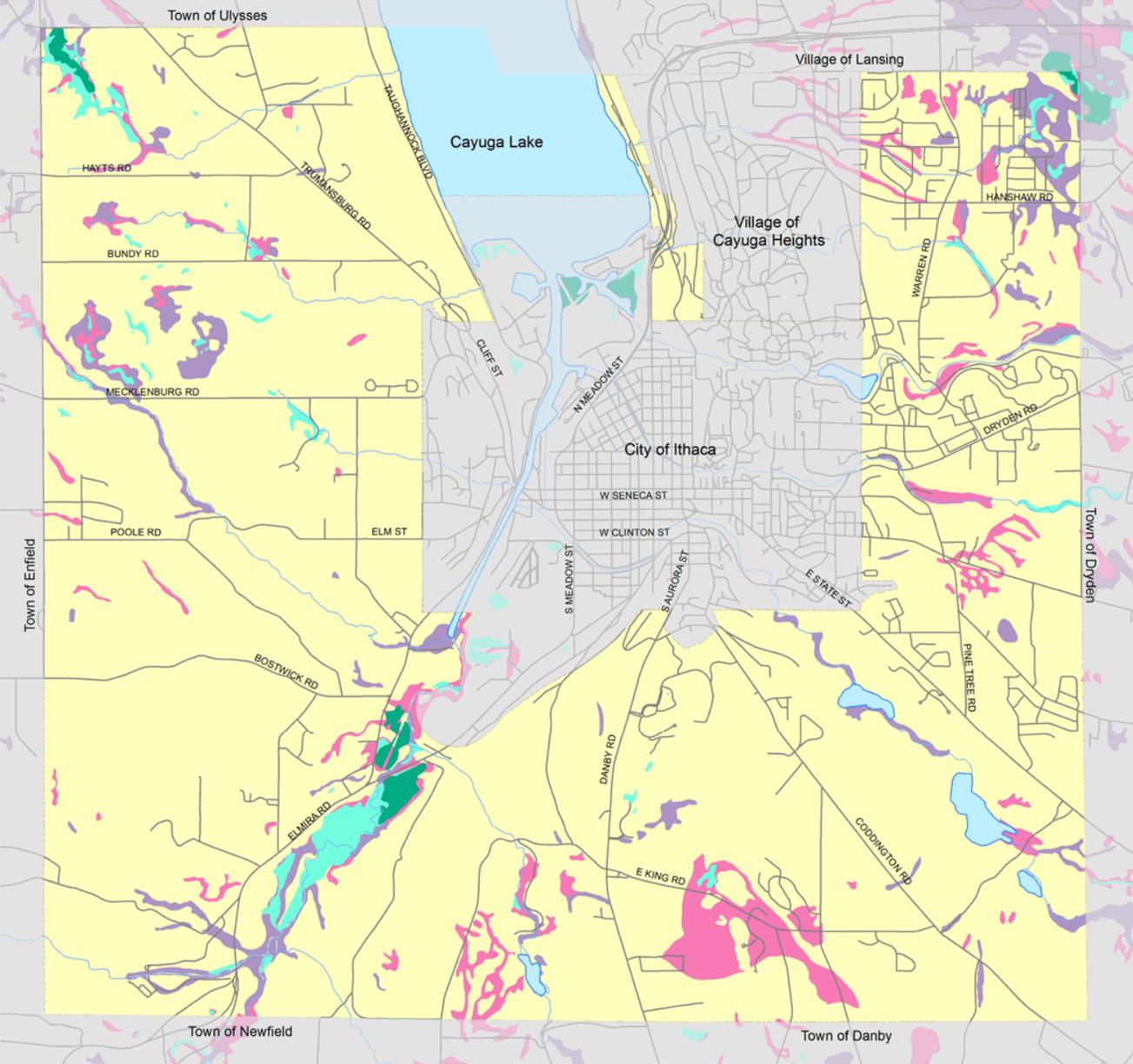
The Town has no municipal wetland regulation and relies on State and Federal entities to provide protection. Under the New York State Freshwater Wetlands Act of 1975, the New York State Department of Environmental Conservation (DEC) maps and regulates wetlands encompassing at least 12.4 acres and those smaller wetlands judged to be of unusual importance. The DEC also regulates a 100-foot adjacent area (buffer zone) surrounding these state-protected wetlands. There are four state-regulated wetlands in the Town, as shown on the *Wetlands and hydric soils* map: Sapsucker Woods in the Town's northeast, Larch Meadows and Fleming Meadows which straddle the Cayuga Inlet, and an unnamed wetland in the northwest corner of the Town.



Wetlands area on the Ithaca College campus

The U.S. Army Corp of Engineers administers a federal program for wetlands protection, regardless of size, under the authority of Section 404 of the Clean Water Act (CWA). Impacts to wetlands are not banned outright under this program. Rather, impacts are regulated under a permit system. A *nationwide permit* (blanket permit) authorizes certain categories of development activities in wetlands that involve impacts of less than 0.5 acres, while *individual permits* are required for activities impacting more than 0.5 acres. This permit system does allow wetland impacts to occur but an applicant must demonstrate that steps have been taken to: (1) avoid impacts to regulated waters, (2) minimize any potential impacts, and/or (3) perform mitigation to compensate for any unavoidable impacts.

Wetlands and hydric soils | Town of Ithaca



- NYS protected wetlands
- National wetlands inventory
- Possible indication of wetlands - hydric soils
- Possible indication of wetlands - partially hydric soils

Produced by Town of Ithaca Planning Department, 17 January 2014
 Data: U.S.D.A. Natural Resources Conservation Service,
 Tompkins County Information Technology Services GIS Division



Some wetlands regulated by the Corp of Engineers have been identified by the U.S. Fish and Wildlife Service in a survey known as the National Wetland Inventory (NWI). However, unlike the mapped DEC wetlands, the Corps of Engineers regulates all waters of the United States, whether they have been mapped or not. The NWI maps indicate where wetlands have been identified through high altitude aerial photography surveys, but do not represent a comprehensive ground-survey of wetlands in the Town. The only way to be certain of the existence of wetland is with on-site surveys conducted by qualified professionals.

The Wetlands and Hydric Soils map identifies NWI wetlands labeled as *P* (palustrine, excluding categories for human-made impoundments), and the locations of hydric soils. Hydric soils are included because they are often a useful indicator of wetlands. The three essential characteristics of wetlands are hydrophytic vegetation, hydric soils, and wetland hydrology.²⁸ Criteria for all of the characteristics must be met for areas to be identified as wetlands.

A 2001 Supreme Court decision²⁹ excluded many isolated wetlands from federal regulation. As defined by the CWA, federal protection extends only to those wetlands located on or adjacent to navigable waters of the United States or their tributary systems. Wetlands that do not meet this requirement, specifically isolated wetlands, with no link to interstate commerce, are not regulated as waters of the United States and are therefore not protected under the CWA.

As a result of this ruling, isolated wetlands existing in the Town are no longer protected by federal law. Efforts to strengthen state wetlands legislation to address this and other limitations of the state law have thus far been unsuccessful. In view of the lack of regulatory authority to protect isolated wetlands, the Town should consider establishing measures to insure protection of all wetlands within the Town. One approach would be to regulate only those wetlands that are outside of federal or state jurisdiction. This could limit the administrative challenges of developing a permitting system and providing enforcement authority and training of staff to ensure effective implementation of the regulations. Other options include modifying existing Town stormwater regulations to strengthen conservation incentives and exploring means to use site plan requirements/incentives to protect wetlands through open space setbacks.

B.4.4 Geology

The geologic history of the Town, and the Finger Lakes Region as a whole, is responsible for the area's defining characteristics. Devonian age sedimentary rocks (rocks that formed from mud, sand, and gravel) accumulated in the warm shallow sea more than 360 million years ago. That was followed by the action of massive sheets of ice that shaped those ancient rocks over the last two million years, which resulted in our prominent landscape of lakes, hills, gorges, and waterfalls. These ancient Devonian rocks, exposed as stacks of sedimentary rock layers along the walls of area gorges, are another distinguishing characteristic and visible reminder of our geologic past. The geology of our area has been a crucial factor in our human history and subsequent settlement patterns; it affected where people have lived and what they have done on and to the land.³⁰

Bedrock geology

Bedrock geology describes the consolidated rock (many-mile thick) underlying the surface of the earth. Its composition influences water supply, topography, and the make-up of surficial soils. The bedrock is also a source of many important energy resources. As illustrated in the *Bedrock geology* map, the Ithaca Formation–West River Shale is the bedrock formation most common in the Town.

²⁸ *Wetlands Delineation Manual*, U.S. Army Corps of Engineers, 1987.

²⁹ *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers et al.*

³⁰ Paleontological Research Institution website, http://www.priweb.org/ed/finger_lakes/nystate_geo1.html, accessed 22 August 2011.

Depth to bedrock is relatively shallow in the Ithaca area. Shallow depths to bedrock affect the location, development, and cost of public services such as sewers, water supply systems, and roads. There are also considerations for private investments such as building foundations and septic tanks.

Surficial geology

Surficial geology describes the rocks and unconsolidated material that lie above the bedrock. While *soil* refers to the organic component of these materials, *surficial geology* refers to the rock and mineral component of these materials. When glaciers receded 12,000 to 25,000 years ago, they deposited the rocks and debris frozen within the ice. These formations contain variously sized particles and are classified by the shape of the formation, the thickness, and the type and size of the particles found.³¹ Surficial geology influences the feasibility of constructing buildings and roads. Because it is these deposits that commonly determine soil composition, their characteristics can affect such things as agricultural viability.

As illustrated in the *Surficial geology* map, till is the most abundant glacial deposit in the Town. Till is a heterogeneous unsorted mix of silt, sand, clay, and rock. Till is often formed at the front of a glacier and is the result of the glacier's gathering and grinding of material. Because tills contain many different grain sizes, the empty spaces between coarser grains tend to become filled with finer-grained materials, resulting in a very low porosity. Till can be very difficult to excavate and generally has poor qualities for farming and for on-site wastewater disposal.

Lacustrine ("lake") silt and clay deposits are also common in Ithaca. These laminated silt and clays deposited in lakes formed during the melting of the glaciers. Lacustrine deposits are high in calcite have low permeability, and form potentially unstable land. They have variable thickness which can range up to 160 feet deep. Two small pockets of lacustrine sand can also be found in Town's southwest quadrant; these two well-sorted (particles of similar size) and stratified sand deposits tend to be permeable and six to 60 feet in depth.³²

Shallow or exposed bedrock can also be found in several locations in the Town, including a linear strip which extends from South Hill into the Inlet Valley, and an area bordering both sides of Cayuga Lake extending into the west half of the Village of Cayuga Heights.

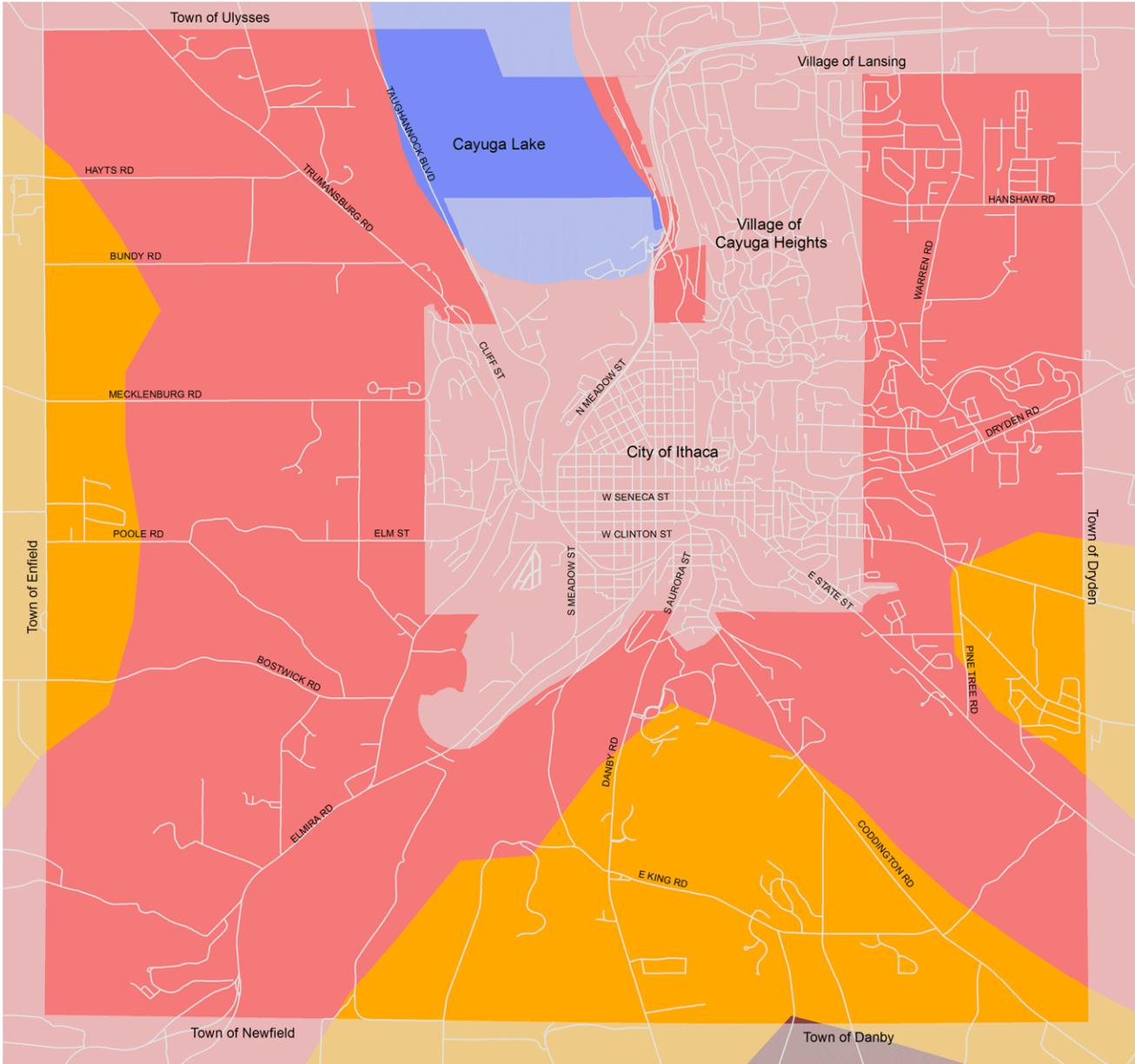


Six Mile Creek and bedrock layer.

³¹ Land Resources, Tompkins County Planning Department website, http://www.tompkins-co.org/planning/nri/land_resources.pdf, accessed 22 August 2011.

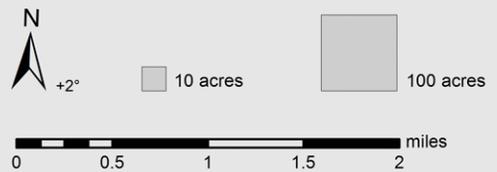
³² *Natural Resources Inventory*, Tompkins County Planning Department, <http://www.tompkins-co.org/planning/nri/inventory.pdf>, accessed 19 August 2011.

Bedrock geology | Town of Ithaca

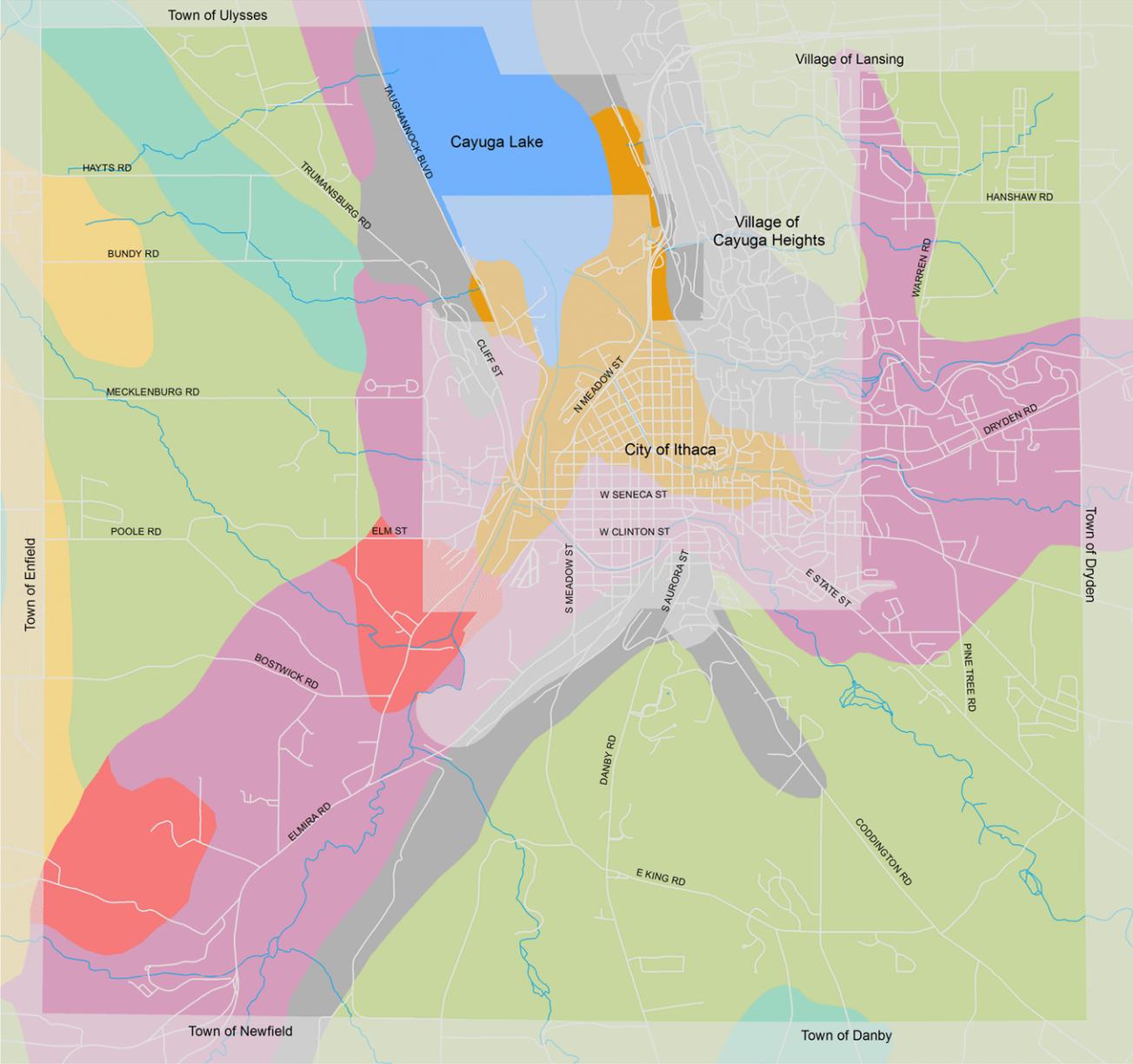


- Genesee Group Dg - West River Shale/Ithaca Formation
- Sonyea Group Ds - Cashaqua Shale
- West Fall Group Dwm - Beers Hill Shale
- Water

Produced by Town of Ithaca Planning Department, 17 January 2014
 Data: Tompkins County Planning Department, Tompkins County Information Technology Services GIS Division



Surficial geology | Town of Ithaca



- Water - Cayuga Lake
- Bedrock
- Kame deposits - coarse to fine gravel and/or sand
- Lacustrine sand - generally stratified quartz sand, well sorted
- Lacustrine silt and clay - thin layers of silt and clay, calcareous, low permeability
- Recent alluvium - fine sand to gravel, permeable, usually floodplains
- Till - variable texture (boulders to silt) poorly sorted, permeable
- Till moraine - generally variable texture, low permeability

Produced by Town of Ithaca Planning Department, 17 January 2014
 Data: Tompkins County Planning Department, Tompkins County Information Technology Services GIS Division



Geologic and energy resources

Mineral resource excavation in the Town includes sand and gravel operations. These are usually processed through screens and crushers and used in roadfill and construction projects. Extensive mining for salt also occurs under Cayuga Lake, outside and north of the Town of Ithaca municipal boundary.

Natural gas is another important local resource. Early production of natural gas began in western New York in the early 1800s, and originated from seeps and reservoirs in the Devonian-aged sandstones. As these sandstone beds became depleted, drilling into deeper layers of bedrock become necessary and hydraulic fracturing was introduced to develop low-permeability reservoirs in "tight" gas sands.

New technological advances (coupled with increased demand and cost of natural gas) have made it economically feasible for gas companies to begin extracting natural gas from impermeable shale rock. In contrast to permeable sandstone, it is very hard for fluids like water and gas to penetrate and move through the shale rock. But a new drilling process, called high volume hydraulic fracturing (hydrofracking) has made the huge natural gas reserves in the Marcellus Shale (a Devonian age formation which underlies the Town and much of the southern half of New York State) now recoverable.

The hydrofracking process raises serious concerns for the Town and for communities throughout southern New York. The process requires enormous supplies of fresh water which is mixed with toxic chemicals and results in large quantities of toxic waste that must be disposed of. The process requires large industrial-pad sites for drilling equipment and storage of chemicals and water (5 to 15 acre site). The drilling of one well is estimated to result in over 1,000 truck trips during the drilling and hydraulic fracturing process.³³ Noise and air pollution generated from drilling operations and permanent compressor stations is another serious concern. Development for gas pipelines poses concern for the local landscape and resources, especially if pipelines are routed across wetlands, steep slopes, gorges, forests, or scenic viewsheds to reach main transmission lines. The Town has begun and continues to explore ways to address the impending impacts posed by natural gas extraction from Marcellus Shale.

B.4.5 Soils

As in most of Tompkins County, soils in the Town of Ithaca vary considerably from place-to-place in terms of their physical properties and suitability for various uses. Ninety-one different soil types (mapping units) have been identified in the Town, with a wide variety of soil characteristics. The most common soil type is BgC (Bath and Valois gravelly silt loam with 5% to 15% slopes) which represents 9.7% of all known soil types within the town. Most other soil types in the Town each represent less than 2% of Town soil. This variability of the soil properties can equate to variability in the suitability of the land to support agricultural uses or development. Soils may be seasonally wet or subject to flooding. They may be shallow to bedrock or unstable for use as foundations for buildings or roads. Having a basic understanding of soils and of their potential and limitations, allows us to make good decisions in the use of this basic and valuable resource. In the *Soils series* map we have grouped the 91 different soil types (mapping units) based on their *soil series*.

The only comprehensive survey of soils for the Town was completed in 1961 by the United States Department of Agriculture Soil Conservation Service (SCS) now known as the Natural Resource Conservation Service (NRCS), in cooperation with the Cornell University Agricultural Experimental Station. The Soil Survey: Tompkins County, New York was published in 1965 by the SCS and provides detailed soils maps at a scale of 1:20,000 overlaid on aerial photographs, along with detailed descriptions of soil types, their characteristics, and an interpretation of their

³³ *Impacts on Community Character of Horizontal Drilling and High Volume Hydraulic Fracturing, Final Report* New York State Energy Research and Development Authority (NYSERDA), 16 September 2009.

suitability for various uses. The NRCS now also maintains an Internet site, the Web Soil Survey, which provides publicly accessible detailed information on soils for locations throughout the U.S. (including the Town of Ithaca).

The SCS survey is an indispensable tool for providing soil information, but it has certain limitations. For instance, due to the scale at which the maps were originally created, soil map units can have inclusions of up to two acres that do not fit within the use and limitations for the soil series that is labeled. Therefore, site-specific soil examinations and testing are recommended. The other limitation is that soil mapping is a continual process, and for Tompkins County, the survey is almost 50 years old; in some cases, it may no longer accurately reflect existing soil conditions.³⁴

Prime farmland soil

Soils that are likely to be highly suited for agricultural activity are known as *prime farmland soils*. The NRCS defines prime farmland as land that is best suited to producing food, feed, forage, fiber, and oilseed. Approximately 2,633 acres (14%) of the Town contains soils that have been identified as prime farmland soils per the USDA definition. An additional 1,153 acres (about 6%) contain soils that would meet the indicators of prime farmland if they were drained. As shown on the *Prime agricultural soils* map, prime farmland soils are distributed throughout the Town.

Approximately 41,453 acres of soils in Tompkins County are considered prime farmland. More than half of these soils exist in the northern part of the county. For comparison, Lansing and Ulysses, municipalities immediately to the north of the Town of Ithaca have approximately 13,314 acres (38%) and 9,286 acres (47%) of prime farmland soil respectively, while Dryden to the east and Danby to the south have approximately 4,635 acres (8%) and 1,152 acres (3%), respectively.



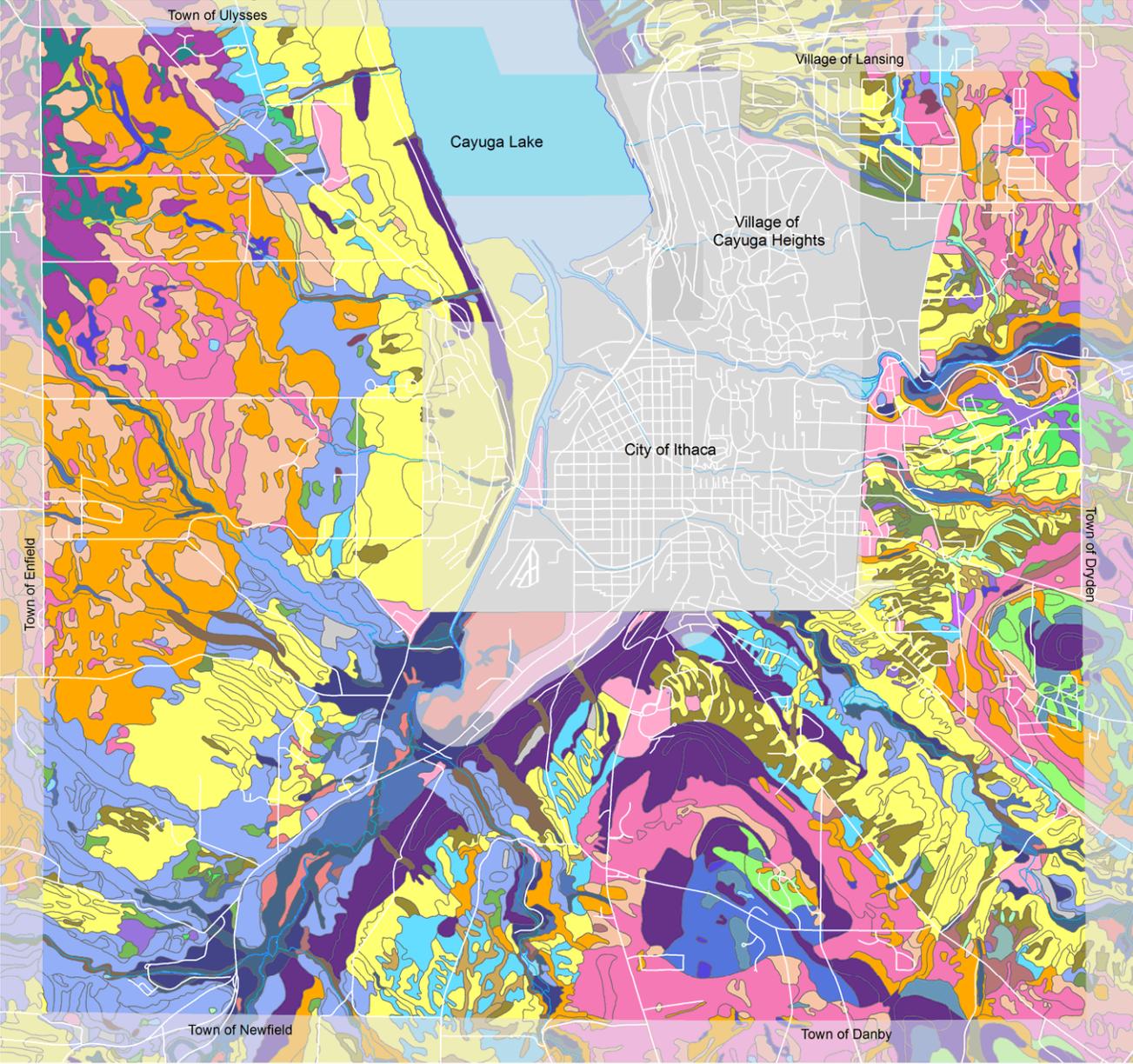
The West Hill Community Garden sits on a prime farmland soil area.

Erodible soils

Soil erodibility is an estimate, based on the physical characteristics of each soil, of a soil's susceptibility to erosion. Slope is one factor contributing to soil erodibility; another important factor is the cohesiveness of the soil particles. Soil scientists use a measure known as the *K-factor* to describe the susceptibility of soil particles to detach and be transported by rainfall and runoff. Soils with high clay content have low K values (about 0.05 to 0.15) because they are resistant to detachment. Coarse-textured soils (such as sandy soils) have low K values (about 0.05 to 0.2) because of low runoff even though these soils are easily detached. Medium textured soils such as the silt loam soils have moderate K values (about 0.25 to 0.4) because they are moderately susceptible to detachment and they produce moderate runoff. Soils of high silt content are the most erodible. They are easily detached; they tend to crust and produce high rates of runoff. Values of K for these soils tend to be greater than 0.4. The *Probability of highly erodible soils* map identifies those soils that have a K-factor value greater than 0.4 and are located on slopes of 8% or greater. Approximately 2,587 acres of land surface in the Town have a strong probability of being highly erodible.

³⁴ Barbee, G.C. and Morris, D.K., *Web Soil Survey: A New Horizon in the Use of Site-Specific Soil Data*, *Journal of Extension*, August 2009, Volume 47, No 4.

Soils series | Town of Ithaca

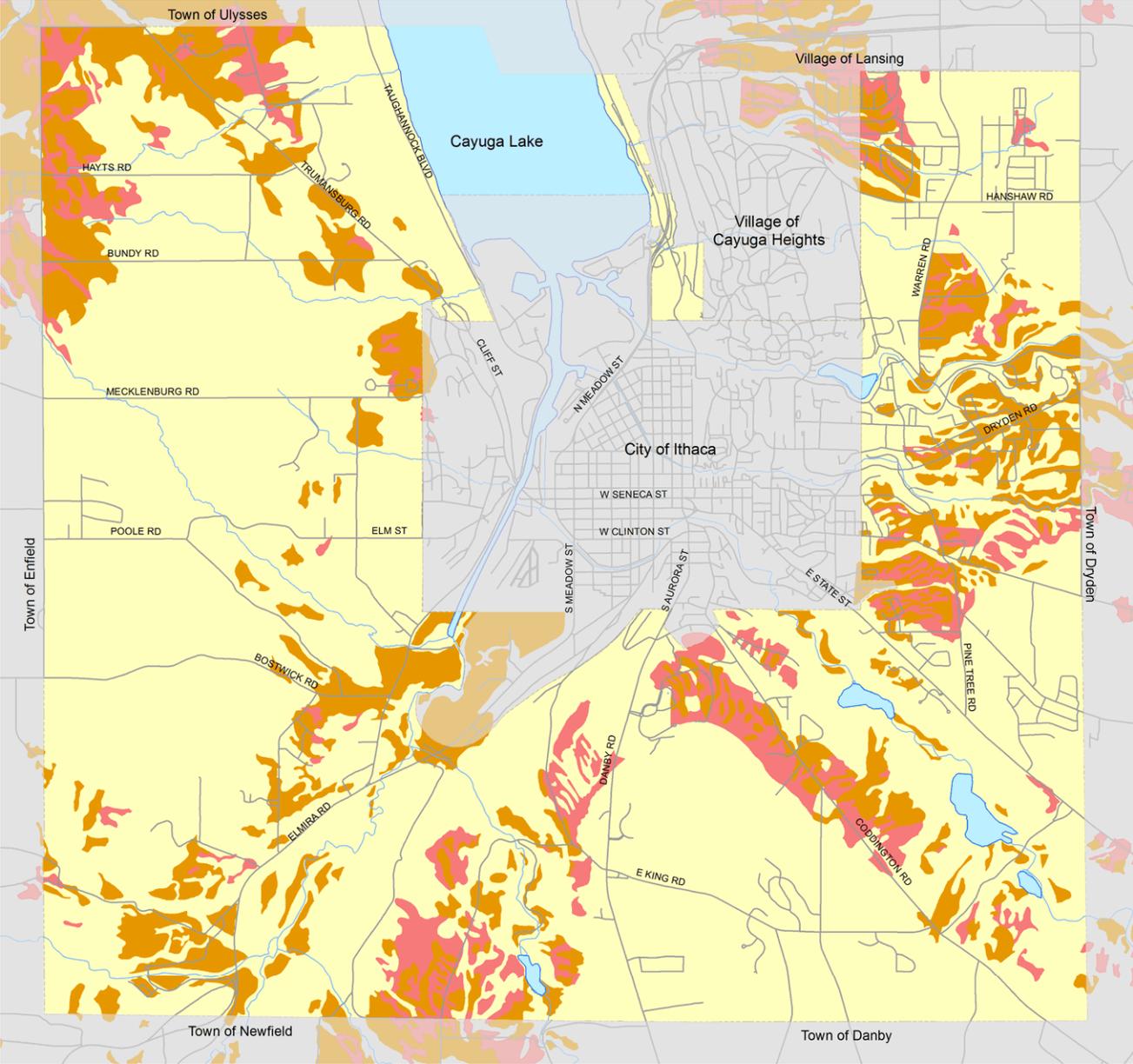


	Alluvial		Halsey		Niagara
	Arkport		Howard		Ovid
	Bath		Hudson		Palmyra
	Braceville		Ilion		Phelps
	Canadaigua		Kendaia		Red
	Chenango		Lansing		Rhinebeck
	Conesus		Lordstown		Rock
	Darien		Lyons		Tuller
	Eel		Madalin		Volusia
	Ellery		Made		Wayland
	Erie		Mardin		Williamson
	Fredon		Middlebury		Water
	Genesee		Muck		Unclassified

Produced by Town of Ithaca Planning Department, 17 January 2014
 Data: Tompkins County Planning Department, Tompkins County
 Information Technology Services GIS Division



Prime farmland soils | Town of Ithaca

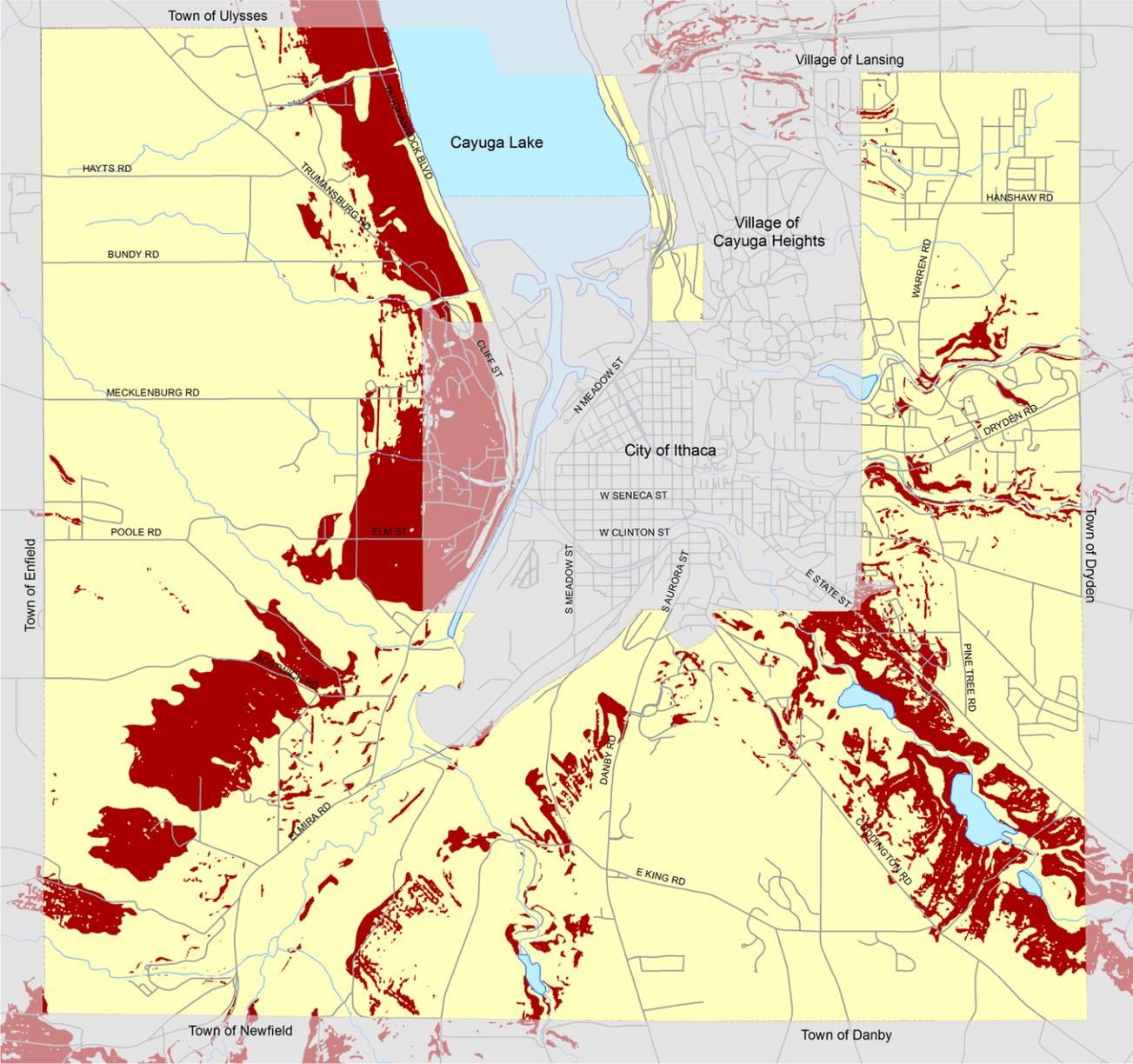


- Prime farmland soil (USDA classified)
- Prime farmland soil if drained (USDA classified)

Produced by Town of Ithaca Planning Department, 5 March 2014
 Data: USDA, Natural Resources Conservation Service,
 Tompkins County Information Technology Services GIS Division



Probability of highly erodible soils | Town of Ithaca



 Highly erodible soils (based on "K" factor and slope)

For the purposes of this map, soils with a K factor >0.43 and a slope >8% or greater were considered the most probable for being highly erodible.

Produced by Town of Ithaca Planning Department, 17 January 2014
 Data: USDA, Natural Resources Conservation Service,
 Tompkins County Information Technology Services GIS Division



Hydric soils and drainage capacity

Drainage classification of soils refers to the frequency and duration that a soil is saturated with water. Hydric soils loosely correspond to poor and very poor drainage designations. The NRCS defines hydric soils as being water saturated for a sufficient duration (when plants and soil microbes are active; soil temp > ~405 C), to produce anaerobic conditions and to support hydrophilic vegetation. Collectively referred to as *hydric soil indicators*, mineral and organic soil features created under these conditions are used in conjunction with vegetation cues to infer the presence of hydric soils. As previously described in the Wetlands subsection above, these water logged soils are also indicators for the presence of wetlands. The NRCS reports that hydric soils that have been converted to other uses are generally capable of being restored to wetlands. Approximately 1,528 acres of land in the Town are comprised of hydric soils. The Wetland and Hydric Soils map identifies the location of *all hydric* (857 acres) and *partially hydric* (671 acres) soils in the Town. According to the NRCS, an all hydric soil means that all components for a given map unit are rated as being hydric, while partially hydric means that at least one component of the map unit is rated as hydric, and at least one component is not rated as hydric, so a definitive rating for the map unit cannot be made.³⁵

B.4.6 Terrestrial ecology

The Town contains many habitat types that support a wide array of plant and wildlife species. Woodlands, brush lands, meadows, wetlands, streams and gorges, as well as agricultural lands and transitional areas, support a wide variety of plant species and dwelling and feeding areas for mammals, birds, reptiles, and amphibians.

The Town is fortunate to have a number of open space areas that provide large contiguous habitats for plant and wildlife species. In addition to Buttermilk Falls and Robert H. Treman State Parks, there are also the Eldridge Preserve (owned by The Nature Conservancy), Lick Brook Preserve (owned by the Finger Lakes Land Trust), and a number of Cornell-owned lands such as the Sapsucker Woods Bird Sanctuary and portions of Coy Glen.



Sapsucker Woods. (DT)

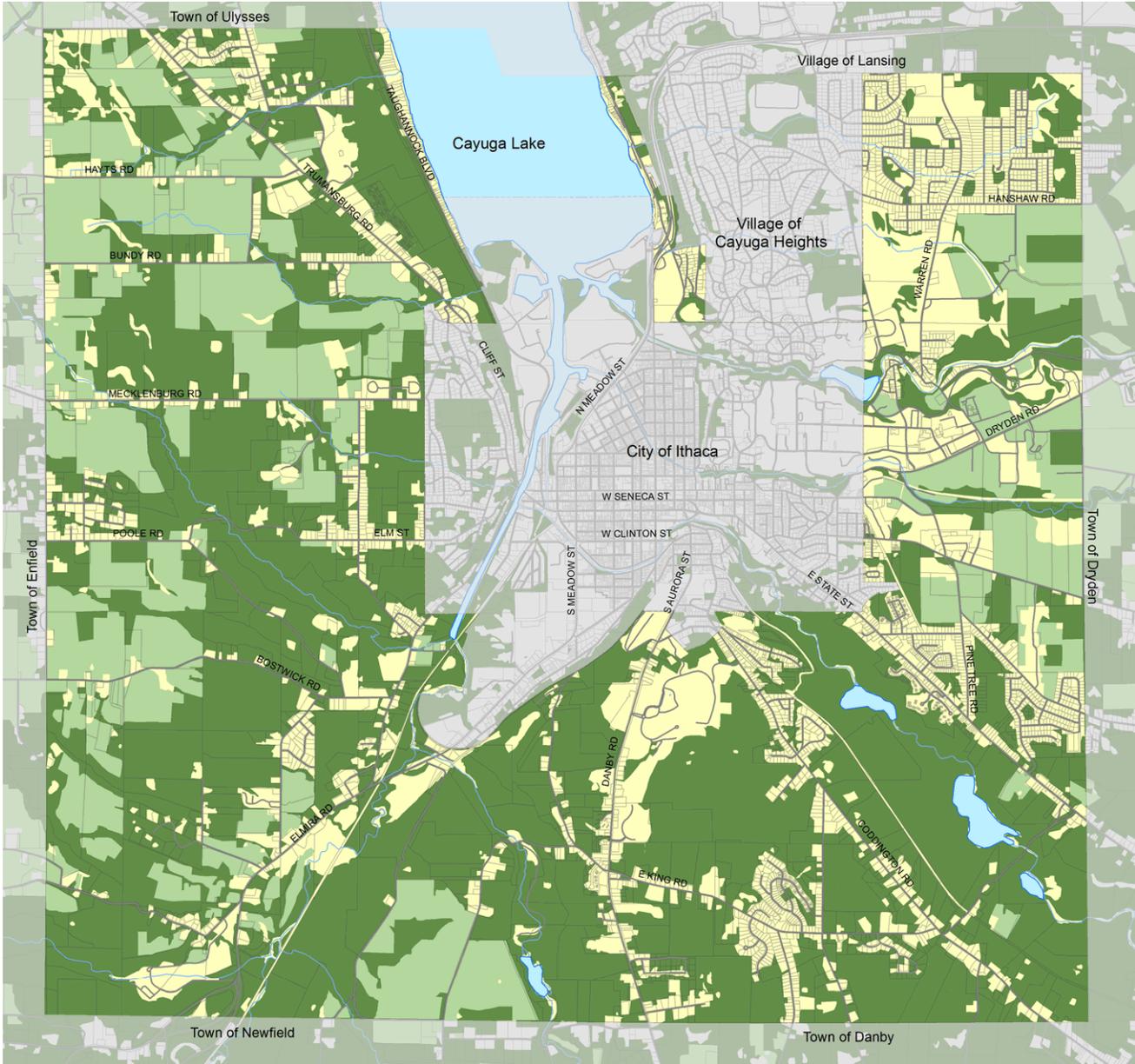
Vegetation

The Town of Ithaca falls within the regional forest formation designated as the Allegheny Section of the Northern Appalachian Highland Division of the Hemlock-White Pine Northern Hardwood Region.³⁶ The Allegheny Section is a broad forest type that begins at the northern edge of the Finger Lakes and continues south, covering most of the northern half of Pennsylvania and the southern half of New York. This mosaic forest is typical of central New York. Some of the tree species found in this forest are red, sugar, and silver maples, paper birch, quaking and bigtooth aspens, eastern cottonwood, black cherry, chokecherry, black walnut, butternut, pignut and shagbark hickories, northern red oak, white, bur and black oaks, serviceberry, hackberry, dogwood, American hornbeam, hop hornbeam, hawthorn, tuliptree, black locust, white and green ashes, boxelder, eastern white pine, American sycamore, redbud, mulberry, basswood, black willow, and eastern hemlock.

³⁵ Natural Resources Conservation Service website, <http://soils.usda.gov/use/hydric/intro.html>, accessed 19 August 2011.

³⁶ *Deciduous Forests of Eastern North America*, Braun, E. Lucy, 1950.

Forests, meadows, and other open areas | Town of Ithaca



- Vegetative (forest, meadow, brush)
- Agriculture (active and inactive)

Produced by Town of Ithaca Planning Department, 17 January 2014
 Data: Tompkins County Planning Department, Tompkins County
 Information Technology Services GIS Division



According to Tompkins County Land Use Land Cover Mapping Project (updated in 2007 by the Tompkins County Planning Department) approximately 6800 acres, or 36% of the land area of the Town (including Village of Cayuga Heights, excluding Cayuga Lake), is forested and composed of either deciduous, conifer, or mixed woodlands or forest plantations. Brush or grassland accounts for approximately 2757 acres (15%) of the land area. The *Forests, meadows, and other open space* map depicts these undeveloped areas.

The Finger Lakes region was a renowned botanical collecting ground as early as the 1800s,³⁷ which was likely further advanced by the founding of the Wiegand Herbarium (merged with the L. H. Bailey Hortorium Herbarium in 1977) at Cornell University in 1869; the Herbarium emphasized native and naturalized flora of central New York, as well as of national and international locations. Areas in the Town (such as the South Hill Swamp (Claussen Swamp) on South Hill, and Larch Meadows and Negundo Woods along the Cayuga Inlet) were studied because of their botanical qualities. The South Hill Swamp was an especially significant location within the Cayuga Lake basin for the presence of rare and unusual plant species, leading Cornell to purchase six acres of the core swamp in 1960, later adding 45 acres to its holdings).³⁸

The New York State Protected Native Plants Program was created in 1989 following adoption of the protected native plants regulation.³⁹ This regulation established four categories of listed protected plants, including *endangered*, *threatened*, *rare*, and *exploitably vulnerable*. Exploitably vulnerable species are considered likely to become rare as a result of being over-picked for commercial and personal purposes. Unlike protection of wildlife, plants are the property of and under the control of the landowner, whether that is an individual, corporation, or government agency. Protection is provided under state Environmental Conservation Law §9-1503 which states that it is a violation to sever, damage, or remove any of these listed plants without the permission of the landowner.



Trillium along South Hill Trail.



Eldridge Wilderness Preserve. The preserve includes a variety of early and late plant succession areas.

³⁷ *Some rare Myxomycetes of central New York, with notes on the germination of Enteridium Rozeanum*, Durand, E.J., Botanical Gazette, March 1894.

³⁸ *South Hill Swamp, Its Unique Natural Characteristics and Need for Protection*, Town of Ithaca Conservation Board, 18 March 1999.

The New York State Natural Heritage Program (a joint venture of the New York State DEC and The Nature Conservancy) maintains a comprehensive database on the locations and status of rare plants and significant natural communities in New York State. This includes unlisted species, which while not under the same level of regulatory protection as the listed species, are ranked by the Natural Heritage Program. The Heritage list (updated annually) has no legal status but is used by the DEC as a basis for the legally protected list that the state produces. This information is housed in databases maintained by the DEC and is accessible to the public through the New York Nature Explorer, a website providing maps (showing only general plant locations) and lists of species and their protection status.⁴⁰

This database lists 25 scarce plant species that were known to exist at one time in the Town of Ithaca, 18 of which are State-listed plant species. Of these, however, only four were recently confirmed; with exception of one species documented in 1977, the rest have not been documented since 1945. (Most have not been seen since the 1920s and earlier.) All of the recently confirmed listed species are sedge species. None of the plants listed by New York State as being rare are on the Federal endangered and threatened list.

Unique to Tompkins County are local rarity codes. Locally rarity codes are specific to the Cayuga Lake Basin and were defined and assigned by local botanists Nancy Ostman and Robert Wesley, based on their experience in evaluating plant species of Tompkins County. These codes are used in the inventory sheets associated with the Unique Natural Areas (UNA) of Tompkins County inventory. The UNA inventory is described further below.

The greatest threats to maintaining the diversity of plant species in the Town of Ithaca is the introduction of invasive plant species and plant pests, habitat loss and degradation, and the impending changes due to climate change. The UNA inventory, for instance, describes both Fleming Meadow and Larch Meadow as having been considered botanically important sites, but due to filling and disturbance of the wetlands they are now considered much less botanically interesting.

Wildlife

No comprehensive fish and wildlife surveys have been completed for the Town; however, predictions based on habitat types can be made. As described in the Vegetation section above, the Town contains a mosaic of land use and vegetation types. This mosaic includes large tracts of undeveloped areas of deciduous forests, coniferous forests, mixed forests, forest plantations, wetlands, brush, and grasslands, as well as agriculture and transitional areas. This variety translates to different habitat types that can support a wide variety of mammals, birds, reptiles, and amphibians. The New York State Gap Analysis Project (GAP) produced a database and final report in 2001 that describes land cover types with corresponding predicted distributions of native species of terrestrial vertebrate species. These distribution data were developed based on knowledge of species habitat requirements and illustrate how the diversity of vegetation types and land use equates to habitat and animal-species occurrences.⁴¹

For many wildlife species, another important component is the presence of biological corridors. Biological corridors serve as thoroughfares that allow for the safe passage of wildlife species between fragmented habitats. These are routes along which wide-ranging animals can travel, plants can propagate, genetic interchange can occur, populations can move in response to environmental changes and threatened species can be replenished from other areas. As development increases, biological corridors become more important for wildlife movements. In the Town of Ithaca, there are several areas that contain relatively long contiguous stretches of undeveloped land that potentially serve as biological corridors. One in particular is Buttermilk Falls State Park. Buttermilk Falls State Park is over 600 acres in

³⁹ New York State Environmental Conservation Law, 6 NYCRR 193.3, protected native plants.

⁴⁰ New York State Department of Environmental Conservation, Nature Explorer, <http://www.dec.ny.gov/natureexplorer/app/>, accessed 11 August 2011.

⁴¹ *A Gap Analysis of New York*, United States Geologic Survey (USGS), January 2001.



Deer, South Hill Recreation Way.

size and traverses both sides of Buttermilk Creek for over two miles within the Town. This north-south corridor continues south into the Town of Danby, for almost another two miles until it reaches the headwaters of Buttermilk Creek. Many of the Town's other large stream systems have similar qualities. The Cayuga Inlet and Six Mile Creek are especially characteristic of long, narrow, contiguous, mostly undeveloped vegetative corridors that likely function as biological passageways. This characterization also includes the valley hill slope along the western side of Route 89. This largely undeveloped tract of forest land extends from the City of Ithaca municipal boundary, north through the Town and beyond to the Town of Ulysses. Within Ulysses the land becomes

a mix of forest and agricultural land with some interspersed development along with several extensive forested tracts, including the Cayuga Nature Center and Taughannock Falls State Park.

The State of New York owns all fish, wildlife, and protected insects in the state, except for those that are licensed to be held in private ownership. The legal management and protection of wildlife is specified by state statute in Article 11 and 13 of the Environmental Conservation Law of New York, known as the Fish and Wildlife Law. Section 11-0535 of the Environmental Conservation Law and 6 NYCRR (New York Code of Rules and Regulations) Part 182 lists categories of endangered, threatened, and species of special concern in New York State. As described above with plant species, the NYS DEC and NYS Heritage Program maintains a database of threatened, endangered, and rare species known to exist in the state, accessible to the public on the NYS DEC Nature Explorer webpage.

Increasing human populations and development place a significant stress on our native wildlife populations. Land that was once habitat for wildlife species continues to be converted for residential and commercial uses, roads, and other types of uses. The development of land and related activities affect both the quantity and quality of wildlife habitat. Loss of habitat represents the single greatest impact to wildlife. All species require certain habitat features to survive; development typically eliminates or significantly changes habitat value. Habitat fragmentation is another significant impact, though it's often a gradual progression, which makes it a less obvious consequence of development. Fragmentation occurs as large tracts of the natural landscape are steadily developed and subdivided until only patches of original habitat remain. These patches are often too small and too far apart to support the basic survival and reproductive needs of many wildlife species during the various stages of their lifecycle or in different times of the year. Roads are a particularly destructive element of the habitat fragmentation process; roads disrupt passage across the disturbed area, increase mortality, and provide an entrance for exotic species and predators. Species that require connections between habitat types to complete stages in their life cycles cannot survive if these connections are broken. For example, wood frogs and salamanders require wetlands for breeding and must have adjacent woodlands for their adult stage. Animals such as the wood thrush, cerulean warbler, and red-shouldered hawk that rely on large unbroken tracts of forest can become vulnerable when such forest lands are broken up. Reptiles and amphibians are especially susceptible to being killed while crossing roads.

Human activity can also introduce changes to the surrounding environment that can negatively affect natural habitat. The introduction of domestic pets can have a profound effect on wildlife, especially cats, which often prey excessively

on wildlife, especially bird populations. Changes in light also affect some species' behavioral and biological rhythms; nocturnal species, particularly birds, can become disoriented by nighttime lighting.

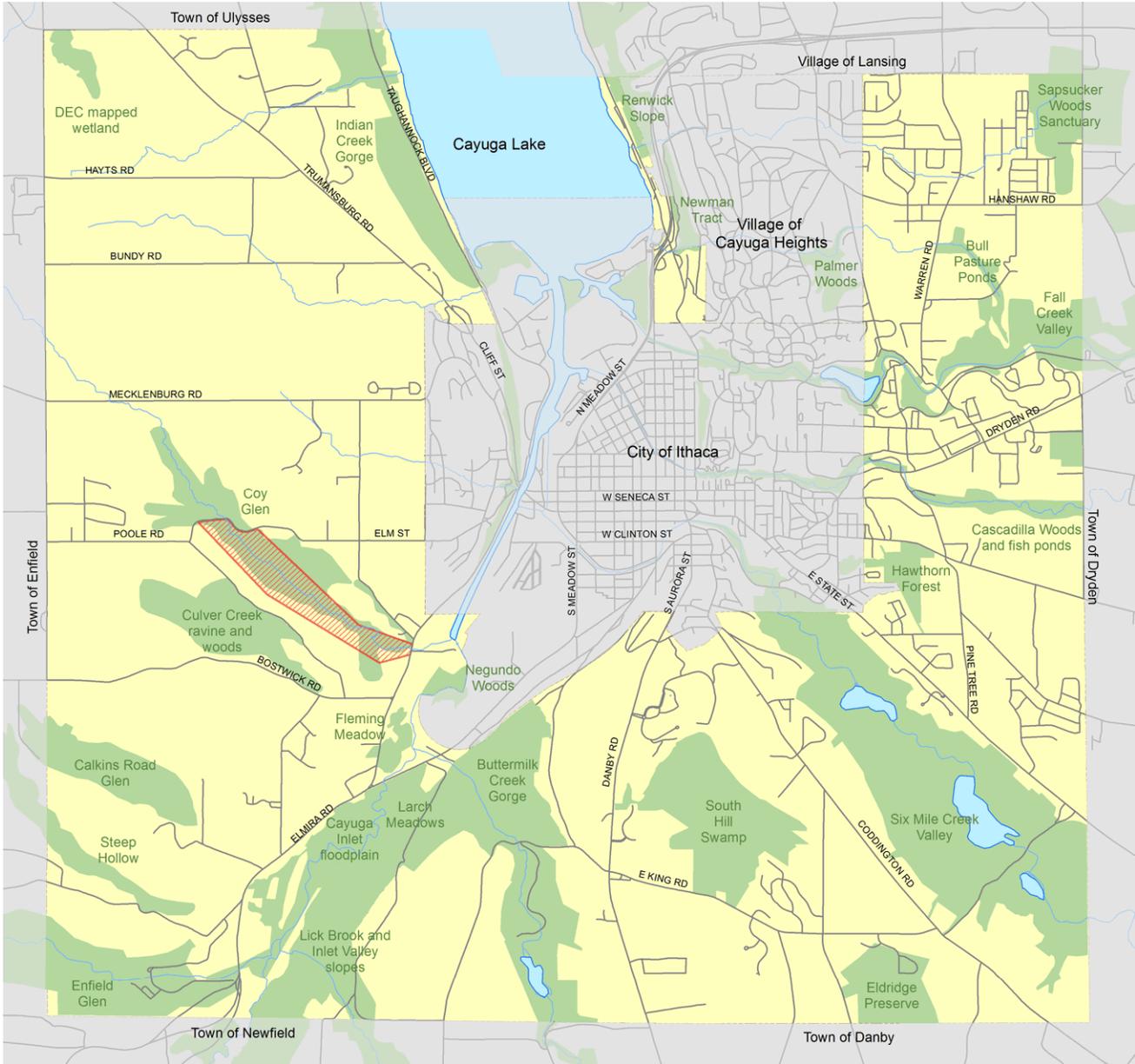
Unique Natural Areas

The Environmental Management Council of Tompkins County developed an inventory of Unique Natural Areas (UNAs) in the county. UNAs are areas identified as having outstanding environmental qualities such as containing locally or regionally rare or scarce animal and plant species or plant communities, important habitats, and significant geologic features. Designations are based on the work of ecologists, botanists, animal scientists, geologists, and wetland specialists who surveyed the sites on foot, an adjacent property or road, or using topographic maps and aerial photography. The UNA inventory was started in 1973, greatly expanded in 1990, and revised in 2000. The UNA is not a regulatory designation; its purpose is to identify environmentally significant areas so municipalities can make informed choices about development in or near those areas, and encourage their conservation or preservation. 3,161 acres in the Town designated as UNAs have been zoned as C - Conservation.

There are 27 UNAs in the Town of Ithaca, covering about 4,100 acres. The *Unique Natural Areas and Critical Environmental Area* map shows UNAs in the Town, as well as the Town's one Critical Environmental Area along Coy Glen. The following table lists the area of UNAs in the Town. More information about each UNA can be found in the *Unique Natural Areas of Tompkins County* (revised January 2000).

Unique Natural Areas (UNAs) Town of Ithaca	
UNA	Area
Beebe Lake Woods and Gorge	24 ac
Bull Pasture Ponds	33 ac
Buttermilk Creek Gorge and Inlet	572 ac
Calkins Road Glen	157 ac
Cascadilla Gorge	7 ac
Cascadilla Woods and Fish Ponds	61 ac
Cayuga Inlet Floodplain	182 ac
Coy Glen	288 ac
Culver Creek Ravine	186 ac
DEC Mapped Wetland	35 ac
Eldridge Preserve	131 ac
Enfield Glen	252 ac
Fall Creek Valley	156 ac
Flaming Meadows	31 ac
Hawthorn Forest	51 ac
Indian Creek Gorge and Lake Slopes	225 ac
Larch Meadows	39 ac
Lick Brook and Inlet Valley Slopes	263 ac
McGowan Woods	26 ac
Mundy Wildflower Garden	25 ac
Negundo Woods	17 ac
Newman Tract	8 ac
Palmer Woods	44 ac
Renwick Slope	67 ac
Sapsucker Woods Bird Sanctuary	109 ac
Six Mile Creek Valley	1027 ac
South Hill Swamp	70 ac

Unique Natural Areas and Critical Environmental Areas | Town of Ithaca



-  Critical Environmental Area (CEA)
-  Unique Natural Area (UNA)

Produced by Town of Ithaca Planning Department, 7 March 2014
 Data: Town of Ithaca Planning Department, Tompkins County Planning Department, Tompkins County Information Technology Services GIS Division



Critical Environmental Area

Coy Glen was designated in 1976 by the Ithaca Town Board as a Critical Environmental Area (CEA). While currently the only CEA, the Town is considering the designation for several other significant areas of the Town. State Environmental Quality Review regulation (6 NYCRR 617.14(g)) allows local municipalities to designate specific geographic areas within their boundaries as CEAs. To be so designated, an area must have an exceptional or unique character covering one or more of the following: (1) a benefit or threat to human health; (2) a natural setting (e.g., fish and wildlife habitat, forest and vegetation, open space, and areas of important aesthetic or scenic quality); (3) agricultural, social, cultural, historic, archaeological, recreational, or educational values; or (4) an inherent ecological, geological, or hydrological sensitivity to change that may be adversely affected by any change.

State law requires that designation of a CEA be preceded by a written public notice and a public hearing. According to State law, once designated, potential impact of any Type I or Unlisted Action on the environmental characteristics of the CEA is a relevant area of environmental concern and must be evaluated during the SEQOR process. In addition, Town Code, Chapter 148 Environmental Quality Review, requires any Unlisted action taking place in or within 250 feet of any CEA to be classified as a Type I Action.

B.4.7 Aesthetics and visual quality

The Town's rich glacial history has endowed it with a landscape of deep carved valleys, rolling hills, and long ridgelines. Nestled among the hills surrounding the City of Ithaca and the southern tip of Cayuga Lake, the Town retains much of its rural character despite its close proximity to the City and increasing development pressures. Forest-clad hillside and panoramic views of agricultural fields and woodlands enhances the areas visual appeal, as do the cultural surroundings including the many historic buildings and institutional landmarks. Together these give the Town its scenic beauty which in turn reflects the community's character and contributes to a "sense of place."



View from the Ithaca Country Club.

The Town's *Scenic Resource Inventory and Analysis* report (dated May 12, 2014) inventoried and analyzed 35 views including the views from the New York State-recognized Forest Home Drive Scenic Byway and the Cayuga Lake Scenic Byway on Route 89. The inventory followed the work of the Town's Scenic Resources Committee (a committee of the Conservation Board) which catalogued 33 views and then developed five factors to evaluate them. Three of the factors were based on composition (distinctiveness, quality, and appeal). The other two factors were practical considerations, and included how many people would see the view and how easily a view could be preserved. Once the evaluation was complete, the Scenic Resources Committee presented ten of their highest scoring views to the public with a Town Hall exhibition during April and May of 2007 and an insert published in the April 2007 Town of Ithaca newsletter mailed to Town residents. Public feedback was encouraged in the newsletter, with ballot forms for voting on favorite views in the lobby and on the Town's website. Maps of selected scenic viewpoints with a recommended route for touring the views were also made available in the Town Hall lobby.

The subsequent *Scenic Resources Inventory and Analysis* report builds on this initial effort, and advances the goal of protecting the Town scenic resources by outlining and describing possible regulations and programs that the Town should consider in establishing a protection program for scenic resources. While the Town currently has several zoning and site plan regulations in place that help to mitigate impacts to views from development projects, these planning tools are fairly limited and do not provide a proactive comprehensive means of protecting views. To achieve a more proactive approach the report recommends the Town consider implementing several situation dependent tools such as regulations applied to specific zoning overlay districts, conservation zoning, tree ordinances, and conservation easements or land acquisition. Especially important scenic views identified in the Town are summarized in the following table.

Important scenic views Town of Ithaca		
<p>Danby Road/State Route 96 Danby Road pullout, just south of Bella Vista Lane in front of Longview, a residential senior retirement community.</p>		<p>This gateway view is perhaps the best public view of Cayuga Lake from any of the hills in the Town of Ithaca. The Lake is at its southern-most point and extends nearly into the horizon before it curves around West Hill.</p>
<p>Pine Tree Road Across the street from the intersection of Snyder Hill Road with Pine Tree Road.</p>		<p>This is perhaps the most natural and most expansive view in the Town of Ithaca looking west. The view is largely intact and the sparse development that appears in the distance is not enough to detract from it.</p>

Important scenic views | Town of Ithaca

Sandbank Road

One of several long stretches of scenic views seen along the road.



This road meanders down the hill through open areas and Buttermilk Falls State Park. This largely intact view overlooks the Bostwick Road farms, some of the last working farms in Ithaca, nestled within the wooded landscape. It is a reflection of Ithaca's historic character.

East Shore Park/State Route 34B

East Shore Park on East Shore Drive, across the street from Cornell's Lake Source Cooling building.



Cayuga Lake and the view from the lake is a defining experience of the Finger Lakes region. Tompkins County Scenic Inventory identified this view from East Shore Park as one of the 25 Distinctive views throughout the County. East Shore Park is also the Town of Ithaca's only public access point to Cayuga Lake.

Sheffield Road

There are several viewpoints between the intersections with Mecklenburg Road and Hayts Road.



This road represents the ridgeline of West Hill as seen from the Cayuga Lake valley. The road also features a wide variety of farms, which open the area up to provide for clear views to the East for miles around. Distant hanging deltas and truncated spurs are part of the landforms created by glacier action in previous ice ages.

Mecklenburg Road/State Route 79

Many points along Mecklenburg Road, looking east.



One of many eye-catching views from West Hill's Route 79; as farm fields give way to the city sights as one begins descending toward the valley floor.

Important scenic views | Town of Ithaca

Along Taughannock Boulevard/State Route 89



This intimate westward view captures Williams Glen Creek emerging from a rustic culvert under the former Lehigh Valley Railroad, splashing down bedrock shale near Cass Park. This small gorge is one of seven similar streams observed as one travels along the road.

Bostwick Road

Bostwick Road has many scenic stretches.



This view from Bostwick Road, with farm fields in the foreground and Newfield hills in the distance, is one of many in a variety of directions. Wooded hillsides on the south-west bank of Inlet Valley, farm fields off Sandbank Road and Buttermilk Falls can all be seen from Bostwick Road.

Trumansburg Road/State Route 96

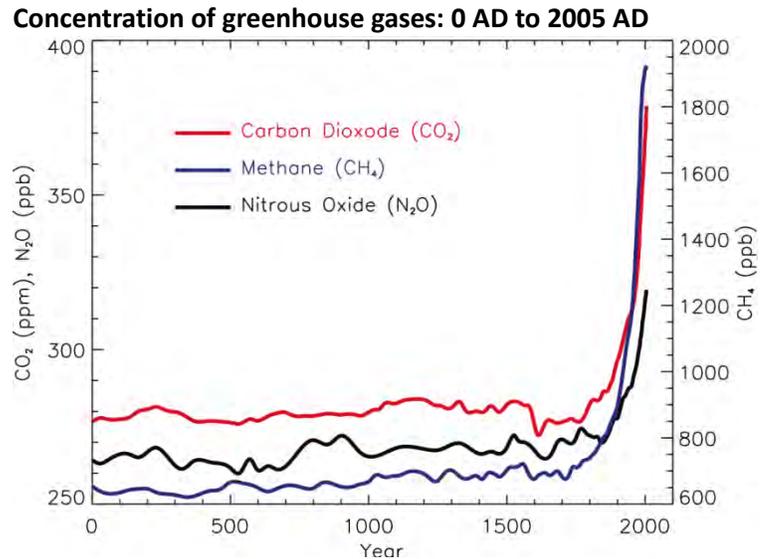
On the east side of the road the grand lawns of the former Odd Fellows building (now includes the Museum of the Earth and Finger Lakes School of Massage).



The Odd Fellows buildings are treasured land marks, providing a unique character and historic context to the area.

B.5 Energy and climate protection

Climate change is one of the most urgent, pressing issues faced by the global community. According to the Intergovernmental Panel on Climate Change (IPCC), global GHG emissions resulting from human activities have grown since pre-industrial times, with an increase of 70% between 1970 and 2004. The IPCC is the leading international body for the assessment of climate change. Thousands of scientists from all over the world contribute to the work of the IPCC on a voluntary basis. Since 1750, global atmospheric concentrations of greenhouse gases have significantly increased as a result of human activities, and now far exceed pre-industrial values. Most of the observed increase in global average temperatures since the mid-20th century is very likely due to the observed increase in anthropogenic (human-made) GHG concentrations. Although the Earth's climate has changed throughout history, never before have we seen such significant disruptions to the systems that make life on Earth possible.



According to the IPCC, human influences have:

- “Very likely contributed to sea level rise during the latter half of the 20th century.”
- “Likely contributed to changes in wind patterns, affecting extra-tropical storm tracks and temperature patterns.”
- “Likely increased temperatures of extreme hot nights, cold nights and cold days.”
- “More likely than not increased risk of heat waves, area affected by drought since the 1970s and frequency of heavy precipitation events.”

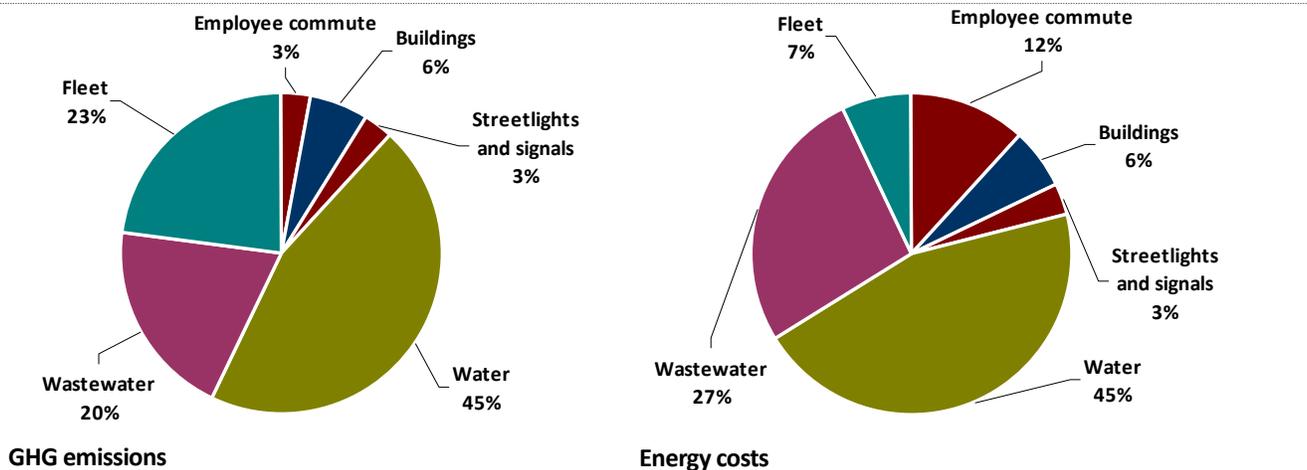
(Source: https://www.ipcc-wg1.unibe.ch/publications/wg1-ar4/faq/wg1_faq-2.1.html)

With its April 2009 resolution to participate in the New York State Department of Environmental Conservation “Climate Smart Communities Initiative,” the Ithaca Town Board recognized that climate change is a threat not only globally, but also locally, and likely to affect our water supply, food sources, infrastructure, sensitive ecosystems, economy, and quality of life. The Town Board resolved to promote sustainability, reduce greenhouse gas (GHG) emissions, and adapt to climate change by implementing the following strategies:

- Reduce GHG emissions from Town operations and in the community.
 - Gather data on current GHG emissions from Town operations, as well as throughout the Town at large.
 - Set GHG emissions reduction goals for Town operations.
 - Develop and implement an Energy Action Plan to decrease Town government’s energy demand and achieve reduction goals.
 - Pursue renewable energy sources at Town government facilities.
- Reduce solid waste generation and disposal and enhance recycling strategies in Town government facilities as well as throughout the Town.
- Implement land use planning that supports Smart Growth principles and GHG emissions reductions.
- Assess risks and develop a climate adaptation plan for Town operations and within the Town at large.

As the first step in the process, the Government Operations GHG Emissions Inventory was initiated to assist the Town in understanding the scope and nature of the challenges we face in reducing our impacts. Completed in April 2011 using 2009 data, the inventory revealed the largest sources of emissions and the most expensive energy consumers within Town buildings, fleet, and infrastructure:

GHG emissions and energy costs by sector



The above figure illustrates the proportion of GHG emissions resulting from the Town of Ithaca’s government operations, broken down into six sectors.⁴² Water treatment is by far the largest source of emissions in the Town, comprising nearly half of the total emissions. The vehicle fleet and wastewater treatment facility are also significant contributors to overall emissions in the Town’s operations. The figure also illustrates the costs associated with powering, heating, cooling, and fueling the Town’s operations. This reveals that water treatment, wastewater treatment, employee commute⁴³ and vehicle fleet are the biggest expenses for the Town when it comes to energy. The conclusions drawn from these data inform our next steps and prioritize actions. The biggest opportunities to save money and reduce emissions are clearly within the water treatment, wastewater treatment and vehicle fleet sectors. Efforts focused in these areas will yield the greatest return on any investment, whether through energy efficiency upgrades, alternative fuel usage, renewable energy installation, or energy conservation policies.

These data guided the Town Board in setting emissions reduction targets for both the long- and short-terms, and provided the foundation for the Energy Action Plan. The Town Board considered actions already planned, and weighed the impacts of proposed actions before coming to agreement on ambitious, yet achievable emissions reduction targets. Recognizing that all sectors of the community, especially the local government, must accept responsibility for their share of reducing emissions and the risks associated with climate change, the Town Board endorsed the following GHG emissions reduction goals for its government operations:

- 80% reduction below 2009 levels by 2050
- 30% reduction below 2009 levels by 2020

The 2020 Energy Action Plan, which is available for download on the Town of Ithaca’s website, was adopted by the Town Board in October 2011 and provides a clear roadmap of the activities and measures that should be

⁴² The wastewater treatment facility, which is an intermunicipal system, entered into a 20-year energy performance contract in 2010 and will undergo significant improvements starting in 2011 to lower energy costs, and emissions over the long term.

⁴³ Employee commute is not considered an expense to the Town, but is included in the inventory because local governments often have opportunities to reduce emissions associated with employee commuting, such as encouraging and incentivizing alternatives to driving to work alone.

implemented to achieve GHG emissions reduction goals. A summary of these recommended measures by sector, and their contribution towards the interim reduction target is as follows:

Water treatment

- Energy efficiency improvements to water treatment system
- Promote water conservation practices amongst residents

Wastewater treatment

- Energy efficiency improvements to wastewater treatment facility
- Energy efficiency improvements to wastewater pumping stations

Vehicle fleet

- Use biodiesel (B20) as fuel source for vehicles
- Limit idling of heavy duty trucks and other vehicles
- Reduce vehicle fleet mileage
- Optimize fleet and vehicle size
- Maintain and repair vehicles regularly

Buildings and facilities

- “Lights out” policy (electricity conservation)
- Increase chiller efficiency
- Efficient lighting retrofits
- Energy efficient computer hardware (computers, printers, monitors)
- Reflective roofing
- HVAC fan upgrades
- Increase boiler efficiency
- Municipal green building policy

Streetlights and traffic signals

- Replace streetlights with efficient lamps
- Evaluate lighting districts and remove unnecessary lights
- Install LED lamps in town-owned lights

Renewables

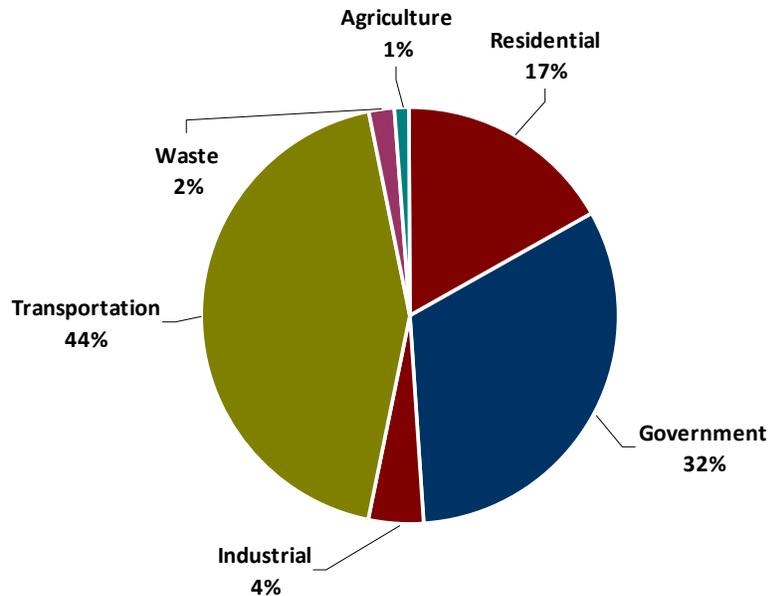
- Purchase 10% of electricity from Renewable Energy Certificates (REC's)
- Solar power purchase agreement

Given that government operations constitute only 2% of the Town of Ithaca’s community-wide emissions, the Town of Ithaca determined that it was critical to complete a Community GHG Emissions Inventory. The inventory details emissions:

The following chart illustrates the proportion of total town-wide community GHG emissions associated with the various sectors. Transportation is by far the single largest source of emissions within the Town of Ithaca (44% of total emissions). Buildings, however, when combined from the Residential, Commercial, and Industrial sectors are responsible for more than half of total emissions (53%). The Town can use this information to engage the public in an effort similar to the Town’s to develop GHG emissions reduction goals, and to develop and implement an Energy Action Plan. These data also have important implications for the Town’s land use planning and policy development, given the authority the Town has to regulate and guide future development. With 97% of Townwide emissions

coming from transportation and buildings, the Town can adopt policies and implement programs to reduce vehicle miles traveled and automobile dependence, create more walkable, livable neighborhoods, require greener, more efficient buildings, and promote energy conservation amongst residents.

GHG emissions by sector | Town of Ithaca



Robust data, ambitious goals, and well-articulated plans can only go so far in helping the Town achieve its energy and sustainability objectives over the long-term. Without a centralized sustainability department or permanent staff devoted to energy and climate change programs and projects, it is essential that the Town identify who will be responsible for carrying out specific energy and climate change actions to meet the goals, and that the Town devote resources to these areas. In addition to devoted staff time and resources to carry out the energy and climate change goals, actions, and plans, the Town should also take the lead in establishing an Energy Action Committee. This committee should be comprised of local community members and experts, and should guide the implementation of the Town's energy, climate change, and sustainability plans, goals, and actions. Critical to the success of these stated goals is a commitment to tracking and evaluating the outcomes of various action items and goals to ensure effectiveness and clarify the best path forward. Once the Town has identified responsible departments and individuals for each goal and their related actions, those point people will report annually to the Town Board on their progress. It is anticipated that the goals and actions will evolve continuously over the years, and the annual report can serve as an opportunity to check in, reevaluate, and add or omit focus areas to reflect the needs and interests of the Town.

B.6 Agriculture



Nelson Eddy farm

Before World War II, agriculture was a major economic sector and the predominant land use in the Town of Ithaca. Despite the formidable barriers to farming presented by terrain, soils, and climate, the Town produced and exported significant amounts of wheat and other agriculture products beginning around 1800. Throughout the 19th century, potatoes, hay, tobacco, grain, fruit, and dairy and meat products were sent to market from the numerous farms dotting East Hill, South Hill, Inlet Valley, and West Hill.

Although agriculture in the Town has declined since the end of World War II, it is still the predominant land use in several portions of the Town. Farming areas are concentrated in the western part of the Town along the borders of Enfield and Ulysses and extend in places into these other towns. Portions of South Hill also are actively farmed, and Cornell University uses areas of East Hill for agricultural research and teaching.

Farmland, and the farmers who work the land, contribute to the well-being of all Town residents. In addition to the direct contribution to the local economy through production and employment, local farmers also make significant indirect contributions to the local economy through the purchase of equipment and supplies and through their relatively low demands on costly public infrastructure. The rural character of the Town—enjoyed by Town residents and essential to the local tourist industry—is provided largely by local farmers and State Parks. Perhaps most importantly, farmers in the Town of Ithaca have established a tradition of stewardship of the land and its resources.

Agriculture in the Town of Ithaca reflects agriculture in the region. Even though the number of farms is relatively small, agriculture in the Town is surprisingly diverse, in both types of operations and their longevity. Enterprises include dairies, vineyards and wineries, direct-marketed produce (via area farmers markets, U-pick tree-fruit and berry crops, farm markets, or roadside stands), field crops, forest crops, landscaping and nursery stock, Christmas trees, greenhouses, horses, beef, chickens, fiber products, and even a “corn maze sound garden.” There are newly developing farm operations, farms that have been operating 20 to 50 years, and several multigenerational farms.

There are approximately 3,412 acres of agricultural land in the Town of Ithaca (including Cornell University agricultural lands): 2,832 actively farmed acres and 580 fallow acres. Approximately 2,533 acres receive an agricultural property-tax assessment. Of the 2,533 acres receiving agricultural assessment, 1,058 acres (42%) are rented to farmers. This is evidence that rural landowners value the opportunity to keep land in agriculture and enjoy the tax benefit of agricultural assessment, but in some cases the owner farms some of the land and another farmer uses the rest. However, this also points out that should landowners decide not to rent land to farmers, it could have a significant impact on the farm operation specifically and on the amount of farming in general in the Town.

Agricultural operations range from start-ups, to family-run only, to farm businesses employing seasonal and/or year-around help. Most of the farms (among those whose owners were interviewed as part of the development of the Town's Agricultural and Farmland Protection Plan) employ many farm-family members, including 14 full-time and 30 part-time positions in all. These farms also have paid non-family staff providing a total of 13 full-time and nine part-time year-round jobs and 15 full-time and 10 part-time seasonal jobs (seasons range from a few to nine months).

Farm size is not an indicator of economic viability; some of the medium-sized farms are being worked just enough to keep the land open, meet the criteria for agricultural assessment, pay taxes, and provide some money for reinvestment. Some of the smaller operations have the highest sales and employ the most people. Six farms report six-figure annual gross incomes; two gross close to or over \$1 million annually. As reported during the interviews in 2009, using the high sides of ranges given, the total value of agricultural products is approximately \$4,431,000.

Town agriculture is not isolated within the Town's boundaries; several operations cross borders into neighboring towns (Danby, Dryden, Enfield, and Ulysses). In one case, Town of Ithaca land supports a landscaping business in Lansing. This illustrates the need to consider a regional approach to farm and agricultural-land preservation and to work with adjacent municipalities whenever possible.

Cornell University, through many of its colleges and departments, has a large agricultural presence on East Hill in the Town of Ithaca. Cornell has various teaching and research facilities related to agriculture, provides services to local farmers (veterinary care, research, resource for questions, etc.), and supports local agriculture through purchasing and selling agricultural products (hay, fruits, compost, etc.) and purchasing materials and equipment locally.

The Town of Ithaca adopted the Agricultural and Farmland Protection Plan (AFPP) in November 2011 which outlines ways the Town and other organizations can help to support and encourage agriculture in the Town. The AFPP can be found in Appendix I, which provides additional background information on agriculture in the Town along with specific goals and recommendations and implementation steps.

B.7 Parks and recreation system

The Town of Ithaca's park needs are served by a variety of both private and public facilities. These facilities include many neighborhood parks, one developed community park, six nature preserves, several multi-use trails, and numerous walkways. Existing Town parks provide a range of recreational facilities including play structures, ballfields, playfields, sledding hills, picnic areas, gazebos, pavilions, nature trails, and a community garden in one undeveloped Town park. The multiuse trails and walkways provide off-street alternatives for joggers, bikers, and walkers, as well as commuting paths to work, school or shopping.



Eastern Heights Park.

The Ithaca area is also fortunate in having two large City parks, four State parks, Village parks, and the open areas of Cornell University and Ithaca College, Finger Lakes Land Trust lands and other public and private recreational facilities in the Town or nearby. Two of the State parks, Buttermilk Falls State Park and Robert H. Treman State Park, are located within the Town of Ithaca.

B.7.1 Parks

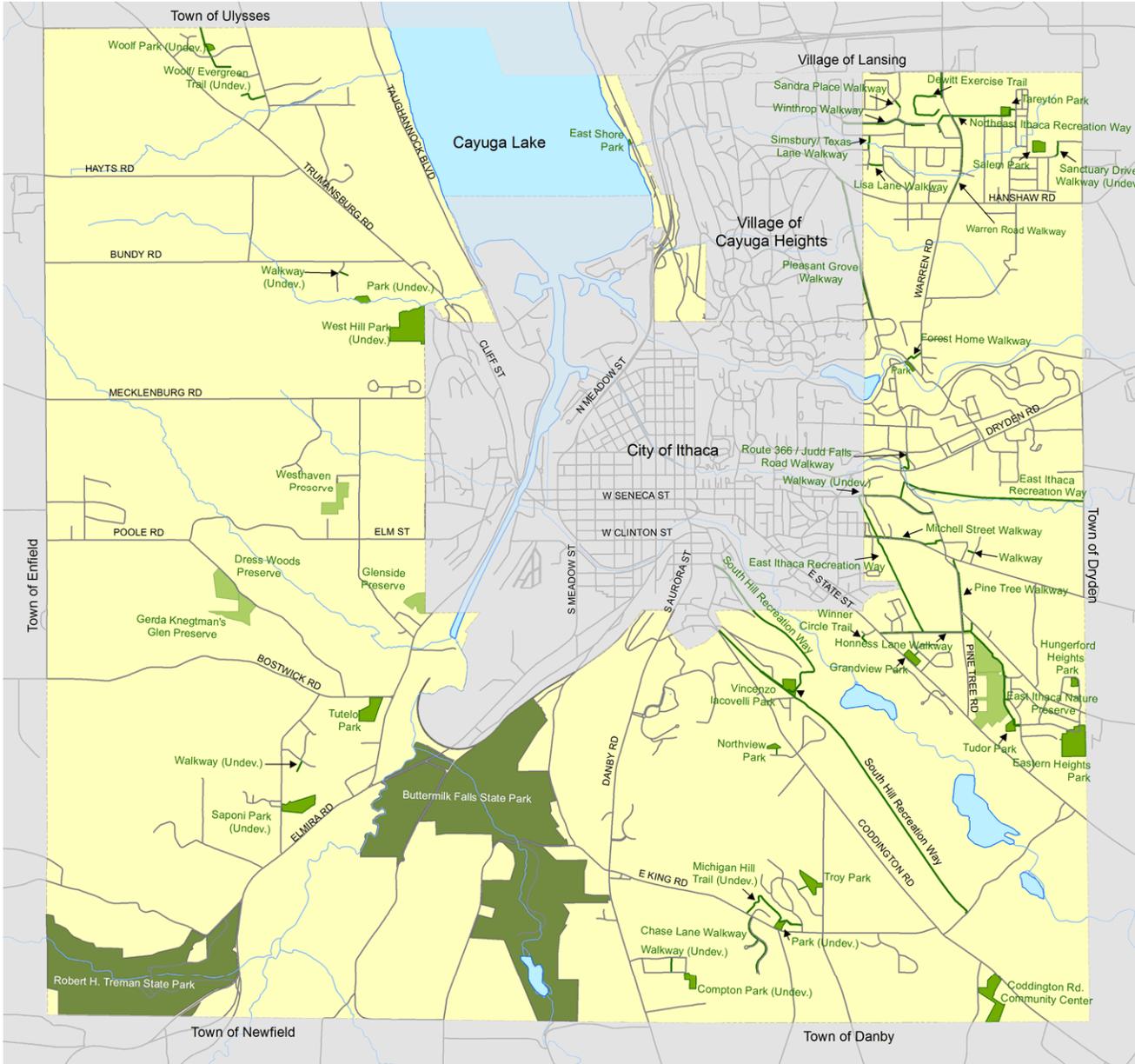
The Town of Ithaca Public Works Department maintains a system of close-to-home space⁴⁴ consisting of ten neighborhood parks, one community park, and several undeveloped park sites. These parks provide a range of recreational facilities including play structures, ballfields, playfields, grills, picnic tables, park benches, and walking trails. Among its many duties, the Town of Ithaca Public Works Department is responsible for building and maintaining parks and trails. The Public Works Department also maintains the playfield at the private Coddington Road Community Center, which is open to the public.

Nearby communities (such as the City of Ithaca, Town of Lansing, and Village of Lansing) have park facilities which may be used by Town of Ithaca residents. The Town of Lansing Community Center, for example, is an important youth soccer and football facility for all of Tompkins County. City facilities include the Cass Park's ice rink, tennis courts, swimming pool, athletic fields, and picnic and play area complex; Stewart Park's extensive lakefront, picnic facilities, boathouse, tennis courts, playgrounds, and walking trails; the nearby Newman Municipal Golf Course (9 hole); and walking paths at Fuertes Bird Sanctuary and the Mulholland Wildflower Preserve at Six Mile Creek.

Numerous institutional and private recreational facilities are available to Town residents with memberships or for a fee. These facilities, while part of the Town's many recreational offerings, should not be considered as facilities open to the public. Nonetheless, they are an important element of this inventory because they are a significant recreational resource for the town's student population, which makes up 40% of the whole.

⁴⁴ The National Recreation and Park Association (NRPA) classifies "close-to-home space" as parks within easy walking distance of one's home (half mile or less) that serve parts or all of a neighborhood, including mini-parks, neighborhood parks, and community or park areas. *Town of Ithaca Park, Recreation and Open Space Plan, 1997.*

Parks and trails | Town of Ithaca



- Town trails
- Town parks (developed and undeveloped)
- Town preserves
- State parks

Produced by Town of Ithaca Planning Department, 17 January 2014
 Data: Tompkins County Planning Department, Tompkins County Information Technology Services GIS Division



In addition to athletic facilities, Cornell University maintains large amounts of open space that is used for informal recreational pursuits. The Cornell Plantations offer numerous opportunities for walking, hiking, biking, sledding, and skiing. Off-season use of the University's Robert Trent Jones Golf Course is high among cross-country skiers.

Schools in the Ithaca City School District (ICSD) provide facilities available for use by residents, but public use is limited to times when they are not being used by classes or sports teams. An exception is the exercise trail at DeWitt Middle School, which was built and maintained by the Town as a public facility. Ithaca High School and Boynton Middle School offer a running track, athletic fields, tennis courts, baseball and softball fields, and a swimming pool (at Ithaca High School). Northeast Elementary School and Cayuga Heights Elementary School have playgrounds, which to some extent serve as surrogate parks and relieve the need to develop neighborhood parks in those areas.

The New York State Office of Parks, Recreation and Historic Preservation (NYS OPRHP) operates two state parks in the Town. The 646-acre Buttermilk Falls State Park encompasses Buttermilk Creek Gorge, Lake Treman, and wetlands in Inlet Valley. Robert H. Treman State Park covers 291 acres in the Town of Ithaca and about 790 acres in the Town of Enfield. Both state parks have ballfields and facilities for camping, swimming, hiking, and picnicking. The City of Ithaca contains Allan H. Treman State Marine Park, which encompasses some 75 acres of undeveloped woods, wetlands, and lakefront and offers boat launching facilities, 430 boat slips, and picnic areas.⁴⁵

Town parks Town of Ithaca	
Park	Area
Coddington Road Community Center Playfield	11.74 ac
Compton Park (undeveloped)	2.91 ac
East Shore Park	0.29 ac
Eastern Heights Park	15.24 ac
Grandview Park	2.65 ac
Hungerford Heights Park	1.2 ac
Northview Park	1.12 ac
Park (undeveloped) at East King Road and Saunders Road	1.78 ac
Park (undeveloped) at Perry Lane	1.98 ac
Salem Park	3.14 ac
Saponi Meadows Park (undeveloped)	8.20 ac
Tareyton Park	2.10 ac
Troy Park	4.87 ac
Tudor Park	2.22 ac
Tutelo Park	8.1 ac
Vincenzo Iacovelli Park	5.39 ac
West Hill Park (undeveloped park with West Hill Community Garden)	21.71 ac
Woolf Park (undeveloped)	1.63 ac
Total park area	96.95 ac

Other parks Town of Ithaca	
Park	Area
Buttermilk Falls State Park	646.00 ac
Cayuga Heights Park (Village of Cayuga Heights)	1.26 ac
Robert H Treman State Park	291.55 ac
Sunset Heights Park (Village of Cayuga Heights)	1.85 ac
Total park area	940.66 ac

⁴⁵ New York State Office of Parks, Recreation and Historic Preservation, 2011. <http://nysparks.state.ny.us/parks/35/details.aspx>

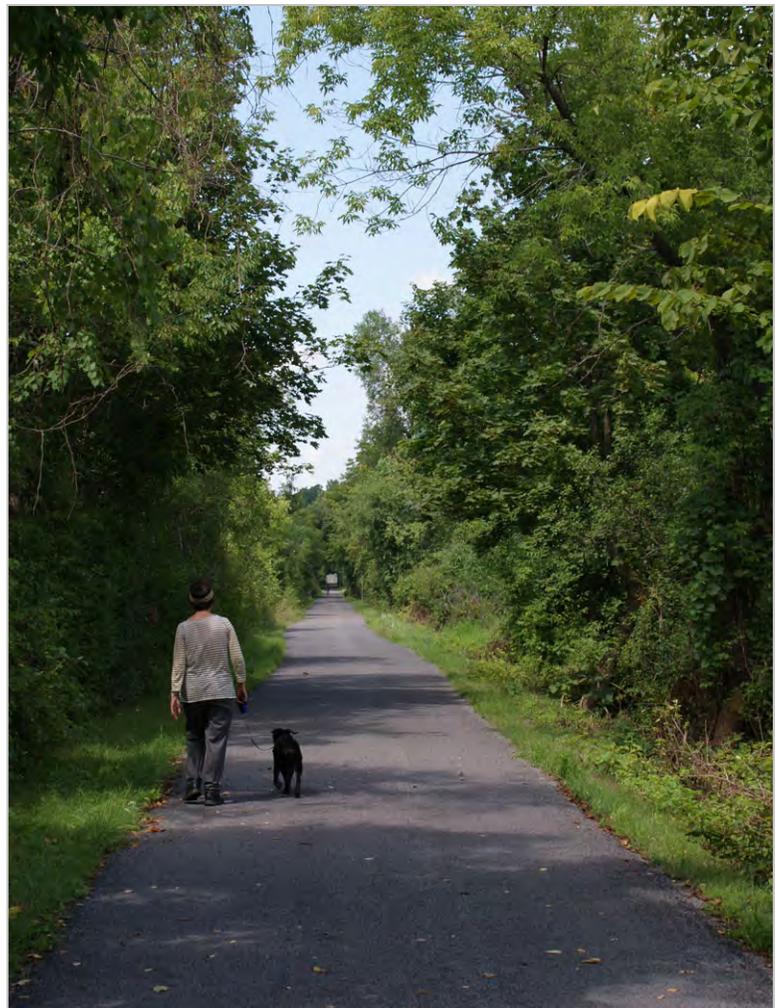
B.7.2 Preserves

The six preserves in the Town of Ithaca (listed below) are a relatively new point of focus for the Town. The preserves consist of a mix of habitat types that support a wide range of plants and animals. The Dress Woods Preserve and Gerda Knechtman's Glen are located in the Culver Creek Ravine and Woods (UNA-140), and are completely forested. In general, the preserves are managed on a passive basis, including infrequent mowing of paths, reduction of invasive species, annual posting of the property lines, maintaining a walkable trail surface as appropriate, and clean-up of storm damage as necessary. The Town will not be developing these preserves for active uses and many of them have deed restrictions outlining their future uses with the intention that those parcels remain 'forever wild'.

Town preserves Town of Ithaca	
Park	Area
Dress Woods Preserve	11.72 ac
East Ithaca Nature Preserve	27.89 ac
Glenside Preserve	7.08 ac
Gerda Knechtman's Glen Preserve	11.20 ac
Pine Tree Wildlife Preserve	14.15 ac
Westhaven Preserve	10.71 ac
Total preserve area	82.75 ac

B.7.3 Trails and walkways

The Town owns and maintains approximately seven miles of off-road multi-use trails that provide safe and quiet paths for jogging, strolling, bicycling, horseback riding, and cross-country skiing. Portions of the South Hill Recreation Way and East Ithaca Recreation Way pass through attractive woodland and meadows and afford local residents convenient access to high quality natural settings. The Town's multiuse trails provide important commuter alternatives for pedestrians and bicyclists. The southern half of the East Ithaca Recreation Way connects the Pine Tree Road/Honness Lane/Grandview residential area with Cornell University, and is heavily used by bicycle and pedestrian commuters. The Northeast Trail is a popular offroad commuter route for students walking and bicycling from the residential area east of Warren Road to DeWitt Middle School and Northeast Elementary School. Interwoven in this trail system are the Lisa Lane, Sandra Place, and Forest Home Walkways, which offer attractive linkages within their neighborhoods and afford a convenient commuter route to the Triphammer



Northeast Ithaca Recreation Way.

commercial centers. The South Hill Recreation Way also serves, to a limited extent, as a commuter route between South Hill residential areas, Ithaca College, and downtown.

Cornell University maintains the Plantations Path (a unique seven-mile network of self-guided walkways, roads and paths on the University’s land). The Plantations Path begins at the Treman Triangle in the City of Ithaca, winds eastward through Cascadilla Gorge, crosses the Cornell Campus, circles Beebe Lake, and wanders through the Cornell Plantations’ botanical gardens and natural areas until it ends at the Newman overlook in Cornell’s arboretum. Both ends of the Path connect with other regional walking trails, including the Circle Greenway in downtown Ithaca and the Cayuga Trail hiking path along Fall Creek.

Trails and walkways Town of Ithaca			
Name	Type	Length (ft)	Length (mi)
Chase Lane Walkway	connector	2077'	0.4 mi
Dewitt Exercise Trail	local	2061'	0.4 mi
East Ithaca Recreation Way	connector	19,235'	2.9 mi
Forest Home Walkway	local	545'	0.1 mi
Honness Lane Walkway	connector	1,222'	0.5 mi
Judd Falls Road Walkway	connector	1,507'	0.1 mi
Lisa Lane Walkway	local	514'	0.1 mi
Maple Ave Walkway	connector	2,344'	0.4 mi
Mitchell Street Walkway	connector	2,581'	0.5 mi
Northeast Ithaca Recreation Way	connector	2,752'	0.5 mi
Pine Tree Walkway	connector	1,732'	0.4 mi
Pleasant Grove Walkway	connector	1,735'	0.3 mi
Sandra Place Walkway	local	277'	0.05 mi
Texas Lane Walkway	local	458'	0.1 mi
South Hill Recreation Way	connector	18,042'	3.4 mi
Summerhill/East Hill Plaza Walkway	local	236'	0.04 mi
Warren Road Walkway	connector	3,743'	0.7mi
Winner Circle Trail	local	324'	0.06 mi
Winthrop Walkway	connector	3,122'	0.6 mi
Gateway Trail	(proposed / undeveloped)		
Michigan Hill Trail	(proposed / undeveloped)		
Peachtree Lane Walkway	(proposed / undeveloped)		
Perry Lane Walkway	(proposed / undeveloped)		
Sanctuary Drive Walkway	(proposed / undeveloped)		
Woolf/Evergreen Trail	(proposed / undeveloped)		
Total length			11.55 mi

B.7.4 Recreational services

The Town of Ithaca is a partner of Recreation Partnership, which provides youth recreation programs and services to municipal partners throughout Tompkins County. These youth programs are administered through the City of Ithaca Youth Bureau, and the Town provides funding to the Youth Bureau in return. Recreation Partnership offers many fun and educational opportunities for youth in the Town of Ithaca such as soccer leagues, karate classes, and summer camps.

The Town contracts with the Coddington Road Community Center, primarily for summer camps and childcare services, and Life Long for senior recreational programs. The Town also provides funding to Cass Park to encourage use by Town residents.

In addition to organized adult and youth sports leagues, Town residents may also participate in recreational programs through the YMCA, Boy Scouts and Girl Scouts, 4-H, Cayuga Nature Center, and other organizations. Seasonal programs and summer camps are also offered at Cornell University and Ithaca College.

B.7.5 Future planning

As discussed above, the Town of Ithaca offers a wide variety of recreation opportunities for Town of Ithaca residents and the Ithaca community. While the Town has made significant accomplishments to meet the recreation needs of the individual neighborhoods and of the overall community, the Town needs to continue to address the recreational needs of the growing population of the Town. There are several locations within the Town that have limited convenient recreational facilities, and there are several types of recreational facilities that the Town may wish to exploring adding or increasing.

The National Recreation and Park Association (NRPA) has standards for the amount of park and open space that is recommended along with standards for specific types of facilities, all based on the communities population. The 1997 *Park, Recreation and Open Space Plan* used these standards to outline the future needs for the Town, which should be updated based on the new population numbers in the Town and current recreation trends.

As the Town continues to expand its recreational facilities, it is becoming a challenge for Town staff, with the resources provided, to maintain everything. As the Town plans for and considers the development of future recreational facilities, future maintenance and operating costs (equipment, personnel, materials, utilities, replacement costs, etc.) should be considered as part of each project.

B.8 Historical resources

B.8.1 Historical resources survey: structures and properties

Historic resources include structures and sites and the historic environment in which they exist. They serve as visual reminders of Ithaca's past, providing a link to our cultural heritage and a better understanding of the people and events that shaped the town's development. The Town of Ithaca is fortunate to claim a number of resources of historical importance within its boundaries, including buildings on the Cornell University campus, several neighborhoods, scores of individual residential structures, and other important landmarks such as abandoned railroad corridors—some that have been converted to multi-use trails—and former Native American settlements.

The most recent survey of historical resources in the Town of Ithaca was conducted by the Historic Preservation Planning Workshop at Cornell University. The scope of this project was limited to above-ground historic structures, and did not include prehistoric or historical archaeological sites. The project

was conducted over a four year period (1997-2000) and utilized guidelines and survey forms adopted by the NYS Office of Parks, Recreation and Historic Preservation and the National Park Service. The project involved a reconnaissance survey ("windshield survey") to get a general picture of the distribution of types and styles of buildings, structures, and neighborhoods representing different architectural styles and periods, followed by an "intensive level survey" which involved in-depth archival research along with field work to document detailed information about each historic property in the survey area. In general, structures that are a minimum of 50 years of age are considered historic.

A total of 480 properties were surveyed as shown on *Historical Resources Map*. Information collected for each property included: history of ownership, architectural description, identification of items of historic significance, additions and alterations to the structure, a map and photograph. The following areas are represented in the survey:

- 86 properties in the southeast portion of Ithaca on Coddington Road, Danby Road, Mitchell Street, Hungerford Hill Road, and Troy Road.
- 168 properties in the east and northeast portion of Ithaca on Slaterville Road, East Shore Drive, Warren Road, Hanshaw Road, Renwick Place, Renwick Drive, and Renwick Heights Road.
- 112 properties in the southwestern portion of Ithaca on Stone Quarry Road., West King Road, Elmira Road, Sand Bank Road, East Buttermilk Road, West Buttermilk Road, Seven Mile Drive, Enfield Falls Road, Gray Road, Glenside Road, Coy Glen Road, and Five Mile Drive.



Former Grand Lodge of the International Order of Odd Fellows/Rebekah's Home, located on Trumansburg Road

- 115 properties in the northwestern portion of Ithaca on Coy Glen Road, West Haven Road, Elm Street, Five Mile Drive, Indian Creek Road, Bostwick Road, Calkins Road, Hayts Road, Duboise Road, Bundy Road., Sheffield Road, and Mecklenburg Road.

Not included in the survey were a number of residences along Taughannock Boulevard where the buildings and structures could only be studied and photographed from locations on the Lake or along shoreline. Also, the Village of Cayuga Heights was not included in the project scope.

The *Final Report for the Intensive Level Survey* (September 2005) highlighted 28 “especially interesting” individual properties (out of “scores” that were considered architecturally or historically significant) along with three clusters (“districts”) of historic homes united by one or more themes as potentially significant. The report describes these properties as being potentially eligible for listing on the National Register of Historic Places. The National Register is the official list of cultural resources of significant historic or architectural merit. Authorized under the National Historic Preservation Act of 1966, the National Register is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect historic resources. This program is administered in cooperation with the New York State Register of Historic Places. An owner interested in pursuing National Register designation for their property must first work with the State Historic Preservation Officer to get it listed on the State Register, which is required before listing on the National Register.

Currently there are four locations in the Town of Ithaca listed on the State and National Registers of Historic Places. This includes three sites and one district:

- Forest Home Historic District, nominated to the State and National Registers in 1998, which encompasses 50 acres and includes 75 buildings and four structures.
- Cornell University campus (within the Town), Rice and Wing Halls (part of the Agriculture Quad) listed in 1984.
- Hayts Corner Chapel (Abolitionist Church) and Schoolhouse on the corner of Hayts and Trumansburg Roads listed in 2006.

The New York State Historic Preservation Office (SHPO) also maintains a broad range of information relating to historic properties in the state. SHPO is another source of information on historic buildings, structures, and districts and also includes information on historic sites and objects in the Town. The State Preservation Historical Information Network Exchange (SPHINX) provides an electronic, program-wide database of SHPO records. It identifies numerous properties in the town and provides a determination on many of them in terms of their eligibility for listing on the National Register. In addition, in 1990, Historic Ithaca undertook an intensive level survey of properties along Trumansburg Road/NY 96 in response to development pressure along that transportation corridor.

The National Register by itself does not provide any protection from alteration or demolition of a listed property, though it can offer advantages in the form of certain tax provisions and incentives (i.e., grants) for preservation and rehabilitation. The Town currently does not have a local historic preservation program. Such a program would be an effective next step in taking the findings of the historic resource surveys and databases and establishing strategies to protect and promote the Town’s historical resources. In 2011, the Town established a Limited Historic Commercial Zone to encourage the retention and productive reuse of structures that have historic value. The floating zone allows additional uses of historic properties not otherwise permitted under the base zoning. Property owners would still need to apply for the rezoning and each request would undergo an examination to ensure that the proposed commercial use would be appropriate and not negatively affect the neighborhood.

As a companion to the Cornell survey work, the Town also commissioned Historic Ithaca to write *Historic Overview: Town of Ithaca New York* which serves as a useful reference concerning the Town’s history.

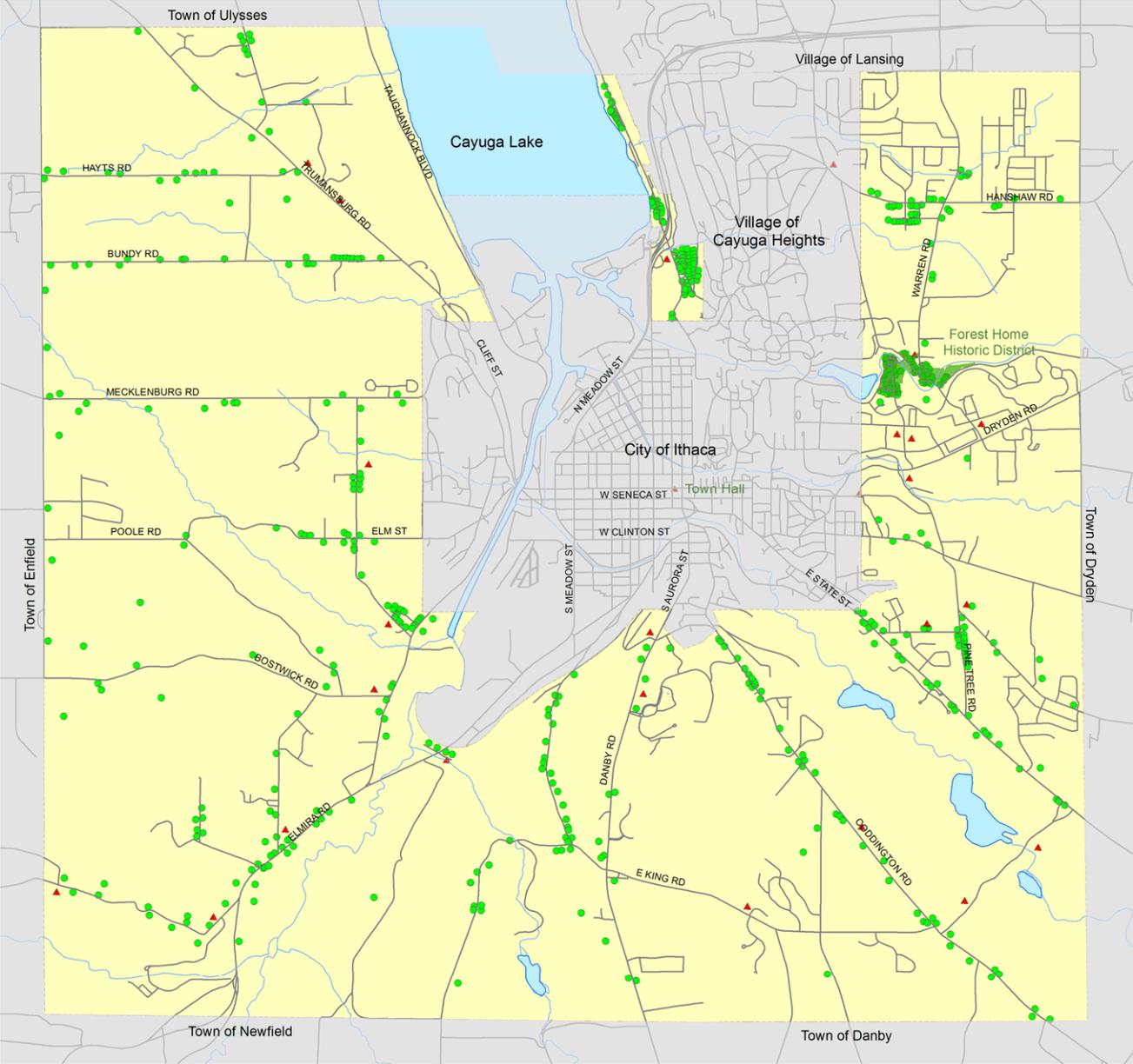
B.8.2 Historical markers

In 1996, as part of the Town's 175th anniversary, the Town purchased and installed 28 historic markers commemorating the Town's history. These maroon markers can be seen throughout the Town and describe historical places and events.

Historical markers Town of Ithaca		
Name and location	Type	Subject
Town Hall	Town of Ithaca	Formed March 15 1821 from portion of Town of Ulysses. Nathan Herrick 1st Supervisor; Isaac Beers 1st Clerk. Original size 31 square miles.
Front Lawn of Village Hall, 836 Hanshaw Road	Cayuga Heights	Incorporated in 1915. Begun 1901 by Ithaca businessmen Jared Newman and Charles Blood as a quality residential community.
Off East Shore Drive, south of NY 13 interchange	Renwick Heights	Named for Revolutionary War veteran and early settler Major James Renwick, whose Military Lot 88 encompassed much of the surrounding area.
Forest Home Drive, east of Pleasant Grove Road and downstream bridge	Forest Home	Settled in 1794. Known as Sidney's Mill, later Free Hollow. 19th Century center of industry. Renamed Forest Home in 1876
Forest Home Drive, west of downstream bridge and The Byway	Former Industry	Grist, saw, woolen, plaster and gunpowder mills, foundry and furniture factory once tapped Fall Creek waterpower here in Forest Home.
Judd Falls Road, ±1,000' north of Dryden Road/NY 366	Cornell University	New York's land grant university, founded in 1865 by Ezra Cornell "where any person can find instruction in any study"
Judd Falls Road, ±300' south of Tower Road intersection	Agriculture College	Established in 1868 on Ezra Cornell's farm to realize his vision for agricultural research and education
Caldwell Road, ±500' north of Dryden Road/NY 366	Veterinary College	In 1868 Cornell was the first U.S. university to teach veterinary medicine. New York established the college in 1894.
Pine Tree Road, 200' south of Dryden Road/NY 366	Judd Falls	Reuben Judd owned a waterpowered woolen mill here from 1832 to 1858. Other nearby industry included a lead pipe and a chair factory
Snyder Hill Road ±500' east of Pine Tree Road	William and Hannah Pew	In 1801 settled 600 acres that today comprise Eastern Heights and vicinity. The Pine Tree/Snyder Hill Road corner was once known as Pewtown.
Maple Avenue, ±1,300' east of Five Corners intersection	East Ithaca	Nearby was the East Ithaca railroad depot that served Cornell and East Hill between 1876 and 1935, and which gave this area its name.
Honness Lane, ±1,300' west of Pine Tree Road	Elmira Cortland and Northern Railroad	Formed in 1869, the Elmira Cortland and Northern Railroad served Ithaca, Etna, Cortland, Brooktondale, and Elmira. Absorbed by Lehigh Valley Railroad in 1896
Coddington Road, ±1,500' east of Troy Road	Ithaca and Owego Railroad	Chartered 1828. Completed 1834. Among earliest of New York railroads. Originally horses pulled trains the 29 miles to and from Owego.
Danby Road/NY 96B, ±300' north of Ithaca College entrance	Ithaca College	Founded in 1892 as Ithaca Conservatory of Music. Chartered as Ithaca College in 1931. Moved from downtown Ithaca to South Hill campus in early 1960s.

Historical markers Town of Ithaca		
Name and location	Type	Subject
Coy Glen Road, approx 1,000' west of Five Mile Drive/NY 13A	Glenside	Begun in 1928 by local contractor John Daley, who named his new residential development Glenside for its proximity to Coy Glen.
Bostwick Road, ±1,000' west of Five Mile Drive/NY 13A	Tutelo Indians	In the 1700s the Tutelo settled Inlet Valley under protection of the Cayuga Nation. The 1779 Sullivan Raid drove them into Canada.
Seven Mile Drive, ±1,000 feet north of Elmira Road/NY 13	Indian Path	From Coreorgonel over West Hill to Five Mile (Enfield) Creek. then around Connecticut Hill and Cayuga Lake to Cheoquagah, now Montour Falls.
East King Road, ±0.5 mile west of Troy Road	Michigan Hill	Onetime name for this area. It parodied the constant boasting by a local farmer about his plans to move on to then frontier Michigan.
Trumansburg Road/NY 96, ±1,000' south of Dates Drive	Odd Fellows Home	Established in 1921 as home for aged and infirm members of the Independent Order of Odd Fellows or their orphans. Closed in 1977.
Trumansburg Road/NY 96, ±300' south of Hayts Road	Hayts Chapel	Built in 1847 as First Congregational Church of West Hill. Was known as Abolition Church for the anti-slavery advocates among its leaders.
West Haven Road, ±2,000' south of Mecklenburg Road/NY 79	Military Lots	New York State gave its Revolutionary War veterans land as compensation for their service. 31 such lots comprised the original Town of Ithaca.
East Buttermilk Falls Road, ±500' east of Elmira Road/ NY 13	C.C.C. Co.1265	Between 1933 and 1941 men from Civilian Conservation Corps Company 1265 built many of the facilities at Buttermilk Falls and R.H. Treman State Parks.
Burns Road, ±1,000' south of bridge over Six Mile Creek	Teegastoweas	Iroquois name for Six Mile Creek. Derived from distance to Cascadilla Creek from place where Warriors Path to Owego forded the stream.
Danby Road/NY 96B, ±500' north of Coddington Road	Incline Plane	Nearby was an incline plane that the Ithaca and Owego Railroad used from 1828 to 1849 to haul freight and passenger trains up and down South Hill
Enfield Falls Road/NY 327 opposite Gray Road	Teeter Farm	In 1847 Isaac Teeter bought 112 acres of Military Lot 78. His descendants continue to farm this and other portions of Lot 78 and adjacent Lot 77.
Enfield Falls Road/NY 327 ±1,000' west of Elmira Road/NY 13	C.C.C. Co.1265	Between 1933 and 1941 men from Civilian Conservation Corps Company 1265 built many of the facilities at Buttermilk Falls and R.H. Treman State Parks.
East Shore Drive/NY 34 ±0.75 mile north of NY 13 interchange	Remington Point	From 1900 to 1921 Remington Salt Company operated brine wells and processing plant at this location. Salt was shipped by boat and railroad.
South Hill Recreation Way, ±300' west of Burns Road	Cayuga and Susquehanna Railroad	Built in 1849 to haul Pennsylvania anthracite coal to canal at Ithaca. Later merged with Delaware Lackawanna and Western Railroad. Abandoned in 1957.

Historic resources | Town of Ithaca



- ▲ Historical markers
- Inventoried historic properties
- Forest Home Historic District

Produced by Town of Ithaca Planning Department, 6 March 2014
 Data: Tompkins County Information Technology Services
 GIS Division



B.9 Transportation resources

A transportation system includes physical infrastructure, such as roads and walkways, as well as intangible aspects, such as the government's policies on transportation and transportation-related demographics. A transportation network refers to physical infrastructure, like roadways and sidewalks. Many non-transportation related factors affect the transportation system, including the history, geography, and demographics of an area and policies at the national, state, regional, and local level.

B.9.1 Demographics and transportation

Demographics such as population distribution, household size, and age distribution affect the transportation system. Trip generation rates are related to the number of persons per household, because small households tend to generate more trips per person than larger households. This translates to more vehicle trips with lower vehicle occupancy.

According to the National Personal Transportation Survey (1995) and the National Household Travel Survey (2001), the highest percentage of trips made by Ithaca area residents are for family or personal business, social or recreational business, and work, in that order. Residents travel the greatest number of miles for weekend social or recreational trips, followed by weekday or weekend family or personal business and weekday trips to earn a living. Finally, the average length of a vehicle trip is longest for earning a living during the week, or social and recreational trips on the weekend.



Forest Home.

The privately owned motor vehicle is the most popular mode choice for Town of Ithaca residents, followed by walking. Between 1995 and 2001, however, the percentage of trips made in private vehicle dropped from 83% to 70%, while the percentage of trips made on foot increased from 11% to 15% and the percentage of trips made using public transit rose from 1.5% to almost 10%.

According to the American Community Survey (2006-2009), residents between the ages of 18 and 24 account for nearly 36% of the Town's population; not surprising, given the presence of Ithaca College and Cornell University. According to statistics from the Census Bureau, students are more likely to walk and less likely to drive to work or to school.

The American Community Survey shows that the total number of employees in Tompkins County was 52,609. Nearly one in four people employed in Tompkins County live outside the county; 14,901 workers, or 24% of the county workforce. This means that Tompkins County imports workers or commuters, and exports income, as workers spend their income in their county of residence. The Town of Ithaca is home to many major employers including Cornell University, the largest employer in the County. To get to work, or to move from one side of Cayuga Lake to the other, commuters must pass through the Town and City of Ithaca. The Town's unique circumstances—as a doughnut with the City in the center—mean that Town planners have little control over much of the development that creates traffic on its roads.

For more information about the demographic and transportation profile of Town residents, refer to the Town of Ithaca 2007 Transportation Plan.

B.9.2 Metropolitan Planning Organization

The Ithaca Tompkins County Transportation Council (ITCTC) is designated as the Metropolitan Planning Organization (MPO) for the Town of Ithaca and Tompkins County as a whole. All urbanized areas with a population of greater than 50,000 people are required by the federal government to be represented by an MPO. The ITCTC is charged with facilitating county-wide transportation planning and works jointly and cooperatively with all transportation-related agencies in Tompkins County.⁴⁶

A primary responsibility of the ITCTC is preparing and updating three critical documents on a regular basis: a Long Range Transportation Plan (LRTP), a Unified Planning Work Program (UPWP), and a Transportation Improvement Program (TIP). These three documents are critical because the US Department of Transportation will only allocate transportation funds to MPOs which engage in this planning process.

Transportation Improvement Program

The TIP identifies the agreed-upon timing and funding of all specific transportation projects scheduled for implementation in the Ithaca metropolitan area over a five-year period for which Federal funds are anticipated. Projects outlined in the TIP must be consistent with goals and objectives identified in the current Long Range Transportation Plan for the region. The TIP must be updated and adopted by the ITCTC at least every four years.⁴⁷

Town of Ithaca's projects in the 2011-2015 TIP include: improvements to Hanshaw Road from the Village of Cayuga Heights border to Sapsucker Woods Road; construction of the Gateway Trail; and the planning and design of the reconstruction of NY 13 from NY 13A to NY 327.⁴⁸

B.9.3 Existing road network

Official highway map and road network design

The Town of Ithaca is shaped like a square with a hole in it. The City of Ithaca is in the center, and the remainder of the County surrounds the perimeter. This means that much of the traffic in the Town is traveling into or out of the City. Furthermore, the Town is segmented like a pie cut into slices by the creeks and gorges that converge in the Inlet of Cayuga Lake. This unique geography and hydrology means that many roads in the Town radiate outward from the City of Ithaca, while circulation in the Town is restricted because of the gorges.

The current road network of the Town is shown in its *Official Highway Map*. The purpose of an official map is to state in the public record the specific locations of existing and proposed streets, highways, parks, and sometimes drainage systems. By fixing the location of both existing and proposed infrastructure, the official map helps to prevent development in planned rights-of-way.

The 1993 Comprehensive Plan reported that there were about 117 miles of roads in the Town in the early 1990s. New York State owned 22.2 miles, Tompkins County 23.9 miles, the Town 45.6 miles, Cornell 3.1, and Ithaca College 2.3 miles. Nearly 20 years later, all of these mileage measurements have increased slightly except for roads owned

⁴⁶ ITCTC website. <http://www.tompkins-co.org/itctc/about.html>

⁴⁷ *Transportation Improvement Program Guidebook*, Fall 2006.

⁴⁸ ITCTC. *2011-2015 Transportation Improvement Program*.

by New York State. As of 2007, the state owns approximately 20 miles of road within the Town's municipal boundaries, while Tompkins County owns about 25 miles, and the Town approximately 50 miles. Cornell University owns about 15 miles of road, and Ithaca College about 11 miles.

Roads owned and maintained by the Town are mostly low- to moderate-speed, two-lane roads serving residential land uses. Driveways connecting to Town owned and Town-maintained roads generally do not have access controls. Existing Town roadways do not have bike lanes, and most do not have sidewalks adjacent to the roadway. Unless otherwise posted, the default speed limit for Town roads is the state 55 MPH speed limit. The Town has successfully appealed to NYSDOT to lower the limit to 25-45 mph in most areas.

The Town anticipates only a few new major roads outside of subdivisions. Roads that have been approved but not yet built include the extension of Conifer Drive from Mecklenburg Road to Bundy Road and the future road shown on the Overlook at West Hill Subdivision map, which loops from Trumansburg Road to Hayts Road. On the Official Highway Map, these roads are shown with a dashed line. The Official Highway Map also indicates the location of a potential future roadway corridor that connects the extension of Conifer Drive to Overlook using a cross-hatched strip. This rights-of-way has not been formally proposed or approved.

Another potential roadway that has received attention in recent years is a northeast bypass road, which could help to keep traffic out of residential areas on East Hill in the towns of Ithaca, Dryden, and Lansing. The 1999 Northeast Subarea Transportation Study (NESTS) called for a design and feasibility analysis for this potential connector.

Finally, Recommendation 7 of NESTS called for a connector road between Pleasant Grove Road and the Thurston Avenue bridge that would act as a "gateway" to the Cornell campus and would help to divert unnecessary through traffic out of the residential Forest Home neighborhood. The Town is currently exploring this option with Cornell University, but it is not shown on the Official Highway Map.

Roadway functional classification and right-of-way design

Functional classification is the system that attempts to classify each road according to its role in the road network. The functional classification system is made up of arterial roads, collector roads, and local roads. Ideally, an arterial road carries relatively intense traffic, and land access to arterials is subordinate to the traffic flow on the arterial itself. Conversely, local roads are intended to carry lower traffic volumes with lower speeds and should provide the highest level of access to land uses. Collectors fall in between.

The *Distance of roads by functional classification* table shows the total roadway mileage for each functional classification in the Town and gives a few examples for each functional classification.⁴⁹ The *Functional classifications of roads* map shows roads in the Town by their functional classification.

Many Town-owned roads are classified as local roads. While these roads are ineligible for Federal aid for maintenance or improvement projects, the Town has more flexibility in the design of the roadway. The Town's current design standards are limited to road construction specifications, which relate to the actual construction of roads, including substrate needs, pavement thickness, and so on. There are no criteria to guide design of the cross-section of the rights-of-way, nor guidelines for how to provide for multimodal travel, including non-motorized travel.

⁴⁹ Data were generated by the Ithaca-Tompkins County Transportation Council (ITCTC), distributed by the Tompkins County Information Technology Services, GIS Division, and compiled by the Town of Ithaca Planning Department.

Road functional classification | Town of Ithaca



- Urban principal arterial
- Urban minor arterial
- Urban collector
- Rural minor arterial
- Rural major collector
- Rural minor collector
- Local road

Produced by Town of Ithaca Planning Department, 6 March 2014
 Data: Ithaca-Tompkins County Transportation Council, Tompkins County Information Technology Services GIS Division



Distance of roads by functional classification Town of Ithaca		
Classification	Distance	Examples
Urban principal arterial	4.51 mi	Elmira Road (NY 13)
Urban minor arterial	16.38 mi	Slaterville Road (NY 79), Trumansburg Road (NY 96)
Urban collector	19.10 mi	Ellis Hollow Road, Coddington Road (Burns Road to Ithaca C/L)
Urban local	48.60 mi	Honness Lane, Indian Creek Road, Winthrop Drive
Rural minor arterial	3.46 mi	Mecklenburg Road (NY 79)
Rural major collector	2.55 mi	Enfield Falls Road (town line to entrance of Treman Park)
Rural minor collector	2.76 mi	Bostwick Road, Sheffield Road
Rural local	14.01 mi	West King Road (west of Buttermilk Falls Park), Culver Road
Unknown / not available	11.93 mi	Approved but not yet built roads, some small subdivision roads
Total	123.3 mi	

A lack of sidewalks, bicycle lanes, adequate shoulders, and other infrastructure for non-motorized travel sets a dangerous precedent for the long-term development of the Town's transportation system. Many existing neighborhoods have no bike or pedestrian infrastructure; not even for circulation within a subdivision. Often the reserved right-of-way width is inadequate for facilities beyond a two-lane road. As the number of subdivisions and commercial centers across the Town increases, it will be difficult to link nodes of activity with facilities for non-motorized travel if the basic physical and policy infrastructure for non-motorized transportation is not in place.

B.9.4 Traffic

Volume and congestion

In fall 2003, the Town Transportation Committee initiated a survey to gauge residents' travel habits and attitudes. 46% of respondents cited a generally high volume of traffic as the most obvious transportation problem in the Town.

Roadway capacity

Vehicle over capacity (V/C), the ratio of traffic volume on a road to its design capacity, is one measurement of traffic congestion. A V/C of 1.00 indicates traffic volume on a road is at its design capacity, a lower number indicates traffic is below design capacity; and a higher number that the road is carrying more traffic than it was designed to handle. Volume over capacity during the 5:00 PM – 6:00 PM peak hour for selected roads in the Town, as measured by the ITCTC in 2011, is as follows.

Volume over capacity: west Town of Ithaca	
Road segment	Peak hour V/C
Elm Street: West Haven Road to Ithaca city line	0.05
Five Mile Drive: Ithaca city line to Bostwick Road	0.12
Five Mile Drive: Bostwick Road to Elmira Road (NY 13/34/96)	0.14
Hayts Road: Enfield town line to Trumansburg Road (NY 96)	0.12
Mecklenburg Road (NY 79): Enfield town line to Rachel Carson Way	0.33
Mecklenburg Road (NY 79): Rachel Carson Way to West Haven Road	0.42
Mecklenburg Road (NY 79): West Haven Road to Ithaca city line	0.43
Taughannock Boulevard (NY 89): Ulysses town line to Ithaca city line	0.25
Trumansburg Road (NY 96): Ulysses town line to Hayts Road	0.36
Trumansburg Road (NY 96): Hayts Road to Cayuga Medical Center	0.52
Trumansburg Road (NY 96): Cayuga Medical Center to Bundy Road	0.53
Trumansburg Road (NY 96): Bundy Road to Ithaca city line	0.57

Volume over capacity: west Town of Ithaca	
West Haven Road: Mecklenburg Road (NY 79) to Elm Street	0.01

Volume over capacity: southwest / Inlet Valley Town of Ithaca	
Road segment	Peak hour V/C
Elmira Road (NY 13 34 96): Ithaca city line to Five Mile Drive	0.49
Elmira Road (NY 13 34 96): Five Mile Drive to Enfield Falls Road	0.50
Elmira Road (NY 13 34 96): Enfield Falls Road to Newfield town line	0.13
Enfield Falls Road: Elmira Road (NY 13 34 96) to Treman State Park entrance	0.02
Enfield Falls Road: Treman State Park entrance to Enfield town line	0.01

Volume over capacity: south Town of Ithaca	
Road segment	Peak hour V/C
Burns Road: Coddington Road to Slaterville Road (NY 79)	0.12
Coddington Road: Ithaca city line to Troy Road	0.09
Coddington Road: Troy Road to King Road East	0.07
Coddington Road: King Road East to Updike Road	0.10
Coddington Road: Updike Road to Danby town line	0.05
Danby Road (NY 96B): Ithaca city line to Ithaca College entrance	0.48
Danby Road (NY 96B): Ithaca College entrance to College Circle Drive	0.23
Danby Road (NY 96B): College Circle Drive to King Road East/West	0.28
Danby Road (NY 96B): King Road East/West to Danby town line	0.26
King Road East: Danby Road (NY 96B) to Troy Road	0.10
King Road East: Troy Road to Coddington Road	0.09

Volume over capacity: east / northeast Town of Ithaca	
Road segment	Peak hour V/C
Caldwell Drive: Forest Home Drive to Dryden Road (NY 366)	0.55
Dryden Road (NY 366): Ithaca city line to Pine Tree Road	0.27
Dryden Road (NY 366): Pine Tree Road to Tower Road	0.30
Dryden Road (NY 366): Tower Road to Caldwell Road	0.35
Dryden Road (NY 366): Caldwell Road to Dryden town line	0.33
Ellis Hollow Road: Pine Tree Road to Dryden town line	0.38
Hanshaw Road: Cayuga Heights village line to Warren Road	0.23
Hanshaw Road: Warren Road to Dryden town line	0.31
Mitchell Street: Ithaca city line to Pine Tree Road	0.34
Pine Tree Road: Dryden Rd (NY 366) to Ellis Hollow Road	0.10
Pine Tree Road: Ellis Hollow Road/Mitchell Street to Honness Lane	0.18
Pine Tree Road: Honness Lane to Slaterville Road (NY 79)	0.14
Slaterville Road (NY 79): Ithaca city line to Honness Lane	0.23
Slaterville Road (NY 79): Honness Lane to Pine Tree Road	0.17
Slaterville Road (NY 79): Pine Tree Road to Burns Road	0.24
Warren Road: Lansing V/L to Christopher Lane	0.28
Warren Road: Christopher Lane to Hanshaw Road	0.20
Warren Road: Hanshaw Road to Bluegrass Lane	0.26
Warren Road: Bluegrass Lane to Forest Home Drive	0.38

Traffic volume

Annual average daily traffic (AADT) is the number of vehicles that would be assumed counted on a typical day of the year. Based on established formulas, a measured traffic count is factored to an AADT by adjusting it for seasonality and vehicle classifications. AADT for selected roads in the Town, obtained from data compiled by the ITCTC in 2011 and other noted sources, is as follows. Road segments are approximate, based on where traffic counting devices were placed. Some segments will be different than segments where V/C was determined.

Annual average daily traffic: west Town of Ithaca	
Road segment	AADT
Elm Street: West Haven Road to Ithaca city line (NYSDOT 2010)	892
Five Mile Drive: Ithaca city line to Bostwick Road (NYSDOT 2010)	4,653
Five Mile Drive: Bostwick Rd to Elmira Road (NY 13/34/96) (NYSDOT 2010)	4,995
Hayts Road: Enfield town line to Trumansburg Road (NY 96) (Town of Ithaca 4/2004)	1,265
Mecklenburg Road (NY 79): Enfield town line to Ithaca city line (NYSDOT 2010)	4,077
Taughannock Boulevard (NY 89): Ulysses town line to Ithaca city line (NYSDOT 2010)	3,169
Trumansburg Road (NY 96): Ulysses town line to Ithaca city line (NYSDOT 2010)	9,104
West Haven Road: Mecklenburg Road (NY 79) to Elm Street	419

Annual average daily traffic: southwest / Inlet Valley Town of Ithaca	
Road segment	AADT
Elmira Road (NY 13/34/96): Ithaca city line to Five Mile Drive	16,715
Elmira Road (NY 13/34/96): Five Mile Drive to Enfield Falls Road	18,703
Elmira Road (NY 13/34/96): Enfield Falls Road to Newfield town line	18,418
Enfield Falls Road: Elmira Rd (NY 13/34/96) to Enfield town line (NYSDOT 2010)	904

Annual average daily traffic: south	
Road segment	AADT
Burns Road: Coddington Road to Slaterville Road (NY 79)	2,007
Coddington Road: Ithaca city line to Troy Rd	3,192
Coddington Road: Rich Road to King Road East	1,309
Coddington Road: King Road East to Danby town line	2,478
Danby Road (NY 96B): Ithaca city line to King Road East/West	7,943
King Road East: Danby Road (NY 96B) to Coddington Road (NYSDOT 2010)	2,758

Annual average daily traffic: east / northeast	
Road segment	AADT
Dryden Road (NY 366): Ithaca city line to Game Farm Road (Dryden town line)	7,758
Hanshaw Road: Cayuga Heights village line to Warren Rd	6,315
Hanshaw Road: Warren Road to Dryden town line	6,357
Muriel Street: Hanshaw Road to Rose Hill Road	837
Pine Tree Road: Dryden Road (NY 366) to Maple Avenue	7,196
Pine Tree Road: Maple Avenue to Ellis Hollow Road	9,657
Pine Tree Road: Maple Avenue to Snyder Hill Road	6,030
Pine Tree Road: Snyder Hill Road to Slaterville Road (NY 79)	4,499
Slaterville Road (NY 79): Honness Lane to Pine Tree Road	5,245
Warren Road: Lansing V/L to Hanshaw Road	5,347
Warren Road: Hanshaw Road to Forest Home Drive	5,543
Winthrop Road: Warren Road to Cayuga Heights village line	695

Speeding

Like traffic volume and congestion, speeding is quantified in several ways, including the percentage of vehicles that speed and the 85th percentile speed (the speed that 15% of drivers exceed). There is a distinction between the extent and severity of speeding: the extent of speeding refers to the percentage of motorists exceeding the speed limit, while the severity of speeding also considers the characteristics of the adjacent land uses and the impacts of speeding on those land uses. Thus, prioritizing locations for speed mitigation is not as simple as determining the location with the highest ratio of the 85th percentile speed to the speed limit.

Based on the data collected for the 2007 Transportation Plan, some areas in the Town that may need speed mitigation include the Northeast, the southern part of Pine Tree Road, Forest Home, and Coddington Road near Ithaca College. All of these areas are in neighborhoods of medium density with significant pedestrian activity.

Accidents

1,900 vehicle accidents were reported in the Town of Ithaca between 2000 and 2007. 655 accidents (34.5%) involved another vehicle. 27 accidents (1.27%) involved a collision with a deer, while 153 (8.0%) a collision with another animal. Six accidents involved a crash with a cyclist, and 13 with a pedestrian. The remainder involved collisions with trees, ditches, signs, and other stationary objects; or other types of accidents not involving other vehicles or objects.

478 accidents (25.1%) resulted in injuries, while five accidents resulted in fatalities. 836 accidents (44.0%) resulted in property damage.

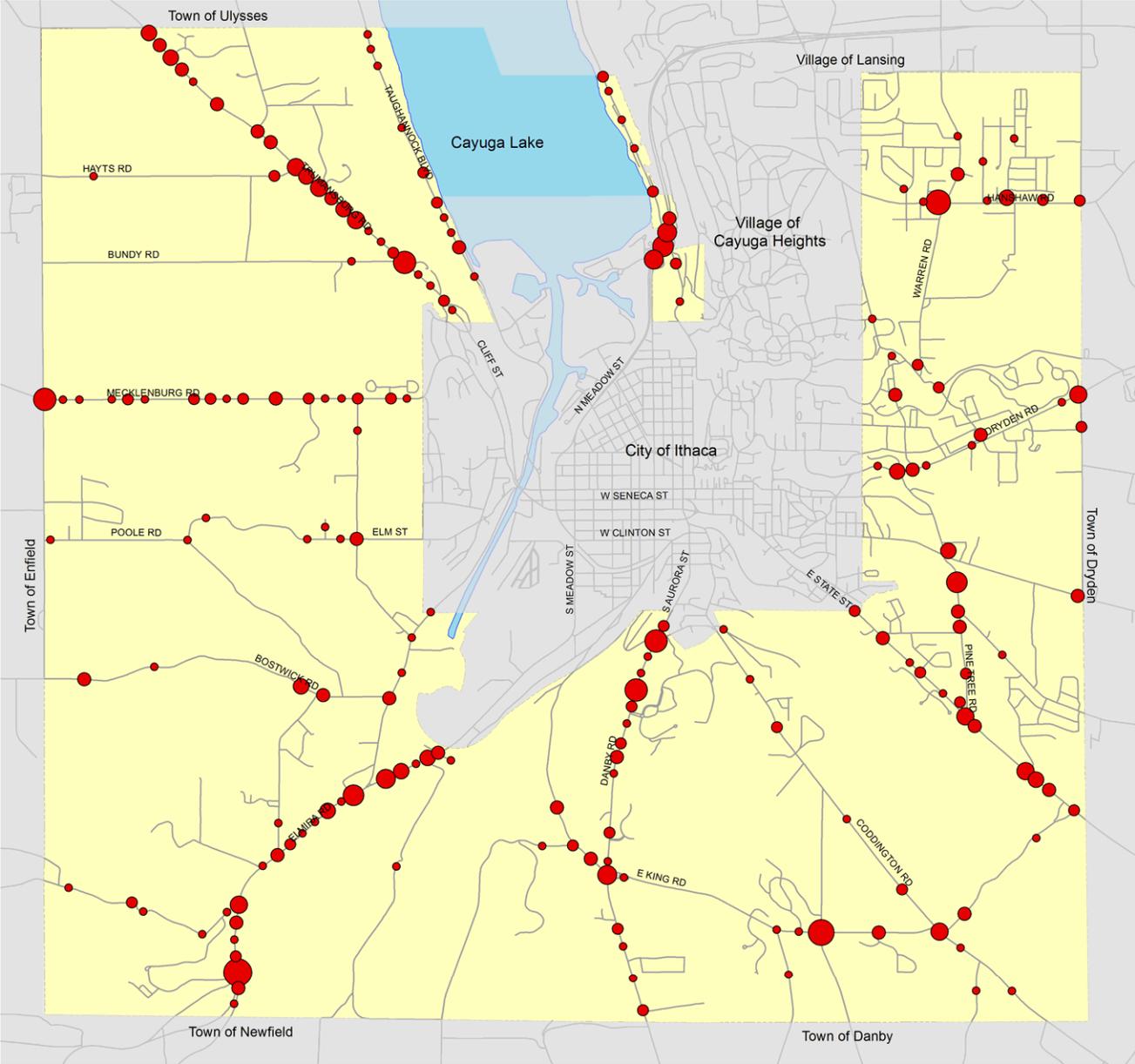
Locations of crash clusters in the Town are fairly predictable; the vast majority occur on state routes where volumes and speed limits are highest. Small clusters of crashes on county roads occur on Coddington Road, East King Road, Pine Tree Road, Warren Road, and Hanshaw Road. Very few crashes occur on Town roads; most were one-vehicle crashes involving an animal or object.

In the fall of 2005, the Town of Ithaca Transportation Committee worked with Fisher Associates (a consulting firm from Rochester) to analyze safety at several intersections and along several road segments in the Town. Building on Fisher Associates' work, Town Planning staff evaluated the crashes at the locations to determine if there was a pattern. The crash screenings showed no obvious, immediate safety hazards. In most cases, possible mitigation measures are as simple as improving signage to alert drivers to unexpected intersections or road curves. In other cases, the crash screening showed that mitigation measures might be needed in the future, such as improved traffic controls like a traffic light. (See the Town of Ithaca 2007 Transportation Plan for Fisher Associates' final report and the Town's Crash Screening Report.)

B.9.5 Road maintenance

During the summer of 2004, the Town of Ithaca Highway Department conducted an inventory of the condition of every Town-owned road. Each road or road segment received a Pavement Condition Index (PCI), which is a measure of several signs of pavement deterioration, including several types of cracking, patching/potholes, drainage, and roughness. The goals of the project were to prioritize Town roads in greatest need of maintenance, to create a regular maintenance schedule, and to assist the budgeting of Town resources. The information in the PCI shows that most of the Town-owned roads are in good to excellent condition.

Location of serious crashes 2000-2007 | Town of Ithaca

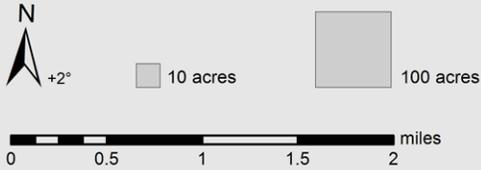


Accidents

- 1
- 5
- 10

Dot size represents number of accidents with injuries or fatalities, excluding collision with animals, at a location.

Produced by Town of Ithaca Planning Department, 6 March 2014
 Data: New York State Department of Transportation Accident Location Information System (ALIS), Tompkins County Information Technology Services GIS Division



According to a road condition study conducted by the Town of Peterborough, New Hampshire, pavement quality drops only 40% over the first 75% of the pavement lifespan (i.e. after 10 to 12 years, the pavement is still in acceptable or “good” quality). Over the next four years, however, pavement quality drops another 40% from “fair” to “very poor.” More importantly, allowing pavement to degrade from “fair” to “very poor” increases repair costs at least five-fold. Considering that pavement condition inventory was conducted eight years ago as of 2012, Town-owned roads in good to excellent condition in 2004 might now be degrading to “fair” or “poor” conditions.



Maintenance activity on Stone Quarry Road.

The Town is currently on a 33-year reconstruction schedule. Every year, the Public Works Department repaves about 1.5 miles of road of the approximately 50 miles the Town owns and performs preventive maintenance on five to seven miles. This schedule is sufficient to maintain high quality roads, but there is little room for putting off necessary maintenance.

B.9.6 Automobile alternatives

Alternatives to the private automobile provide choice, protect safety and health, and reduce congestion. Alternatives can be available for everyone (including the young, old, disabled, and low income), and protect the natural environment by keeping air clean, conserving fossil fuels, reducing wear-and-tear on the roads which can negatively affect water quality due to increased runoff, preserving open space by avoiding the need to build new roads, and so on.



TCAT bus at the Pew Trail.

Public transportation

Tompkins Consolidated Area Transit, Inc. (TCAT) is a not-for-profit corporation that provides public transportation for Tompkins County. TCAT’s annual ridership is nearly 4 million, covering a distance of 1.7 million miles. The fleet of approximately 55 buses includes eight hybrid electric-diesel buses.⁵⁰ TCAT also offers complementary ADA Paratransit services through Gadabout. In 2011 operated 35 routes (34 fixed routes and one hybrid fixed/demand

⁵⁰ Doug Swarts, TCAT Service Development Manager, 8 June 2012 email

responsive route) with a diverse range of schedules for academic year, summer, and yearlong service.⁵¹ Routes change periodically based on need. Currently, TCAT's Zone 1 single-ride fares, which apply to travel within the City of Ithaca and most of the Town, are \$1.50 for adults, \$0.75 for youth, and \$0.75 for seniors.⁵² Zone 2 fares, which generally apply to areas outside of the City and Town, are \$2.50 for adults, \$1.25 for youth, and \$1.25 for seniors. In addition to single-ride fares, TCAT also offers 15-ride cards, along with day, weekly, monthly and annual passes. These passes can provide substantial savings for frequent riders. TCAT additionally contracts with Cornell University and Ithaca College to craft special offers for students, faculty, and staff to encourage them to use transit.

The *TCAT routes in the Town of Ithaca* table summarizes select destinations within the Town of Ithaca and the TCAT routes that serve them, as of summer 2012.

TCAT routes Town of Ithaca	
Route	Origin / destination / corridor
11	Ithaca College, South Hill Business Campus
14	Linderman Creek, Cayuga Medical Center, Overlook Apartments. Conifer Senior Apartments
20	EcoVillage, Mecklenburg Road (NY 79) corridor, Cornell University
21	Trumansburg Road (NY 96) corridor, Cornell University
22	Taughannock Boulevard (NY 89 – summer service only)
30, 90	Cornell University and Cayuga Heights
31	Northeast neighborhood, BOCES, DeWitt Middle and Northeast Elementary Schools, Forest Home, Cornell
36	East Shore Drive (NY 34) corridor, Cornell University
40, 43	Dryden Road (NY 366) corridor, Cornell University
41	Hanshaw Road, Sapsucker Woods
51, 93	Eastern Heights neighborhood, East Hill Plaza, Honness Lane
52	Slaterville Road (Route 79E), Pine Tree Road, Cornell University
53	Slaterville Road (NY 79E), Cornell University, Dryden Road (NY 366)
65	Danby Road (NY 96B), Ithaca College, Longview
67	Elmira Road (NY 13), Cornell University
81, 82	Cornell University, East Hill Plaza, Maplewood Apartments

The Americans with Disabilities Act (ADA) of 1990 requires public transit operators to offer equal services for those with disabilities. Paratransit is an alternative mode of flexible passenger transportation that does not follow fixed routes or schedules, and is often used to increase mobility options for people with disabilities and the elderly. TCAT contracts paratransit service out to Gadabout, a not-for-profit private service demand-responsive transportation service. Gadabout provides vans specially equipped for wheelchairs and volunteer drivers who are sensitive to the needs of the disabled. Gadabout also serves the senior population of Tompkins County (aged 60 and over) by providing on-demand service in a comfortable atmosphere. This indispensable service provides opportunities for education, employment, personal and health care, and social interaction for vulnerable populations.

Founded in 1976 with just one bus, the Gadabout service has grown to 26 small buses which provide an average of 60,000 rides per year, traveling over 330,000 miles.⁵³ A 67% ridership increase in the decade 1999-2008 culminated in a record 63,809 riders in 2008.⁵⁴ To request a ride, patrons call a local number (607-277-1878) the morning before the day of the trip. In 2012, the Town provided \$12,000 in funding to Gadabout for services to Town residents.

⁵¹ Tompkins Consolidated Area Transit, Ithaca, New York, ITCTC, *2011 Yearbook*

⁵² TCAT, *Frequently Asked Questions*

⁵³ Szudzik, Christine, *Gadabout Gets...*

⁵⁴ ITCTC, *2030 Long Range Transportation Plan*, pages 4.6

TCAT integrates different modes of transport with public transit through the bikes on bus program, park-and-ride lots, and service to local bus stations and airports. In 1996, TCAT purchased 64 bike racks for installation on the front of buses, a project known as BobCat (“Bob” is an acronym for “bikes on buses”). The bike racks hold two bicycles each and are easy to operate. The racks serve riders who might not otherwise incorporate bicycling into their commute or travels because of Ithaca’s hilly terrain. The racks are very popular—they now sit on the front of every TCAT bus—and the program has become the most successful intermodal effort in the county. Park-and-ride lots across the County capture commuters to Ithaca from outlying rural areas. TCAT has routes running past fourteen formal park-and-ride lots. TCAT also offers routes that serve the airport (32 and 72) and the bus station in the City of Ithaca (14, 20, and 21).

The greatest concentration and frequency of public transit service is in the City of Ithaca and the Cornell campus. Many Town residents expressed a desire for greater transit coverage in the Town in the aforementioned Town transportation survey. Transit provision for many parts of the Town, especially West Hill and South Hill, is difficult; because of low residential densities, buses must travel long distances to pick up few persons at each stop. This can make routes prohibitively long for riders and prohibitively costly for the transit provider. Also, routes through West Hill and South Hill only run on major state and county roads. This puts bus stops too far away from many residential homes to be convenient.

Bus-based park-and-ride facilities are an increasingly popular traffic management tool used to intercept car traffic on the periphery of an urban area by providing parking and direct bus service to the urban core or employment center. Currently there are 13 small park and ride lots in communities around Tompkins County; none within the Town of Ithaca. All of these sites are shared use (serve other parking needs) rather than exclusively planned and designed as park-and-ride facilities. While park-and-ride facilities offer a positive approach to getting people out of their cars and reducing urban highway traffic congestion and worksite parking demand, they must be part of a carefully thought out integrated transport strategy to ensure positive benefits. Any consideration of creating park-and-ride facilities in the Town needs to be carefully considered. A discussion on the advantages and disadvantages of park-and-ride can be found in the *Park and Ride for Tompkins County* (2004, Fernando De Aragon, Director Ithaca-Tompkins County Transportation Council).

In addition to local service by TCAT and Gadabout, three private companies, Shortline, Greyhound, and Trailways, provide bus service between the Ithaca metropolitan area and other metropolitan areas. Every day, between 27 and 30 intercity buses serve the Ithaca area.⁵⁵ According to a 2001 study, intercity operators have estimated that 179,000 people per year use the Ithaca bus station. Of those, 133,000 were arriving or departing passengers. 46,000 passengers transferred to another bus.⁵⁶ This indicates that buses carry a significant amount of travel between the Ithaca metropolitan area and other municipalities.

Bicycle and pedestrian facilities

Besides serving as a mode of transportation, biking and walking offer personal and societal benefits. Biking and walking improve personal physical fitness and well-being. Promoting walking and biking will play an important role in protecting public health; in fact, exercise is a component of the FDA’s revised food pyramid. Walking or biking instead of driving for short trips conserves fossil fuels, saves money, alleviates traffic burdens, promotes the health of the natural environment, thus protecting human health, and protects the integrity of neighborhoods. Walking and biking foster healthy communities by encouraging social interactions on the street and by getting motorists out of their cars and onto the sidewalks. The option of using a non-motorized mode provides a real choice for residents and visitors.

⁵⁵ Mengel and Rakaczky, *The Inter-City...*

⁵⁶ *Ibid.*

The four main types of non-motorized transportation infrastructure are: dedicated pedestrian facilities such as sidewalks, walkways, pedestrian bridges and paths; dedicated bicycle facilities such as bike lanes; multi-use trails and paths for pedestrians, bicyclists, inline skaters, parents with children in strollers, and so on; and roadway shoulders. In many rural areas, it is impractical to provide dedicated bicycle or pedestrian facilities.

More often, paved roadway shoulders take the place of sidewalks and bike lanes, although some rural areas have multi-use recreation trails.

The Town of Ithaca has approximately 11 miles of walkways in its jurisdiction. These walkways are owned and maintained by the Town. There are also a limited number of newer residential areas with sidewalks, such as Linderman Creek, in which property owners own sidewalks and are responsible for their upkeep and maintenance. There are some bicycle lanes on the Cornell campus, and many roadways in the Town have sufficient shoulder width to permit comfortable bicycling. Two of the longest multi-use trails owned and maintained by the Town are the East Ithaca and South Hill



Honness Lane Walkway.

Recreation Ways. The Town's 2003 *Park, Recreation, and Open Space Plan* called for the creation of a multi-use trail system. The Town is already in the process of implementing that plan. In fact, off-road multiuse trails in the Town are more extensive than walkways or sidewalks that run next to roadways.

Walkways and paths not owned by the Town include the Plantations Path (a seven-mile network of self-guided walkways, roads, and paths through Cornell Plantations); the Circle Greenway (the Walk Ithaca path which passes through both the Town and City); the trail systems in Buttermilk Falls and Robert H. Treman State Parks; and the 500-mile long Finger Lakes Trail hiking path which passes through the southern portion of the Town.⁵⁷ These paths generally serve recreational needs.

Non-motorized modes of transportation play a significant role in the transportation system of the Town of Ithaca. For example, the 2000 Census calculates that more than one in five Town residents get to work by walking. Many of these residents are students, professors, and staff traveling to one of the institutions of higher education in the area.

Walking and bicycling are popular in the Town despite limited supporting infrastructure, and these non-motorized modes would perhaps be even more popular if sidewalks, walkways, and bicycle infrastructure were more available.

Many roadways with significant pedestrian traffic do not even have sufficient shoulder space for a single pedestrian. Furthermore, a 2002 study examined 4.75 miles of Town-owned walkways and found that 60% do not meet ADA standards.

As previously mentioned, shoulders are available to bicyclists on some State and County roads. Unfortunately, roads with shoulders are generally roads with high volumes and speeds of vehicular traffic, which can lead to an uncomfortable and unsafe bicycling environment. On all other roadways, bicyclists share lanes with motorists--which

⁵⁷ Town of Ithaca, 1997

is the least desirable arrangement for both bicyclists and motorists when motor vehicle speeds are higher than bicycling speeds.

The Town's 2007 *Transportation Plan* includes more information on the Town's bicycle and pedestrian facilities.

B.9.7 Air, rail and freight

Airports and air travel

Ithaca-Tompkins Regional Airport (ITH), in the Village of Lansing, is the closest airport to the Town of Ithaca that provides regional passenger air travel. ITH has been operated by a division of the Department of Public Works of Tompkins County since 1956, when it purchased the East Hill Airport from Cornell University.⁵⁸ The airport covers 531 acres, includes a 33,000 square foot terminal with six gates (four walkway, two sharing a single jet bridge) and has two runways (6,601 foot paved, 2,018 foot turf). The airport is served by TCAT Route 32, connecting it to Cornell University and downtown Ithaca.

As of June 2012, commercial passenger airlines serving the airport include United Airlines, US Airways Express and Delta Airlines, with 10 scheduled passenger flights with departures from the airport at least four times a week. Destination airports include Newark, Philadelphia, and Detroit. US Airways Express terminated service to New York-LaGuardia in March 2012.

The passenger count at ITH was 242,293 in 2011, an increase of 53% since 2005. Routes to and from ITH are usually flown by small regional and commuter jets and turboprop planes.

Many small cities and towns in the United States are facing the loss of all passenger air service, as airlines face financial problems and subsidies are reduced. Crowded airspace conditions in the Northeastern United States, and slot exchange agreements between airlines, may affect passenger service at ITH. However, the presence of Cornell University and Ithaca College provides a passenger base that insulates ITH from the most severe cuts that face other airports in small cities.

Many Ithaca area residents travel to nearby airports in Syracuse, Elmira and Binghamton, all about an hour drive from the Town.

Rail and freight

Passenger rail service to Ithaca ended in 1961. The nearest Amtrak station is in Syracuse.

Beyond the movement of people, the regional transportation system supports the movement of freight via rail, air, and trucks. The Norfolk Southern Railroad provides rail freight transport in Tompkins County. Rail can carry much larger quantities of freight than a truck. For example, one freight car can carry 100 tons, while a truck can only carry 20 to 25; thus one train of 20 cars carries the freight of 80 to 100 trucks. Besides being capable of carrying more freight, rail uses less fuel than trucks to carry any given amount. One gallon of fuel will carry one ton of freight 59 miles via truck and 202 miles via rail.⁵⁹ Despite its efficiency, rail transport is prohibitively expensive for most shipping, except for objects shipped in bulk or extremely large quantities. Rail freight in Tompkins County consists mainly of coal to the Milliken Point Power Plant in Lansing, and salt from the Cargill Corporation.

⁵⁸ Ithaca Tompkins Regional Airport, *Airport Facts*.

⁵⁹ Rock Island District, U.S. Army Corps of Engineers, 2004

While the airport and rail freight terminals are not actually located within the Town of Ithaca, they still affect the transportation system and economic base of the Town. Railroad trains run through the Town, passing through residential areas along East Shore Drive, where they impact the quality of life for residents.

Trucks carry the majority of freight in the County, often to or from destinations within the City of Ithaca. Thus, much of the truck freight traffic is merely passing through the Town; most of it is limited to state highways. Many trucks travel on non-truck routes and local roads to take shortcuts, avoid congestion, or make local deliveries. While excessive commercial truck traffic impacts livability and safety in some residential neighborhoods, in many cases the afflicted roads were established as through routes long before residential development took place.

The following table lists truck volumes for roads within the Town.

Truck volume on roads Town of Ithaca	
Road	Truck volume/day
Bostwick Road	82
Bundy Road	82
Burns Road	41
Caldwell Road	92
Coddington Road	62
Culver Road	6
Danby Road (NY 96B)	242
Ellis Hollow Road *	184
Elm Street	24
Elmira Rd (NY 13), City of Ithaca	309
Hanshaw Road (near Warren Rd)	125
Hayts Road	20
King Road	94
Pine Tree Road	173
Pine Tree Road (Maple Avenue to Mitchell Street) *	315
Poole Road	9
Seven Mile Drive	35
Slaterville Road (NY 79)	412
Snyder Hill Road	25
Stone Quarry Road	40
Troy Road	13
Trumansburg Road (NY 96), north of the Town *	385
* - data from <i>Tompkins County Freight Transportation Study</i> (2002, Sear-Brown). All other data were collected by the Town of Ithaca Public Works Department in 2003-2004.	

B.10 Municipal services and infrastructure

B.10.1 Water supply

Public water in the Town is supplied by three entities: the Southern Cayuga Lake Intermunicipal Water Commission (locally referred to as Bolton Point and which supplies water from Cayuga Lake); the City of Ithaca (which provides water from the Upper Reservoir on Six Mile Creek); and Cornell University Water Filtration Plant (which uses Fall Creek).

Some residents living along Taughannock Blvd/NY 89 are still served by the City of Ithaca. 40 Forest Home residents and the Cornell University campus are served by the University water system, and some Town residents are served by private wells in rural areas. However, the vast majority of the Town is served by Bolton Point (see *Water service areas Map*).



Christopher Circle water tank.

While the three entities operate independently from one another, emergency agreements and multiple permanent interconnecting valves located throughout the system ensure emergency backup water supplies.

Bolton Point Water System: treatment and distribution

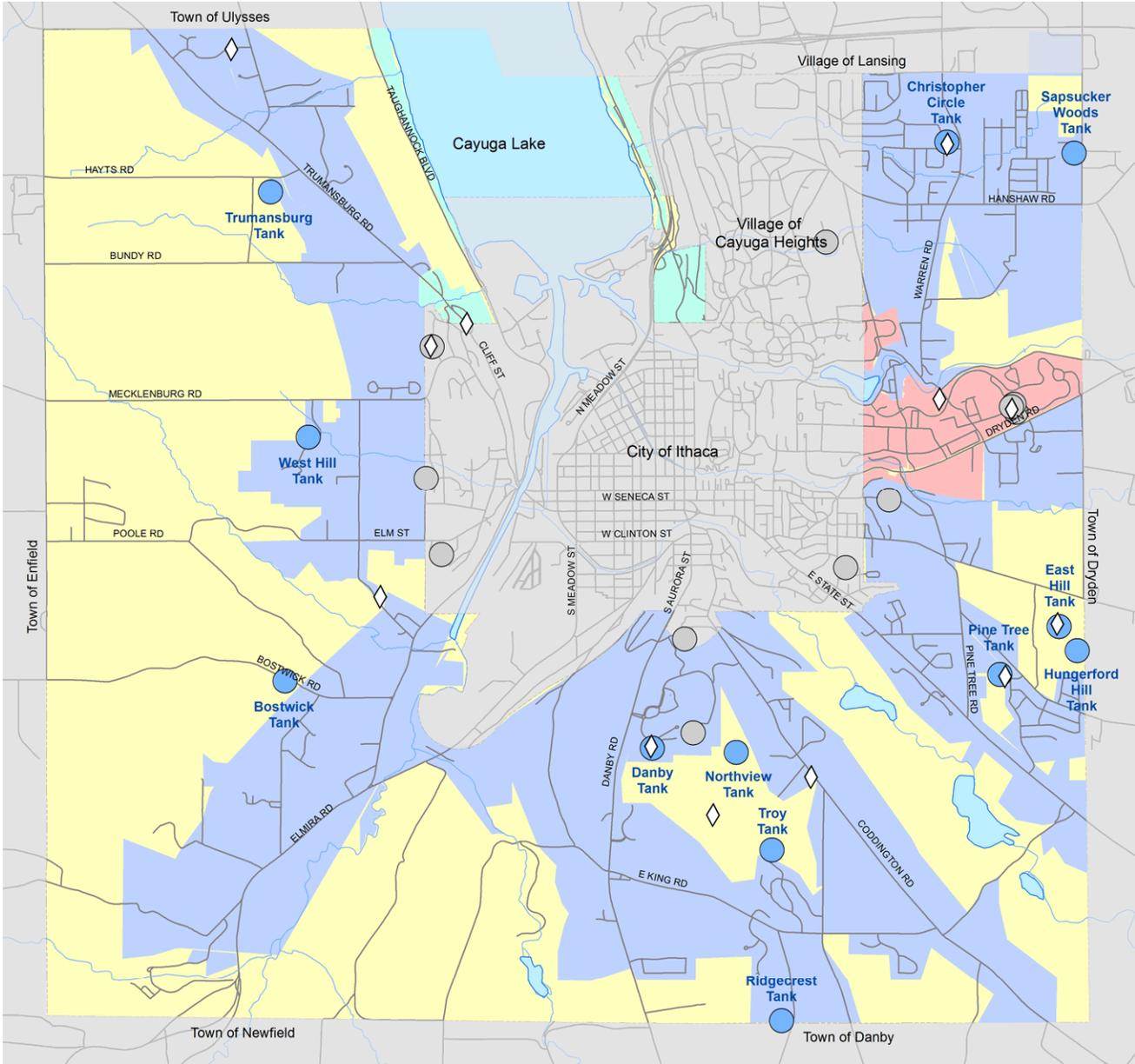
The Bolton Point water plant was constructed in 1976. Before this time, public water in the Town of Ithaca was provided by the City of Ithaca, which also served the Varna area of the Town of Dryden and the Village of Cayuga Heights. By 1972, demand for city water was approaching 6 million gallons per day (MGD), surpassing the amount of water the city system could supply under drought conditions, which had been experienced in the mid-1960s. The City of Ithaca, wary of added demand upon its system, declared a moratorium on the number of new water connections outside the City. In 1974, the Towns of Ithaca, Lansing, and Dryden and the Village of Cayuga Heights formed the Southern Cayuga Lake Intermunicipal Water Commission to develop a water plant on Cayuga Lake (the Village of Lansing joined in 1975).⁶⁰

The facility, jointly owned by the five municipalities, is overseen by a Commission made up of two representatives (one of whom must be an elected official) from each municipality. The commission via a cooperation agreement makes decisions on various aspects of the facility from expansion decisions, operating costs, debt retirement, and personnel. Each municipality retains ownership of the distribution system within its borders and has responsibility for system maintenance and in establishing their own water rate structure.

There are three basic elements of the Bolton Point water system: (1) the intake system, (2) the water treatment plant, and (3) the transmission system.

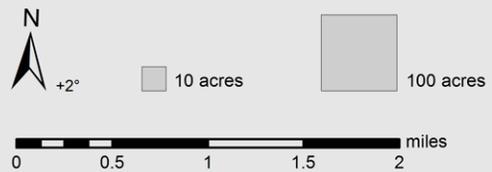
⁶⁰ Bolton Point website, <http://www.boltonpoint.org/PopUps/ourhistory.html>, accessed 1 August 2011.

Water service areas | Town of Ithaca



-  Other water tanks
-  Town water tanks
-  Pump station
-  Town water service area
-  City water service area in the Town
-  Cornell water service area in the Town

Produced by Town of Ithaca Planning Department, 10 March 2014
 Data: Town of Ithaca Public Works Department, Tompkins County Information Technology Services GIS Division



The intake system consists of a 36-inch diameter intake pipe that stretches 400 feet into Cayuga Lake to a depth of 60 feet, and the raw water pump station located on the shore. The raw water pump station has three pumps, with a combined rated capacity of 9 MGD. With the construction of additional filters and two pump systems, its capacity can be increased to 12 MGD; the original plans allow for a maximum expansion of the system to 24 MGD. From the lakeshore pump station, there is a 20-inch diameter pipe running from the pump station up to the water treatment plant on East Shore Drive, a rise of about 270 feet and a distance of about 1,800 feet.

The water treatment plant contains a chemical storage room, flocculation tanks, settling tanks, filter tanks, storage well, a control room, and a pump room. The pump room has three pumps that raise the water another 360 feet to the Burdick Hill storage tank; a distance of approximately 3200 feet. The plant is designed to process 9 MGD of water, and its capacity can easily be increased to 12 MGD or more. Provision has been made for the eventual expansion of the system to 24 MGD.⁶¹

The transmission system is made up of the Burdick Hill storage tank of 1.5 million gallons capacity, the Oakcrest Road pump station (in the Village of Lansing), and over 10 miles of 16-inch to 20-inch transmission pipeline running from the treatment plant through East Ithaca to its termination point at the Pearsall Place pump station on South Hill. The transmission lines provide water to the five municipal systems, from which each municipality operates and maintains distribution lines that serve their individual customers.

Town of Ithaca: distribution system

The Town operates and maintains all of the distribution system for Bolton Point supplied water within its municipal boundary. The *Water service areas* map indicates the areas in the Town that are served. The Town's varied topography plays a large role in the complexity of this water delivery system and necessitates numerous water tanks and pump stations throughout the served area. Service areas are established by the elevation of the water storage tanks and the ground topography. The service area boundaries are essentially defined by the specified ranges of acceptable water pressure that are maintained by each tank.

Approximately 72% of residential properties in the Town (outside of the Village of Cayuga Heights) with existing dwellings have access to public water. Of those served, 7% are non-residential users and 93% are residential users. Average daily consumption rates (based on billing records) are 131 gallons/day for residential usage and 3,607 gallons/day for non-residential usage.

The Town of Ithaca's water distribution system consists of 12 water storage tanks and nine pump stations. The *Water supply tanks* table provides information on Town-owned and maintained water tanks.

Until recently, the City of Ithaca supplied water to the Inlet Valley and West Hill areas of the Town of Ithaca. Problems with water pressure fluctuation, fire fighting flow, and the City's aging infrastructure led the Town to look for a way to bring Bolton Point water to these areas. In 2001 the Town embarked on a series of system improvements to make that happen. Modifications included:

- A 16-inch transmission pipe was installed from Pearsall Road control station to Danby Road, with connection to an existing eight inch line to the Danby Road tank and Ithaca College.
- A 12-inch line was laid from Danby Road tank to Buttermilk Falls State Park using an existing abandoned railroad bed.
- A 250,000 gallon tank was installed on Bostwick Road to supply water to the distribution grid at Inlet Valley.

⁶¹ Bolton Point Water System website, <http://www.boltonpoint.org/aboutus.html>, accessed 1 August 2011

- A one million gallon tank (West Hill tank) was place near Mecklenburg Road at EcoVillage.
- A pump station was placed on Coy Glen Road to pump water uphill to the new West Hill Tank; an existing 12-inch line connected the West Hill tank with the Trumansburg Road Tank.

In addition, in 2006 a new three million gallon tank was placed near Hungerford Hill Road as part of improvements to the existing transmission system. The new East Hill transmission tank, which acts as a reservoir for the system and does not directly supply customers, enables Bolton Point to pump water at night to this tank, using off-peak electric rates. In the daytime the transmission system delivers water to the East Hill, South Hill, Inlet Valley and West Hill distribution grids and is filled at night. In case of a power outage or fire, the East Hill Tank reinforces the transmission system with a two day supply of water.

Future planned improvements of the water system are aimed at addressing the aging system, with specific plans for replacing and rehabilitating several of the older water tanks.

Water supply tanks Town of Ithaca					
Region	Tank name	Year built	Capacity	Customers *	Average use **
Northeast	Christopher Circle	1959	500,000 gal	400	80,000 gal/d
	Sapsucker Woods	1959	500,000 gal	520	110,000 gal/d
East Hill	Pine Tree	1954	200,000 gal	442	160,000 gal/d
	Hungerford Hill	1970	500,000 gal	219	60,000 gal/d
	East Hill Transmission Tank	2003	3,000,000 gal	Does not directly serve customers	
South Hill	Ridgecrest	1968	500,000 gal	399	80,000 gal/d
	Troy	1968	160,000 gal	129	50,000 gal/d
	Danby (serves Ithaca College)	1954	500,000 gal	17	352,000 gal/d
	Northview	1954	200,000 gal	200	60,000 gal/d
Inlet Valley	Bostwick	2003	200,000 gal	120	33,000 gal/d
West Hill	Trumansburg	1932***	500,000 gal	151	152,000 gal/d
	West Hill	2003	1,000,000 gal	125	50,000 gal/d
Total				2,722	1,187,000 gal/d
* 2007. Refers to water meter count, not actual number of consumers.					
** 2007. Based on distribution meter readings at each tank supply line. Readings taken weekly. Figures reflect customer use and do not include additional pass-through water that supplies neighboring tanks.					
*** Rehabilitated in 2006.					

City of Ithaca water system: treatment and distribution

The City of Ithaca Water Treatment Plant (WTP) has been serving customers in the City of Ithaca and portions of the Town of Ithaca since 1903. The plant serves over 35,000 customers and on average treats 3.27 million gallons of water daily. Water is drawn from the Six Mile Creek reservoir in the Town of Ithaca (just north of Burns Road) and flows by gravity to the WTP in the City on Water Street. After treatment, finished water is distributed to the public through a distribution network consisting of roughly 85 miles of ductile iron and cast iron water mains. The distribution system includes three pumping stations and six water storage tanks.⁶²

Due to the age of the City WTP and the impending changes in water quality regulations, the City has proposed to rebuild the existing 7 MGD WTP with a 6 MGD plant on the current Water Street site. The source of water would continue to be the City's existing Six Mile Creek supply impounded by the 60-foot dam. Raw (untreated) water

⁶² City of Ithaca, Water Treatment Plant website, <http://www.ci.ithaca.ny.us/departments/dpw/water/wtp.cfm>. accessed 15 August 2011.

would continue to flow by gravity from the reservoir to the new WTP through the City's existing 24-inch diameter cast iron pipeline. The proposal will require a number of modifications in the vicinity of the water intake at the 60-foot reservoir; construction of facilities, security monitoring, upgrade of the access road to allow year-round access, reservoir dredging, and so on.⁶³

Cornell University water system: treatment and distribution

Cornell University owns and maintains its own potable water system, which serves the campus and portions of the surrounding community. The Cornell Water Filtration Plant (WFP); originally constructed in 1929, serves a population of 35,000: students, faculty, academic and non-academic employees, residents of the hamlet of Forest Home, and a portion of the City of Ithaca.

The Cornell WFP produces an average of up to 1.7 MGD to meet the needs of its customers. Upon reaching the plant, water is treated with sodium hypochlorite for disinfection and polyaluminum chloride for sediment removal. The treatment process begins with the rapid mixing of coagulants followed by flocculation and sedimentation. The water is then filtered, disinfected, and pumped to a 1.0 million gallon and a 1.5 million gallon water storage tank. From these tanks, water is distributed to the campus via a network of piping that is approximately 120 miles long.⁶⁴

Current daily average consumption is 1.5 to 1.7 MGD. Even though the campus building square footage has almost doubled, water conservation measures have led to a reduction in consumption from a high of 3.0 MDG in the early 1970s. Strategies like requiring low-flow fixtures in campus buildings, district cooling, and improved lab practices have contributed to the savings. Cornell's water system is fully metered and water usage can be tracked for most campus buildings online; information is available to the public on the facilities services Web site.⁶⁵

B.10.2 Wastewater

The Town of Ithaca is a single townwide sewer district, although not all lands in the Town have access to municipal sewer. There are six distinct geographic service areas within the Town that have approximately 3,200 connections.

The West Hill collection system serves properties on and adjacent to Trumansburg Road, Dubois Road, Woolf Lane, Bundy Road, Mecklenburg Road, Westhaven Road, and Elm Street. The sewer mains along these highway corridors connect to jointly owned interceptor pipes in the City. The three interceptors converge near the Buffalo Street Bridge at the Flood Relief Channel. A combination of gravity and low-pressure (siphon) piping convey flow over and under the Channel, respectively. Lakefront parcels along Taughannock Boulevard (from the City boundary to the Town of Ulysses' border) are also served by a Town sewer main. The Taughannock Boulevard main connects to a jointly owned interceptor pipe and pump station in Cass Park. A force main from the pump station extends beneath the Cayuga Inlet to Pier Road.

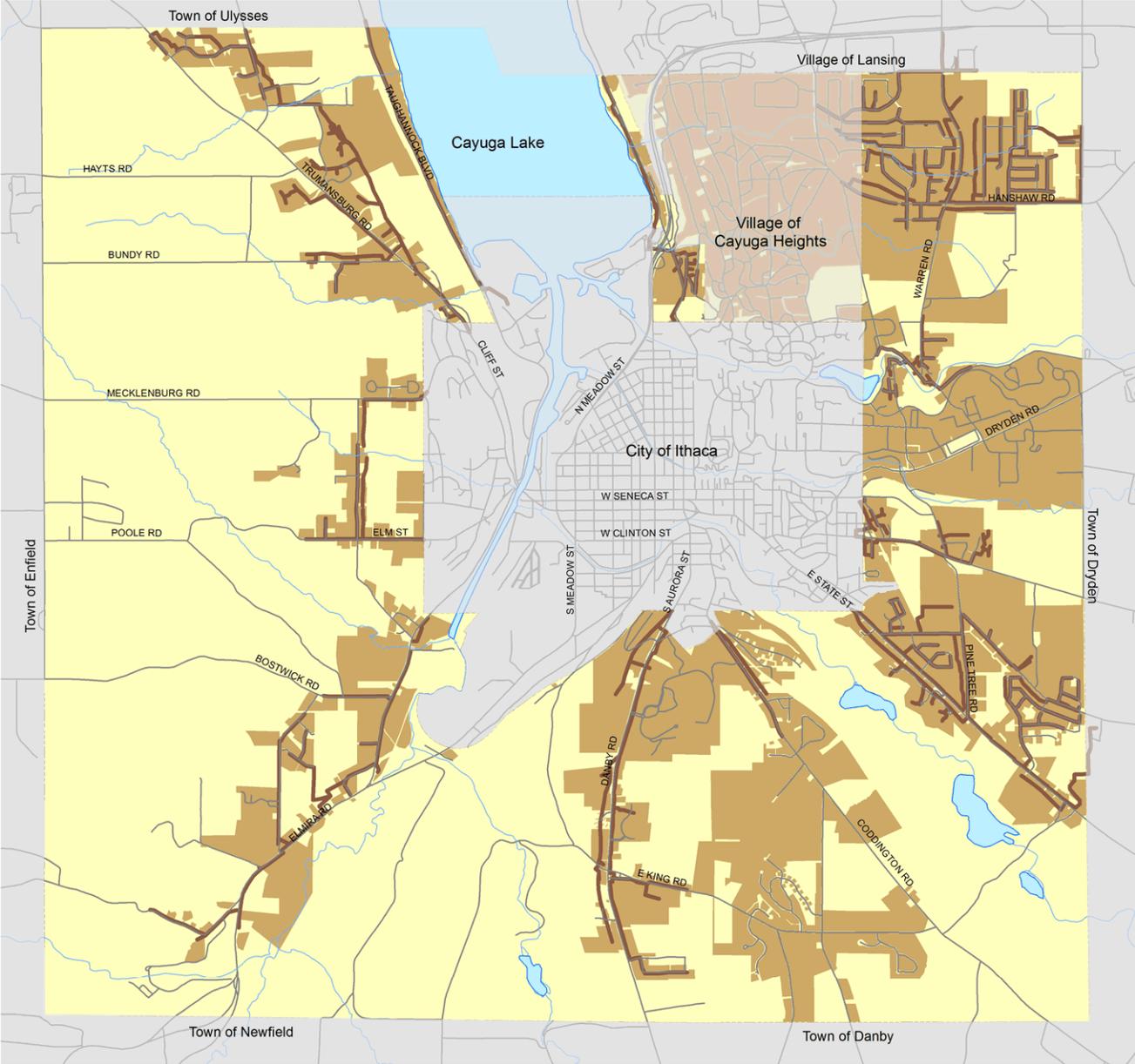
The Inlet Valley system extends from a jointly owned interceptor on Floral Avenue and serves parcels along Five Mile Drive, Seven Mile Drive, Elmira Road, and Enfield Falls Road. A siphon beneath the Flood Relief Channel discharges to a pump station in the Cherry Street industrial park.

⁶³ City of Ithaca Water Supply Project SEQR draft scoping document, 22 June 2007.

⁶⁴ Cornell University Facilities Services Energy and Sustainability website, <http://energyandsustainability.fs.cornell.edu/util/water/drinking/distribution.cfm>, accessed 12 August 2011.

⁶⁵ *Building Utility Use and Costs History*, <http://energyandsustainability.fs.cornell.edu/em/bldgenenergy/history.cfm>

Sewer service areas | Town of Ithaca



- Town sanitary mains
- Sewer service
- Onsite septic or no service

Produced by Town of Ithaca Planning Department, 10 March 2014
 Data: Town of Ithaca Public Works Department, Tompkins County Information Technology Services GIS Division



Sewer mains throughout the South Hill neighborhoods converge at jointly owned interceptors in the City of Ithaca on Aurora Street, Hudson Street, and Crescent Place. The Danby Road corridor serves most of Ithaca College, the South Hill Business Campus, and the commercial uses in the vicinity of the West King Road intersection. The collection system along Coddington Road serves a limited number of residential customers between the City of Ithaca boundary and West Northview Road. Therm, Inc. and residential neighborhoods in the vicinity of Pennsylvania Avenue, Northview Road, Troy Road and East King Road (Southwoods, Deer Run, and Chase Lane developments) connect to the interceptor at Crescent Place.

The East Hill system includes extensions of jointly owned interceptors on East State Street/Slaterville Road (from the City of Ithaca boundary to Burns Road) and on Mitchell Street from the City of Ithaca boundary to Summerhill Lane. Collection pipes serving residential and institutional uses on Pine Tree Road, Honness Lane, Snyder Hill Road, and the Eastern Heights neighborhood connect to the Slaterville Road interceptor. Commercial and high density residential properties surrounding the East Hill Plaza discharge through the Mitchell Street interceptor.

The Northeast system includes the Town's sewer infrastructure in the vicinity of the Warren Road and Hanshaw Road corridors north of the Cornell University Campus. Sewage from the residential and institutional properties is ultimately discharged into the Village of Cayuga Heights collection system and treated at the Village of Cayuga Heights Wastewater Treatment Plant.

The Lake Street system includes gravity collection mains along Lake Street and throughout the Renwick Heights neighborhood; they extend from an interceptor sewer at the Ithaca High School. The East Shore Drive properties, including a few City parcels adjacent to Stewart Park, drain to a pump station which lifts sewage to the Lake Street main.

There are also many portions of the West Hill and South Hill areas that do not have access to the municipal sewer and use private septic systems to handle their waste.

Village of Cayuga Heights Wastewater Treatment Plant

The WTP for the Village of Cayuga Heights is a trickling filter plant with tertiary phosphorus removal. It treats flow from the Village of Cayuga Heights, the northeast portion of the Town of Ithaca, parts of the Village and Town of Lansing and the Town of Dryden. The wastewater collection system is a gravity system and is operating at 1.477 MGD of a permitted 2.0 MGD maximum 30-day flow. The plant has been upgraded to improve the phosphorus removal capability. All of the capacity is owned by the Village and is allocated to neighboring municipalities by contract. The recent activation of the Kline Road bypass in the Village of Cayuga Heights collection system directs a portion of the volume of sewage for Town of Ithaca customers in Northeast Ithaca to the Ithaca Area Wastewater Treatment Facility.

Ithaca Area Wastewater Treatment Facility

The Ithaca Area Wastewater Treatment Plant is jointly owned and operated by the City of Ithaca, Town of Ithaca, and Town of Dryden. The maximum 30-day flow through the facility in 2008 was 9.83 MGD (approximately 75% of the 13.0 MGD permit limit). The surplus capacity of 3.17 MGD is owned in varying percentages by the three municipalities, with the Town of Ithaca owning approximately 1.181 MGD of the surplus capacity. Sewage generated in the Town of Ithaca is transported to the plant via portions of the City's sewer system.⁶⁶

⁶⁶ *Countywide Inter-municipal Water and Sewer Feasibility Study for Tompkins County*, T.G. Miller, P.C., Stearns & Wheeler, and John M. Andersson, P.E., 31 March 2010.

B.10.3 Stormwater

Until relatively recently, the primary objective for municipalities managing stormwater was to control the quantity of it. Because this often posed problems for downstream locations, stormwater management evolved into the use of detention facilities to delay the rate and flow of runoff downstream. The 1993 Comprehensive Plan described just four detention facilities that existed at that time, including only one publicly owned stormwater management facility, constructed in conjunction with the DeWitt Middle School.

With recent involvement from the Federal and State governments as a result of amendments to the Clean Water Act, municipal management of stormwater runoff has significantly evolved with a major focus now aimed at water quality. This broadening of the concept of stormwater management has brought about elaborate new techniques for controlling and treating stormwater runoff-- and has also brought about a host of new responsibilities for the Town of Ithaca, including oversight for an expanding number and variety of stormwater management facilities

Beginning in 2003, the Town of Ithaca and many other municipalities in Tompkins County were mandated to comply with Federal and State water quality regulations, commonly referred to as the Stormwater Phase II Program. These regulations administered by the NYS DEC required all regulated municipalities to obtain a permit from the DEC for the discharge of stormwater runoff into surface waters. As a condition of this permit, regulated municipalities were required to develop and implement a comprehensive stormwater management program that included mandated programs and practices for the following elements:⁶⁷

- Conduct outreach and education about polluted stormwater runoff.
- Provide opportunities for residents to be involved in conversations and activities related to stormwater management.
- Detect illicit discharges, such as a pipe dumping directly into a stream.
- Control construction site runoff.
- Control post-construction runoff.
- Perform "municipal housekeeping" by taking steps to prevent runoff from municipal grounds and activities.



Stormwater inlet on Winthrop Drive, part of a larger drainage improvement project in Northeast Ithaca.

⁶⁷ *Stormwater Management Guidance Manual for Local Officials*, NYS Department of Environmental Conservation and NYS Department of State, September 2004.

To comply with these regulations, the Town adopted a Stormwater Management and Erosion and Sedimentation Control Law in 2008. The law requires the installation of temporary erosion control measures at construction sites and the construction of permanent onsite stormwater treatment and control facilities at many new building sites meeting certain thresholds. The Town of Ithaca is required to review and approve Stormwater Pollution Prevention Plans (SWPPP) plans and designs for controlling runoff and pollutants resulting from these projects, as well as for conducting regular inspections of the temporary erosion control measures used during construction activities. The Town is also required to monitor and perform periodic inspections of permanent stormwater management facilities to ensure that they are regularly maintained and continue to function as they were designed for in perpetuity.

As required by NYS DEC, the Town maintains an inventory of all permanent stormwater management facilities in the Town. The current inventory (as of 2012) includes 40 permanent stormwater facilities. These include stormwater wetlands (created), bioretention ponds, swales, sand filters, and rain gardens. Most facilities are privately owned and maintained. Owners of permanent stormwater facilities are required to enter into an operation, maintenance and reporting agreement with the Town, specifying that current and future owners of land containing stormwater facilities are responsible for future operation, maintenance, and repair to ensure that they continue to function for their designed purpose. The agreement reserves the right for the Town to access and conduct inspections of stormwater facilities. If deficiencies are found and not remedied, the Town reserves the right to have repairs performed at owner expense.

The Town also adopted an illicit discharge detection and elimination law in 2008. The Storm Sewer System and Surface Water Protection Law is intended to prohibit non-stormwater discharges (pollutants) from entering the stormwater conveyance system. Illicit discharges can inadvertently enter the stormwater system from failing septic systems, or they can intentionally enter the system through illegal dumping of material (e.g. used motor oil) into storm drains or ditches. To implement this law, the Town has developed and continues to update a map of its entire stormwater conveyance system. The Town is required to inspect a portion of this system annually.

The Town is a partner in the Stormwater Coalition of Tompkins County. This intermunicipal organization was created in 2003 to provide a means for regulated communities in Tompkins County to work collectively to meet the goals of the NYS DEC's stormwater management requirements. The Coalition is composed of 10 Tompkins County municipalities along with ex-officio members, including the Tompkins County Soil and Water District which provides technical and administrative assistance. Among its many benefits, the Coalition sponsors trainings and various public outreach efforts to educate the public about the impacts of pollutants and stormwater runoff.

Implementation of Federal and State stormwater regulations has increased the role of the Town in managing stormwater impacts. These regulations mandate compliance but offer very little in the way of assistance, leaving the Town and other local municipalities on their own to find and allocate resources to implement the program. Funding and staffing needs will need to be carefully examined so the Town meets the challenges of implementing evolving regulatory requirements, and of ensuring that ever-expanding stormwater infrastructure is adequately maintained.

B.10.4 Road maintenance

There are approximately 121 miles of roads in the Town, of which 50 are owned and maintained by the Town of Ithaca. The roads owned by the Town are maintained by the Town Public Works Department. The latter is responsible for paving and repairs, winter maintenance (plowing and salting), roadside mowing (where needed to keep the area clear and provide adequate site distance for road users), catch basin and ditch cleaning and repairs, and other road maintenance duties. Public Works Department also plows and salts sections of State and County roads through shared agreements with these entities.

The Village of Cayuga Heights maintains its own roads except for a few small sections maintained by the Town. Cornell University and Ithaca College build and maintain most of their own internal roads.

B.11 Community services

B.11.1 Fire protection and emergency services

The Town of Ithaca contracts with the City of Ithaca Fire Department (IFD) and the Village of Cayuga Heights Volunteer Fire Department (CHFD) for fire protection and emergency rescue services. The Cayuga Heights Fire Department serves Northeast Ithaca and the Forest Home neighborhood. The IFD serves the rest of the Town.

The CHFD is an all-volunteer department that depends on community members to provide 24-hour fire protection, emergency medical assistance, and some rescue services. As of 2011 there were 50 members serving in the department, not including additional volunteers providing non-emergency support functions. The CHFD also offers community educational programs, most notably regular CPR classes, in their fire house at 194 Pleasant Grove Road.⁶⁸



IFD West Hill Station on Trumansburg Road.

CHFD fire protection to the Town is provided under a contract that was renewed in 2007. Fire protection cost is divided based on the ratio of Town property values in the service area to village property values. In 2011 the Town's share amounted to 36.3% of costs (about \$172,300 for operation costs). The same ratio is allied to capital purchases. Operational expenses that solely benefit the Village (i.e. fire inspections or flushing mains in the Village) are not included in these calculations.

CHFD answered 517 calls in 2009; 169 of these (32%) were in the Town outside of the Village and 54 of the calls being outside of their normal service area. The number of calls has increased 81% since 1989, when total calls reported in the 1993 Plan was 285.⁶⁹

The IFD is largely staffed by career fire fighters and emergency response personnel. As of 2011 the IFD had 67 uniformed staff. IFD has four fire stations; two in the City, one in the South Hill area, and one in the West Hill area. The minimum staffing level for the department on duty at any one time is 11; eight fire fighters and three officers. In addition to basic firefighting, the IFD services include fire prevention, rescue, hazardous material control, and public education. It also provides emergency medical services for serious accidents and life threatening emergencies.

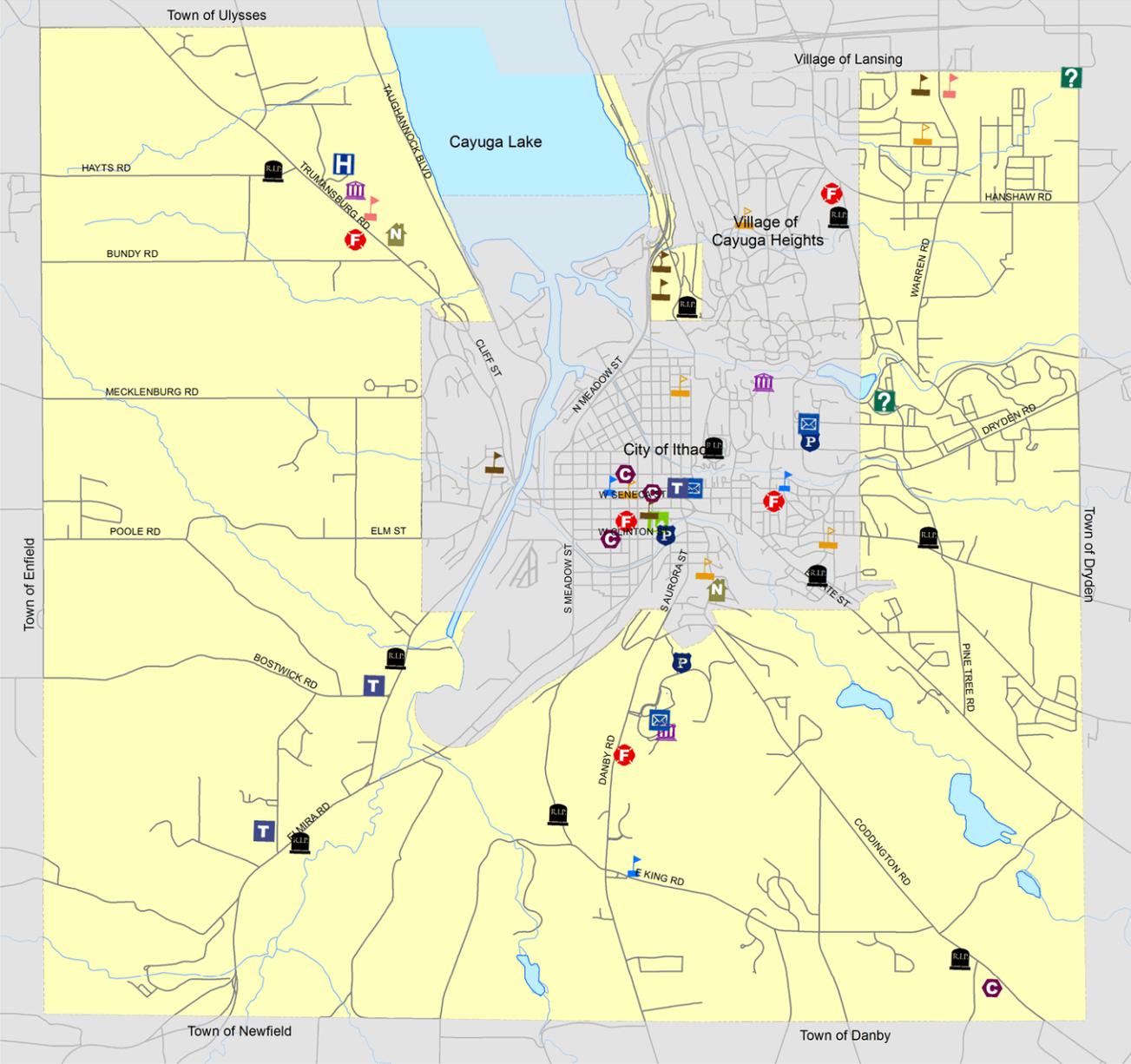
The number of alarms answered by the IFD has steadily increased over the decades. In 1990 the total number of calls answered was 3,362, which by 2010 had increased to 4,874. Calls originating from the Town also steadily increased; 563 reported in 1990, 776 in 2000, and 1,206 in 2010. Percentage of total calls to the IFD originating from the Town of Ithaca varies from year to year and has averaged around 20% over the last two decades, fluctuating between 16% to 25%, with percentages since 2005 being above 20%.⁷⁰

⁶⁸ Cayuga Heights Fire Department website, <http://www.chfd.net/about.php>, accessed 8 August 2011.

⁶⁹ Cayuga Heights Fire Department records.

⁷⁰ City of Ithaca Fire Department data

Community services | Town of Ithaca



- | | | | |
|--|------------------|--|----------------------------|
| | Town government | | Educational visitor center |
| | Post office | | Museum |
| | Cemetery | | Library |
| | Hospital | | Elementary school |
| | Fire department | | Secondary school |
| | Law enforcement | | Private school |
| | Nursing home | | Special education |
| | Community center | | |

Produced by Town of Ithaca Planning Department, 4 March 2014
 Data: Town of Ithaca Planning Department, Tompkins County Information Technology Services GIS Division



The Town and City of Ithaca last renewed and revised their fire contract in 2010 to provide for fire protection and emergency medical services until 2014. In return, the Town pays for approximately 37% of operating expenditures and capital items over \$25,000. It also stipulates that the Board of Commissioners must have two Town representatives.

The Tompkins County Department of Emergency Response oversees the County-wide emergency dispatch and communications systems that allows residents to dial 911 to receive emergency medical, fire, police, or other emergency help from any phone in Tompkins County. Ambulance service is provided by a commercial provider; in the area of the Town of Ithaca, Bangs Ambulance is the provider.

B.11.2 Police

Police protection for the Town is provided primarily by the Tompkins County Sheriff Department, although the New York State Police also patrol the Town. The Village of Cayuga Heights has its own police force, as do both Cornell University and Ithaca College. All police forces in the County have mutual assistance policies for large or special emergencies.

The Tompkins County Sheriff, headquartered on Warren Road in Lansing, has three to five deputies on patrol at any given time, and 26 deputies total. The department also has seven sergeant deputies and five criminal investigators. The Tompkins County Jail is also located on Warren Road with an overall inmate capacity of 74 beds.⁷¹ The County is split up into four zones. The zone that includes the Town of Ithaca has at least one officer on patrol at any given time. There are 20 uniformed NY State Troopers for road patrol and four investigators. The Village of Cayuga Heights Police Department has six full-time and seven part-time officers with at least one on duty at any given time.⁷²

B.11.3 Town government facilities

Ithaca Town Hall is located at 215 North Tioga Street in the City of Ithaca. Town Hall moved to its present location in 2000 after determining that its Seneca Street location, one block away, had become grossly inadequate to meet its needs. Built in 1910, the building is formerly the main Ithaca Post Office, and is considered one of the finest local examples of Beaux Arts Classicism, an architectural style highly favored for public buildings designed at the turn of the 20th century. The building is listed on both the New York State and National Registers of Historic Places and as part of the DeWitt Park Historic District in the City of Ithaca.

Following significant renovations and rehabilitation of the former post office, with care to maintain its historical character, the structure now provides approximately 13,000 square feet of usable space for Town office activities (18,000 square feet total). It contains offices, a board/court room, meeting rooms, and storage space. All Town functions outside of Public Works and Engineering occupy offices within this spacious building.

While having changed location over the years, the Ithaca Town Hall has been located within the City of Ithaca for over 45 years, providing a central and convenient location for residents. Prior to its Seneca Street office location, now the site of the Hilton Hotel, Town Hall was located in the City of Ithaca City Hall annex from 1964 until 1975.

The Town Public Works Facility is located on Seven Mile Drive and houses equipment, vehicles, operations, and administrative offices for the department. Built in 1976, the 10,900 square foot facility was renovated and expanded by 16,000 square feet in 2003 to accommodate the needs of the department and to provide storage and protection of equipment and vehicles. The addition included a wash bay, mechanics shop, office space, and a staff break room and

⁷¹ 2009 Annual Report, Tompkins County Sheriff's Office

⁷² Tompkins County Sheriff Department, communications with multiple staff, August 2011.

meeting space. With the steady growth of the Town has come a steady increase in the amount and type of work being done by the Public Works Department. Part of the growth has put a strain on the current facility to appropriately store material and equipment. The Public Works 2010 Master Plan called for upgrades to the facility, some of which have since been completed, including a new salt storage shed, new wash bay, and additions to the annex building.

B.11.4 Schools

Most Town residents attending public schools are served by the Ithaca City School District, which includes eight elementary schools (grades K-5), two middle schools (grades 6-8), one high school, and two alternative middle/high schools (grades 6-12 for Lehman Alternative Community School and grades 9-12 at New Roots Charter School). Four of the public schools are located within the Town: two elementary schools (Northeast and Cayuga Heights) and both middle schools (Boynton and DeWitt). About 5,500 students are enrolled in the 12 schools.

An additional public education resource is Tompkins-Seneca-Tioga Board of Cooperative Educational Services (BOCES), which offers special and vocational education and other shared services designed to meet the needs of member districts. BOCES began in 1949 and in 1970 opened its campus on Warren Road in the Town of Ithaca. As of the 2010-2011 school year there were 477 school-age students and 527 adult students attending programs. BOCES has approximately 286 staff members.

Several private and parochial schools service students in the area. The Ithaca Waldorf School is in the Town of Dryden (early childhood through 7th grade); the Elizabeth A. Clune Montessori School is in the Town of Ithaca (ages 3-14); and Immaculate Conception School is in the City of Ithaca.

Other schools

The Community School of Music and Art (CSMA) in Ithaca is a private nonprofit organization that has served the community for over 50 years. It provides instruction in the visual arts, music, dance, theatre, and languages for students of all ages and backgrounds. CSMA enrolls about 1700 students annually.

B.11.5 Library

Library services are provided by the Tompkins County Public Library (TCPL). TCPL serves the residents of Tompkins County and is the Central Library for the Finger Lakes Library System, serving libraries and users in Tompkins, Tioga, Cortland, Seneca and Cayuga counties. In 2000, TCPL moved into the former Woolworth store on Green Street in downtown Ithaca. The move allowed the Library to double in size and attract thousands of new users. As of 2011, TCPL had over 47,000 registered borrowers and an annual circulation of 835,000 items.⁷³

TCPL offers a circulating collection of 263,000 items including books, paperbacks, magazines, videos, DVDs, music CDs, and recorded books. An extensive interlibrary loan service provides patrons with items that are not owned by TCPL. Reference and information services are available in person, by phone or by e-mail. Access to comprehensive databases, the library's catalog, and the extensive resources on the Internet is available through free public workstations. Specialized services include microfilm scanners and Rosetta Stone, a language software program for learning English and Spanish. Public programming for all ages includes author readings, story time, art shows, music, cultural celebrations, and an annual Community Read in collaboration with Cornell University.

⁷³ Tompkins County Public Library, <http://www.tcpl.org/libinfo/about-history.php>, accessed 8 August 2011.

Funding for TCPL continues to be a challenge, and staffing and hours of operation have declined from their peak in 2001. County support for the library has declined in recent years; fundraising campaigns have been conducted and alternative funding mechanisms explored.

B.11.6 Solid waste management

The Town of Ithaca is not directly responsible for solid waste management. Waste is handled countywide by the Tompkins County Solid Waste Management Division, and garbage collection is provided by private haulers. The Cayuga Heights Department of Public Works collects garbage within the Village of Cayuga Heights.

The solid waste program is funded largely by transfer station tipping fees, which are reflected in trash tags and an annual user fee collected through property taxes. The annual fee pays for closing and maintaining old landfills, curbside recycling collection, the Household Hazardous Waste and Reuse programs, capital costs of the Recycling and Solid Waste Center, and administration costs. Solid waste handled by the County is exported to Seneca Meadows landfill in Waterloo.

As outlined in Tompkins County's Solid Waste Management Plan (1995), a major focus of the Solid Waste Management Division is diverting materials from the landfill through waste reduction, reuse, recycling, and composting. The Division has established an extensive countywide recycling program; curbside collection is offered every other week, and residents may also bring recyclables to the Recycling and Solid Waste Center (160 Commercial Avenue in the City of Ithaca). This facility underwent a \$2.5 million upgrade through the summer and fall of 2011, enabling Tompkins County to reach its goal of diverting 75% of waste by 2016 and 80% by 2030.⁷⁴

Tompkins County residents are required by law to recycle newspaper, glass bottles and jars, metal food and beverage cans, and corrugated cardboard. Beyond their direct programs and services, the Solid Waste Management Division encourages reuse, home composting, and green purchasing by providing extensive information and resources on their website for County residents, businesses, and schools. It also sponsors the Compost Education Program at Cornell Cooperative Extension of Tompkins County. In 2005, approximately 2,200 tons of food waste and 3,000 tons of yard waste were diverted from landfills through home composting in Tompkins County.⁷⁵

B.11.7 Public health facilities

The primary health care facility in the area is the Cayuga Medical Center (CMC) and its satellite facility, the Convenient Care Center at Ithaca. CMC is located on West Hill, off NYS Route 96 (Trumansburg Road) in the Town of Ithaca. It is a 204-bed facility with more than 200 affiliated physicians and over 1,200 total health care professionals. The CMC is a not-for-profit, acute care medical center with many state-of-the-art diagnostic and treatment services. Over the past decade the facility has undergone significant renovations and expansions, increasing approximately 100,000 square feet⁷⁶ to improve and increase services.

The Convenient Care Center at Ithaca facility is located off Warren Road in the Village of Lansing. This facility provides a variety of medical and emergency services in a location that is convenient to population-growth areas in the eastern portion of Ithaca and Lansing. The facility is staffed by full-time physicians, registered nurses, and support personnel who offer medical care on a walk-in basis. They also provide outpatient surgical care, radiology imaging services, laboratory services, physical therapy, and the Veterans Primary Care Clinic.

⁷⁴ *News Details: Partners Break Ground for Recycling and Solid Waste Center Upgrade*. 3 June 2011. Tompkins County website. <http://www.tompkins-co.org/detail.aspx?ContentID=1705>, accessed 21 July 2011.

⁷⁵ Tompkins County Solid Waste Management Division, 2006. <http://www.recyclecomptkins.org>, accessed 21 July 2011.

⁷⁶ Town of Ithaca Planning Department records.

B.12 Economic development

The following provides an economic profile of the Town. The information includes countywide economic and employment information and a Town-specific profile of commercial and retail development.

B.12.1 General economy

The economy of Tompkins County has been steady and growing moderately over the last several decades. Since the 1960s, the economy has transformed from being primarily driven by durable goods manufacturing to being dominated by the educational service sector. In 1962, manufacturing peaked with 6,200 jobs accounting for 36% of all private sector jobs in Tompkins County. By 2005, manufacturing accounted for less than 8% of all private sector jobs, while service sector jobs accounted for 90%. Conventional service jobs, such as retail, food service, and hospitality, have remained steady over recent decades, and account for 16% of private sector jobs. Starting in the mid-1960s, and with a rapid rise in the 1980s, educational services grew into the dominant sector and by 2005 accounted for 49% of private sector jobs in the County. Technology firms producing software, equipment, and high tech services emerged in the 1980's and by 2005 accounted for 5% of permanent private sector jobs. Health services, transportation, professional services, and other business services make up most of the remaining service jobs. The key wealth-generating sectors in Tompkins County are education, manufacturing, and high tech. Agriculture and tourism, while smaller in their economic contributions, add significantly to the community's overall quality of life and help diversify the economic base.⁷⁷

The annual growth rate of the economy over the last decade has averaged around 1.5 %. The recent recession, which started in 2008, hit Tompkins County much harder than the recession of 2002 and about equal to the 1991-92 recession. In the 1991-92 recession, Tompkins County lost approximately 1,600 jobs.⁷⁸ Current figures indicate job losses between 2008 and 2011 in Tompkins County at about 1,551.⁷⁹ Unlike manufacturing or high tech employment, which tends to fluctuate with the market, the relatively stable employment in the educational sector allowed the area to fare better than the national and State average during the last recession. In addition, thousands of students, many from outside the State, bring millions of dollars in consumer spending to the region each year. This spending helps to support a host of industries from restaurants and real estate to other retail establishments in Ithaca and the surrounding area.

There is no established economic development policy or strategy for the Town of Ithaca. However, the Tompkins County Area Development (TCAD) is an excellent resource to develop incentives and initiatives to attract certain industries and businesses. TCAD, a private, not-for-profit organization founded in 1964 is the economic development agency for the County. The organization provides a number of services aimed at attracting, retaining, and fostering the growth of businesses that create quality jobs and increase the tax base. TCAD identified three major goals in its 2006 economic development strategy for Tompkins County:

1. Increase and diversify housing supply,
2. Improve workforce and business skills,
3. Revitalize unique commercial districts and town centers.

Among its many efforts, TCAD manages a revolving loan program to help area businesses; serves as a conduit to the tax-exempt bond market for local not-for-profit employers; partnered with the Workforce Investment Board to create

⁷⁷ *Tompkins County Economic Development Strategy*, Tompkins County Area Development (2006).

⁷⁸ *Index of Economic Activity in Tompkins County*, Department of Economics at Ithaca College, <http://www.ithaca.edu/economics/tcindex.htm>, accessed 4 August 2011.

⁷⁹ *Quarterly Census of Employment and Wages (QCEW)*, Department of Labor, Labor Statistics, <http://www.labor.ny.gov/stats/ins.asp>

a comprehensive Workforce Strategy for Tompkins County; coordinated the efforts in producing the Countywide Inter-Municipal Water and Sewer Feasibility Study for Tompkins County (March 2010); and in 2008 contracted with Chumura Economic and Analytics to produce the Tompkins County Labor Market Region Study (April 2008).

B.12.2 Employers

Four of the top ten employers in Tompkins County are located wholly or partially within the Town of Ithaca: Cornell University, Ithaca College, the Ithaca City School District and the Cayuga Medical Center.

Top employers in Tompkins County		
Rank	Employer	Sector
1	Cornell University	Education
2	Ithaca College	Education
3	BorgWarner	Manufacturing
4	Ithaca City School District	Education
5	Cayuga Medical Center	Health services
6	Tompkins County	Government
7	Wegmans	Retail
8	Franziska Racker Center	Social services
9	City of Ithaca	Government
10	William George Agency	Social services

Source: TCAD, <http://www.tcad.org/businessInfo/factsandfigures.php#employ>, accessed 1 August 2011

Institutions of higher learning

Higher education has provided a stable foundation for the local economy. Together the area's three institutions of higher learning, Cornell University, Ithaca College and Tompkins Cortland Community College, have more than 14,000 employees, enroll more than 30,000 students per year, and generate billions of dollars worth of economic activity. These institutions also provide numerous opportunities for cultural, recreational, and sports events for the enjoyment of area residents. These institutions provide continuing education opportunities for residents and provide student interns and volunteers to support community programs and activities.

Cornell University, founded in 1865, has grown over the years in size, enrollment, and breadth of activity. It has become internationally known as a research and development center. According to the Cornell University Division of Planning and Budget, for the Fall 2012 semester, Cornell had a workforce of 9,734 full- and part-time employees (faculty of 1,587, academic non-faculty of 1,073, and non-academic staff of 7,074).⁸⁰ Its extensive holdings of land also make it possible for Cornell to play a significant role as a local real estate developer and as a steward of significant natural areas. While most of Cornell's core campus is located in the City of Ithaca, many of its facilities are situated within the Town of Ithaca, including the School of Veterinary Medicine, athletic fields, the Orchards area, Plantations, the Tennis Center, Equestrian Center and the area around East Hill Plaza that is planned for future University expansion as East Ithaca Village.

Ithaca College was founded in 1892 as a music conservatory, and was originally located within the City of Ithaca. In the 1960s, Ithaca College moved its campus to South Hill in the Town of Ithaca. The College employs 1,697 faculty

⁸⁰ Cornell University Office of Institutional Research and Planning, www.irdp.dpb.cornell.edu/tableau_visual/academic-workforce-at-a-glance, www.irdp.dpb.cornell.edu/tableau_visual/non-academic-workforce-at-a-glance

and staff (non-student, full- and part-time in 2010).⁸¹ Most of its students live on campus. The College has been expanding its facilities on campus in recent year, most recently with the addition of a new Athletic and Events Center.

Tompkins Cortland Community College (TC3), founded in 1967, is located in the Town of Dryden, with extension centers in the City of Ithaca and Cortland. TC3 serves more than 3,000 students in credit programs, and another 3,000 in non-credit workshops and customized training. TC3 has 266 full-time employees (faculty, administration, support) with 250 adjunct instructors. TC3 plays a vital role in the area's workforce development.

Other major employers in the Town

The Cayuga Medical Center has been expanding its size and services over the years. Currently the facility employs 1,200 health care professionals, and has a medical staff of more than 200 affiliated physicians.

The Ithaca City School District (ICSD) has 5,247 students enrolled in its 12 schools; eight elementary, two middle, one high school, and one 6-12 alternative school.⁸² The District covers an area of 155 square miles, covering urban, suburban and rural areas. According to the ICSD 2011-2012 budget proposal, the District has 1,181 employees.

The Tompkins-Seneca-Tioga Board of Cooperative Education Services (BOCES), located in the Town on Warren Road, provides career and technical programs for high school students, students with disabilities, and literacy and employment training for adults. As part of its shared services mission, BOCES also provides non-instructional support services to local school districts. The facility on Warren Road has about 290 employees.

B.12.3 Employment: major occupations

Education, training, and library-related occupations are the largest occupation group in Tompkins County, with 9,500 jobs in 2007, while office and administrative support occupations accounted for more than 8,600 jobs.⁸³ Total employment during the period was 50,341, according to the Bureau of Labor Statistics.

The occupation profile for Town residents indicates the most common occupations as: educational services, healthcare, and social assistance (58%), followed by professional, scientific, management, administrative, and waste management service (12%), arts, entertainment, recreation, accommodation, and food service occupations (7%), and retail trade (6%).⁸⁴ Of employed people, 82% were private wage and salary workers, 13% federal, state, or local government workers, and 5% self-employed workers.⁸⁵

Tompkins County has a highly skilled workforce. Many students choose to stay in the region after graduation, resulting in a high percentage of residents with college and graduate degrees. This creates opportunities for industries requiring highly educated workers and entrepreneurial activities. However, the skills embodied in the residents do not necessarily match the skills demanded by firms in the region. According to the Chmura Economics and Analytics report (2008), in 2006, close to half the positions created by Tompkins County firms needed workers with a minimum of basic skills (short- to long-term on-the-job training), while 18.1% required medium skills (experience in a related occupation, postsecondary vocational award, or associate's degree) and 32.7% called for high skills (four-year degree or greater). High-skilled workers composed 40.3% of the labor supply while medium-skilled workers composed

⁸¹ *Ithaca College Facts in Brief 2010-11*, Ithaca College Office of Institutional Research.

http://www.ithaca.edu/ir/facts/Ithaca_College_Facts_in_Brief_2010-11.pdf, accessed 1 August 2011.

⁸² Ithaca City School District Registrar Office, 2012 school year.

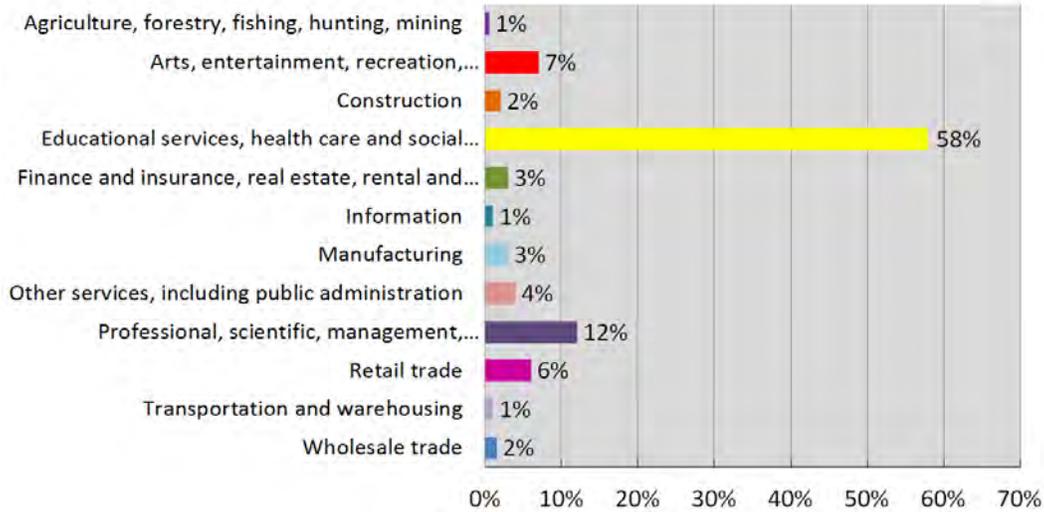
⁸³ *Tompkins County Labor Market Region Study*, Chmura Economic and Analytics for Tompkins County Area Development, April 2008.

⁸⁴ American Community Survey 2008-2012, United States Census Bureau.

⁸⁵ American Community Survey 3yr. dataset 2010-2012, United States Census Bureau.

33.9% of the supply. The result was potential underemployment for 23.4% of the workforce. Such workers are likely candidates to migrate out of the area in search of more suitable work.

Employment sectors: Town of Ithaca residents



Source: American Community Survey 2008-2012

B.12.4 Commuters

The County labor market extends well beyond the borders of Tompkins County. According to the American Community Survey data, approximately 14,901 workers commute from various neighboring and nearby counties into Tompkins County.⁸⁶

Due to the growing demand for workers in Tompkins County, the number of people incommuting has been steadily increasing. In 1990, about 11,350 workers, or 20% of the workforce, commuted into Tompkins County. In 2000, there were 13,713 incommuters; about 24% of the workforce in the county.

Incommuting into Tompkins County	
County	% of incommuters
Cortland (Cortland, Homer, McGraw)	22%
Tioga (Spencer, Candor, Owego)	21%
Cayuga (Auburn, Moravia, Aurora)	15%
Schuyler (Watkins Glen, Odessa, Montour Falls)	11%
Chemung (Elmira, Horseheads, Van Etten)	8%
Seneca (Seneca Falls, Interlaken, Ovid)	7%
Broome (Binghamton, Whitney Point, Lisle)	3%
Onondaga (Syracuse, Tully, Skaneateles)	2%
Other counties	11%

⁸⁶ American Community Survey data (2006-2008), Census Transportation Planning Products, United States Census Bureau. The Census Bureau’s American Community Survey program has replaced the standard decennial census long form. This “continuous measurement” program began in 2003.

B.12.5 Commercial and manufacturing profile

The Town of Ithaca has some limited commercial and retail businesses but most of this type of economic activity is concentrated in the City of Ithaca and Village of Lansing. There are currently four neighborhood commercial zones and one community commercial zone in the Town. The neighborhood commercial zone is intended to serve nearby neighborhoods, be low-volume traffic generators, and be minimally intrusive on residential neighborhoods. The community commercial zone is intended to provide a broader range of economic activities that might draw clientele from all areas of the Town and beyond its borders. These areas include:

Neighborhood commercial

- Inlet Valley/ Elmira Road (NY 13). This area includes several motels, a veterinary hospital, and a stereo/electronics store. It has not experienced much change over the last decade
- Danby Road (NY 96B) near the City of Ithaca/Town of Ithaca border. This site, known as Rogan's Corner, includes a restaurant, convenience store, gas station, liquor store and dessert catering business. The site is constrained physically and is not anticipated to expand, but turnover in the occupants of some businesses has occurred over the last ten years.
- Danby Road (NY 96B)/King Road. This area includes a gas station/convenience store, furniture store, hotel, coffee shop, and a food delivery/take-out store. Commercial uses continue to grow in this area, including the proposed 19,000 square foot College Crossings neighborhood retail center.



Inlet Valley Corridor area. (DT)

Community commercial

- Pine Tree Road/Ellis Hollow/Mitchell Street. This area continues to be in fluctuation and has recently experienced a decline in the number and variety of commercial businesses. Once supporting two plazas, one on each side of Pine Tree Road, now only East Hill Plaza remains, along with a number of freestanding businesses along the perimeter of the plaza and on the west side of Pine Tree Road. East Hill Plaza is owned by Cornell University, and operated by a private management company. It includes a supermarket (about 50,000 square feet), several restaurants, a liquor store, laundromat, gym, and other retail spaces, along with almost 50,000 square feet of Cornell University administrative offices in former retail space. The freestanding businesses in the Plaza include a hotel, several banks, gas station, dental office, and car wash. East Hill Plaza occupies about 22.2 acres. A drug store/pharmacy and a bank are the only commercial uses that remain on the opposite side of Pine Tree Road. In recent years, Cornell University has significantly expanded their property holdings in this area.

Manufacturing and technical businesses

- South Hill Business Campus on Danby Road (NY 96B). This 271,000 square foot facility originally opened in 1957 as the new regional headquarters of the National Cash Register Company, and later became home to the

corporate headquarters of Axiohm Transactions Solutions. The manufacturing component eventually left Ithaca, and the expansive factory stood idle for a time, until its most recent transformation into a successful multi-tenant mixed use facility. The South Hill Business Campus was rezoned from Industrial to Planned Development Zone in 2005 to allow a wide mix of uses. Currently, some 43 businesses occupy the complex, including approximately 30% manufacturing, 30% research and development, and 40% office use. As of 2011, approximately 90% of the facility was rented and the owners are interested in future expansion of the campus.

- Therm Incorporated. Therm is located on Hudson Street Extension, near the city-town boundary. It is a manufacturer and supplier of state-of-the-art turbine blades, and has supplied custom-machined components since 1935. The company has approximately 170 skilled and cross-skilled employees at its 130,000 square foot facility.
- Emerson Power Transmission was the most recent owner of the 760,733 square foot manufacturing complex located off Aurora Street/Danby Road (NY 96B) in the Town and City of Ithaca. The plant was built in 1928, with several subsequent expansions, and was used for manufacturing equipment for industrial and automotive applications. The plant, closed since 2010, offers many opportunities for reuse and/or redevelopment.
- Portion of Inlet Valley along Elmira Road (NY 13)/Five Mile Drive. This light industrial zoned area contains a small cluster of construction and trade-related uses, a small machine manufacturing business, and a brewery located near Five Mile Drive. The Ithaca Beer Company is a noticeably thriving presence in this area. The company will be expanding into a new 15,000 square foot facility that will include a brewery, pub, beer garden, and retail space on an adjacent site.

APPENDIX C RESIDENT SURVEY RESULTS

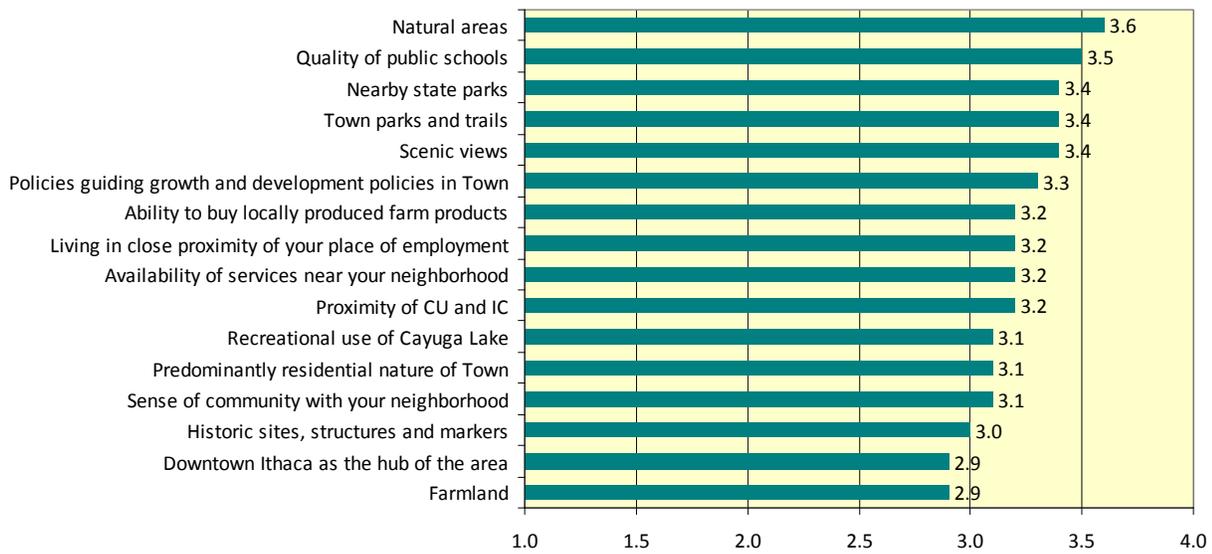
RESIDENT SURVEY RESULTS

The Town of Ithaca hired the Survey Research Institute at Cornell University to conduct a telephone survey of Town residents. The goal of the survey was to determine how residents feel about the town, its character, municipal services offered, and its future goals and spending. The results of the survey, along with other public input, will help to inform and assist the town as it proceeds in the update of its Comprehensive Plan.

Residents were randomly selected to participate in the survey via their telephone number. Telephone numbers for the survey were randomly selected using a random-digit dial sample of telephone exchanges covering the Town of Ithaca including the Village of Cayuga Heights. This method of selecting phone numbers was chosen because of the ability to obtain unlisted and cell phone numbers that would be missed had the numbers been selected from a phone book. Excluded from the project were residents of dormitories on the Cornell University and Ithaca College campus. The telephone survey was conducted over a three and a half week period in January 2009. In total, 359 surveys were completed.

The survey questionnaire was divided into five topic areas: (1) quality of life, (2) growth and development, (3) quality of municipal services, (4) spending priorities, and (5) laws and policies.

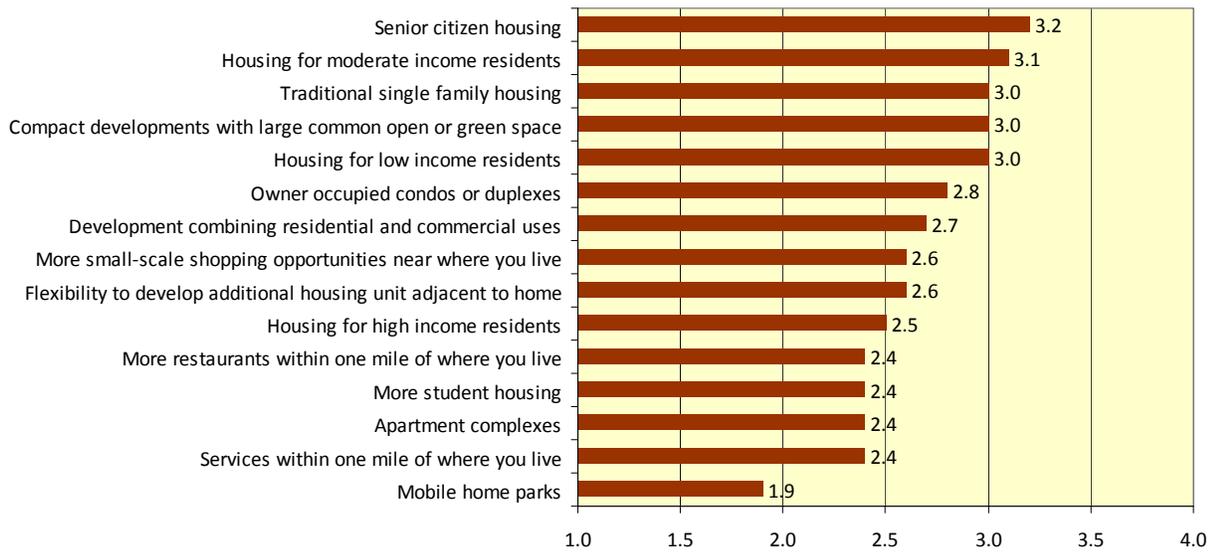
1. Quality of life: How important are these aspects to your quality of life?



Average rating on 4 point scale (1 – very unimportant to 4 – very important)

Quality of life				
Quality of life aspect	Very unimportant %	Unimportant %	Important %	Very important %
Natural areas	1	4	28	67
Quality of public schools	2	11	25	62
Nearby state parks	1	8	39	52
Town parks and trails	2	7	39	52
Scenic views	1	8	40	51
Policies guiding growth and development policies in Town	2	10	47	41
Ability to buy locally produced farm products	3	14	36	46
Living in close proximity of your place of employment	3	14	40	44
Availability of services near your neighborhood	2	14	47	38
Proximity of CU and IC	2	19	40	39
Recreational use of Cayuga Lake	4	18	41	37
Predominantly residential nature of Town	2	17	49	32
Sense of community with your neighborhood	3	19	43	35
Historic sites, structures and markers	2	25	48	25
Downtown Ithaca as the hub of the area	6	22	45	26
Farmland	8	21	46	24
Sense of community with the Town	5	30	49	16

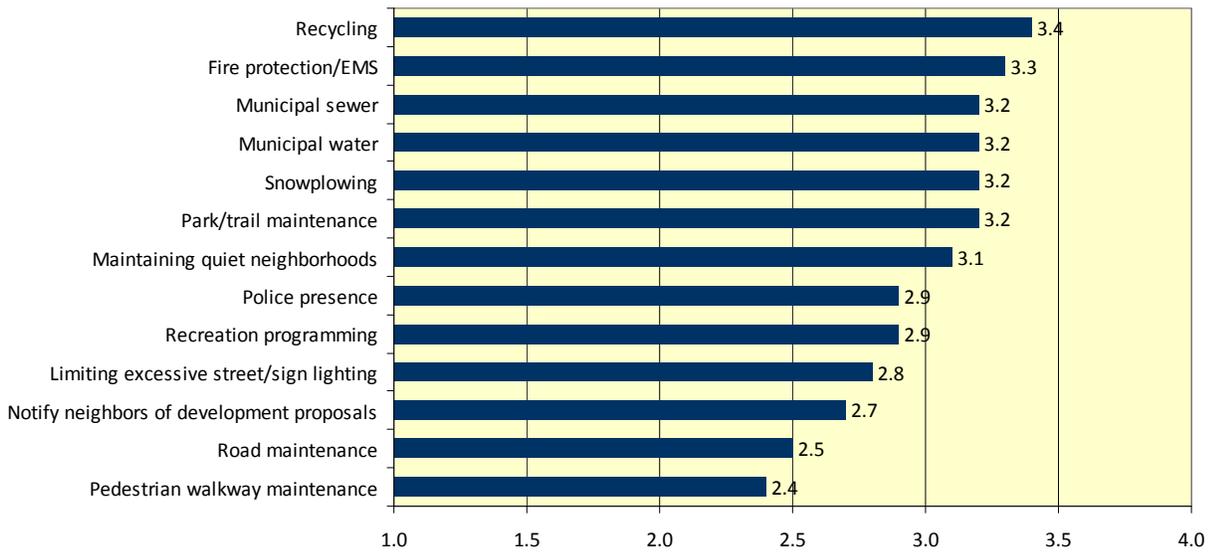
2. Growth and development: To what extent should the Town encourage or discourage the following types of development?



Average rating on 4 point scale (1 – strongly discourage to 4 – strongly encourage)

Growth and development				
Growth and development issue	Strongly discourage %	Discourage %	Encourage %	Strongly encourage %
Senior citizen housing	1	8	60	30
Housing for moderate income residents	2	9	68	20
Traditional single family housing	2	16	57	25
Compact developments with large common open or green space	4	16	56	25
Housing for low income residents	6	14	55	24
Owner occupied condos or duplexes	6	27	52	16
Development combining residential and commercial uses	10	26	52	12
More small-scale shopping opportunities near where you live	11	31	40	18
Flexibility to develop additional housing unit adjacent to existing home	11	33	40	16
Housing for high income residents	9	37	49	5
More restaurants within one mile of where you live	12	44	32	12
More student housing	12	41	37	10
Apartment complexes	10	41	42	6
Services within one mile of where you live	13	41	36	10
Mobile home parks	36	45	16	3

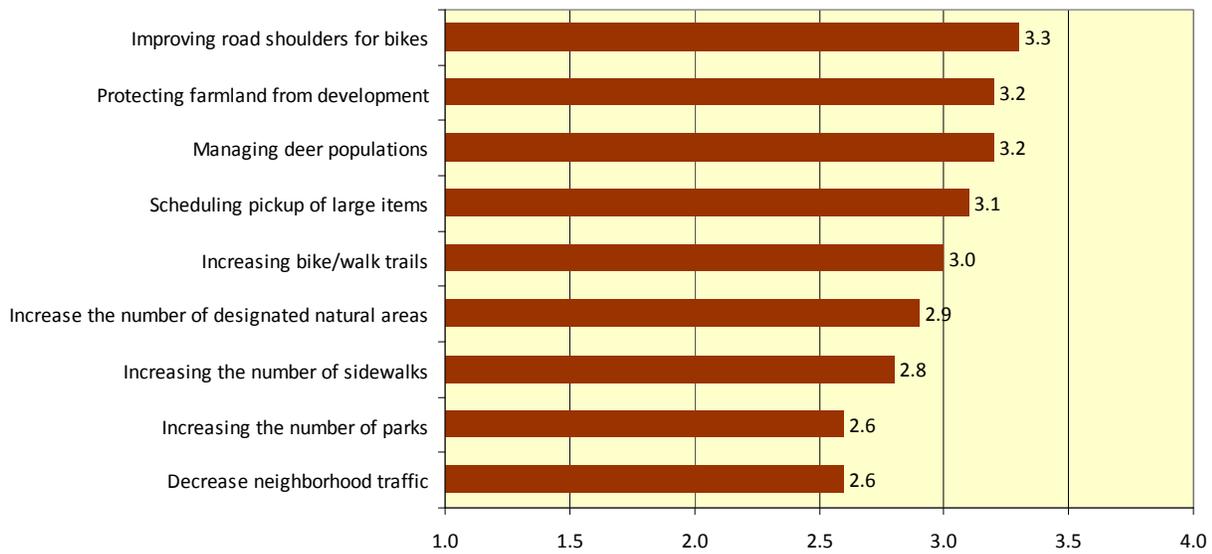
3. Municipal service: How would you rate the quality of the following services provided in the Town of Ithaca?



Average rating on 4 point scale (1 – poor to 4 – excellent)

Municipal services				
Service	Poor %	Fair %	Good %	Excellent %
Recycling	3	7	43	47
Fire protection/EMS	2	9	46	44
Municipal sewer	4	6	53	36
Municipal water	5	8	48	39
Snowplowing	3	13	46	38
Park/trail maintenance	3	9	58	30
Maintaining quiet neighborhoods	3	12	57	28
Police presence	4	24	50	23
Recreation programming	5	20	54	20
Limiting excessive street/sign lighting	8	21	56	16
Notify neighbors of development proposals	14	24	42	20
Road maintenance	15	33	40	11
Pedestrian walkway maintenance	20	29	40	11

4. Spending priorities: How do you feel about the Town spending money on the following activities?



Average rating on 4 point scale (1 – strongly oppose to 4 – strongly support)

Spending priority				
Activity	Strongly oppose %	Oppose %	Support %	Strongly support %
Improving road shoulders for bikes	4	8	43	44
Protecting farmland from development	3	15	43	39
Managing deer populations	7	14	35	44
Scheduling pickup of large items	3	15	49	34
Increasing bike/walk trails	5	20	43	32
Increase the number of designated natural areas	5	24	47	24
Increasing the number of sidewalks	6	26	45	23
Increasing the number of parks	8	32	46	13
Decrease neighborhood traffic	8	34	43	14

Open-ended survey responses

This section provides a general overview of residents' individual responses from a more lengthy collection of responses gathered during the 2009 Residential Survey. Responses were grouped and rearranged into four categories: strong opinions, positive comments, constructive recommendations, and need for clarification.

Strong opinions:

- Deer concerns
- Lower taxes

Positive comments:

- "Ithaca is a friendly place."
- Trail appreciation: "I feel very strong about environmental issues. Natural areas in Ithaca are very important. I use these areas, myself, everyday. I do a lot of walking and I walk my dog. I live on South Hill next to a recreation trail, and I use it every day."
- "It's a really good place to live!"
- "I am happy where I live."
- "I really love living in the town of Ithaca, and I think they are doing a great job."
- "We enjoy all the things the two universities have to offer and the small-town feel. We love it here."
- "I have been living in Ithaca for 58 years and I love it here."
- "I am happy that my opinion was sought. I feel that the town should be very cautious in how they spend their money and try to keep taxes as low as possible. I believe that prioritizing will be important in the economic situation that we're in. I also feel that one income level group should not be considered more important than another and that there should be proper housing and resources for all groups."
- "I really appreciate the bi-annual newsletter they send out. It's informative."
- "Ithaca is unique, keep it that way."
- "I really love Ithaca, moved here about two years ago and am very please with it. There is not much I feel would need to be changed."
- "Ithaca is unique for its international population and should be supported and kept "Ithaca."

Constructive recommendations:

- Considering updating utility payments system to allow automatic withdraws from checking or online payment ability.
- Address the lack of sidewalks and poor road maintenance.
- Require better attention to road side tree planting and reviewing speed limit and speed traps on Elm Street, Chestnut, and Hector Street.
- "I think it's important for local governments to reach out to social and cultural organizations in the community. I feel that the government has missed many opportunities to encourage citizens to participate."
- "Need more athletic facilities and to better maintain what we have and add to it, for kids and adults. More outdoor pools for public use and have them be open longer."
- Increase bike paths and road shoulders.
- Request more bulk trash pick up.
- Consider revising energy conservation policies and codes.
- Consider improving pedestrian crosswalk on Lake Street to Boynton Middle School.
- Increase support for senior services."
- Consider reducing the speed limit on route 79 and re-touting trucks.
- Televis Town Board meetings, or perhaps consider webcams for internet users.
- Improve snow plowing.

- Increase residents' awareness of new developments besides local newspaper.
- More flyers and newsletters.
- Better leave clean up.
- "Senior housing should be encouraged, but be integrated, not isolated. Higher-income housing should not be discouraged, but the town doesn't need to do anything to encourage it."
- "The town and city should be more united in services" as well as county.
- Consider limited billboards and rights-of-way advertisement regulations.
- Improve residential accessibility construction safer route from school to home for disabled children.
- Improve handicap parking.
- "Deal with the pot hole on Pine Tree Road that is under the overpass!"
- "The value of surveys like this are pretty limited."
- Warren and Hanshaw Road is a major safety problem for bicycles.
- "There needs to be boundaries established pertaining to growth and sprawl to maintain a good balance."
- "Our part of town doesn't get certain services that are available in other parts for the town like DSL cable because the road is split between two townships. I think the townships should get together and solve the problem."
- "Build more convenient bike and pedestrian access from West Hill to downtown like trails not on the road. More convenient and regular bus service linking the outlying areas of the town to reduce carbon and car use."
- Improve bus service on Coddington Road.
- More sidewalks, no sidewalks near Ithaca College, very dangerous.
- Viewsheds and regulations: "There's a barn blocking my view of the lake. It was a surprise. If I had know about it, maybe we could have worked towards setting it so it didn't block my view."
- "The town should have aggressively pursue funding for development rights."
- "The town should have a development plan, and it should include planned unit developments. I'd like to see natural resources used better. I appreciate low density, but I don't know if five-acre individual lots are the best way to do this. I'm interested in denser developments surrounded by open space. I'd like to see these developments include senior and low income housing. The town may be working too hard to pursue matching funds for employment programs, rather than efficiently maintaining the roads."
- Support low income housing.
- Misconceptions on taxes, and municipal services.
- More police.
- Speed concerns.
- "The town administrative staff is discourteous, obstructive, and rude. Their job is to serve residents. For example, when residents need to find out about new developments in their neighborhood, the town staff stands between the residents and public records. They are biased and self-protective."

What the Town needs to clarify for residents:

- Explain what services are offered by the town and what private services are.
- Create better communication changes between resident complaints and what service offices the town uses, e.g. sheriff's department.
- Town boundaries and explanation town's jurisdictions.
- Explain how municipal water or sewer works with payments, especially with homes that also have a private well.

**APPENDIX D
PUBLIC AND FOCUS GROUP
MEETING SUMMARIES**

PUBLIC AND FOCUS GROUP MEETING SUMMARIES



D.1 Focus groups

D.1.1 Neighborhood focus group

26 February 2009
Town Hall Board Room

There were several related topics that were touched upon in the Neighborhood focus group meeting, including growth and development, housing, neighborhood character, transportation and traffic. Each topic area was addressed according to an area of the Town: South Hill, East Hill, Northeast, and West Hill.

South Hill

Residents of South Hill were concerned about the area's growing student population, particularly in the Kendall and Pennsylvania Avenue area, where trash, noise, lack of landscaping, large parking areas, and speeding have become significant problems. There was also concern over the conversion of single family homes to student housing along Coddington Road, near the City/Town border. There was praise for the maintenance of the South Hill Recreation Way and for new plantings at the Coddington Road entrance to Ithaca College. However, overall, residents pointed out that a transient, student rental population has altered the area's character and created difficulties for elderly residents.

Coddington Road was also the subject of traffic complaints. Residents noted the challenge of parking along the road, its lack of lighting and sidewalks, prevalence of speeding (especially approaching the Hudson Street and Coddington Road intersection), and general difficulties with the road's Ithaca College entrance. Residents often observed students walking four or five people wide along roads and suggested that sidewalks would reduce dangerous pedestrian-vehicle conflicts.

In terms of future directions, residents advocated for more infill development, catered to a mixed population. In particular, there was a desire for more walkable commercial development, and for continued housing development in the King and Danby Road areas. Residents also pointed out the need for better pedestrian access around Ithaca College.

East Hill

Similar to South Hill, residents expressed concern about students populating the area, especially around the Eastwood Commons, Honness Lane, and Pine Tree Road. They suggested that Cornell and Ithaca College construct more on-campus apartments to prevent overpopulated student neighborhoods. For students that do live off campus, residents advocated for more integrated neighborhood housing that incorporated green spaces, rather than clusters of large, tightly packed apartment complexes. In addition to student housing, there was also a desire for Cornell-provided affordable housing for employees, in places such as Eastwood Commons.

In Forest Home, residents stressed the need for safety and accessibility, particularly in terms of sidewalk provisions and safe play areas for children. Similarly, residents pointed out the poor appearance, maintenance, and lack of playgrounds for children in the Maplewood Apartments development. Speeding, slippery surfaces, and lack of pedestrian crossings along Pine Tree Road, as well as the road's intersections with Route 79 and Honness Lane, were also seen as jeopardizing pedestrian access and safety.

Other topics that surfaced during the course of discussion included the loss of services at East Hill Plaza and the influence of the Cornell 30-year master plan on the area's development.

Northeast

One main concern expressed by residents of the northeast area of the Town included the proposed Briarwood II subdivision development, located adjacent to Sapsucker Woods. It was noted that in the past three years, homes along Hanshaw Road have been converted from single family to multi-dwelling units. The units have not been maintained and have generated parking and traffic difficulties. Issues of commuter traffic through Forest Home and the main intersection at Community Corners were also discussed.

The area's natural beauty and preservation, particularly Sapsucker Woods, was highlighted as an asset.

West Hill

Residents expressed worry over the Carrowmoor project and the lack of pedestrian access to and from the Linderman Creek development, stating that any new development should have pedestrian accommodations and bus stops. There was also concern over high end housing and its impact on the existing character of the neighborhood. The loss of farmland along Mecklenburg Road and the Eco Village area was also seen as a major issue. In general, residents were unsure of how the Town would go about convincing residents to live in denser, more compact housing.

Overall, residents desired more discussion between Cornell, Ithaca College, the Town, and residents. They reiterated the need for consistent and standard crosswalk designation and lines, and for better enforcement of traffic in the Town. They also believed that the Low Density Residential zone needed to be improved to prevent individual building lots and to encourage more clustered housing. Where possible, trees should be preserved and required in new developments, including single family residential subdivisions.

D.1.2 Agricultural focus group

4 March 2009

Town Hall Board Room

The Agricultural focus group meeting included very positive and encouraging statements about the value of agriculture in the Town of Ithaca. Residents noted that farming has helped with environmental issues, such as stormwater retention and erosion. It has provided a number of jobs and services, and has satisfied local food demand. Finally, agriculture has provided both valued green space as well as space for various land uses, such as

energy and biofuel production (it was noted that an energy collective was in place in Enfield). Overall, in comparison with other municipalities, there was recognition that locally grown food was both fundamentally valued and supported by Ithaca consumers.

Farmers' primary concern was concentrating development and infill close to the City of Ithaca, rather than leapfrogging into agricultural areas. The Carrowmoor development's conversion of farmland to housing was highlighted as a poor example of farmland preservation. In general, farmers desired better coordination with Town staff on proposed zoning changes, permit applications, and deed restrictions. A new Town farm liaison could provide farmers with additional help in working through approvals and permits, and communicating their needs. Lastly, attendees reminded the Town that farms often cross municipal boundaries, and that better coordination was needed among municipalities with respect to laws, regulations, and general attitudes towards agriculture.

Farmers were also concerned about vehicular traffic and speeds on Town roads. They emphasized the difficulty of operating farm equipment on heavily trafficked roads, especially where there were minimal shoulders. Special concern was given to traffic speeds at the Dubois and Trumansburg Road intersection, where it was suggested that a flashing light be installed.

Attendees mentioned a number of strategies that could facilitate long term agriculture in the Town. In terms of community services, farmers noted that they have paid more than they have received and suggested that the Town provide deer fences, water, and other infrastructure items in order to achieve the Town's goal of local small-scale food production. Attendees also suggested that the Town create a program to assist farmers with putting up fences and other capital projects, similar to the Michigan Orchard Program. Finally, participants stated that the Town could do more to encourage young buyers to purchase farmland through programs such as "Farm Link," which would encourage the transferring of farms between generations.

The meeting also addressed more specific business issues and ideas. First, attendees advocated for relief from high taxes. They noted that tax breaks were not available when individuals purchased farms, which has made it difficult for new farmers to enter the profession. Farmers could provide community benefits, such as school tours, in exchange for tax relief. Providing tax breaks for Town restaurants that served local food was also recommended.

Second, farmers and residents expressed their desire for a more permanent seven-day-per-week sales location for their products. At minimum, they pointed out the need for designated off-site locations to gather and sell produce. Lastly, farmers proposed that farm districts be advertised as farmers market destination clusters, similar to the wine trail. Agricultural tourism would encourage people to come from the City of Ithaca, Town of Ithaca, and surrounding municipalities and enjoy their food in green spaces closer to production sources.

Finally, attendees suggested implementing some sort of resident education awareness to preserve farmland and promote support for local agriculture. Participants brainstormed educational ideas like mailing pamphlets, offering educational programs during certain times of the year (e.g. during the seasonal movement of equipment), and creating a Town welcome bag for area newcomers that included agricultural information. Mobile signs, especially those that indicate traffic speeds in agricultural zones, were also suggested.

D.1.3 Energy focus group

11 May 2009

Ithaca Town Hall

The Energy focus group meeting began with a discussion of the shortcomings in the environmental review process for new developments. Specifically, residents asserted that the review process should consider climate change impacts and that the Town's environmental quality review law should be modified to include climate change sections, thereby making the process more stringent than state requirements.

The group then went into a discussion about local organizational and municipal energy efforts. Attendees noted that Tompkins County, with its high quality software tracking system, saw its role as an umbrella for the administration of programs, such as alternative fuels, Finger Lakes Environmental Procurement, and distribution lists. The County also has included a number of green elements as part of its Comprehensive Plan, was currently conducting a green fleet study, and was also looking into a loan fund for energy efficiency improvements for low income residents. Another local organization, the Tompkins County Area Development (TCAD), was trying to incorporate more green jobs in their structure.

Additionally, the City of Ithaca, with its 2006 Local Action Plan, has been striving to reduce greenhouse gas emissions from its operations. The Plan includes a green fleet and purchasing and building policies for city operations, including building deconstruction (disassembling and reuse/recycle) and energy efficiency. As part of the Plan, each department has been developing its own energy strategy. Sustainability training is being provided for City employees, and funding to pay for a sustainability coordinator comes from the Mayor's budget. Cornell's Climate Action Plan was also briefly mentioned. Discussion of the Town's municipal energy usage was brief. The Town's building audits were mentioned, as was the need to reduce energy loss from the large windows in Town Hall.

Attendees discussed the necessity of partnerships between organizations, especially because climate change goes beyond local, state, and national levels in its scope. One participant noted that Portland, Oregon had a sustainability department and that their codes provide incentives for builders to go beyond the existing energy code. Residents also discussed the value of partnership organizations such as the ICLEI (formerly International Council for Local Environmental Initiatives, now called Local Governments for Sustainability), of which the City and County are members.

A number of energy topic areas were addressed, including housing, energy production sources, education, and the Town government's own energy usage in its daily operations.

In terms of housing, participants suggested that the existing housing coalition should be closely connected to any energy discussions. There was criticism of current energy housing programs at various government levels (e.g. current incentives that are targeted at builders, not towards homeowners that make improvements). Current programs have tended to favor low, rather than middle income households.

Attendees suggested modifying the Town's zoning regulations to favor projects that included solar or wind energy. Attendees also had questions about the possibility of hydropower in the Town and how the Town proposed to handle the demand for natural gas drilling in the region.

Residents pointed out the difficulty of trying to get people to make energy improvements to their homes, given the area's highly transient population. In response, it was mentioned that tax credits are available, as are loans for improvements that are tied to mortgages.

The group then discussed the strides that were needed in educating consumers about energy improvement strategies (e.g. simple changes that could increase sustainability, like installing better insulation, mowing smaller lawns, and having more naturally landscaped properties). To promote sustainability, residents suggested having energy efficiency contests and holding open houses on energy efficiency improvements. On a larger scale, it was suggested that neighborhoods work together and obtain grants. Cornell Cooperative Extension noted that they provide energy educational support, but acknowledged that they needed to do a better job of reaching out to those who were less receptive to changing behavior.

D.1.4 Housing focus group

27 October 2009
Ithaca Town Hall

The Housing focus group meeting centered on the condition of existing housing in the Town, need for additional housing, and possible locations for new housing units. The discussion also touched upon methods of incorporating green building practices into future housing stock.

The group recognized that there has been a housing shortage in the County, particularly affordable housing. Attendees discussed the need for homes in the \$150,000-\$250,000 range (\$150,000-\$200,000 for workforce housing, \$200,000-\$250,000 for young professionals or retirees looking to downsize) that could accommodate the growing number of single-person households. One resident illustrated the point by noting that the Conifer development on West Hill had a waiting list for its 325 currently occupied affordable rental units.

When asked what they perceived to be “affordable”, residents responded in a variety of ways. They noted that the Tompkins County median family income was approximately \$74,000, and that nearly 80% of residents could not afford a \$150,000 home with a \$1,000/month mortgage, excluding utilities. They weighed the variety of other factors that affected affordability, such as one’s debt to income ratio, transportation and utility costs, local tax rate, and the amount of competition from other buyers and renters.

Participants then discussed strategies to encourage affordable housing in the area. First, attendees recognized the challenges to implementing affordable housing. They pointed out the funding difficulties associated with mixed income rental housing, and in particular, the large profits needed on market-rate units to offset the cost of affordable units. Residents also noted the challenges of using federal and state credits for market-rate housing, although the success of Conifer Village in applying federal and state low income tax credits was noted. There was verbal support for the large number of residents at Linderman Creek that were either employed or receiving assistance.

Residents came up with a number of proposals for ensuring more affordable housing. For example, they suggested creating more areas with higher density and inclusionary and incentive zoning, similar to what the County has been doing. In particular, there was criticism that the Town zoned very little land for multiple residences (MR zoning). Attendees suggested that the Town plan for MR zoning in advance, instead of rezoning parcels to MR as development proposals occur.

There was also an idea to create a Town Community Housing Trust (similar to the IHNS model), where owner-occupied housing would be made affordable by keeping all land in a community-wide system of ownership. The Town and other landowners could contribute land to help grow the model, and private owners that donated land would be rewarded with tax breaks. Participants had other ideas for affordable housing financing, including purchasing land for a land bank (similar to the southwest area of the City) to encourage growth in certain areas, and using CDGB funds, tax incentives, and property taxes for promote affordable housing.

In terms of the role of universities in providing housing assistance, residents noted the difficulty of finding a balance between on-campus housing to relieve housing pressure, versus off-campus housing to increase economic bases for surrounding communities. Cornell attendees indicated that they would not likely get directly involved with providing housing for employees; however, they would provide land and incentives to find locations for employee housing (e.g., Cornell would provide incentives for future \$150,000-\$250,000 housing in the Northeast).

Major discussion revolved around the necessity of housing rehabilitation, particularly regarding older rental stock and some Cornell buildings. There was an emphasis on ways to make homes more efficient and sustainable. There was agreement among participants that the New York State Building Code was not adequate in terms of green building incentives, and should be modified. Residents emphasized incentivizing smaller housing footprints, particularly for homes around 1,200 square feet in size and around \$100,000 in price. Incentives, rather than restrictions, should encourage green building practices and higher building standards.

Residents conversed over possible locations for new housing in the Town. It was thought that infill development might be suitable on Cornell-owned parcels on Honness Lane, within East Hill Plaza, and near Briarwood. Remediation of the Emerson site and possible locations on South Hill were also discussed. Locations for new, non-infill development included East and South Hill, areas closer to Cornell, West Hill (near the medical center), the Route 96B/King Road intersection, and Varna, just past NYSEG. Residents agreed that new housing should be located near employment, transportation, and municipal services.

Lastly, a discussion occurred on whether housing decisions should be made based primarily on where one's workplace was, when Cornell, the county's largest employment center, only provided 17% of jobs in the county. Attendees also debated the idea that growth should occur within the Town and City, when not all people desired to live in denser areas. One resident suggested that attendees approach the question of new growth by first discussing the areas that residents wish to preserve.

D.1.5 Ecology focus group

10 November 2009
Ithaca Town Hall

The ecologists in the group stated that many local forests were not healthy, due in large part to an overabundance of deer and invasive plants and insects. They also noted that dead wood (cleared for biomass use) was actually important for forest regeneration and nutrient replenishment. Arnot Forest research showed that the removal of slash had a particularly detrimental effect on salamanders. A healthy, regenerative forest, it was noted, should contain oak saplings and an understory with key indicator species (e.g., trillium plants), especially where light gaps occur. Attendees advocated for comprehensive deer management and better educational awareness among landowners regarding invasive plant identification and forest protection strategies.

Residents in the group pointed out the need for more comprehensive forest management knowledge among Town Board members, noting that the scope of the Town's forest management plan should go beyond protection of stream banks and include types of harvest, timing and frequency of cuttings, and information on leaving behind slash for wildlife and nutrient replenishment. Additional discussions involved land use changes (particularly reforestation trends and development along roads), water quality assessments for temperature, pollutants, organisms, and flow regimes, and the types of ecological mapping projects the Town was working on. Residents ultimately suggested that the Town find ways to better incorporate concepts from best management practice documents before imposing standards on developers and residents.

A number of other ecological impacts were identified, including noise, light pollution, gas drilling, and building color. The importance of quiet areas for both wildlife and people was emphasized, as were ways to reduce noise from compression stations.

In terms of lights, it was noted that light pollution made it difficult to observe a truly dark night sky. Moreover, light pollution has reduced firefly populations, and lights on towers may have affected the migration of birds. Residents mentioned that the colors of buildings on hillsides were important for retaining visual quality, although one resident questioned whether preserving quality views went hand in hand with ecological preservation.

Participants pointed out that fragmentation caused by development was a major threat to local ecologies. They suggested establishing a developer-supported mitigation fund, wherein money would support protection and rehabilitation of sensitive lands. Such funds had been established in areas with intensive gas drilling operations.

Ecologists in the group stressed the need for additional intermunicipal conservation plans, specifically recommending an ecosystem approach, wherein a municipality collaborated with bordering municipalities on specific projects to create a more connected natural area system. For example, the Town of Ithaca could work with the Town of Dryden on hydrologic issues in the northeast area. Ultimately, a series of biological corridors could form an “emerald bracelet”, in conjunction with the highly praised plan for the greater “emerald necklace”. It was also noted that the Town and surrounding municipalities were in need of quality wetlands maps that identified hydric soils as potential wetlands areas so that development restrictions could be put in place.

Overall, attendees thought that the Town could engage in more proactive, rather than reactive, goal setting. They acknowledged that the designation of Unique Natural Areas was a good starting point, but that an abundance of other privately held land should also be protected. The Town should designate areas for public ownership, where it wishes to have development, as well as lands that were so sensitive that even hiking should not be allowed (e.g., Coy Glen).

To achieve an integrated, contiguous habitat system, the Town could utilize GIS to map layers that include “herps” (amphibians and reptiles) and birds. The connectivity plan could indicate wildlife connections that were both within and outside Unique Natural Areas and other protected areas. Once the boundaries of a biological corridor were defined, goals and objectives could be created to govern its protection.

Lastly, residents identified ecological potential in the Town. It was recognized that the Town has seen a decline in agricultural areas, and that it should reclaim vacant agricultural fields. The northwest area of Town was singled out in particular. It was also suggested that, rather than establishing set-asides for small pocket parks when developments are proposed, the Town should consider setting aside areas for preserves or natural areas. On the whole, the Town’s environmentally protective regulations were praised, and it was suggested that the Town do more to share its information with others.

D.1.6 Health focus group

8 February 2010
Ithaca Town Hall

Attendees were asked what they believed were the most crucial community health needs for the next 10-20 years. Responses were heavily oriented towards accommodations for the elderly.

Health representatives stated that the physical activity levels of residents needed to be increased, through the use of recreational trails and facilities. Housing, services, and other facilities—benches along paths, restrooms at community gardens, public transit, assistance for retrofitting homes for health and accessibility needs, and general universal design principles—needed to be provided for the aging population. The elderly, in particular, needed indoor exercise spaces during the winter months. It was suggested that the Town review the Health Planning Council's Improving Outcomes for People by Strengthening the Long Term Care System, a report that includes recommendations for providing better community services.

Attendees were also asked about how the Town's Comprehensive Plan could provide better services for disadvantaged populations, through universal design changes to the built environment. Responses were varied, but tended to focus on pedestrian access, housing needs, transportation, and obesity.

First, residents stated that recreation should encompass more than just playground equipment. It should include trails that are situated between destinations and that are accessible to the elderly. In general, the design of spaces must be conducted from the perspective of the elderly. Signage font must be large enough to be seen by aging eyes, signals for crosswalks need to be timed for slower, aging bodies, and intersections must include adequate lighting. Moreover, wheelchair accessible entrances and mail delivery locations should be conveniently situated, and the lengths of routes between handicapped parking spaces and destinations within buildings must be relatively short. One attendee noted in particular that the walkway between P&C and Rite Aid at East Hill Plaza, which is located near senior housing on Ellis Hollow Road, is insufficiently visible to drivers. Another pointed out that Pine Tree Road needed a sidewalk south of the Honness Lane intersection.

Second, emphasis was placed on constructing and maintaining appropriate housing for the elderly, using universal design principles that created livable communities. For example, it should be easy and efficient for services to be provided in home. In-home services reduce boredom and physical and social isolation (e.g. Eden Alternative). Moreover, providing more appropriate in-home care encourages aging populations to remain in their homes longer and retain their independence. The NYS Office of the Aging and the "Empowering Communities" section of the AARP website each provide guidelines for implementing universal design principles.

The group suggested modifying Town codes to allow more people to live together, which would reduce social isolation. Clustering housing units would also permit easier and more affordable transit services, home-nurse visits, delivery of meals, and neighbors to keep watch and provide social interaction. The concept of "visit-ability" was emphasized; that is, the designing of homes so that anyone, regardless of age or ability, is able to visit. According to one attendee, the Town should continue to allow elder cottages, although it was pointed out that the cottages were not ideal for handicapped persons. There was general consensus that additions to the supply of median income affordable housing are necessary. According to attendees, the lack of willing developers, rather than the Town's zoning, was an impediment to the provision of medium and low income assisted living units.

Third, health care officials noted the importance of safe, affordable, and accessible transportation. Specific requests included adding bike racks at retail outlets, adding more TCAT service during the evenings and on weekends, and providing more rural bus service. One attendee suggested that in order to make rural bus service available, adult family members could pay to ride school busses to travel to work. It was also recommended that TCAT be used for older school children, which would reduce the amount of time that children spent on busses. Lastly, transportation costs for special needs children was high and should be more affordable.

Finally, combating obesity was addressed. Specifically, residents should have access to places to obtain healthy foods, especially farm stands, CSA programs, and community gardens (the latter of which should have raised beds and restrooms to facilitate the participation of seniors and others who are disabled), and other opportunities that discourage sedentary time.

Other comments included a recommendation for the Town to enhance access to health care by providing service information available on its website, and that it provide more consistent EMS service. The Health Planning Council offered assistance with letters of support when advocating for health related issues (with NYS DOT, etc).

D.1.7 Recreation/museum focus group

Stakeholder meetings

March – April 2009

Attendees had concerns regarding reduced buffer areas around their land due to increased residential development. The consequence, as noted by stakeholders, was that reduced buffer areas limited the ability of organizations to expand and protect additional land. Increased development also meant that people would be living closer to natural areas, which could threaten habitat and encourage the expansion of invasive species. Other attendees noted that one benefit of development near natural areas was that people would be living closer to recreational opportunities.

Participants noted numerous concerns regarding the potential effects of new development on existing open spaces. In particular, there was concern that properties developed near Cornell Plantations and state park lands would encourage unauthorized use of parks and impact the long-term viability of habitat areas. Recommendations included making Conservation zoning stricter on development and maintaining the lowest possible density on properties adjacent to state park lands. Attendees suggested changing the zoning designations of properties between Route 327 and Treman State Park from Low Density Residential to Agricultural or Conservation zoning. Overall, there was consensus that stakeholders would like work with the Town and other landowners to purchase properties located adjacent to their institutions.

Stakeholders were highly supportive of the Town's efforts to create and expand recreation trails in the Town. Specific recommendations included future trail connections between the Black Diamond Trail and PRI, a footbridge across Cayuga Inlet where the Finger Lakes Trail crossed, and expansion of the South and East Hill Recreation Ways. Attendees were concerned that, because of the location on private property, the Finger Lakes Trail might be halted if private property owners denied access to the public. There was also fear that the expansion of trails in the Coy Glen or the South Hill Unique Natural Areas would have environmentally detrimental effects.

The group's general recommendations included increasing lengths of trails, addressing unleashed dogs, installing more trailhead signs and interpretive or historical signs, and developing more loop or destination trails (trails with scenic views, historical landmarks, etc.). Stakeholders saw traffic and speeding as problems that needed to be resolved, especially on Route 96 and Hanshaw Road. They also recognized that bike lanes and sidewalks were needed in many areas. Finally, stakeholders were concerned about proposed changes to TCAT routes, including reduced access to Sapsucker Woods and the fact that there was no direct TCAT line from Cornell to PRI.

Other comments entailed the need for dog parks in all municipalities, building permits for temporary tents, the recommendation that Town staff join the Cayuga Bird Club list serve in order to post pertinent site plan or subdivision applications, and the possibility of utilizing personal yards as habitat areas near the Lab of Ornithology.

D.2 Public information meetings

D.2.1 Public information meeting 1

Open house group visioning session
23 September 2008
Ithaca Town Hall

Purpose: to introduce the public to the process of the Comp Plan update and begin to get the public involved.

As part of the open house, the audience was divided into three groups to discuss a number of questions related to their vision for the Town's future. Below is a compilation of discussions.

General vision (discussed in all three groups)

Why is the Town of Ithaca a good place in which to live?

- Proximity to Cayuga Lake.
- Proximity to nature and open space.
- Proximity to the City.
- Town has parks and trails and is proximal to other parks and trails.
- Natural surroundings and natural beauty. (Review to make sure it's protected.)
- Buttermilk Falls.
- Feeling of open space.
- Geology and topography.
- Low crime.
- Easy to get around by car.
- Rural residents are still close to shopping and cultural opportunities .
- Isolated yet convenient to many resources.
- Financial health.
- Good utility and infrastructure.
- Low development pressure until recently.
- Community supported agriculture nearby.
- Walk to a farm and get food.
- Agricultural land. (Recruit farmers to ensure working agricultural uses stay in agricultural areas)
- University makes this an interesting place to live.
- Horse community.
- Affordable housing.
- Windmills.
- Town encouraging solar and wind.

What don't you like about the Town?

- Traffic.
- Topographic shape results in lack of neighborhoods, and trouble getting from one hill to the other.
- Few shopping opportunities for certain items like furniture.
- Increasing housing costs and too expensive.
- Lack of small neighborhood stores.
- Loss of traditional nodal development (true village).

- Not pedestrian and bicycle friendly.
- No public access to lake.
- Restrictive sign law limits off premises signs, which would be beneficial to u-pick farms, agriculture, and other business.
- Open space/conservation zoning. Only rich can purchase; it's elitist.
- Overdevelopment of West Hill.
- Need more solar energy use.
- Proximity to Cornell/IC leads to student neighbors and it is difficult for the town to enforce rules on occupancy.
- Town lacks a center or identity. There is a need to engage the entire community .

What do you wish the Town to be like in the future?

- Off road system of bike and pedestrian trails.
- Comprehensive plan to depend on.
- Fewer single occupancy vehicles.
- Ferry service across Cayuga Lake.
- Protection of neighborhood.
- Supported and expanded bus service.
- Nodal development.
- Supported small businesses and home businesses.
- Protected views.
- Retain agricultural land.
- Protected and buffered gorges and natural areas.
- Energy that meets needs in a variety of ways.
- Aggressive purchase of development rights (PDR) for agriculture and natural areas.

What does the Town need?

- Planning to maintain neighborhoods in areas contiguous to colleges.
- More parks connected to each other.
- Do comprehensive plan with input from surrounding municipalities.
- Town needs small nodes of development for localized services.
- Town needs to guide nodal development to work with areas of employment.

What things about the Town do you hope remain the same in 15 years?

- Protect natural areas.
- Protect neighborhoods.
- Maintain relative density while protecting resources.
- Mix of economic diversity.
- Maintain cultural diversity.

What things about the Town would you like to see change in 15 years?

- Greater cultural diversity.
- Greater stewardship of Cayuga Lake.
- Ecological planning: take ecology into account during plan reviews.
- Greater proportion of energy from renewable resources.
- Effective and accessible alternative transportation other than cars, fewer single occupancy vehicles.
- Regional cooperation, consolidation of services.
- Development of recreational facilities that keep pace with population.

- Regulations and infrastructure for clean water.
- Medical care.
- More orderly development; spread it out around the Town more; there is too much development on West Hill.
- More places for community activities.

Specific subjects (each topic was discussed by only one group)

Growth and development

How should the Town grow over the next 15 years? What types of development should the Town encourage?

- Development that concentrates/clusters housing to protect natural areas; use EcoVillage as an example.
- Greater range of housing types for variety of age groups and needs; condos for example.
- Energy costs will drive the need for nodal development. The Town should plan ahead for this and not wait until this happens.
- Expansion of agriculture so we don't have to travel for food.
- Do not plan growth around the automobile.
- Height restrictions limiting building heights.
- Fine tune zoning to allow appropriate building heights.
- Restrict size of big box commercial stores.
- Requirements on commercial nodes to address noise, lighting, and aesthetics.

How is the Town different from the City of Ithaca?

- Town has yard and suburban character.
- Mix of suburban and rural in the Town.
- Views in the Town.
- Open space in the Town, but not in the City.
- Lack of neighborhoods in certain locations of the Town, just rows of individual houses along roads, and nothing to bring people together.
- City is pedestrian friendly, has a social atmosphere, and people are brought together.
- Encourage design to create neighborhoods, on the street interactions (i.e. Fall Creek at Halloween).

Natural and environmental features, open space

Are we doing enough to preserve significant natural, environmental, and scenic features in the Town?

- Purchase of development rights: need money to accomplish goals.
- Do more to protect the gorges.
- Do more to encourage agriculture, town is not ag friendly.
- Maintain more natural shoreline along lake, habitat protection, buffers for runoff, etc.
- Ecological planning: look at ecosystem in land use planning.
- Be sensitive to land owners rights, because of expectations established under 1993 comprehensive plan/zoning.

Housing

What are the important housing issues in the Town?

- Need houses for moderate income families.
- Need mixed housing for different levels of income in the same neighborhoods.
- Explore options for the above.
- Cornell University and Ithaca College need to provide more housing for students.

- Set aside scenic viewpoints before they are developed, and establish through zoning.
- Clustered housing preserves open space, and limits the needs for lots of infrastructure.
- Limit new houses to where infrastructure exists.

Transportation and traffic

What are the most important issues relating to transportation? Do we need more accessibility for pedestrians and bicyclists and more mass transit services?

- In a transition phase, town's transportation plan will need to be updated in three years.
- Walkways are needed: connected to each other, some weather limitations, a must in new neighborhoods, work on adding to established neighborhoods, add along streets, place paths strategically.

Economy

What are the strengths and weaknesses of our local economy? How important is agriculture to our area's future economy? How important are Cornell University and Ithaca College to our area's future economy?

- Preserve local agriculture.
- Tough competition with PhDs, two class economy,
- Low unemployment.
- Economic stability.
- Encourage new green jobs that use our expertise and pay reasonable wages.
- Developers need to use local labor and local materials, and smart design for our climate and location.
- More facilities for agriculture to do business.
- Smaller scale agriculture.
- Small scale clean industry: more local jobs, not just service jobs. Electronics, small scale manufacturing of consumer goods, designate space for light industrial, green high tech.
- "Take your land in a heartbeat" – Cornell.
- Not sure if I want to live near a new business.
- Zone business away from established neighborhoods.
- Housing is so expensive that workforce has to travel from outside.
- Natural gas is making land more expensive.

Community services and infrastructure

How is the Town doing in terms of providing the necessary public services to the community? How are we doing with our parks and trails system, walkways, recreation and youth programs, senior programs, water and sewer?

- Major parks (bigger than neighborhood park) – none on South Hill, West Hill, Inlet Valley; activity playground; ball fields, community center; all ages; does not need to be in town.
- West Hill needs a school.
- Route 79 traffic: town development impacts city infrastructure, not enough sidewalks, bike trails, bus service
- Create bypasses around city.
- Contribute to TCAT.
- Better upkeep of roads.
- Expansion with more and larger roads.
- Senior and youth services: city and county provide so the town does not need to duplicate.
- Multiple use trails with other municipalities, Black Diamond and South Hill Recreation Way.

Energy

Should Town government encourage the reduction of greenhouse gas emissions and our dependence on fossil fuels?
How can we help to make our future more sustainable?

- How much will it cost to reduce greenhouse gas?
- Lower speed limit encourages biking and will save gas.
- Widen bike lanes and create walking space.

D.2.2 Public information meeting 2

11 May 2010

Ithaca Town Hall

Purpose: report on the progress of the Comp Plan update, report on the resident survey completed in 2009, overview of existing conditions and trends in the Town since the 1993 Plan, focus discussion regarding growth and development in the Town, and provide opportunity for resident input on the draft vision statement and process for feedback on goals and objectives review.

Staff presentations

- Existing condition: regional location, roads and parks, developed and undeveloped lands, agriculture, Unique Natural Areas (UNAs) and Critical Environmental Areas (CEAs), streams, lakes and wetlands, slope, scenic views.
- Demographics: population, location, housing units, housing types and location, population and housing growth.

Development type

- Need less government intervention for residential and commercial development.
- Town directs development to areas with water and sewer.
- Towns of Lansing and Dryden are favorable for development.
- Developing in the Town of Ithaca is expensive.
- How much does it cost the Town to have planning staff?
- The Town should not encourage growth.
- Nodal development works as villages with space between, and discourages otherwise continuous sprawl

Preserves

- Open space: what should there be?
- The agricultural community is shrinking. Don't nickel and dime them.
- Controls on agricultural related signage is an issue, and the Town should be more flexible.

Housing location and type

- Multi-unit complexes on West Hill: is there too much of the same thing in this area?
- People are moving outside the Town.
- The Town should not encourage housing development.
- Smaller lot sizes, single family homes.

- What is the Town's position on extending water and sewer service into neighboring towns?
- Are utility extensions planned?
- Is development restricted to areas with water and sewer?

Development appearance

- New housing should have larger planted trees.
- Keep height restrictions.
- Farmland and grassland provide scenic views.
- Houston has no zoning, and development there is successful.

Mixed use development: where?

- Small stores cannot compete with big box stores.
- Allow other commercial development.
- The town should consider vertical zoning. For example, 1st floor for commercial uses, and upper floors for residential uses.
- Development should have a dense node in the middle, and rural on the periphery.
- If the Town wants mixed nodes, start where there isn't current development.
- The node recommended near Cayuga Medical Center in the Route 96 Corridor Study makes sense.
- Development should be concentrated.

Other comments

- Resident survey: is a mile too far to walk to services? How far would you walk to get milk?
- Walk able communities concept = $\frac{1}{4}$ to $\frac{1}{2}$ mile radius to services.
- The concept is great in summer, but alternatives are needed in bad weather
- Change zoning to allow mixed use, and put more services within walking distance from residents.
- Cul-de-sacs and dead-end roads are not an ideal way to develop. The Town should not allow any more development with dead end roads.
- The previous Planning Board approved subdivisions with dead-end streets because didn't want through streets.
- According to the 1993 Plan, one half of Town residents live on cul-de-sacs.
- Traffic is a big issue in Town, to those who don't live on cul-de-sacs.

Emerson: what should happen to it?

- Pray for a big company to come in and provide employment.
- Housing development for next 25 years.
- Older building may not be usable, but newer building could be used for business. Look into the structural integrity of buildings.
- No traffic problem on South Hill. Why promote development on roads that have traffic problems and not on roads that don't have problems?

D.3 Neighborhood meetings

D.3.1 West Hill

17 June 2010

Linderman Creek Community Building, 201 Cypress Court

1. What do you like about the area where you live? What keeps you there?

- Bought my first home on West Hill because the area is quiet, beautiful, “uneventful,” with convenient and close proximity to Town, but a country neighborhood feel.
- There is a strong sense of community on West Haven Road, people walk and bike in the area.
- The rural character, yet close to the City.
- The views are lovely-didn’t want to be near a commercial center.
- Wanted a farm but also wanted to be close to community and West Hill has that rural setting only a few miles from town - a three to four minute drive is not far to get to services.
- Built home here 44 years ago because it was peaceful and beautiful and it is still peaceful and beautiful even now. I like the sense of being in the country.
- Public transit is easily accessible, an easy walk to the bus stop.

2. What are the conditions and trends that you see in your area? What do you NOT like about the area where you live? Impact of the city on town residents? Any issues that pull city and town residents apart?

- West Haven Rd. residents tried to get speed limit reduced on their street and were refused. Living sustainably means more walking and biking, but can’t do that here because of the speeding, frustrated that there wasn’t a lot of action taken to deal with speeding and traffic impacts on neighborhood.
- Traffic and TCAT buses have become problems- might have thought twice about buying a home here if those problems existed when I purchased my house on Oakwood Lane.
- Route 79 (Mecklenburg Road) is really scary without sidewalks.
- There has been increased traffic, increased development, and increased speeding.
- Loss of farmland on Route 79 is a concern.
- Traffic and congestion is a problem. Worries about the separation of services, particularly fire and ambulance services. Learned from a fire fighter neighbor in the area that the West Hill fire station was not regularly fully staffed. Also if one needs to get to the hospital but cannot drive themselves, they have to wait for the ambulance to come from across the railroad tracks to get them.
- Large development proposals are being proposed here that are unlike the other proposals in other parts of the Town.
- Open space and farmland being replaced by development is a concern – West Hill has the best farmland and open areas but development pressure is mounting and we could lose the best farmland in the Town to development if we don’t preserve it.
- Farms are important to all of the residents of West Hill (not just farmers) and once they are built upon, they are lost forever.
- There are deep concerns regarding the Town not working with the City on the comprehensive planning process. Does the Town’s plan meld with the City’s plan? [this spurred lots of discussion about Town/City relations – comments below]
- Coordination of roads and infrastructure (mainly road systems) is an issue between the Town and City, although there is an imaginary boundary between the two municipalities. The Route 96 Corridor Study, for example, talks

about methods to reduce traffic impacts with these nodes, but the traffic impacts to the City at the base of West Hill won't be reduced. Where is the coordination?

- There needs to be an integrated and continued channel of discussion between the Town and City with their plans – there's no integration of ideas that would benefit both municipalities. There is a city representative on the Town's Comprehensive Plan Committee, but it's a token – there's no real discussion between the two municipalities. Rural areas add so much to the community and sprawl will continue to ruin that and will destroy the overall community in both municipalities.
- Frustrated by both municipalities' only identifying with their own area and both saying "we don't want growth." Ithaca is attractive to people, so they will continue to move here and Ithaca will continue to grow – but we've never accepted the fact that we're going to grow and we haven't accommodated the growth. The City hasn't explored growing up (taller buildings). It's the same issue with affordable housing – land values are staggering here. One way to reduce land costs and promote affordability is to increase density – concentrates infrastructure and services. We need affordable housing on tighter, denser areas. Hope that the Town and City Comprehensive Plans acknowledge growth and figure out where they want it to go.

Town Board member asked the group where they think development should go, and they responded:

- At what point is there a line crossed where too much development is happening? Do you keep building and building or can you say enough is enough?
- We need to look at channeling growth to finite areas. We also need to accommodate the increased traffic along with population growth. I have a relative who is a planner and has seen a lot of developments in her area and loss of farmland, but along with that development are green areas and services placed within the developments themselves. Maybe there needs to be more services available within some of the Town developments that are "out there."

3. What needs to be improved/preserved to enhance your area of the town? (ie sidewalks, parks, open space, natural areas, historic buildings, commercial services, agriculture, transportation, etc)?

This question was skipped – discussion lead from question #2 into nodal development conversation.

4. The committee has discussed encouraging compact neighborhoods or nodes.

Possible node sites in the town: the intersection of King and Danby Roads for a South Hill node; near the hospital for a West Hill node; and East Hill Plaza area for an East Hill node. What are the benefits? What are the pitfalls? What suggestions do you have for development in this area? (Herb explained the nodal development concept)

- Nodal development is a great idea – have seen it operate well in England and in Europe.
- There will still be infrastructure problems in the City, even if there's a Route 96 node.
- Don't believe people will want to live near CMC. It's not a big enough employer to
- draw people and there aren't any services around it to draw people in.
- Having separate little entities in small areas is problematic. Nodes would create a separate entity, where the City is/should be the center node for the area. How can these little nodes work? Is there enough population to support alternative modes of transportation? What population density would one need to support a node at Route 96?
- Based on a past meeting at the County, the County as a whole has issues with sprawl, with homes on 2 and 3 acre lots. This was even a problem 8-10 years ago. It costs too much money in infrastructure to support that kind of density – it's inefficient to have sprawl. Nodal development should be where infrastructure already exists and density should be increased in existing areas. More cost effective to the community.
- The bus services can be made more reliable with more concentrated development.
- Supporter of nodal development. Use Zoning as a tool to define uses within the node. The Comprehensive Plan provides future guidance for Zoning.

- Likes Ecovillage for two reasons (1) it's off the main road, and (2) parking is kept separate from houses. Nodal designs should study and follow the Ecovillage model/layout versus the Linderman layout (lots of parking at the street or visible from the road, buildings very visible).
- Raleigh-Durham area of NC has a lot of very large scale nodal development that includes a mix of housing along with services, offices, retail, etc. There's a sense of community that is formed in nodes – nodal development draws people to it and it creates communities of people.
- How do you tell people to not just plop buildings down without adding more services (i.e. commercial, office) to their development?
- You have to start with a group of people who want to do something different, like a node, – that's how Ecovillage started.
- Holochuck example: there is no commercial planned for that development, it's only housing. For nodal development to work, you must define, in detail, what should go in the node before it is established - and it has to include more than just housing.
- Will the future nodes have mixed housing and uses? The current proposals only have high-end housing. We need to see more mixed uses, not just high end housing projects. The proposed Conifer development across from the hospital is more in line with the nodal concept.
- One participant was a tepid supporter of nodes. Creating new nodes out of thin air with retail and commerce defies market realities. We first need a population to support commercial and retail enterprises. Economics is a factor that needs to be considered. Density needs to be closely considered. Besides Zoning, we can provide incentives to promote nodes.
- What about TCAT? They have no interest in providing services to these areas (Holochuck used as an example).
- Member of the TCAT Board spoke – developers come to town, apply for federal money, and make the assumption that TCAT will provide bus service to their developments without checking with TCAT first. There is a process to follow and they do not follow it. The amount of service TCAT can provide depends on the amount of money they get. There are limits, but they are nonetheless very interested in providing services.
- (again, Holochuck as an example) – TCAT explicitly told one participant that the people in the Holochuck development were not the kind of people who would use bus service and that is one reason why they weren't interested in providing service to that development.

Any other thoughts? Comments?

- One resident asked about the 26-acre parcel left over from the County's sale of the Biggs building (near the hospital).
- Someone suggested that the parcel could be made into a park.
- Another participant asked, "Why park that land when it's got the infrastructure (water, sewer) ready and available for housing or other uses?"
- One resident asked what the status of the 79 to Bundy Road connector road was.
- If a connector road to 79/Bundy existed, then it would take the pressure off of Route 96.
- Developers, not the Town, seem to determine the fate of West Hill and it feels like the community is dying with no way to save it. It is imperative that the Town and City work together in planning.
- The County has this Affordable Housing strategy that says it needs 4,000 affordable units. Is the Town considering what proportion of needed affordable housing the Town wants and can accommodate? The City can possibly accommodate 500-1000 units, although it is struggling to figure out specific numbers and locations. Nodes are determined by volume/population sizes – we must consider affordable housing in them. Growth should be anticipated – put tools in place to guide it. The question of "how big do we want to be?" will dictate where the nodes will be located.
- The Vision Statement lists 'urban' areas as one of the town characteristics (along with rural, suburban, etc)...but where are these urban areas? There are no urban areas in the Town.

5. What future involvement would you like to have in planning and developing your neighborhood area? How can the town communicate better about proposed changes?

- Can the Town create a listserv from its website where people can opt-in to get updates on what's happening?
- Update the website regularly
- Add neighborhood association websites to the Town's website and also mention them in the Town newsletter.

Attendance: 18 residents

D.3.2 South Hill

9 June 2010

Campus Center, Ithaca College

1. What do you like about the area where you live?

- The Deer Run development is a perfect location for this (resident's) stage of life. The townhouse type development is great. There is a shortage of townhouse development the town.
- Pleasant Street (in the City) is near downtown and walkable.
- Danby Road business finds transportation for employees including transit, walking, and bikes difficult south of Ithaca College; transportation options are essential for students - this needs improvement.
- South Hill Recreation Way is great.
- South Hill is beautiful for the Montessori School, the location allows children to play in woods; the green space is appreciated.
- Natural beauty and space to garden is important; the less dense/non-compact development provides opportunities for property owners to have large gardens; public transportation would be nice but not as feasible in these less dense areas (Coddington Road resident).
- Ability to walk to work to Ithaca College from just inside the City line, but has worries about the lack of sidewalk; having more transportation options would be nice.
- The natural area, the gorge in my backyard, gardening and nearness to the park; but can't walk safely on Coddington Road and doesn't like the deer (Coddington Road resident).
- Can walk to downtown and can easily catch bus to airport; since 1967 this resident has lived without a car (south end of Coddington Road resident)
- No bus service on King Road. Having transit would really help. If transit could be extended just another mile (to King Road) you would find many eager riders.
- Town should pursue a trail connection between South Hill Recreation Way and Buttermilk Falls State Park.

2. What are the conditions and trends that you see in your area?

- Student populations living in residential areas; increasing density of students relative to other residents in some neighborhoods. Need to keep a better balance, especially at the city line. The older neighborhoods on East Hill have been ruined; landlords are not taking care of these properties; nice to have density for students but not the negative aspects.
- Parking problems; people living downtown actually park on South Hill so they don't have to pay for parking in the City.

- Lack of sidewalks leads to people walking along the shoulder, this is particularly scary during rush hour traffic. Need to create a safer environment for walkers, so people can safely walk from where they live to Ithaca College. Make it safer for cars and students.
- Sidewalks needed to King Road and beyond too.
- Efforts to address the need for sidewalks require many parties to collaborate.
- Need bike shoulders. Shoulders are soft and narrow on South Hill roads, except for 96B.
- Trash pickup in the Kendall / Pennsylvania Ave area; solid waste services disconnected, IC became transfer station for waste; landlords not addressing this – City and Town need to do better job with landlords.
- Town and City have been increasing amenities for residents, but this means more taxes. We need to think broadly – what we do can lead to more sprawl causing problems and antithesis to what we like about living here.
- Traffic is a problem. Drivers are traveling into the Town from out of the County; Route 96B traffic is non-stop now and it is only going to get worse.
- Coddington Road is a choke point for traffic – the County is not doing what it needs to do to improve the road because of the ongoing lawsuit. The road needs shoulders, so people can walk, etc.

3. What needs to be improved / preserved in your area?

- There is never enough protection for our waterways.
- Roads enhancement, while needed, must be built to a reasonable size – they should not be built too wide as that will only increase traffic speed and impact the safety of pedestrians. There is no disagreement that Coddington Road needs improvements; but it should be reasonable for the character of the area (i.e. 10 foot lanes, 3-4 foot shoulders).
- City needs to get its act together and allow more density.
- Town parkland located between properties on Saunders Road and Whitetail Drive (located directly across street from Ridgecrest Road/King Road intersection) should be developed into a park. The population in this area has been increasing and there are many children in the area now. A children's park would be welcome.

4. What do you think should happen at the Emerson Site when Emerson moves out? (100 acres, approximately one third within the City and two thirds in the Town)

- Clean it up, it could solve everyone's problem if developed; residential density, trails, energy improvement district, affordable housing – but needs to be clean to residential standards.
- South Hill Business Campus is an example of what is possible; taking a brown field building, identifying the commercial potential and making it very attractive. With South Hill Business Campus someone took the risk. Emerson has done very little to clean up the site – the potential to develop is there if someone would clean it up; need to find someone to sink money into the project.
- Give priority to job creation, we really need employment opportunities; good paying jobs are important.
- Private developer is unlikely to come in until the site is cleaned up.
- Town regulations are cumbersome and could make it difficult for developer; strict and time consuming building regulations for interior changes, for instance, long delays for a building permit. Delay is a real problem if you are trying to attract business tenants. Town needs to look at its regulations, to assist a developer, and make the process smoother and less time consuming.
- Green building codes in Seattle give priority for "green" building proposals; move to front of list in building permit reviews – fast track – Emerson site could benefit from this.

Preference for South Hill?

- When Emerson was a manufacturing location it was a good neighbor, except for the pollution, there were there were no loud parties. Manufacturing would be okay.

- The ultimate “palazzo” – great place for views – should be living units.
- Love to see mixed uses – houses and clean jobs.
- Retail space.
- District energy (heating and cooling) plant.
- Should be preserved and if can be devoted to housing; mixing uses, it is a huge property with many potential uses.
- Options for traffic; plans for connection (play role in) from Ithaca College to downtown to Route 13.
- Must make economic sense to pay the mortgage.
- Industrial zoned but now there is more interest in research and development. South Hill business zoning prevents some uses.
- Markets, places to buy goods near neighborhoods, desire to go back to that; hear that people want mixed uses – don’t zone out neighborhood store from residential.

5. Possible node/compact neighborhood in the King Road/Danby Road area – discussion and comments on node idea:

- What are the incentives for developers? Tax incentives are needed – IDA (Industrial Development Agency) – it is tough currently for the private sector; a density zone is being pursued by Lansing and Town should look into this.
- District energy idea being pushed by U.S. EPA for areas with dense zoning. Denmark has examples of district energy. It is a stable energy source that would create an incentive and draw in developers.
- Exchange for protecting open space – denser development?
- Don’t want “Collegetown” on South Hill – worried about another Collegetown on South Hill – a pitfall to caution against.
- Commercial feel should not take over the area.
- Public transportation to serve the node.
- Too easy to end up with just another strip development – put small shopping - need bounds on the node – say a 10 year plan).
- Community Corners is growing but maintains community character.
- Need to have more aesthetic way to encourage development.
- Collegetown in early days was rundown; it needed the density and it needed a boundary to keep from spreading to other neighborhoods.
- Collegetown is not attractive; mistakes have been made
- Seattle has a Neighborhood Review Board – this help keep the neighborhood identity – see Seattle website and how it can be done.
- Higher buildings with setbacks, lower towards road.
- What should be height of building?
- (Allows view at Lake from Route 96)
- Collegetown Terrace project (State Street in the City) – wide project with 6 stories is dense – for some areas this is okay. City facing this issue – how much will to take; how high and how widely spread)
- East side of Route 96B is already built; IC tall buildings, slopes down – have buildings follow the contour – density move inward from there
- (Who do you want to market to?)
Need to gear to specific resident’s lifestyle – college students – young professionals – young families – be sensitive to needs of different lifestyle in terms of Emerson development ideas.
- Collegetown has problem with parking - unworkable parking ordinance
- Node idea might have “park and ride” to catch buses from there – could become more viable node – conception of residential and commercial to create density for more frequent TCAT service.

- TCAT will respond to increases in density, example with Challenge Industry relocation to South Hill Business Campus and subsequent TCAT study to determine need.
- Caution on “park and ride”. People in the transportation business say riders are willing to drive one mile to go nine miles; but not drive nine miles to park the last mile.
- Ithaca is ill-suited poor for solar. Centralized power grid is the way to go, similar to what CU is doing. Community non-profit energy is being explored.
- Ithaca College pedestrian route should ideally be through the campus, and not to weave through neighborhoods.

Attendance: 22 residents

D.3.3 East Ithaca

16 June 2010

Trinity Lutheran Church, 149 Honness Lane

1. What do you like about the area where you live? What keeps you there?

(Positives)

- Close to downtown, but feel like being in the country.
- Able to walk to Cornell University for employment.
- Can walk to East Hill Plaza and downtown.
- East Hill Recreation Way is very popular, likes being walking distance to three trails (for recreational walking); but bikes don't follow rules.
- Like having international neighbors; Belle Sherman School; East Hill Recreation Way; and having convenient bus service available.
- Property backs up to undeveloped Cornell University land, along Honness Lane; buses can go anywhere, well connected.
- Forest Home – socially active, close knit – defined neighborhood – Cornell University surrounds the neighborhood on all sides
- Safety – like feeling of being protected – Eastwood Commons, limited access.
- Pine Tree Road – close proximity to services, but open space around, have neighborhood, know neighbors.
- East Hill Recreation Way – very positive.
- Eastwood Commons – vacant area in there should be protected.

(Issues)

- Poor shoulders on Pine Tree Road – no place to bike – potholes are also an issue on Pine Tree Road – would be willing to give a little front yard for bikes.
- Traffic / speed on Pine Tree Road – lots of trucks
- Need for traffic light at Honness Lane / Pine Tree Road intersection – vegetation makes it difficult to see – heavy traffic.
- Usable shoulders for bikes along Mitchell Street needed – area between City line and French Lavender has lots of potholes – bikes have to ride out in traffic lane.
- Loose gravel on trail – would prefer pavement – is getting older.
- Cycling around East Hill Plaza is difficult; Pine Tree Road Walkway trail ends at Ellis Hollow Road.
- No bike racks at East Hill Plaza.
- Pine Tree Road / Route 79 – reconfigure traffic light so it is not blinking . Long back-up on Pine Tree at times and signal would help to get out onto Route 79 – traffic circle?

- Route 366 / Pine Tree Road – very un-pedestrian friendly.
- Should not allow smoking by the entrance to the grocery store.

2. What are the conditions and trends that you see in your area? Impact of the city on town residents? Any issues that pull city and town residents apart?

- Continued Cornell University development – open space is valued – unpredictability.
- Snyder Hill – traffic too high, traffic calming needed.
- Pine Tree Road – speed limit should be reduced, needs enforcement now.
- Deer – traffic – infiltration of rentals – in Forest Home.
- Continue to improve bus schedule – could help to reduce traffic.
- Would like to develop property for retirement, help in future – corner of Slaterville / Honness.

3. (What needs to be improved/preserved to enhance your area of the town? This was incorporated into other answers)

4. Compact neighborhoods or nodes (development).

- Why is more development needed – find tenants for the existing empty spaces in Town and City, not create new empty spaces.
- Cornell University plan of East Hill Village – need to continue to have a grocery store.
- What is the development impact on property tax base - if Cornell University is the developer (don't want to see any tax exempt type of development).
- Like mixed use idea – no need for car – seen good example in Toronto.
- East Hill Village – think about what would make it a nice village and not another Collegetown. Collegetown does not have a comfortable feel – need appropriate regulations.
- East Hill Village needs to be very pedestrian friendly – accessibility is important.
- Would like some open green space – recreational structure – community (center) space.
- Small neighborhood businesses – serve community – shops, restaurants.
- What high-rise (density) is needed to be viable – three to five stories (Cornell representative answered).
- East Hill Plaza was not implemented the way it was originally presented – resident remembers the original plans with lots of trees – new plans should have some accountability.
- Trash always comes with the rentals.
- Worried about Cornell agricultural land – where and how strong is the boundary for development?
- Questions why Cornell University would want to develop for housing, and not save it for Cornell University educational use.
- High density requires strong boundaries.
- How do we/Cornell University make sure students don't take over the planned workforce housing.
- Would like to see concrete numbers – i.e. what amount of green space is in the Village plan? – very firm numbers needed before plans get to far along.
- Compact / clusters ideas are good, but unsure of how they can be implemented here.
- Will five story building hurt the feel of planned open space – tall building next to green area may not feel right.
- Support Village dream – Cornell University employee housing is very good, but would like to see trees, safe places to walk / bike, trash pickup, Cornell University students should not to bring cars.
- Concern over zoning appeals – how many are approved? – why do we have regulations if it is so easy to get variance?
- County library should have copies of the Cornell University Master Plan available for the public.
- Cornell should subsidize the workforce housing like they do for current student housing.

5. What future involvement would you like to have in planning and developing your neighborhood area? How can the town communicate better about proposed changes?

- Read in the newspaper the notice of this neighborhood meeting.
- Like having neighborhood meeting.
- Liked that the newspaper gave Town website for more information.
- Notice in paper was not enough. Put something in mailboxes, maybe notices in grocery stores, or like the road sign at the County uses for meetings.
- Heard it on the radio – it was announced many times.
- Belle Sherman list serve could be used to notify people.

Attendance: 47 residents

D.3.4 Northeast Ithaca

14 June 2010

Northeast Elementary School, 425 Winthrop Drive

1. What do you like about the area where you live? What keeps you there?

- Like the corridor of trees along Hanshaw Road.
- Area is removed from downtown.
- Good places to walk dogs.
- Proximity to Sapsucker Woods.
- Good bus transportation.
- Accessible to employment.
- High elevation – see weather as it approaches.
- Proximity to elementary school.
- Very walkable.
- Close to shopping and medical offices.

When asked where people shop, they responded that they go to the Farmers Market, Greenstar, P&C.

2. What do you NOT like about the area where you live?

- The condition of Hanshaw Road. It's been poorly maintained.
- Drainage issues, some of the worst soils in the county.
- Too many dogs and no signs to encourage/require people to clean up after the dogs.
- Too many deer.
- Speeding.
- Volume of traffic. Drivers use Hanshaw Road as a short-cut to Cornell (GPS units suggest that route).
- Drivers use Hanshaw and not Route 13 when it's snowy.
- Big trucks try to drive through Forest Home.
- As new buildings are built at Cornell, there is more and more noise in Forest Home.
- Are there warnings for the large trucks using the bridges in Forest Home?
- A designated truck route in and around Cornell is needed.
- On Hanshaw, there are problems with bicycles and runners on the road and shoulder; the new path should help.

- Bikes often ride three abreast creating a dangerous situation.
- Bikes with kids in bike trailers are a hazard.
- The new plan for Hanshaw Road rebuild will remove trees that help with traffic calming; the plan for the road appears to be overbuilt; the County has not paid attention to the residents. Could the Town officials talk to TCCOG or the County and better represent the residents' opinions? No new lighting in the plan and it is very dark along there in the winter.
- Driving awareness is needed with cyclists.
- Do not want to see a bike lane with a fast speed limit.
- When the speed limit is 30 MPH, bikers should be mixed with cars.
- The proposed path is too wide and too close to the road.
- Other "linear neighborhoods" (such as Coddington Road) are abused by the County.
- They are in the town but the County is doing the road work. Don't impose a solution just because there is money to do the work.
- Think 10-20 years into the future.
- Infrastructure lacks needed, regular maintenance – faded stop signs, poor road conditions; municipalities need to be taking care of small, important details.

3. What are the conditions and trends that you see in your area?

- Proposed development could additionally stress infrastructure.
- New houses in Forest Home are all McMansions and that is not necessarily what buyers want, but they do want to live close to Cornell and that is the housing type that is available.
- New housing should have a smaller square footage.
- It would be nice to see more sustainable housing development.
- Could government entities use property taxes to encourage solar energy or other renewable energy?
- There is good bus transportation, but they drive too fast. Some intersections in NE neighborhood are tough for buses to make the 90 degree turn. It would be better if there was a shoulder that buses could be driven on for the turns. Or use smaller buses.
- It is frustrating because not everyone works at Cornell but the buses are large to accommodate the riders on campus.
- The Town and County think about everything in terms of Cornell; this is a trend that should end.
- Lots of residents DO work at Cornell.
- Cornell owns a lot of land and they could build a driveway and not use Town and County Roads.
- People will move away from busy areas, away from the urban core and that will expand sprawl into rural areas.

4. Impact of the city on town residents? Any issues that pull city and town residents apart?

- Glad they're the City and we aren't.
- Let the City have the development.
- Seniors should be in the City so that they can get out and walk; don't ghetto-ize the senior community.
- We talk about affordable housing, but we want affordable living – living in a place where one can walk to work and shopping.
- Don't separate age groups; neighborhoods should be mixed.
- The original Chase Farms proposal included different components than what was finally built – the town should be able to step in and make them stick to the original plan.
- Why does Briarwood II have to be built?
- The Town gets bullied by developers.

- Need to think about the Town's interaction with not only the City but also the other municipalities that it borders; there is not much integration.
- Herb and Carolyn are at loggerheads over who gets more development.
- Planning Board and Zoning Board of Adjustment make decisions on parcels that they don't even know. When decisions are made, board members should be visiting site.

5. What needs to be improved/preserved to enhance your area of the town? (i.e. sidewalks, parks, open space, natural areas, historic buildings, commercial services, agriculture, transportation, etc.)?

- A strong emphasis needs to be placed on protecting water quality.
- Reduce traffic speeds.
- Encourage sustainability.
- Protect small farms.
- Some community supported agriculture (CSA) pickups used to be at the Farmers Market, and then people would buy food from other vendors as well. Some no longer doing that and farmers are missing out on some sales. The Farmers Market is more of a tourist destination and that makes it difficult to go and buy produce. Why not sell produce at other locations?
- Rural residents don't want to come to Ithaca.
- Tree pruning for utility protection is poorly executed and they are killing trees. Need to be better arborists.
- The Northeast area is completely built-out except for Briarwood II and Cornell's property, but these areas border Sapsucker Woods, which needs to be protected. The roads are not built for more traffic (from these new developments). The area is not legally a wetland but it is very wet. More encroachment would destroy Sapsucker Woods.
- The park off of Tareyton Road is used a lot.
- Protecting historic structures is also very important.
- Hollis asked about Community Corners – it is not very vertical, should there be more two, three or more storied buildings?
- It depends on what goes into the plaza.
- Cayuga Heights is trying to attract an ice cream/coffee shop for families.
- It should be a more social experience.
- It would be better if more people could walk to it.
- The Cayuga Heights Planning Board is studying Community Corners in great detail. They will be holding a focus group and welcome any input from Northeast Ithaca residents.

6. The committee has discussed encouraging compact neighborhoods or nodes.

Possible node sites in the town: the intersection of King and Danby Roads for a South Hill node; near the hospital for a West Hill node; and East Hill Plaza area for an East Hill node. What are the benefits? What are the pitfalls? What suggestions do you have for development in this area?

- In the West Hill area, traffic is a huge issue.
- The spaces in between are just as important to protect. Create de novo nodes.
- There should be buffers between nodes and other existing development.
- Hollis asked if we are short on housing. The County projected that 4,000 more units are needed in the county.
- Someone asked if that was still a valid number given Cornell's financial situation.
- Building and development will happen even if we don't plan for it.
- There are empty places all over downtown.
- How can places be revitalized?

- Project for Public Spaces (www.pps.org)
- The housing costs in surrounding areas are much lower but people commute to Ithaca to work and shop.

7. What future involvement would you like to have in planning and developing your neighborhood area? How can the town communicate better about proposed changes?

- Residents want to be involved with what happens with developments.
- Drainage problems are also a result of downstream conditions – there are trees and debris in the streams backing up water. It's not just the culverts in the Northeast Ithaca neighborhoods; the water is not running off.
- Building code is not stringent enough; housing should be more energy efficient, and the old housing stock should be retrofitted.
- The Briarwood subdivision is a contentious issue – as it has been for many decades. It would be beneficial if developers brought proposals to residents' attention earlier in the process. Residents often hear about proposals only after they go to the Town Planning Board.
- Residents should be part of the process when Cornell thinks about developing its property west of Sapsucker Woods.

Attendance: 47 residents

APPENDIX E POPULATION AND HOUSING PROJECTIONS

POPULATION AND HOUSING PROJECTIONS

Using Census population data to project population in 2020 and 2030, including the Village of Cayuga Heights:

2000 total population (Census)	18,710 persons [Pt1]
2010 total population (Census)	19,930 persons [Pt2]
2000-2010 rate of change:	$\frac{[Pt2] \text{ or } 19,930}{[Pt1] \text{ or } 18,710} = .065 \text{ or } 6.5\% \text{ in } 10 \text{ years}$

First 10-year period: 2010-2020

Pt2 = 19,930 persons

Pt3 = ?

Rate of change = .065

$$.065 = \frac{Pt3 - 1}{19,930 \text{ persons}}$$

$$1.065 (19,930) = Pt3$$

Pt3 = 21,225 persons (projected total population in 2020)

Second 10-year period: 2020-2030:

Pt3 = 21,225

Pt4 = ?

Rate of change = .065

$$.065 = \frac{Pt4 - 1}{21,225 \text{ persons}}$$

$$1.065 (21,225) = Pt4$$

Pt4 = 22,605 persons (projected total population in 2030)

Total potential population increase by 2030 (next 20 years) = 22,605 – 19,930 = 2,675 persons

Summary:

2000 total population (Census) = 18,710

2010 total population (Census) = 19,930

2020 total population (projected) = 21,225

2030 total population (projected) = 22,605

Using Census population data to project population in 2020 and 2030 - not including Village of Cayuga Heights:

2000 total population (Census) : 14,925 persons [Pt1]

2010 total population (Census): 16,201 persons [Pt2]

$$\begin{array}{l} \text{2000-2010 rate of change:} \quad \frac{[\text{Pt2}] \text{ or } 16,201}{[\text{Pt1}] \text{ or } 14,925} = .085 \text{ or } 8.5\% \text{ in } 10 \text{ years} \end{array}$$

First 10-year period: 2010-2020:

Pt2 = 16,201 persons

Pt3 = ?

Rate of change = .085

$$\begin{array}{l} .085 = \frac{\text{Pt3} - 1}{16,201 \text{ persons}} \end{array}$$

$$1.085 (16,201) = \text{Pt3}$$

Pt3 = 17,586 persons (projected Total population in 2020)

Second 10-year period: 2020-2030:

Pt3 = 17,586

Pt4 = ?

Rate of change = .085

$$\begin{array}{l} .085 = \frac{\text{Pt4} - 1}{17,586 \text{ persons}} \end{array}$$

$$1.085(17,586) = \text{Pt4}$$

Pt4 = 19,081 persons (projected total population in 2030)

Total potential population increase by 2030 (next 20 years) = 19,081 – 16,201 = 2,880 persons

Summary:

2000 total population (Census) = 14,925

2010 total population (Census) = 16,201

2020 total population (projected) = 17,586

2030 total population (projected) = 19,081

Using housing unit data from building permit records to project number of new housing units in 2020 and 2030, Town of Ithaca only:

Number of new housing units in 2000 (building permit records) = 539 [Pt1]
 Number of new housing units, 1-2000 to 12-2009 = 669 [Pt2]

$$\text{2000-2010 rate of change: } \frac{[\text{Pt2}] \text{ or } 669}{[\text{Pt1}] \text{ or } 539} = .24 \text{ or } 24\% \text{ in } 10 \text{ years}$$

First 10 year period: 2010-2020:

Pt2 = 669
 Pt3 = ?
 Rate of change = .24 or 24%

$$.24 = \frac{\text{Pt3} - 1}{669}$$

$$1.24(669) = \text{Pt3}$$

Pt3 = 830 - projected number of new housing units 2010-2020

Second 10 year period: 2020-2030:

Pt3 = 830
 Pt4 = ?
 Rate of change = .24

$$.24 = \frac{\text{Pt4} - 1}{830}$$

$$1.24(830) = \text{Pt4}$$

Pt4 = 1,029- projected number of new housing units 2020-2030

Total potential new housing units by 2030 (next 20 years) = 1,029 + 830 = 1,859 units*

Summary:

2000 new housing units (building permits)	= 539
2010 new housing units (building permits)	= 669
2020 new housing units (projected)	= 830
2030 new housing units (projected)	= 1,029

* note: using Census information instead of building permit information yields 1,534 total new units by 2030.

Using housing unit method to determine total Town population in 2010, not Including Village of Cayuga Heights:

New housing units that received building permits between January 2000 and January 1, 2010 = 669 (assumption that those units were built)

Housing units in the Town in 2010 (Census)	5,863
New housing units between 1-2000 and 12-2009	+669
	<hr/>
	6,532

Occupied units rate (2010 Census) = .93

Housing units	6,532
Occupancy rate	×0.93
	<hr/>
Households	6,075

Average household size (2010 Census) = 2.15

Households (2010)	6,075
Average household size (2010)	×2.15
	<hr/>
People in households in the Town (2010)	13,061

Group quarters = 4,911 total population in group quarters as of January 1, 2010
[includes 4,729 in college/university student housing]

People in households in the Town (2010)	13,061
People in group quarters (2010)	+4,911
	<hr/>
Total population of the Town (2010)	17,972

APPENDIX F

GLOSSARY

GLOSSARY

F.1 Words and terms

Accessory unit / accessory elder cottage: apartment or small cottage sharing ownership and utility connections with a larger principal dwelling.

Affordable housing: unless otherwise specified, housing that has a sale price or rental amount that is within the means of a household that may occupy middle-, moderate-, or low-income housing. Housing is considered “affordable” when the tenant or homeowner pays no more than 30% of their gross income for housing costs.

Agritourism: activities conducted on a farm for the direct enjoyment and/or education of the public, which primarily promotes the sale, marketing, production, harvesting, or use of the farm’s products and which enhance the public’s understanding and awareness of farming and farm life.

Agriculture, small scale: for the Town of Ithaca, and based on the range of farm sizes existing in the Town, a small-scale farm would generally equate to 50 acres in size or less (per Town of Ithaca Agricultural and Farmland Protection Plan (2011)).

Agriculture, medium scale: for the Town of Ithaca, and based on the range of farm sizes existing in the Town, a medium-scale size farm would generally fall between 150-200 acres in size (no existing farms between 50-150 acres in size) (per Town of Ithaca Agricultural and Farmland Protection Plan (2011)).

Artisanal / cottage industry: small-scale production of goods in a home workshop or storefront, using hand or small table-mounted tools.

Best practices: solutions and strategies found to be successful in other settings for the resolution of problems identified in the Town’s Comprehensive Plan.

Bicycle facilities: general term for all improvements and provisions that promote and facilitate bicycling, such as bicycle travel lanes (shared lanes, shoulders, sidewalks, bike lanes or multi-use paths), maps, signs, and bicycle parking facilities. Commuter bicycle facilities would include workplace showers and changing rooms for those who cycle to work.

Biological corridor: a linear patch of habitat that facilitates the movement of species between fragmented habitats.

Bioretention pond / area: shallow stormwater basin or landscaped depression which utilizes engineered soils and vegetation to capture and treat runoff that is returned to the stormwater drain system.

Build-to line: specifies where a building must be located relative to lot lines. A feature of form-based codes.

Bungalow courts: group of small houses closely arranged around a central, linear courtyard or other kind of manicured open space.

Community units: clustered land development or traditional neighborhood development; a feature of the SmartCode.

Complete Streets: roads that are designed to accommodate all users, including motor vehicles, public transportation vehicles and passengers, bicyclists, and pedestrians of all ages and abilities.

Comprehensive plan: official document that guides the long-range physical development of the Town.

Concentrated animal feeding operations (CAFO): agricultural operations where animals are kept and raised in confined situations. These operations congregate animals, feed, manure and urine, dead animals, and production operations on a small land area. Feed is brought to the animal rather than the animals grazing or otherwise seeking feed in pastures, fields, or on rangeland. The U.S. Environmental Protection Agency defines Large CAFOs, Medium CAFOs, and Small CAFOs according to the number of animals that the facility confines.

Conservation easement: voluntary legal agreement entered into between a landowner and a qualified conservation organization or a government entity. The easement permanently limits a property's uses in order to protect the land's natural resource values.

Context sensitive solutions: approach to urban design that emphasizes collaborative planning with stakeholders to develop solutions that are in keeping with the scale, massing, use, and location of existing conditions.

Critical Environmental Area (CEA): areas of land in New York State which have been designated by a local or state agency because they have one or more of the following characteristics: is a benefit or threat to human health; an exceptional or unique natural setting; exceptional or unique social, historic, archaeological, recreational or educational values; or an inherent ecological, geological or hydrological sensitivity to change that may be adversely affected by any physical disturbance.

Curb return radius: curved edge of the curb at thoroughfare intersections, measured at the edge of the travel lines. Curbs at intersections should not intrude into the intersection beyond the specified maximum curb radius.

Dendritic street network: treelike or branching street layout with many cul-de-sacs, loops, and dead ends. Typical of suburban development.

Density: gross density refers to the number of families, persons or housing units allocated per gross unit measure of land. Net density is the maximum density permitted to be developed per unit of land after deducting any required open space, easements and publicly dedicated rights-of-way.

Development: physical extension and/or construction of human-focused land uses; the act of bringing about growth.

Development, brownfield: redevelopment of abandoned or underutilized industrial and commercial sites, where ground contamination is frequently present.

Development, cluster: residential development designed to preserve open space by grouping the homes on a portion of a property only, leaving the remainder as open space.

Development, frontage: creating development lots by splitting parcels fronting the road from a larger parcel. Also called strip development or ribbon development.

Development, greenfield: development on land that has previously never been built on.

Development, grayfield: older, economically obsolete development. The term is commonly applied to malls that are past their prime and experiencing declining levels of occupancy.

Development, infill: development of vacant or underutilized properties within a predominantly built-up neighborhood or commercial area.

Development, light imprint: development strategy that emphasizes sustainability and increased environmental and infrastructural efficiency, while reducing construction expenses; with an emphasis on stormwater and drainage management techniques that provide an alternative to more costly and intrusive conventional methods.

Development, mixed use: development projects that provide for more than one use or purpose within a shared building or development area. Mixed-use development may allow the integration of commercial, retail, office, medium to high-density housing, and in some cases light industrial uses. These uses can be integrated either horizontally or vertically in a single building or structure.

Development, ribbon: see *development, frontage*.

Development, strip: see *development, frontage*.

Elder housing: housing and directly related services that accommodate the physical, medical, social and financial needs of aging residents. This includes aging-in-place programs, accessory units, age-qualified apartments, independent living facilities (congregate housing), assisted living facilities, nursing homes and hospice facilities.

Estate community: residential development with large lots up to a size that can accommodate limited rural lifestyle activities such as horse rearing or small hobby farms.

Force main: pipeline to transfer wastewater from a lower to higher elevation. Prevents excessive excavation depths and expensive sewer pipeline construction costs.

Form-based code: land use regulations that placing an emphasis on guiding the form that development takes, more so than focusing on land use as with traditional zoning.

Habitat: area or environment where an organism, ecological community, or biological populations normally lives or occurs.

Heat island impacts: built up areas that are hotter than nearby rural areas due to more impermeable and heat-trapping surface materials. Heat islands affect communities by increasing energy consumption and greenhouse gas emissions, and decreasing water and air quality.

Home occupation: occupation carried out in a home by its resident; provided that the use is limited and secondary to the use of the home for residential purposes, and does not affect the residential character of the home or neighborhood.

Household: includes all the persons who are current residents of a housing unit. The occupants may be a single family, one person living alone, two or more families living together, or a group of related or unrelated persons who share living arrangements.

Housing, affordable: see *affordable housing*.

Housing, low income: housing that is occupied, reserved, or marketed for households with less than 50% of the region's median household income. (U.S. Department of Housing and Urban Development)

Housing, median income: housing that is occupied, reserved, or marketed for households with 80% to 120% of the region's median household income. (U.S. Department of Housing and Urban Development)

Housing unit: house, apartment, mobile home, a group of rooms, or a single room occupied as separate living quarters.

Human scale: building or streetscape is considered to have good human scale if there is an expression of human activity/use that indicates the buildings' size. For example, traditionally sized windows, doors, and balconies are elements that correspond to the size of the human body, so their presence indicates a building's overall size. In the streetscape, this means making signs the right size and height to be easily read by pedestrians and bicyclists (instead of just motorists), and reducing building setbacks.

Hydrophytic: plants growing in water or very moist soil deficient in oxygen at least part of the time.

Industry cluster: groups of inter-related businesses, suppliers, and associated institutions in a geographic concentration that drive wealth creation in a region, primarily through the creation of and export of goods and services. Industry clusters represent the entire value chain of an industry, from suppliers to end products and include both high and low-value added employment.

Infrastructure: basic facilities and equipment necessary for the effective functioning of the Town, such as the means of providing water service, sewage disposal, electric and gas connections, and the street network.

Infrastructure, green: strategically planned and managed networks of natural lands, working landscapes, and other open spaces that conserve ecosystem values and functions.

Institutional zoning: special zoning designation for institutional uses that provide a public service, such as public and private schools and universities, hospitals, libraries, non-profit cultural organizations, and government structures.

Interconnectivity: quality and quantity of connections in the roadway network, which influences the accessibility of potential destinations in a community.

Ithaca metro area: Tompkins County comprises the entire Ithaca metropolitan area.

Lacustrine: of or relating to a lake.

Land use: description and classification of how land is occupied or utilized, e.g., residential, office, parks, industrial, commercial, etc.

Light industry: research and development, and the manufacturing, processing, assembly, and/or treatment of finished products, predominantly from previously prepared or refined materials. Typical industrial externalities (noise, dust, smoke, vibrations) are at a minimum.

Lot split: division of a single lot of into two lots.

Median: income level which splits the Town's income distribution into two equally-sized groups: one having income above that amount and the other having income below that amount. Median income can refer to a household or a family.

Median income range: 80% to 120% of the Town's median household income, which was \$55,934 as of the 2010 Census.

Mesh-based network: wireless network comprising a relatively large number of small, often unobtrusive nodes, compared to a cellular network with a relatively small number of large, often visually obtrusive facilities.

Microcell: small wireless facility with a much smaller cell or coverage area than a conventional wireless facility.

Multimodal transportation system: transportation system that uses a variety of modes to transport people and goods. Components of the system may include vehicular roadways, transit (bus, rail), bikeways, pedestrian paths (sidewalks, trails), freight railways, and airplanes.

Open space: land and water areas retained for active or passive recreation or for resource protection in an essentially undeveloped state.

Organic arrangement: arrangement that appears natural, with no regular or repeating pattern.

Organically evolved settlement: settlement that was not intentionally created by a developer or other party, but which emerged and grew naturally; e.g. a hamlet that grew around a waterfall which provided power to flour mills.

Outfall location: point source where water from a municipal stormwater sewer system discharges to waters of the United States (streams, lakes, wetlands).

Overlay zoning district: zoning district that extends on top of more than one base zoning district and is intended to protect certain critical features and resources. Where the standards of the overlay and base zoning district are different, the more restrictive standards usually apply.

Palustrine: of, or relating to, or living in, a marsh or swamp; marshy.

Picocell: very small wireless facility that serves a limited area, such as an apartment or office building.

Pod: cluster or part of a development, usually with a single use, that has extremely limited physical and social connections to the larger surrounding neighborhood or area.

Purchase of development rights (PDR): A voluntary program typically used by governmental jurisdictions to maintain land in agricultural or conservation uses by compensating private landowners for the value of the development rights on the property. PDRs allow properties to remain in private ownership without being developed in the future.

Rain garden: planted depression that allows stormwater runoff from impervious areas to be absorbed. Rain gardens are a simplified version of bioretention, but unlike true bioretention areas these are designed as a passive filter system without an underdrain connected to the storm drain system.

Retail frontage, mandatory: Street section along which buildings must have first floor retail/commercial storefronts that face the sidewalk and street.

Retail frontage, recommended: Street section where first floor retail/commercial storefronts that face the sidewalk and street are recommended.

Riparian area: area adjacent to a stream that typically contains trees, shrubs, and other ground covers.

Rowhouses: series of residences attached in a row, which share some structural parts at a common property line but are owned individually.

Sidewalk: improved pedestrian surface located between the lateral lines of the roadway and the adjacent property lines. See *trail* for contrast.

Site planning: considering and elucidating all uses and structures proposed for a parcel of land as required by regulations.

SmartCode: model form-based and transect-based development code based on a nesting relationship of the town or city, neighborhood, transect zone, and building lot.

Smart Growth: see appendix A.1

Snout house: house with a protruding garage that takes up most of the street frontage, squeezing out front yards and making it difficult to find the front door.

Solarthermal system: technology for harnessing solar energy for heat; different from photovoltaic cells, which convert solar energy directly into electricity.

Sprawl: process by which the spread of development outpaces population growth. It is typified by a population widely dispersed in low-density development, separate land uses, a network of roads with poor access, and a lack of defined activity centers.

Stormwater: water from rain or melting snow that doesn't soak into the ground but runs off into water ways. It flows from rooftops, over paved areas and bare soil, and through sloped lawns while picking up a variety of materials on its way. See Wastewater for contrast.

Stub road: road that ends at the boundary line of a parcel, placed to provide access to the neighboring parcel, and provide future connection with or integration into the street network of the neighboring parcel if it is developed.

Subdivision: division of land into two or more lots for the purpose of sale, transfer of ownership, or building development.

Suburban: low- to medium-intensity development patterns that surround the urban areas of a city. Often residential in character, with single-family detached houses as the primary use of land. The automobile historically determines the form of the suburbs.

Surficial geology: rocks and unconsolidated material that lie above the bedrock. Refer to pg B-52 for more information.

Swale: open channel or depression designed to detain and/or retain stormwater and promote filtration through vegetation and soil media.

Traditional neighborhood development (TND): development based on traditional North American town planning principles, which include a range of housing types, a network of interconnected streets and blocks, human-scale public spaces, and amenities such as stores, schools, and places of worship within walking distance of residences.

Trail: publicly owned and maintained multiuse pathway system, often independent and separated from roadways. See *sidewalk* for contrast.

Transect: cross-section of the environment showing a range of different habitats.

Transect-based code: development code based on the ecological concept of a transect, which establishes zones distinguished by its density and shared character, rather than common uses.

Transit oriented development (TOD): development of moderate- to high-density mixed land use, clustered around a transit facility, which seeks to encourage the use of public transit.

Unique Natural Area (UNA): designation established by the Tompkins County Environmental Management Council that recognizing lands within the county that contain outstanding environmental qualities and considered deserving of special attention for preservation in their natural state. It is not a regulatory designation and does not provide legal protection for an area.

Universal design: design ideology meant to produce buildings, products and environments that are inherently accessible to both people without disabilities and people with disabilities.

Viewshed: area within a view from a defined observation point.

Walkable: development patterns and roadway systems that are conducive to walking by providing safe and efficient accommodations for pedestrians. Also known as pedestrian-oriented or pedestrian-friendly.

Wastewater: water carrying wastes from homes, businesses, and industries, or excess irrigation water that is runoff to adjacent land. Also called *greywater* or *sewage*. See *stormwater* for contrast.

Wetlands: land area that is sufficiently saturated by surface water or groundwater as to be able to support vegetation or aquatic life requiring saturated soil conditions for at least part of the year.

Zoning: regulatory mechanism through which the Town regulates the location, size, and use of properties and buildings. Zoning regulations are intended to promote the health, safety and general welfare of the community, and to lessen congestion, prevent overcrowding, and facilitate the adequate provision of transportation, water, sewage, parks, and other public services.

F.2 Acronyms

<i>ACS</i>	American Community Survey
<i>ADA</i>	Americans with Disabilities Act
<i>AFPP</i>	Agricultural and Farmland Protection Plan
<i>AG</i>	Agricultural (zoning)
<i>APA</i>	American Planning Association
<i>B20</i>	Biodiesel fuel
<i>C</i>	Conservation (zoning)
<i>CC</i>	Community Commercial (zoning)
<i>CEA</i>	Critical Environmental Area
<i>CHFD</i>	Cayuga Heights Fire Department
<i>CIP</i>	Capital improvement plan
<i>CLD</i>	Clustered land development
<i>CLG</i>	Certified Local Government
<i>CMC</i>	Cayuga Medical Center
<i>CPTED</i>	Crime Prevention Through Environmental Design
<i>CSA</i>	Community Supported Agricultural operations

<i>CSS</i>	Context sensitive solutions
<i>CWA</i>	Clean Water Act
<i>DEC</i>	Department of Environmental Conservation
<i>DOT</i>	Department of Transportation
<i>FDA</i>	Food and Drug Administration
<i>FRoG</i>	EcoVillage First Neighborhood
<i>GHG</i>	Greenhouse gas
<i>HDR</i>	High Density Residential (zoning)
<i>I</i>	Industrial (zoning)
<i>ICLEI</i>	International Council for Local Environmental Initiatives
<i>ICSD</i>	Ithaca City School District
<i>IFD</i>	Ithaca Fire Department
<i>IPCC</i>	International Panel on Climate Change
<i>IPM</i>	Integrated Pest Management
<i>ITCTC</i>	Ithaca Tompkins County Transportation Council
<i>LC</i>	Lakefront commercial (zoning)
<i>LDR</i>	Low density residential (zoning)
<i>LED</i>	Light Emitting Diode
<i>LEED</i>	Leadership in Energy and Environmental Design (rating system)
<i>LI</i>	Light industrial (zoning)
<i>LOS</i>	Level of service
<i>LR</i>	Lake Residential (zoning)
<i>L RTP</i>	Long Range Transportation Plan (2004)
<i>MDR</i>	Medium density residential (zoning)
<i>MGD</i>	Million gallons per day
<i>MHP</i>	Mobile home park (zoning)
<i>MPO</i>	Metropolitan Planning Organization
<i>MR</i>	Multiple residential (zoning)
<i>MSL</i>	Mean sea level
<i>NC</i>	Neighborhood Commercial (zoning)
<i>NCR</i>	National Cash Register
<i>NESTS</i>	Northeast Subarea Transportation Study (1999)
<i>NRCS</i>	National Resource Conservation Service
<i>NRPA</i>	National Recreation and Park Association
<i>NWI</i>	National Wetland Inventory
<i>NYCRR</i>	New York Code of Rules and Regulations
<i>NYS</i>	New York State
<i>OPC</i>	Office Park Commercial (zoning)
<i>OPRHP</i>	(New York State) Office of Parks, Recreation and Historic Preservation

<i>P</i>	Planned development zones (zoning)
<i>PCI</i>	Pavement Condition Index
<i>PDR</i>	Purchase of Development Rights
<i>PDZ</i>	Planned development zoning
<i>PND</i>	Pocket neighborhood parks
<i>PRI</i>	Paleontological Research Institution
<i>PUD</i>	Planned unit development
<i>PV</i>	Photovoltaic
<i>SCS</i>	Soil Conservation Service
<i>SD</i>	Special District (zoning)
<i>SEQR</i>	State Environmental Quality Review
<i>SHPO</i>	New York State Historic Preservation Office
<i>SoNG</i>	Ecovillage Second Neighborhood
<i>SOV</i>	Single-occupancy vehicle
<i>SPHINX</i>	State Preservation Historical Information Network Exchange
<i>SWOT</i>	Strengths, Weaknesses, Opportunities, and Threats analysis
<i>t-GEIS</i>	Cornell University transportation-focused Generic Environmental Impact Statement
<i>TCAD</i>	Tompkins County Area Development
<i>TCAT</i>	Tompkins Consolidated Area Transit
<i>TCCCE</i>	Cornell Cooperative Extension of Tompkins County
<i>TCPL</i>	Tompkins County Public Library
<i>TCSWMD</i>	Tompkins County Solid Waste Management Division
<i>TIMS</i>	Transportation impact mitigation strategies
<i>TIP</i>	Transportation Improvement Plan
<i>TMDL</i>	Total Maximum Daily Load
<i>TND</i>	Traditional neighborhood development
<i>TST BOCES</i>	Tompkins-Seneca-Tioga Board of Cooperative Educational Services
<i>UNA</i>	Unique Natural Area
<i>UPWP</i>	Unified Planning Work Program
<i>USDA</i>	United States Department of Agriculture
<i>VFR</i>	Vehicle Fuel and Repair (zoning)
<i>VOC</i>	Vehicle Over Capacity ratio
<i>WFP</i>	Water Filtration Plant
<i>WHIP</i>	Wildlife Habitat Incentives Program
<i>WTP</i>	Water Treatment Plant

APPENDIX G BIBLIOGRAPHY

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APPENDIX H AGRICULTURE PLAN

AGRICULTURE PLAN



Suwinski Farm

The Town of Ithaca recognizes that agriculture is an integral part of the Town's economy and environment, provides locally grown food and other agricultural products, and enhances the quality of life for Town residents. The Town proactively promotes a diversity of farm types, seeks the long-term preservation of the Town's agricultural land resources, supports the economic viability of the farming community and the profitability of each farm, values the local public agricultural research and educational resources, and encourages the general public to understand and support local agriculture.

Above is the vision statement that was developed for the Town of Ithaca's *Agricultural and Farmland Protection Plan*. This plan outlines specific goals, recommendations and implementation steps that will help achieve this vision. The plan also includes background information on agriculture in the Town along with existing agricultural resources, maps, and other pertinent information. The plan was adopted by the Town of Ithaca Town Board and the Tompkins County Agriculture and Farmland Protection Board in November 2011.

A copy of the plan is available online at <http://www.town.ithaca.ny.us/a-f-protection-plan>. Paper copies can be obtained from the Town of Ithaca Planning Department, 215 North Tioga Street, Ithaca, New York 14850.

APPENDIX I SCENIC RESOURCES INVENTORY AND ANALYSIS

SCENIC RESOURCES INVENTORY



View from Hanshaw Road

In a 2009 survey conducted for the Comprehensive Plan update, 91% of the 356 respondents reported scenic views were “important” or “very important.”

Scenic resources are defined as public or publicly accessible areas, features, and sites that are recognized, visited, and enjoyed by the public for their visual qualities.

The *Scenic Resources Inventory and Analysis Report* was initiated to:

- Foster community awareness and pride in the Town’s scenic environment.
- Establish the significance of local scenic resources.
- Document the views of each scenic resource and the extent, character, and area of each.
- Provide detailed information to decision makers about how to protect scenic resources, specifically through the updated Comprehensive Plan, possible regulations, and the SEQR process.
- Provide a basis for incorporating scenic resource protection into the Comprehensive Plan.

The *Scenic Resources Inventory and Analysis Report* includes a collection of photographs, descriptions, and maps that provide details of all significant scenic resources in the Town, and show what is visible from identified vantage points.

The completed *Scenic Resources Inventory and Analysis Report* was accepted by the Ithaca Town Board in May 2014. It is available online at <http://www.town.ithaca.ny.us/scenic>, or in print from the Town of Ithaca Planning Department, 215 North Tioga Street, Ithaca, New York 14850.