Town of Halfmoon

Plan
for
Halfmoon Center

January 19, 2006

<u>Produced by:</u>

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Plan developed through the Capital District Transportation Committee Linkage Planning Program

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1. INTRODUCTION AND BACKGROUND

The Halfmoon Center Master Plan, an implementation task identified by the town's 2003 Comprehensive Plan, is intended to refine the town's future land use vision for the Halfmoon Center area and identify and/or develop the tools necessary for implementation. This section provides background information regarding existing land uses, zoning, development trends, environmental features, and transportation for the study area and its general vicinity.

The project is funded in part through a grant awarded to the town from the Capital District Transportation Committee's (CDTC) Linkage planning program. Development of the plan began with a review of the town's previous planning efforts regarding the study area including but not limited to the Comprehensive Plan, CDTC Linkage program background, and the town's 2002 Transportation Improvement Program proposal for roadway improvements in the area. However, input from the community at a public workshop, interviews and discussions with town staff, stakeholders, area landowners, the business community (real estate agents), and participation and suggestions by the plan advisory committee were all integral components to the development of these ideas and the vision for the town center.

Primary public outreach was conducted through a community workshop held within the study area at the senior center on January 25th 2005. Over 50 residents and landowners participated in the event and, in addition to expressing concerns about traffic and transportation issues, helped to generate specific ideas and recommendations for land use, development character and

Public outreach efforts. Above: one of the break-out tables presenting their ideas for the study area.

qualities, roadway and pedestrian connectivity, and parks, preserves, and open space opportunities for the study area. A second workshop was held on October 26th 2005 where over 70 participants listened to a draft plan presentation. Following the presentation, meeting participants broke into groups to discuss aspects of the report they thought needed more work or thought as well as those components they liked. The information gathered from both of these meetings helped form the content and recommendations of this plan.

Participants at the plan presentation and workshop in October, 2005

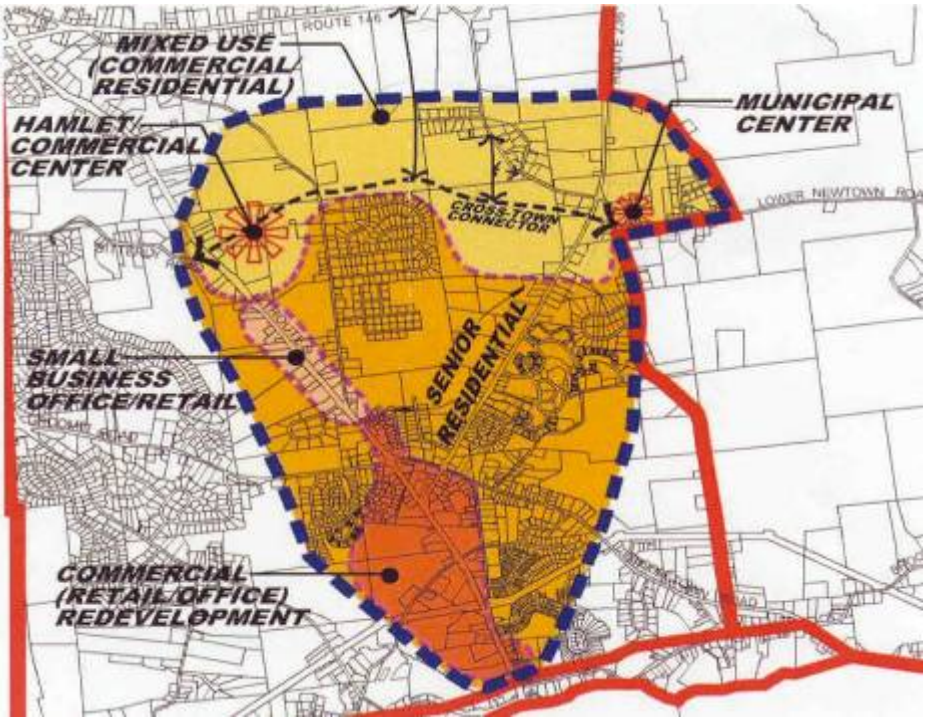
Plan Layout

The Master Plan layout consists of the following four sections:

- Introduction and Background: includes discussion of project goals and objectives, study area description, and planning background
- Inventory and Analysis: provides the existing conditions snapshot of the study area in terms of land use patterns, transportation, and demographics.
- Master Plan Recommendations: presents the planning vision and includes recommendations for each section of the study area
- Conclusion: project summary and implementation concepts.

Study Area Description

The study area boundary for the Halfmoon Center project is a sub-category of the *core area* described in the town's comprehensive plan (Comprehensive Plan Figure III-3 included this page). The core area is the triangular-shaped land situated between Route 146, Route 9, and Route 236. While this report considers the entire core area, particularly in terms of traffic issues and transportation needs, the focus of land use analysis and visioning is targeted to the undeveloped lands south of Route 146 and north of the Orchard Park subdivision (represented in yellow in the graphic with the municipal center to the east and hamlet commercial center to the west).



Town of Halfmoon "Core Area Plan" from the 2003 Comprehensive Plan with the primary study area shown in yellow (Image courtesy of Clough-Harbour and Associates)

The general vicinity surrounding the core area is the most dense and diversely developed section of town. The area includes a mix of single and multi-family residential homes, a number of retail shops (ranging from individual businesses to strip-malls and big-box stores), restaurants, offices, and light industrial operations. In general, the study area vicinity is fast-growing, well-serviced by public utilities, and under significant traffic pressure (there are noted increases in traffic congestion and accidents – these topics are discussed later).

2. INVENTORY AND ANALYSIS

This inventory reviews the study area "foundation" – its primary development patterns, land uses, and zoning detail, environmental characteristics and unique qualities, transportation network, and area demographics and market assessment. This review provides a generalized existing conditions background from which specific planning recommendations are based.

Land Uses and Development Patterns

The Halfmoon Center study area is, in large part, defined by the roads and development patterns that surround it. A brief review of the existing land uses, development patterns, roads, and traffic issues in and around Halfmoon Center will help inform decisions and concepts to be developed in later stages of this planning process. This section, Land Uses and Development Patterns, focuses on building, land use, and zoning trends in the study area and surrounding highway corridors (Routes 9, 236, and 146). Following this discussion, a summary of traffic and transportation issues is provided.

Route 9

Route 9 looking east. In the foreground, the new Wal-Mart surrounded by the Orchard Park subdivision and an active farm.

Route 9 in the vicinity of the study area is a generally built-up corridor consisting of a wide mix of uses such as big box retail, strip-style plazas, auto-oriented services (gas stations, etc.), professional office and businesses, apartments, and single family structures. The area directly west of Route 9 near the intersection with Sitterly Road includes a particularly dense mix of residential and professional business uses. With the exclusion of the Exit 9 area along 146, Route 9 has the heaviest traffic volumes in the vicinity (a detailed discussion of traffic volumes follows this section). The majority of land along Route 9 is zoned C-1 Commercial (the town's primary retail, service, and general office district)

while surrounding areas are predominately residential and Planned Development Districts (PDD).

The comprehensive plan recognizes the adverse impacts due to high rates of growth and traffic along Route 9 and recommends a corridor study to address land uses and provide solutions for traffic congestion, pedestrian access, aesthetics, public transportation, economic development and land use (page III-19).

Route 146 – this former rural residential road is transitioning into a commercial corridor. Above: a converted residential unit – now a service operation. Below: a new car dealership.

Route 146

Route 146, just beyond the northern boundary of the core area is less-intensely developed than Route 9, and includes single family homes, a number of small businesses converted from residential structures, new retail and service operations (such as the recently constructed Lowe's and a Saab automobile dealership), a light industrial and office business park, and a significant amount of open, wooded lands. Current zoning includes a mix of C-1 Commercial, R-2 (Mobile Home Park), R-1 Residential, and PDD. In addition to recommending a corridor study for this route, the town has begun a rezoning effort for Route 146, creating new commercial areas at specific locations along the corridor. In addition, the town is working to establish "performance standards" for growth along the corridor to ensure that future development is consistent with the comprehensive plan and vision for the route.

Proposed development along Route 146

Route 146 between Plant Road and Route 236 (essentially the northern boundary of the study area) can be characterized as open, wooded, and generally rural in character. However, two sizeable projects, currently under review by the town, could dramatically impact the character of this area. The largest, and perhaps most relevant to this project, is the PDD proposal on 84 acres along Fellows Road (Tanski property). The proposal includes twenty-five (25) eight-unit apartment buildings (a total of 200 apartment units), one hundred and forty-seven (147) townhome units contained in forty-nine (49) buildings, and eight (8) duplex style units in four (4) buildings, as well as modifications to the intersection of Fellows Road and Route 236, and infrastructure improvements that will help connect the town-owned property along Route 236 (location of future athletic fields) to the sewer system. The proposal received a positive recommendation from the Planning Board to the Town Board for the creation of a Planned Development District in September. The Town Board approved the PDD in December and subsequently passed the project back to the Planning Board for final approval (where the project stands as of December, 2005).

Looking east to the Fellows Road (center) intersection with Route 146 (left). The town is currently reviewing a large PDD proposal in this area.

Another noteworthy development proposal along Route 146 is a request for a PDD rezoning to allow for a commercial business park on the property just west of the Tanski proposal. The applicant recently submitted a conceptual site plan for an 80 acre medical facility / health care provider campus to include possible hospital type facilities, secondary medical related professional offices and a warehouse area for record storage and medical supplies. As of November 2005, the town has not yet formally reviewed the application.

Route 236

Of the three routes that triangulate the study area, Route 236 is the least developed. Development here consists of mostly strip-style plazas and individual commercial buildings (primarily near the intersection of 236 and Route 9) with a few recently-constructed residential subdivisions that are accessed off the main road. Nevertheless, the Route 236 and Guideboard Road area is one of the most heavily traveled and congested roadways in town and has been the source of significant concern – both intersections of Guideboard Road with Route 9 and 236 currently operate with a level of service rating of "F" (see following transportation discussion). The majority of land abutting Route 236 is currently zoned either R – 1 (Residential) or A – R (Agricultural – Residential).

To the north of this area, the road is less developed and includes small commercial operations, farmland, open fields, and access to the town hall (located at the intersection of Route 236 and Harris Road). In October of this year, the town presented plans for a new town hall to the public (the new building is proposed to be located just behind the existing structure) and recently acquired approximately 50 acres of land along the western side of the road to be used as athletic fields and public parkland. As of November 2005, the town is in the final stages of finalizing exterior design on the future municipal complex at Route 236 and Harris Road and hopes to begin construction in late Spring 2006 with completion scheduled for Fall 2007.

Route 236/Harris Road – Municipal Complex. The existing town hall is located in the foreground. The future facility is proposed for the area just behind this structure near the tree line.

Halfmoon Town Center Study Area and Initial Town Concepts for Connectivity

The project study area includes some of the few remaining undeveloped parcels in the central area of Halfmoon. Surrounded by three fast-growing corridors, it is unlikely that this land will remain free of development far into the future. In the past, the primary development hurdle in this area has been the lack of infrastructure – primarily roads and sewer service. Currently, small local roads (Plant Road, Fellows Road) provide some internal access to residential areas and subdivisions. However, access to

Looking south to the study area with Route 146 in the foreground and Route 9 to the far right (Wal-Mart is visible). Development, primarily from Routes 9 and 146 is fast-encroaching and encircling the area. Note the presence of a significant wetland in the center of the image.

The initial plan for the "Cross-Town Connector" (shown in the dotted blue line). Source: Halfmoon Center Roadway Improvement Plan (TIP Project Justification Package, 2002) – map developed by Clough Harbour and Assoc.

the internal portion of the study area is limited. In an effort to provide access and alleviate traffic congestion in the surrounding area, the town's comprehensive plan suggested a "Cross-Town Connector" that would traverse the internal portions of the study area and connect the municipal center on Route 236 to Route 9 (running parallel with Route 146). The initial concept for the roadway is included above.

In preliminary roadway connection efforts, the town purchased approximately 6 acres just south of the existing town hall for a potential re-alignment of Harris Road that could serve as an eastern connection to Halfmoon Center. The town also maintains a 60' easement along Route 9 for a potential western access to that highway.

Study Area Character

The Halfmoon Center study area is best characterized as undeveloped, wooded, and rural with only some small-scale residential properties along Fellows Road and Plant Road. In fact, a small orchard still operates near Route 9 just north of the new Wal-Mart. Some significant environmental constraints to development exist including pockets of wetlands – one significantly sized NYSDEC regulated wetland is located in the center of the study area – and two small streams that could pose a challenge for any future road design.

An active farming operation off of Plant Road (just east of Route 9)

Plant Road – one of the small collector roads that provide access to the study area – is quite rural in character.

The majority of the study area is currently zoned R-1 Residential which allows for one unit for each ½- to 1-acre (depending on the presence of

utilities). Considering the development trends discussed above, once infrastructure is in place, it is likely that much of this area could be developed at this density, if not perhaps higher through PDD rezoning – resulting in residential subdivisions similar in scale to the Fellows Road project where proposed average density is approximately 3.5 units per acre.

However, in contrast to the traditional suburban-style development patterns that dominate this part of town, the Halfmoon Comprehensive Plan recommends a "hamlet theme" for development and redevelopment in the Halfmoon Center area (III-30) that would include commercial, service, residential, municipal facilities, community gathering areas, and an improved pedestrian environment (III-30). The objective is to allow growth to occur, but also to guide it in such a manner that it helps create a "sense of place" and a center the entire town can enjoy.

The purpose of this study is to begin implementation of the comprehensive plan's recommendation to establish a traditional town center in this area– and more specifically: to determine the feasibility of this type of development concept; determine infrastructure needs, costs, and funding options; develop graphic renderings of the potential look and character of hamlet-style development; and identify zoning amendments necessary to realize the town's vision. *These topics will be discussed in subsequent sections of the study.*

Transportation Inventory and Analysis

The following section reviews existing data regarding traffic conditions and safety, on the major roads surrounding the study area (Route 9, Route 236, Route 146, Plant Rd. and Fellows Rd.) and a general discussion of the area road network.

Road Network

Of the three arterial state highways that form the core area boundary (US 9, NYS Route 146, and NYS Route 236), US 9, a four lane arterial with several major signalized intersections, has the highest traffic volumes. There are two north/south local collectors through the core area, Fellows Road and Plant Road. Guideboard Road, a county road, intersects with both US 9 and NYS Route 236 near the south end of the study area. The remaining streets serve the primarily residential development within the core area.

The character of the local streets is typical of post- WWII era development. These streets offer little or no utility to through traffic, and exist solely to serve the adjacent land uses. The local street network requires that virtually all vehicle trips must use the major roads bounding the core area for circulation, and often have no choice but to use the bottleneck intersections. This shortcoming of the street network is recognized in the Halfmoon Comprehensive Plan, and is the basis for its recommendations of developing new streets within the core area to allow for improved connectivity and access between the major road corridors.

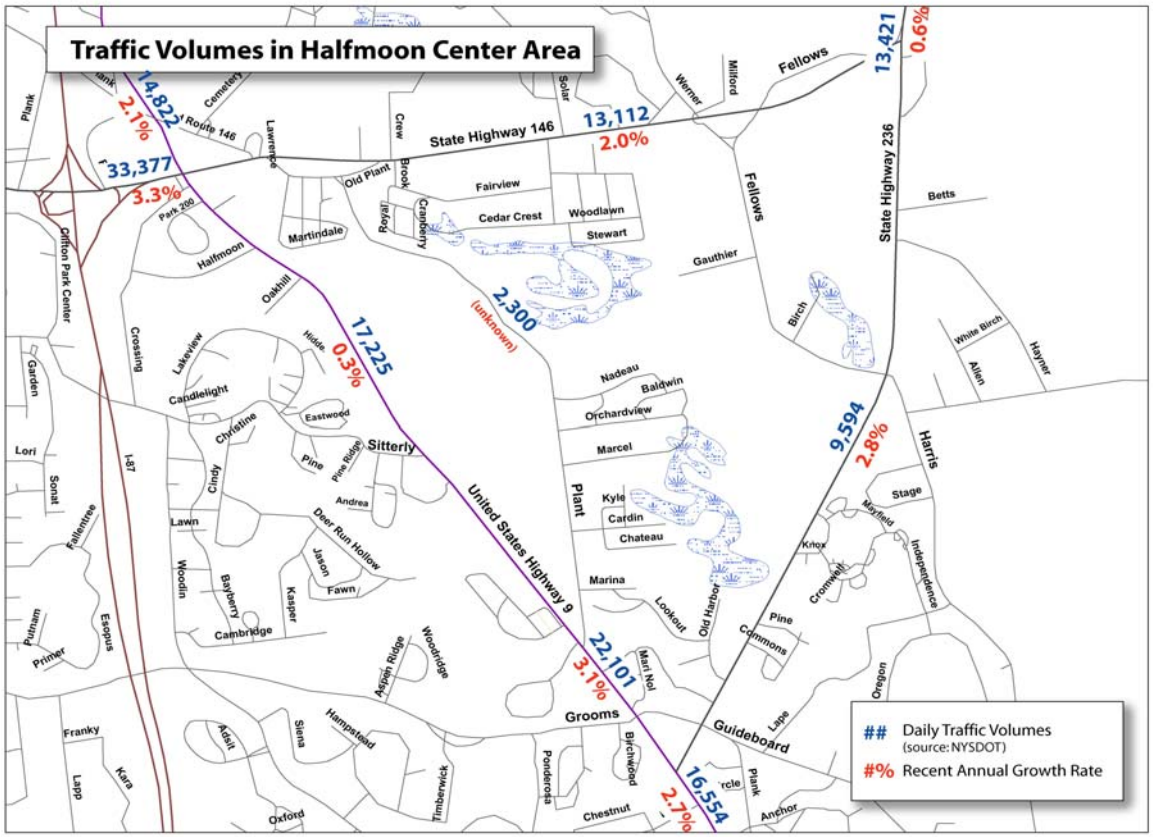
A major concern in Halfmoon is the congestion on US 9, created by a combination of high traffic volumes and roadside development. Ideally, heavily traveled arterials such as US 9 should have the highest capacity and best levels of service, in order to provide the greatest benefit to the public. However, the US 9 corridor has also become a magnet for commercial development, which has resulted in even higher traffic volumes, more turning traffic, numerous traffic signals, and congested intersections. The corridor must now provide both service to through traffic and access to major traffic generators. New policies of access management encouraged by the New York State Department of Transportation (NYSDOT) may help prevent further significant erosion of traffic operations due to new developments, but there is still a need to consider how and where

access to new development should be provided. The Comprehensive Plan's proposal to develop a new village center off of Route 9 responds to this concern, and will help in separating areas with high degrees of access from the major through-commuting corridors.

Traffic Volumes

Average Daily Traffic from NYSDOT for numerous locations on the state roads within the study area are shown in the graphic below. Also shown are the average annual growth rates observed on these roads recently, computed from NYSDOT data. The highest volumes near the study area are on Route 146 between Route 9 and I-87 exit 8. Generally, US 9 has significantly higher traffic than Routes 146 or 236. The growth rates are somewhat variable, and are likely due to traffic fluctuations during count periods, but are generally high, with some locations growing by over 3% per year.

Traffic Volumes and Growth Rates



The Capital District Transportation Committee maintains a travel demand model, which provides future traffic volumes based on forecast development and land use changes. The following table summarizes the projected changes for each of the state highways in the core area. It is evident that continued growth can be expected.

Current and Future PM Peak Hour Traffic Predicted by CDTC Travel Demand Model

Route	From	To		Year 2005	Year 2015	Percent Growth
Route 9	Route 236	Route 146	NB	1080	1203	11%
			SB	566	584	3%
Route 146	Route 9	Route 236	EB	827	859	4%
			WB	807	831	3%
Route 236	Route 9	Route 146	NB	635	663	4%
			SB	391	428	9%

Level of Service/Operations

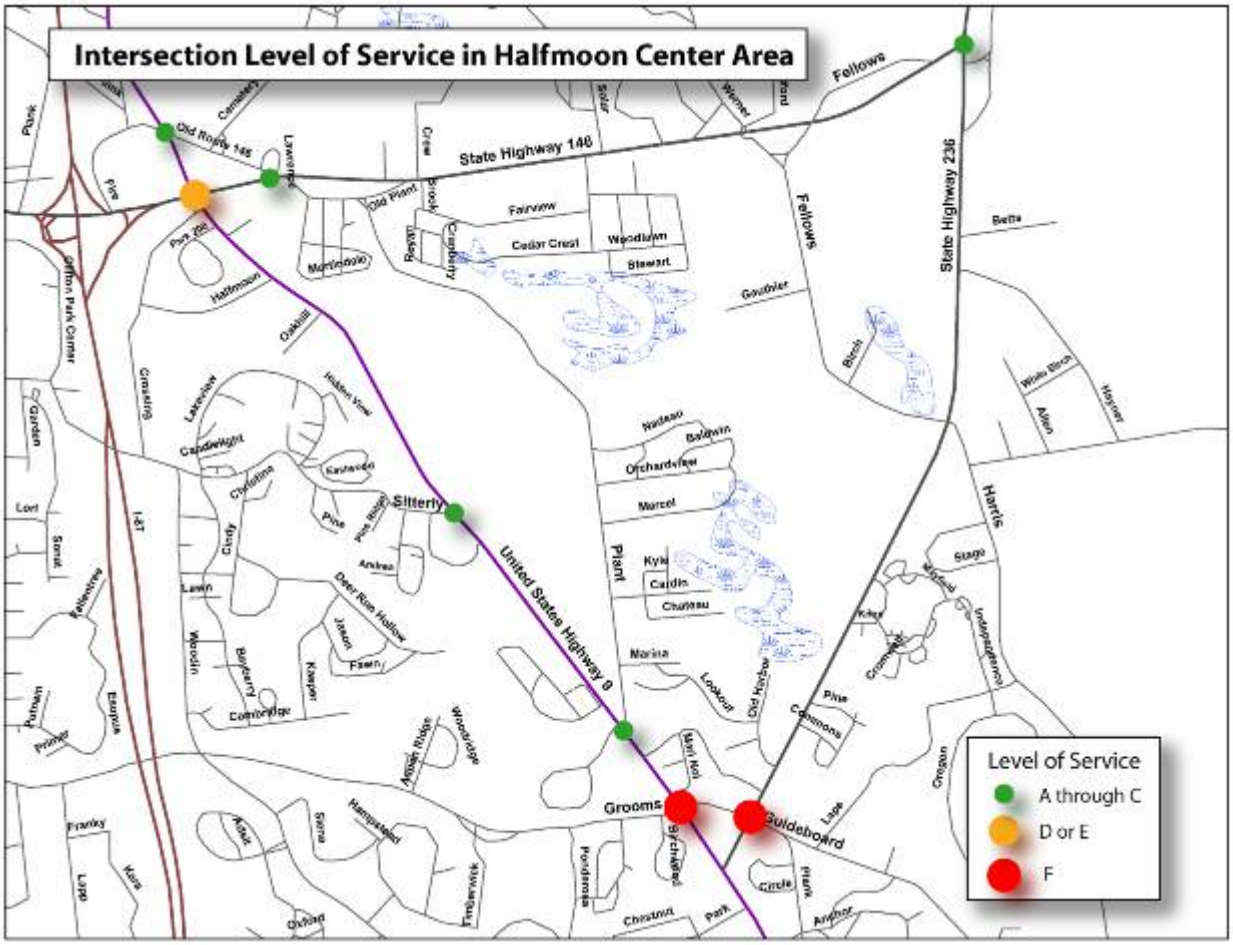
Several recent traffic studies were reviewed to determine existing levels of service at the key intersections:

- Traffic Impact Study for the Tanski Apartment/Medical/Offices PDD and Abele Halfmoon PDD, by Creighton Manning Engineering, LLP, March 2003.
- Traffic Impact Study for the Lowe's Home Improvement Warehouse, by Creighton Manning Engineering, LLP, June 2002.
- Traffic Impact Study for the Halfmoon Sports Complex, by Creighton Manning Engineering, LLP, September 2003.
- Guideboard Road Traffic Analysis, Town of Halfmoon, by Clough, Harbour and Associates, LLP, December, 1999.
- Site Impact Traffic Evaluation for the proposed Retail Development (WalMart), Town of Halfmoon, April 19, 1999 and May 14, 1999

The graphic on the following page shows the PM peak hour level of service as reported in the above sources. Level of service is a measure of traffic operations, or degree of congestion on roads or intersections during peak periods of traffic. It is reported in terms of a letter grade ranging from A to F. "A" represents free flowing traffic, and "F" represents severe congestion. Generally, level of service A through C is considered good, D represents the onset of noticeable traffic congestion, E designates significant traffic

congestion, and F represents failure, and extreme traffic congestion. Traffic engineering projects typically strive to provide a level of service "C" for an overall intersection in the future design year, although "D" is often considered a more realistic goal in urbanized areas. In some particularly intractable cases, where there is severe recurrent congestion, the project design goal is sometimes reduced to simply providing a noticeable improvement over the existing conditions. No level of service was reported in any of these sources for the intersection of US 9 and NYS Route 236.

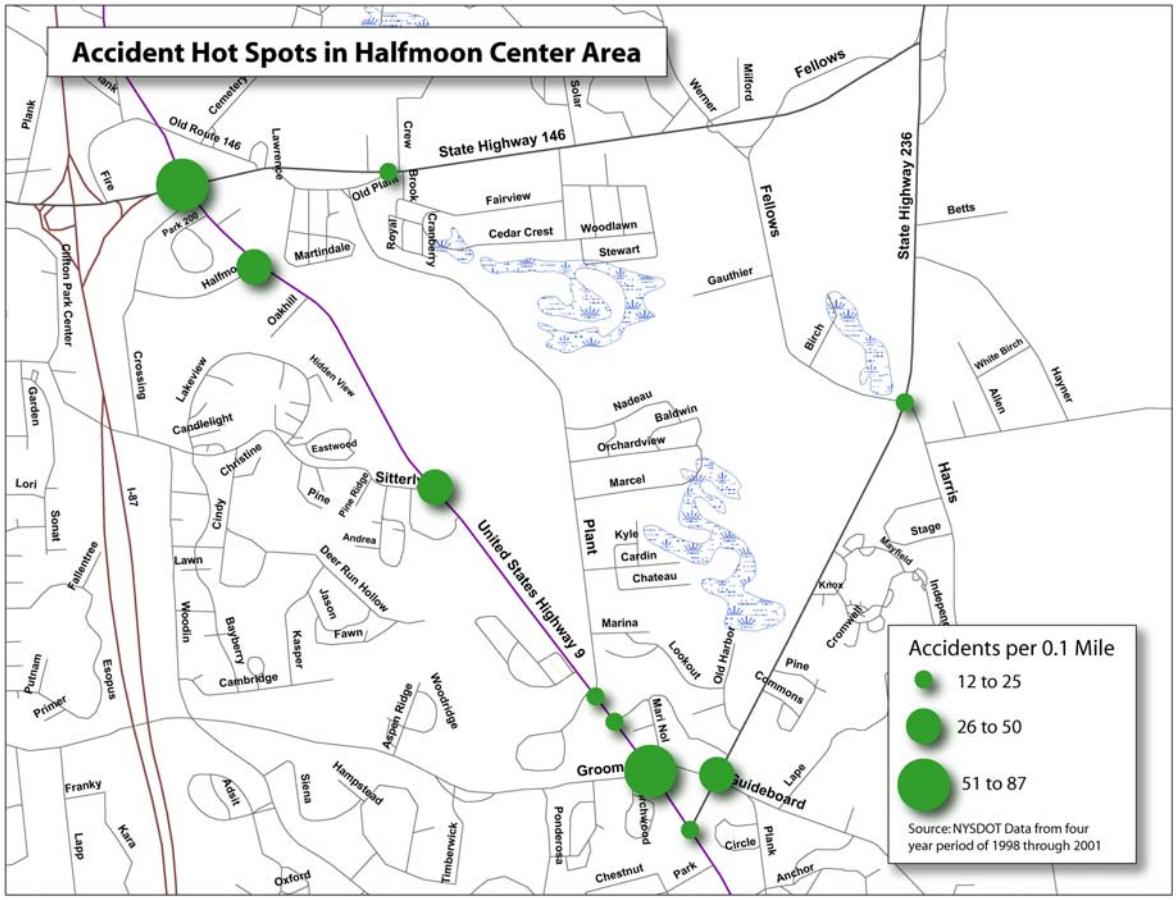
Level of Service



Safety

Accident records for the state highways bounding the Core Area were reviewed and analyzed (data is included in the appendix). Within the study area, intersections with elevated accident rates include US 9/Route 146, US 9/Guideboard Rd, Route 236/Guideboard Rd, US 9/Sitterly Rd, Route 236/Fellows/Harris Rds, US 9/ Plant Rd, and US 9/Halfmoon Crossing (locations are shown on the following map).

Intersections with Elevated Accident Rates



Public Transit

Public transit, due to the heavily auto-dependent patterns of development and lifestyles of residents, is not currently a significant mode of transportation in Halfmoon. Upstate Transit provides commuter bus service to numerous locations in the Albany area from the Exit 9 Park and Ride lot, which is near the Halfmoon Center core area and at Exit 8, just west of I-87 at the corner of Crescent and Southbury Road (just outside Halfmoon in the Town of Clifton Park). There are nine buses per day in each direction, with southbound service more frequent in the morning, and northbound service more frequent in the afternoon.

The 2000 Census Transportation Planning Package data provides data on the mode of transportation used to get to work. The following tabulation shows the results of commuters living in Halfmoon. The great majority of workers drive themselves to work, with carpooling, working at home, and biking or walking as the most common alternatives.

Mode of Transportation	Percent of Workers
Drove alone	86.37%
2-person carpool	6.69%
3-or-more-person carpool	1.17%
Bus	0.30%
Bicycle or walked	1.62%
Worked at Home	2.99%
Other	0.86%

At the same time, the following table shows the most common destinations of commuters from Halfmoon. The commuter flows to Albany, are quite high, and if good connections are available at either end of the trip, perhaps public transit has the potential to increase its commuter share.

Commuter Destination	Number from Halfmoon	% of Halfmoon Commuters
Albany city, Albany Co.	2,080	21.1%
Colonie town, Albany Co.	2,007	20.4%
Clifton Park town, Saratoga Co.	1,284	13.0%
Halfmoon town, Saratoga Co.	1,084	11.0%
Schenectady city, Schenectady Co.	406	4.1%
Troy city, Rensselaer Co.	401	4.1%
Waterford town, Saratoga Co.	239	2.4%
Niskayuna town, Schenectady Co.	215	2.2%

It is important to consider that nearly all transit trips start and end as pedestrian trips. Therefore, in order to attract transit service, you would need a land use pattern that serves pedestrians well. The vision described in the Halfmoon Comprehensive Plan of a more compact, higher density, mixed use village center is highly compatible with promoting both pedestrian and transit modes as viable transportation alternatives, and this should be considered in the planning and design process for both land developments and transportation projects.

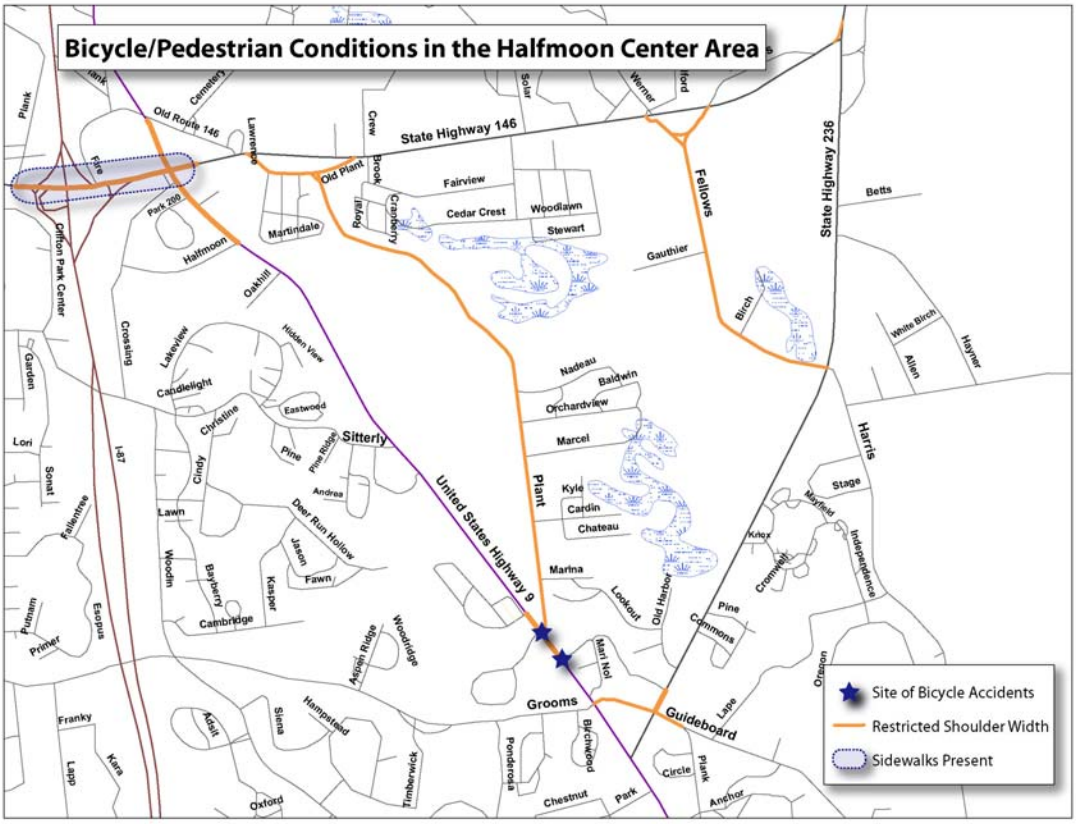
Bicycle and Pedestrian Transportation

Currently, bicycle and pedestrian transportation does not play a significant role in Halfmoon's transportation system, although there is support expressed in the Town of Halfmoon Comprehensive Plan to expand and enhance these modes. The results for the 2000 Census indicate that 1.6% of Halfmoon commuters bicycled or walked to work.

Facilities and Conditions

Bicycle and pedestrian conditions were inventoried in the Halfmoon Core Area, and the results are shown in the map on the following page (Bike and Pedestrian Environment in Study Area). The only sidewalks in the core area are in the northwest corner, where there is relatively high intensity of commercial development near Exit 9. The state highways, Routes 9, 246 and 146, have shoulders along most of their length that could be used for bicycling (note: Route 9 is designated as County Bike Route 9 by Saratoga County). However, these are narrowed at some of the key intersections (the graphic on the following page shows some of these constraints). The high frequency of driveways, high traffic volumes, high traffic speeds, and lack of marked bicycle lanes along the road, provide far from ideal conditions for bicyclists. Both Plant Rd and Fellows Rd have narrow to non-existent shoulders, and their rural nature allows relatively high vehicle speeds. These conditions are not ideal, especially for younger or less experienced bicyclists, although they are mitigated by the lower traffic volumes. A review of accident data shows that 2 accidents involving vehicle/bicycle collisions have occurred between 1998 and 2001 along US 9 in an area with narrow shoulders.

Bicycle and Pedestrian Environment in Study Area



Land Use Relationships with Pedestrian Transportation

An environment that is conducive to pedestrian transportation can be described in terms of the "Three Ds" of "Density, Diversity and Design." These characteristics are defined as follows:

- **Density**: The concentration of Jobs and/or Residences in units per square mile.
- **Diversity**: The degree to which there is a balance and mix of land uses, including residential, commercial and civic institutions.
- **Design**: The scale and arrangement of land uses are critically important to the pedestrian environment, even more than the actual presence of pedestrian facilities. If walking distances between destinations are too long, most people will choose not to walk, even if attractive pedestrian facilities (i.e. sidewalks) are provided. Distances are affected by the scale of development, its arrangement, and the provision of direct pedestrian connections between destinations.

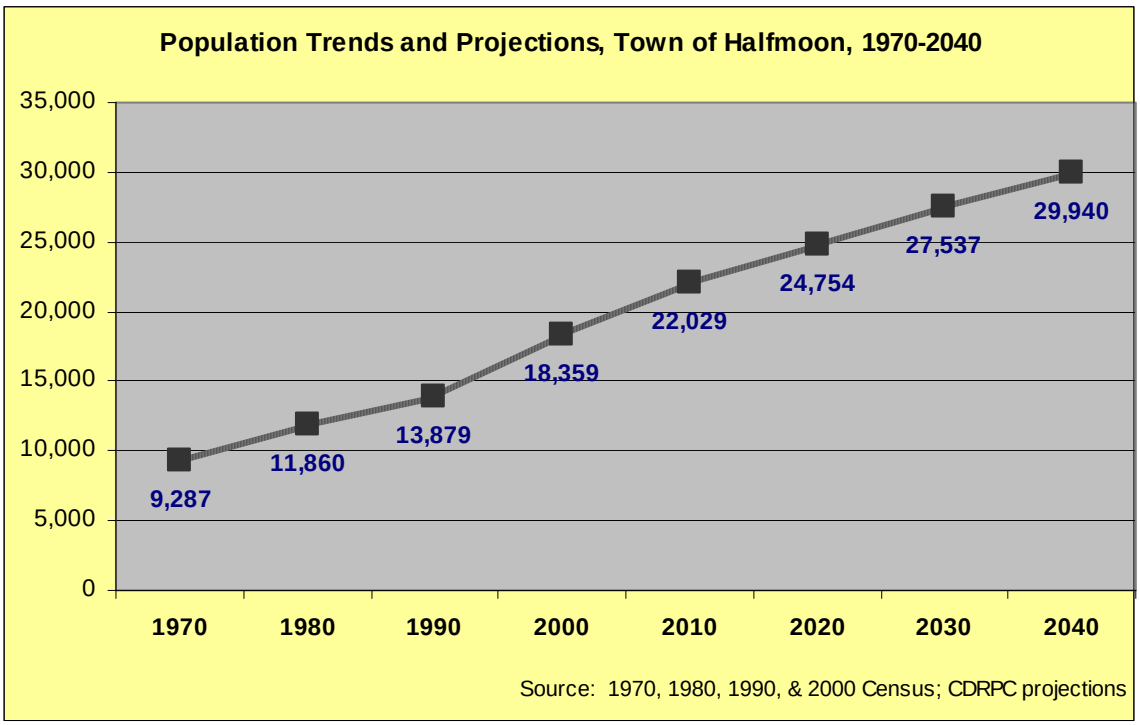
Currently, the development patterns in Halfmoon have resulted in relatively few clusters of commercial establishments, civic institutions, and neighborhoods within

walking distance, and virtually no pedestrian facilities in the Halfmoon Core area. The Halfmoon Comprehensive Plan encourages mixed use developments and hamlets in several locations to establish walkable areas and improve the pedestrian environment. However, in order to create truly walkable places and encourage walking as a practical means of transportation, all of the above "3 Ds" should be considered in the planning and design processes.

Demographic Analysis

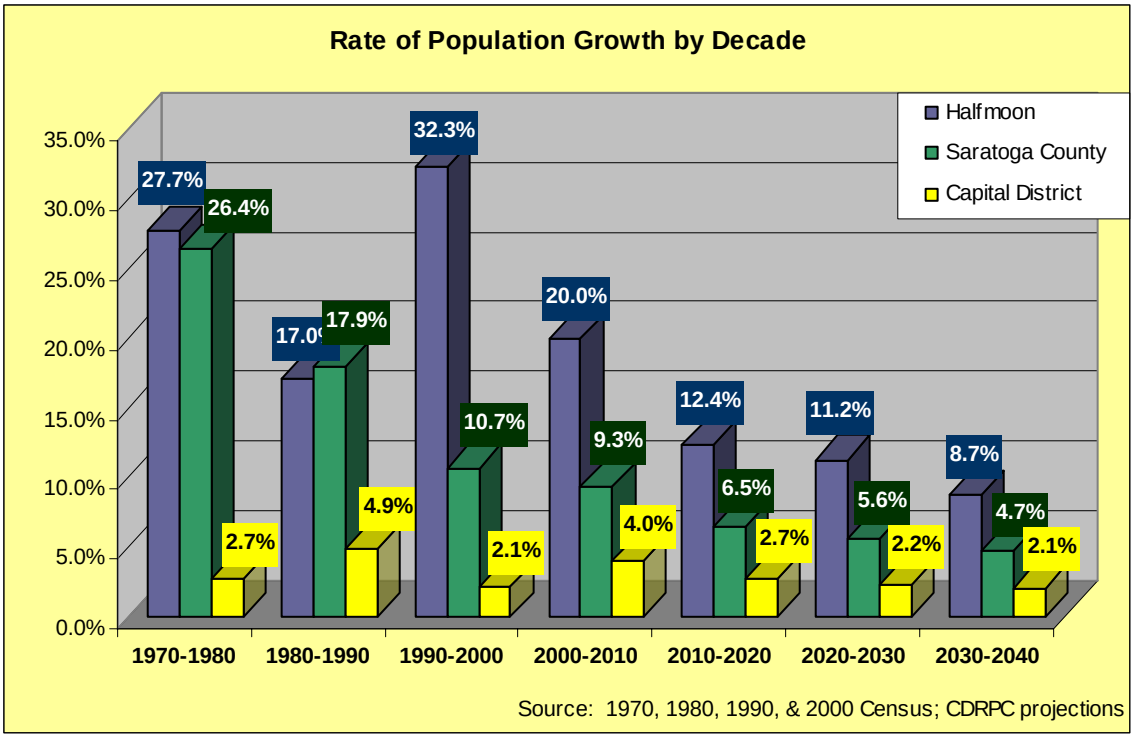
Population Trends

Since the completion of the Northway (I-87), which stimulated suburban development in southern Saratoga County, the population of the Town of Halfmoon has been growing rapidly. The 2000 Census population was 18,359, an increase of 4,480 people since 1990, representing a 32% increase for the decade. According to the Capital District Regional Planning Commission (CDRPC), the Town of Halfmoon had the greatest net increase in population of any municipality in the Capital District, which includes Albany, Rensselaer, Saratoga, and Schenectady Counties.



CDRPC projects that by 2010, Halfmoon's population will increase by 3,700 persons, to 22,029. Continued growth, albeit at somewhat reduced rates, is projected for the Town through 2040.

As shown below, the population base in Halfmoon has been increasing far more rapidly than the Capital District as a whole. During the 1990s, for example, net population growth in the region was a marginal 2%, compared with approximately 11% in Saratoga County and 32% in Halfmoon.



The Halfmoon Comprehensive Plan points out that housing pressure is directly related to the population growth in the Town. Between 1990 and 2000, the Town of Halfmoon issued building permits for 1,126 single-family and 1,224 multi-family housing units; from 2000 through 2004, building permits were issued for an additional 475 single-family and 165 multi-family housing units. This equates to approximately 214 permits annually, and with an average of 2.35 persons per household (2000), correlates closely with the increased population growth experienced by the Town.

Environmental Justice

On February 11, 1994, President Clinton issued Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations". It was created to ensure that federal government activities that may adversely affect human health or the environment do not disproportionately impact minority or low income populations. This Executive Order is closely related to Title VI of the Civil Rights Act of 1964. As a federally funded agency, the Capital District Transportation Committee is required to be in compliance with these federal regulations.

With respect to the Plan for Halfmoon Center, demographic data indicates that there are no areas of special concern (those that meet CDTC thresholds for Hispanic, minority or low income populations) in the area bounded by US 9, NY 146 and NY 236. However, west of US 9 there are two areas of special concern. The first area is roughly from Sitterly Road to NY 146 west to the town line which has a percent minority population of 14.22% and a Hispanic population of 5.35%. The second area is roughly from Sitterly Road to an area just to the north of Midway Mobile Village which has a percent minority population of 5.56% and a Hispanic population of 5.56%. In both cases, the threshold for a Hispanic population is exceeded (CDTC's regional threshold is 2.6% for Hispanic) and in the first case the minority threshold is exceeded (11.2%). Impacts on these households will require special consideration in the project development process.

Income Trends

Using generally accepted measures of economic prosperity, the Town of Halfmoon is doing better than the rest of the Capital District. According to the 2000 Census, the Town has a lower poverty rate and a higher median household income than the region as a whole.

For 1999, the Town of Halfmoon recorded a poverty rate of 4.5% for individuals. This was significantly lower than the Capital District rate of 9.2% and well below the Saratoga County rate of 5.7%.

Based on the 2000 Census, the median household income (MHI) in the Town of Halfmoon was $46,234, as compared to $45,001 for the Capital District. Saratoga County had a higher MHI at $49,460.

Of the 7,733 households in the Town of Halfmoon, 35% have incomes of between $50,000 to $99,000, while 11% have incomes of $100,000 or more. A breakdown of 2000 household income levels with comparisons to Saratoga County and the Capital District is provided below.

Household Income Levels, 2000

Income Range	Halfmoon		Saratoga County		Capital District	
	Number	***Percent***	***Number***	***Percent***	***Number***	***Percent***
Less than $25,000	1,410	18.1%	16,378	20.9%	83,738	26.3%
$25,000 - $34,999	1,281	16.5%	9,555	12.2%	40,565	12.7%
$35,000 - $49,999	1,517	19.5%	13,627	17.4%	52,366	16.4%
$50,000 - $74,999	1,842	23.7%	17,758	22.7%	67,256	21.1%
$75,000 - $99,999	857	11.0%	10,518	13.4%	36,616	11.5%
$100,000 - $149,999	577	7.4%	7,180	9.2%	26,092	8.2%
$150,000 or More	289	3.7%	3,210	4.1%	11,800	3.7%
All Households	7,773	100.0%	78,226	100.0%	318,433	100.0%
Median Household Income		*$ 46,234*		*$ 49,460*		*$ 45,001*

Source: 2000 Census

Halfmoon residents are fairly well-educated. The 2000 Census reported that 89% of Town residents aged 25 and older had graduated from high school, while 31% held a bachelor's degree or higher.

Business & Employment

The table below profiles the business community in the Town of Halfmoon. Based on proprietary data purchased from Claritas Data Services, there are an estimated 682 business establishments in Halfmoon, with 39% in services and 24% in retail trade. Most Halfmoon businesses are relatively small, averaging 11 employees; 12% have more than twenty employees.

Town of Halfmoon Business Facts

Industry	Establishments		Employees		Average Employment
	Number	*Percent*	*Number*	*Percent*	
Construction	55	8.1%	666	8.9%	12.1
Manufacturing	22	3.2%	361	4.8%	16.4
Transportation & Public Utilities	20	2.9%	169	2.3%	8.5
Wholesale Trade	42	6.2%	1,034	13.8%	24.6
Retail Trade	160	23.5%	2,073	27.7%	13.0
Finance, Insurance, & Real Estate	84	12.3%	715	9.5%	8.5
Services	268	39.3%	2,221	29.7%	8.3
Public Administration	7	1.0%	100	1.3%	14.3
Other	24	3.5%	149	2.0%	6.2
Total, All Industries	**682**	**100.0%**	**7,488**	**100.0%**	**11.0**

Source: Claritas Business-Facts which includes data from infoUSA.

Nearly 60% of all jobs in the Town of Halfmoon are in either services or retail trade, with approximately 14% in wholesale trade. The industry categories with the highest concentrations of employment in the Town include:

- wholesale trade in nondurable goods (763 employees);
- eating and drinking places (636);
- general merchandise stores (546);
- educational services (444); and
- building construction and general contractors (406).

It is important to note that individuals working for business establishments in the Town of Halfmoon do not necessarily reside in the Town, while Halfmoon residents do not necessarily work in the Town. In fact, according to Census figures, less than a quarter of the individuals *employed* in the Town of Halfmoon also *live* in Halfmoon.

Figures from the 2000 Census indicate that 72% of Halfmoon residents aged 16 and older participate in the labor force. Of these, approximately 78% are private wage and salary workers, 17% are government workers, and 5% are self-employed. The majority of Halfmoon residents work outside the Town, with nearly half (47%) commuting to jobs in Albany County.

The Town's Comprehensive Plan indicates that between 1990 and 2000, Halfmoon issued building permits for nearly 1 million square feet of commercial space and approximately 470,000 square feet of industrial space. A total of 54 commercial building permits were issued from 2000 through 2004. A list of 20 commercial development projects in progress from 2003 to January 2005, provided by the Town Building Department, indicates that as much as 1 million square feet of additional retail, office, storage, and other commercial space is currently in the pipeline.

3. MASTER PLAN VISION AND RECOMMENDATIONS

Introduction:

This chapter discusses the recommended overall *planning vision and concept* for the Town Center area and is presented in the following sub-sections:

- Planning Themes and Principles: broad statements used to guide planning for the study area.
- Vision and Concept Map: study area vision statement and map graphic showing recommended connectivity opportunities and general development patterns
- Conceptual Master Plan
    - Development and Conservation Scenarios: narrative discussion and graphics (images and sketches) of how implementation of the vision could look in the future
    - Transportation and Linkages: review of specific connectivity recommendations, roadway design, pedestrian enhancements, and traffic mitigation.

As appropriate, policy and regulatory steps to guide implementation are included at the end of each section.

Planning Themes and Principles:

A significant component to the development of plan recommendations was the establishment of a series of guiding principles. These principles relate to the concerns, goals, and initiatives of various groups including area neighbors, landowners, town officials and staff, and workshop participants. These themes helped steer the overall concept as well as the specific strategies. The *Planning Themes and Principles* include:

Limit the adverse impact of future development on traffic and the transportation system.

One of the primary techniques to consider is the creation of transportation connectivity and linkages within and external to the study area. Connectivity is promoted as a way to provide alternative routes and modes for local travel and limit the impact of increased development and traffic on primary arterial roads in Halfmoon.

Protect sensitive natural, environmental, and cultural resources and features.

The project study area includes diverse resources including wetlands, streams, woodlands and forests, farmland, scenic roads, and old farm structures. Preservation of the character of this area, particularly in consideration of the rate and amount of surrounding development is a primary theme for the project. This relates not only to the protection of resources, but the sensitive design and integration of future development and change into the existing character.

Promote the area as an opportunity to enhance the sense of place of Halfmoon.

The new town hall and athletic fields will be obvious contributors to creating a strong identity for Halfmoon. Recommendations for other land uses should be made with consideration for enhancing "community elements" including public gathering spots and establishing a "place" unique to Halfmoon. The project study

area, with its location near the population and commercial center of town, was seen as a special opportunity to create this unique Halfmoon identity.

Promote alternative transportation options including walking and bicycling.

There is a strong and growing desire among Halfmoon residents to increase the ability to travel through and outside of town without using an automobile. Enhancing the town's trail system is promoted throughout the town center study area.

Coordinate the growth pattern of the area and ensure that future zoning and land use regulations reflect the overall vision.

This plan establishes an alternative scenario to the predominant local land development pattern. As such, it will require the leadership and follow-through of town staff, officials, and community volunteers. Primarily, the town must work to amend and update zoning regulations to ensure for the desired land use pattern. In addition, the next phase of physical planning should be conducted including road design and engineering as well as implementation of open space protection.

Seek out diverse public participation in formulating the area vision, future land use plan, and implementation recommendations.

In particular, reach out regularly to landowners and neighbors within and surrounding the study area and ensure that all those interested in participating continue to have a voice in the planning and implementation process.

Planning Vision Statement and Concept Map

The planning vision represents a summary of the entire planning effort including public outreach and workshops, committee-level discussions, data gathering and analysis of existing and future conditions, and consultant synthesis of information. The vision is the broad summary of the recommended growth pattern for the study area and includes the vision statement (below) and conceptual map (following page).

Vision Statement

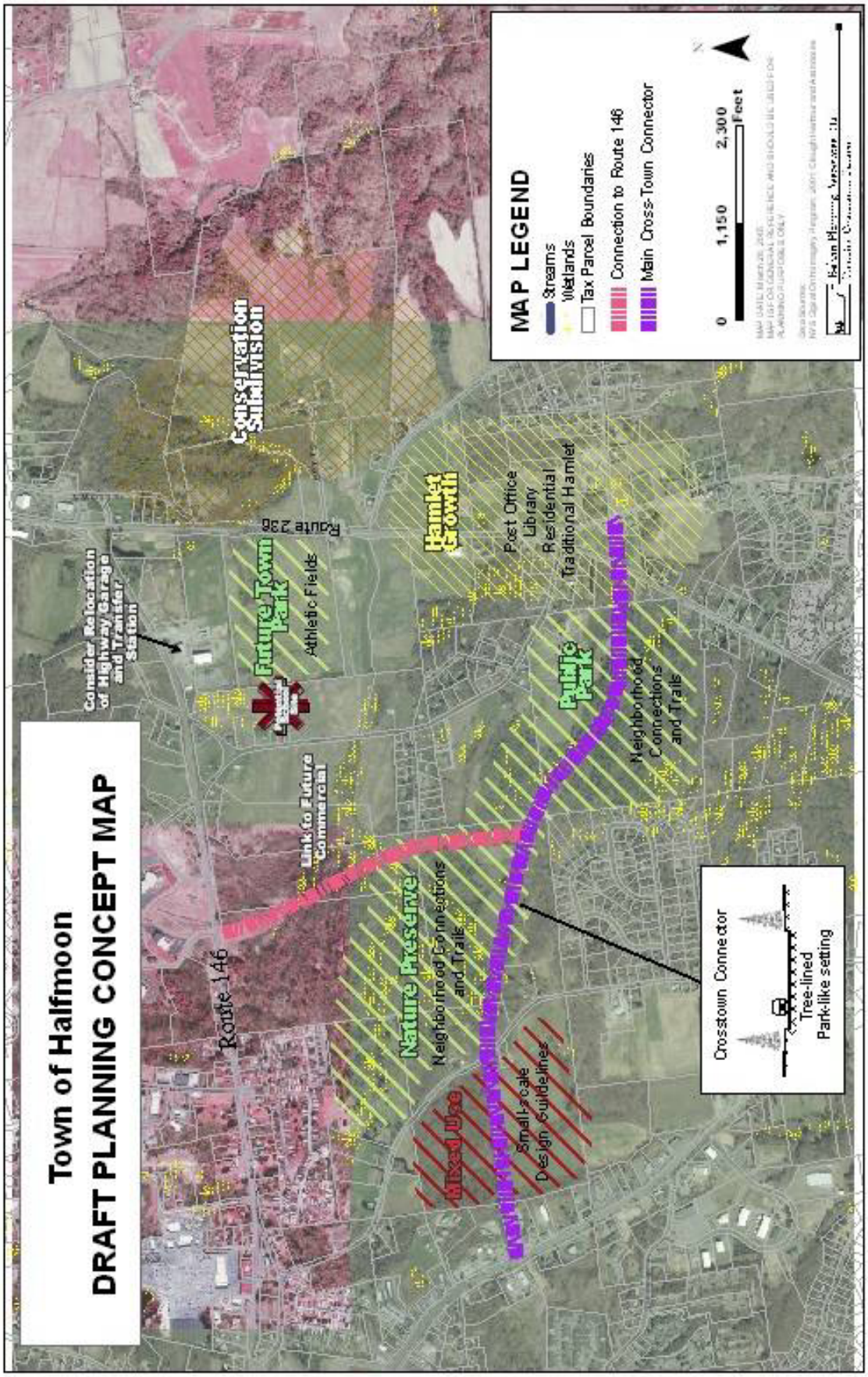
The Town Center has a clear sense of place that strengthens Halfmoon's identity. The area includes gathering spaces where community pride is shown and natural resources are highlighted and celebrated. New development respects local heritage and styles and is sensitive to the natural environment while the transportation system provides for the needs of pedestrians, bicyclists, and automobiles.

This vision guided development of the plan recommendations and is initially visualized in the concept map. Key elements of the master plan are shown including:

- Establishment of alternative travel-ways via the cross-town connector linking Route 236, Route 9 and Route 146 and providing access to the internal portions of the study area as well as smaller connections including at the future town park and Fellows Road.
- Protection of natural and open space resources through establishment of a nature preserve and passive recreation area stretching from the interior of the study area to the town common along Route 236.
- Enhancement of community identity and sense of place through a "Country Hamlet" located in the vicinity of the town hall and senior center along Lower Newtown Road and a "Traditional Neighborhood Development" serving as the western anchor of the area along Route 9.
- Limits to existing and future automobile traffic and congestion through access management strategies along Route 9 and other primary arterials as well as the provision of alternative travel opportunities such as bicycle and pedestrian

facilities along the cross-town connector, within the Country Hamlet and Traditional Neighborhood, as well as establishment of internal road connectivity.

- Increased roadway safety for automobiles and pedestrians through a variety of traffic calming measures including opportunities for roundabouts in place of signalized intersections, narrow pavement widths for internal roads, and pedestrian walkways (sidewalks and pathways) among other measures.
- Opportunities for land conservation in conjunction with growth and change through transfer of development rights (TDR) from open space resources to development areas as well as a purchase of development rights program (PDR). A TDR program enables landowners to transfer a property's development potential to another parcel by selling his/her development rights to other landowners whose property can support increased density. A PDR program would involve the outright purchase of open space by the town for conservation purposes (note: PDR programs are always conducted as voluntary agreements between the town and interested landowners).
- Utilization of conservation subdivision techniques for development. Conservation subdivision is a site planning approach where natural features such as wetlands, streams, and steep slopes as well as culturally-important amenities such as historic structures, stone walls, and special views are identified and prioritized for preservation. Subsequently, structures such as residential dwelling units are clustered in an area of development site where impact on these resources is limited.


Town of Halfmoon
DRAFT PLANNING CONCEPT MAP
Consider Relocation of Highway Garage and Transfer Station
Future Town Park
Athletic Fields
Route 236
Conservation Subdivision
Hamlet Growth
Post Office
Library
Residential
Traditional Hamlet
Link to Future Commercial
Route 146
Nature Preserve
Neighborhood Connections and Trails
Mixed Use
Small-scale Design Guidelines
Public Park
Neighborhood Connections and Trails
Crosstown Connector
Tree-lined
Park-like setting
MAP LEGEND
Streams
Wetlands
Tax Parcel Boundaries
Connection to Route 146
Main Cross-Town Connector
0
1,150
2,300
Feet

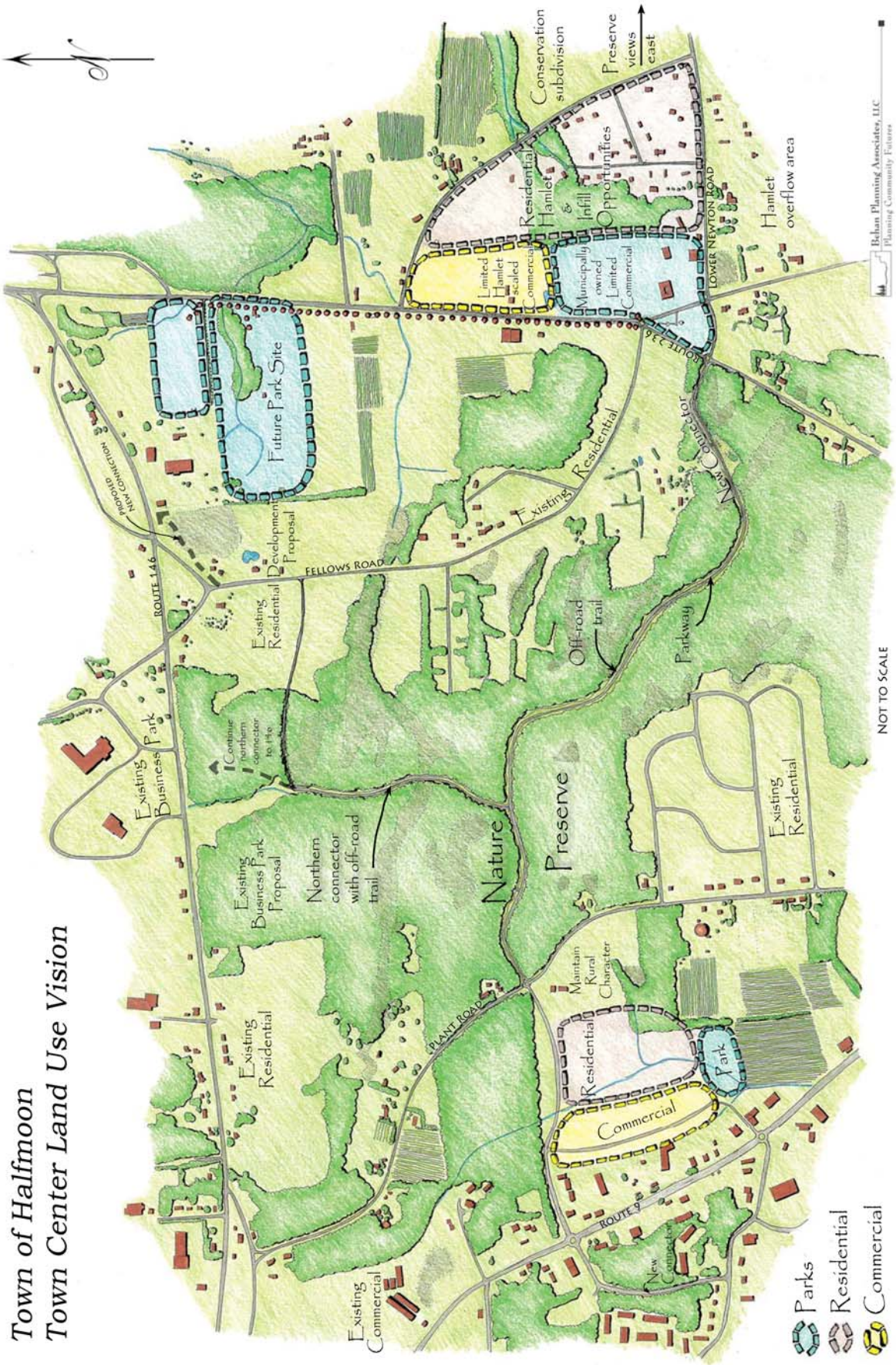
Development and Conservation Scenario

The Development and Conservation Scenario is a narrative and graphic visualization of how the planning concept and vision for the study area could look at future build-out. This scenario is presented in the following sections:

- Recommended Land Use Plan
- The Conceptual Master Plan

Recommended Land Use Plan

The land use plan outlines the recommended development pattern for the study area in broad categories (e.g., residential, commercial, and civic uses). These land uses serve as general guides for future development use and intensity within the study area. As such, the town's zoning and other development regulations should be synchronized with this plan (specific zoning and recommendations are included within the Policy and Regulatory Recommendations section of this plan).


Town of Halfmoon
Town Center Land Use Vision
Existing Business Park
Existing Commercial
Existing Residential
Existing Business Park Proposal
Northern connector with off-road trail
Nature
Preserve
Maintain Rural Character
Residential
Commercial
Park
Existing Residential
Off-road trail
Parkway
Existing Residential
Development Proposal
Future Park Site
Existing Residential
New Connector
Limited Hamlet scaled Commercial
Municipally owned Limited Commercial
Residential
Hamlet & Infill Opportunities
Conservation subdivision
Preserve views east
Hamlet overflow area
ROUTE 146
PROPOSED NEW CONNECTION
FELLOWS ROAD
PLANT ROAD
ROUTE 9
ROUTE 236
LOWER NEWTON ROAD
Continue northern connector to Hwy
New Connector
Behan Planning Associates, LLC
Planning Community Futures
NOT TO SCALE
Parks
Residential
Commercial

The land use plan is a direct product of the Planning Themes and Principles, community input, an analysis of existing development conditions including an assessment of local market characteristics, and is summarized by the following:

- Major commercial development is more appropriate and realistic in areas with direct access to and frontage along the primary arterial roads (Route 9 and Route 146 and to a lesser extent Route 236). However, the built-up nature and existing traffic congestion along Route 9 (documented within the Inventory and Analysis section), and limited available land resources along Route 146 significantly constrain the scale, location and type of commercial use in these areas.

- Interior areas are most appropriate for residential and park/natural use types. Due to access limitations and the amount of environmentally sensitive lands, it is unlikely that commercial operations would locate in these areas. Furthermore, this area's unique rural characteristics (unique in terms of its location within the developed portion of town) are to be preserved through sensitive design approaches and land conservation efforts.

- Recent efforts to enhance the Route 236 area as a municipal and civic center should be enhanced. Land use recommendations should consider ways to tie into the future athletic fields and town hall, as well as existing community resources such as the senior center and town common.

- Future neighborhoods should include opportunities for "neighborhood-scale" commercial uses. Allowing for appropriately-scaled and designed commercial uses, in conjunction with a traditional street network will help create neighborhood identity and allow for alternatives to automotive trips on main arterials.

- All future development should consider and respect the area's cultural and historic resources including the land and structures that tie into Halfmoon's agricultural heritage.

Policy and Regulatory Recommendations

- Implement the land use plan through amendments to the town's zoning ordinance
    - Establishment of new zoning districts including Country Hamlet and Traditional Mixed-use Neighborhood.
    - Development of a Conservation Subdivision ordinance to ensure for high quality cluster design for residential and commercial development.
    - Creation of and utilization of an "incentive zoning" local law to allow for the establishment of desired community amenities such as parks and open space, sidewalks and paths, etc. in exchange for density bonuses. The incentive zoning law could allow for transfer of development from conservation areas to designated development areas described in the master plan.
    - Only allow for new Planned Development Districts within the study area where desired community amenities as described in this and other town plans are provided and ensure that development reflects the vision, concepts, principles, and specific recommendations of this plan.

Illustrative Plan

The Illustrative Plan is a more specific discussion and graphic representation of how build-out could look if developed according to the principles, vision statement, and land use plan. The narrative is organized and framed around the following topics:

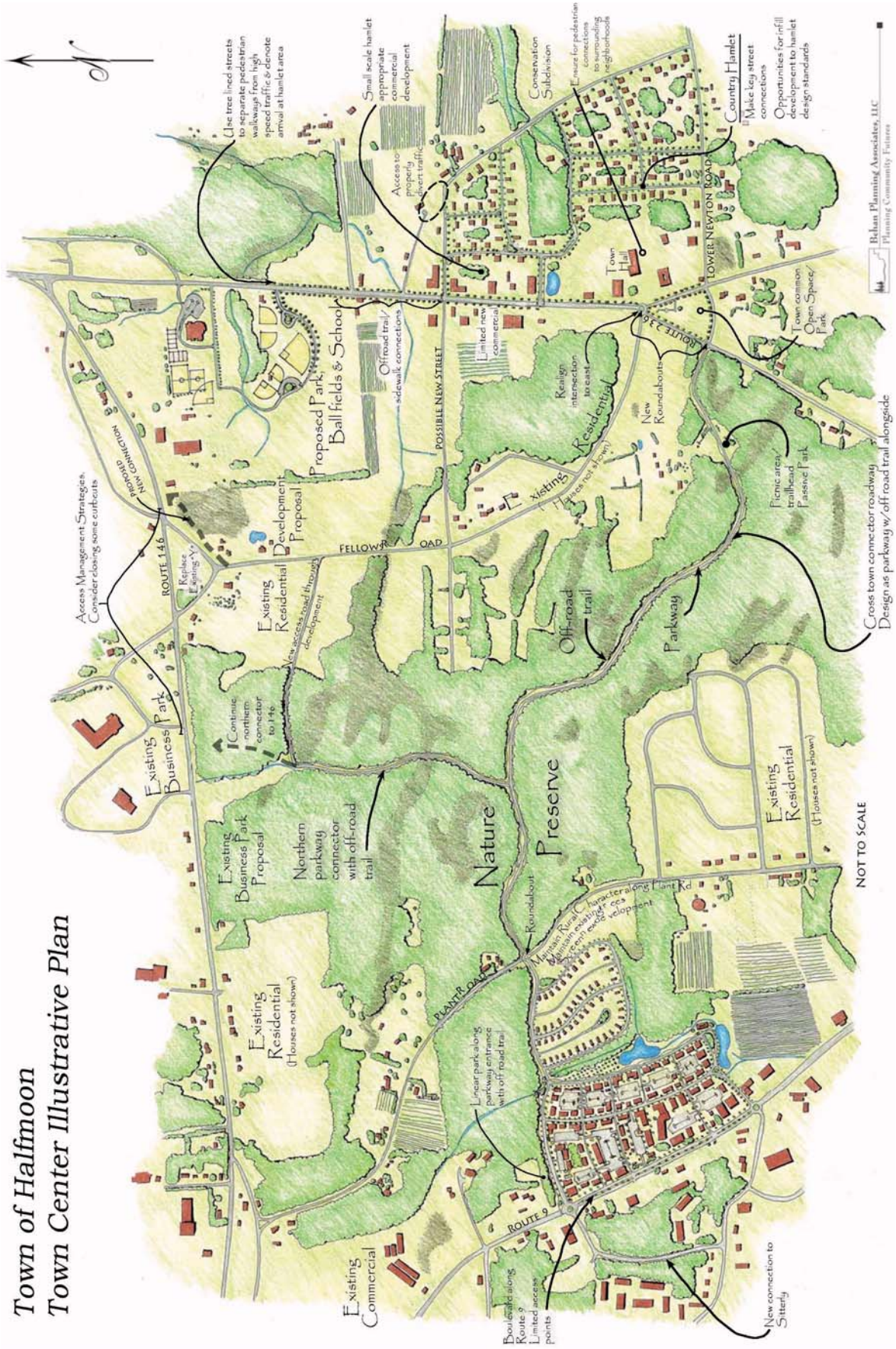
- Primary Development Elements
- Primary Conservation Elements
- Transportation and Linkages

Primary Development Elements

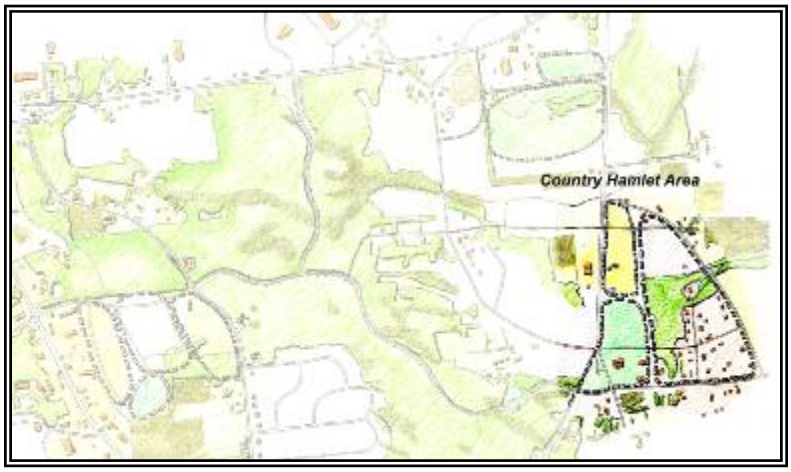
There are two primary development areas highlighted within the plan. The first development area – the **Country Hamlet** – is located around the existing town hall near Route 236 and Lower Newtown Road. The general characteristic of this area is that of a

traditional, country hamlet. The second, and larger of the two – the **Traditional Mixed-Use Neighborhood –** is located between Route 9 and Plant Road forming the eastern "anchor" of the study area. Each area is described in more detail on the following pages.

Note: the Illustrative Plan graphic is a conceptual representation of a possible development and conservation scenario for the study area and is for illustrative purposes only. While it is intended to guide future decision making, it is also intended to be flexible. Further, engineering-level review and analysis of environmental constraints will be necessary prior to finalizing any future connections or roadway patterns.


Town of Halfmoon
Town Center Illustrative Plan
Use tree lined streets to separate pedestrian walkways from high speed traffic & denote arrival at hamlet area
Small scale hamlet appropriate commercial development
Access to property divert traffic
Conservation Subdivision
Ensure for pedestrian connections to surrounding neighborhoods
Country Hamlet
Make key street connections
Opportunities for infill development to hamlet design standards
Town Hall
TOWER NEWTON ROAD
ROUTE 32
Town common Open Space/ Park
Behan Planning Associates, LLC
Planning Community Futures
Proposed Park, Ball fields & School
Off-road trail/ sidewalk connections
POSSIBLE NEW STREET
Limited new commercial
Realign intersection to east
Residential
New Roundabouts
Existing
(Houses not shown)
Picnic area/ trailhead Passive Park
Cross town connector roadway
Design as parkway w/off road trail alongside
Parkway
Off-road trail
Access Management Strategies. Consider closing some curbcuts
NEW CONNECTION
ROUTE 146
Replace Existing Y
Existing Residential Development Proposal
FELLOW ROAD
No access road through development
Existing Business Park
Continue northern connector to 146
Existing Business Park Proposal
Northern parkway connector with off-road trail
Nature
Preserve
Roundabout
Existing Residential
(Houses not shown)
Existing Residential
(Houses not shown)
NOT TO SCALE
Maintain Rural Character along Plant Rd
Maintain existing ocs
Prevent exide velopment
PLANT ROAD
Linear park along parkway entrance with off road trail
ROUTE 9
Existing Commercial
Boulevard along Route 9 Limited access points
New connection to Sitterly

Country Hamlet



The Country Hamlet (shown at right) contributes to the enhancement of Halfmoon's community identity and sense of place by providing a traditional "small town atmosphere." Recent and ongoing town efforts including planned construction of a new town hall have established this area as the municipal center of Halfmoon (other useful community resources are located here including the senior center, parks, and town commons). As opportunities for future community resources become available, a post office for example, the town should consider the country hamlet and municipal center area as the primary location for such uses. As the town moves forward with construction of the new town hall, connectivity to the surrounding area should be considered and incorporated into the project.

Overall, future development in and around this area should be integrated into these resources through common design elements such as signage, lighting, street trees, and pedestrian connections. The overall goal is to establish a unified theme, identifying this area as a special component of the town.

Above: sketch of the proposed Country Hamlet area

The Country Hamlet vision is characterized as a walkable, pleasant center for the community with an interconnected road and pedestrian system

at its foundation. All future roads should be designed to provide linkages for automobiles, pedestrians, and bicyclists, and enhance overall connectivity in the area.

Surrounding the municipal features, small-scale commercial and residential uses within walking distance will help create a small neighborhood and community. Businesses could include professional offices (e.g., dental offices) and small convenience businesses while residential components could be single and two-family housing.

Country Hamlet Policy and Regulatory Implementation

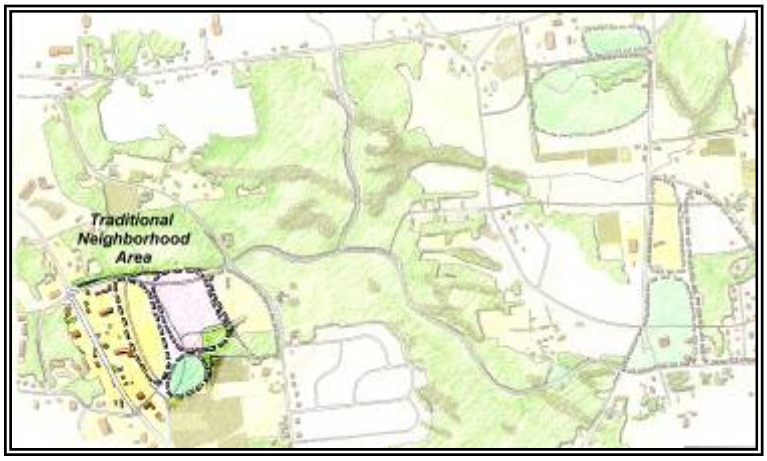
- Continued outreach to area residents and landowners for refinement of the land use vision, Country Hamlet concepts, discussion of traffic impacts, transportation, and intersection alternatives, and design components.
- Establishment of the Country Hamlet district: this district should include some limited mix of uses with specific standards related to height, size, architectural compatibility, landscaping, and pedestrian amenities. The following standards should be considered for this district:
    - Commercial:
        - Uses: office, medical, small retail (country store type)
        - Size: 10,000 sq. ft. cap for individual buildings
        - Density: commercial uses should make up a relatively small percentage of the Country Hamlet (no more than 10 to 20% of total built square footage)
    - Residential uses:
        - Uses: single family, two family, accessory dwellings
        - Size: one and two-story structures on small to medium sized lots (12,500 sq. ft minimum)
        - Density: approximately four units per acre.
- Development design guidelines to reflect the specific vision for this area. Design guidelines would help landowners, developers and the town realize the vision for the area. As design guidelines are discussed and recommended for other

portions of the study area, it is advisable that an area-wide development and conservation document be created.

- The Country Hamlet district could "receive" a higher density (up to the maximum allowed) through the recommended incentive zoning law in exchange for contributions to purchase designated conservation areas or for funds to assist with construction of the connector road.

Note: specific strategies regarding design of the connector, overall road connectivity and road safety, and traffic mitigation measures are discussed within the Transportation and Linkages section of this report (following).

Traditional Mixed-Use Neighborhood



The Route 9 Traditional Mixed-Use Neighborhood, located between Route 9 and Plant Road, similarly contributes to Halfmoon's sense of place but also provides additional commercial opportunities. This area is located close to the major retail, office, and other commercial areas of Halfmoon and serves to welcome residents, shoppers, visitors, and workers to the town center. The area is also a major component of the enhancements recommended for Route 9 (discussed below). Access to this area is provided from the west via the cross-town connector at Route 9 towards the northern section of the study area with the potential for a secondary access point at Sitterly Road (location of existing town ROW). To the east, the connector links with Plant Road at a small-scale roundabout which also helps to reduce speeds along that route.

Similar to the Country Hamlet, this area supports various uses. However, due to its location near Route 9 and the more heavily developed and traveled portion of the study area, a greater variety of retail, office, and residential opportunities are present.

At the forefront of the mixed-use neighborhood is the establishment of a Halfmoon Main Street. This road, possibly running parallel to Route 9 (north and south), could provide the type of walkable shopping and office environment desired by local residents.

Sketch of the main street concept within the traditional neighborhood area near Route 9

Again, the overall character of development here has a traditional neighborhood feel and a layout that encourages walking and bicycling. Residential uses are connected to the Main Street through small-scale roadways and pedestrian amenities and vary in size and type (e.g., single, two-family, townhomes, etc.). The primary development concept is "connectivity." Similar to the Country Hamlet, roads should connect and provide alternative travel routes (rather than dead ends and cul-de-sacs) for automobiles and non-motorized mobility.

A significant component of the Mixed-Use Neighborhood is its relationship with Route 9. It is envisioned that the Main Street area and commercial side (western portion) of the neighborhood could eventually connect to enhancements along Route 9. This could be accomplished by allowing for infill behind the existing structures along the eastern side of Route 9 coordinated with an intensive access management plan (discussed in the following section on Transportation and Linkages).

Policy and Regulatory Implementation

- Continued outreach to area residents and landowners for refinement of the land use vision, Traditional Neighborhood concepts, discussion of traffic impacts, transportation, and intersection alternatives, and design components.
- Establishment of the Traditional Neighborhood district: should include expanded commercial uses with height and size restrictions, requirements related to connectivity (internal and external), and architectural compatibility
    - Commercial:
        - Uses: office, medical, retail, drive-thru uses excluded.
        - Size: 25,000 sq. ft. cap for individual buildings
        - Density: commercial uses should make up a significant percentage of the Traditional Neighborhood area (up to 50% of the total built square footage)
    - Residential uses:
        - Uses: single, two, and multi-family, condominiums and apartments, accessory dwellings
        - Size: structures from two up to four stories on a variety of lot sizes
        - Density: up to 6 units per acre.

- Development design guidelines to reflect the specific vision for this area.
- Integration of roadway enhancement concepts with Route 9 (access management and corridor study) and continued outreach to New York State Department of Transportation.

- Utilization of incentive zoning as in the country hamlet to allow for density bonuses in exchange for conservation land and infrastructure needs.

Primary Conservation Elements

Much of Halfmoon's existing identity and natural beauty comes from its rolling farmland, scenic vistas, rural roads, and small town charm. The project study area is unique in that while relatively large-scaled development has occurred (and is occurring) in surrounding directions, all of these special resources are still found here. The conservation and celebration of these features is integrated into the development plan through the following elements:

Nature Preserve and Recreation Area

The primary conservation resource within the town center is the establishment of a nature preserve and passive recreation area stretching from the interior of the study area to the town common along Route 236. At the focus of this preserve is a large area of woodlands and nature trails for passive recreation such as hiking, walking, and environmental education. This public park is adjacent to the Country Hamlet and municipal center along Route 236 and compliments the active recreation facilities in this area. Access to the park and preserve is provided via the cross-town connector and integrated pedestrian network (the park is easily accessible by foot from Route 236 and the municipal center).

The western end of the park and preserve is best used for environmental education and only limited low-impact recreation due to development constraints (predominantly streams and wetlands). The eastern portion, near Route 236 is generally dry, but includes a more varied terrain including the highest point within the study area. This section of the park and preserve is best-suited for hiking, picnicking, and other passive

recreation activities. One of this area's main features is the scenic overlook and trailhead used for access into the wooded portion of the preserve. A bicycle and pedestrian network is provided throughout the parkland through a "rural pathway" along side the connector road (described in the following transportation section) as well as dirt paths and trails establishing pedestrian access into the park.

Bicycle paths and pedestrian amenities should be coordinated with the cross-town connector and nature preserve.

Establishment of the park and preserve will protect and enhance the rural character of the area and offset the surrounding development intensity. Furthermore, these resources complement the athletic fields and active recreation parks the town is currently developing in the northern part of the study area.

Conservation Development Practices

Abundant open land resources and qualities define the beauty and attraction of Halfmoon and the town center area. To maintain the character of the town center area the town should enhance the integration of open space and the sensitive treatment of natural resources into new site design and development (within and outside of the study area). For example, when outright land protection is inappropriate or untenable, environmental resources including streams, wetlands, steep slopes, as well as scenic roadways and views, active agriculture and historic features (among others) should be incorporated through a "conservation" approach to site planning.

Highlight: Stormwater management using the Low Impact Development concept

The overall goal of LID storm water treatment is to maintain to the extent possible or mimic pre-development conditions through the use of structural and non-structural practices that detain, retain, percolate and evaporate water (The Practice of Low Impact Development – US Dept. of HUD, July, 2003). Essentially, these treatment practices "decentralize" stormwater management facilities to reduce storm water quantity and treat it at the source (rather than downstream).
LID practices could be put to use extensively within the town center study area.

The conservation approach includes a wide range of site planning components but may be best-summarized as maintenance of the integrity of the natural and cultural features found on a site prior to development. Two specific techniques include clustering development in areas where impact to natural resources will be the most limited and utilizing "low-impact development" practices to diminish the ecological footprint of new construction. Low impact techniques tie into Halfmoon's "solartown" history – the existing town hall was once partially solar powered (the future structure will have environmentally-friendly design components) – and future – recognizing that high quality design and sensitive treatment of natural resources will enhance the value and desirability of the town. Utilization of these practices will also help Halfmoon meet the United States Environmental Protection Agency's requirements for MS4 communities.

<u>Policy and Regulatory Implementation</u>

- Include consideration of key parcels in the town's open space efforts and consider purchase of development rights for park and preserve properties.

- Continue landowner outreach to identify conservation interest and provide updates on the town's open space planning efforts. Through this process work towards establishing "letters of intent" with landowners who are interested in pursuing land conservation.
- Utilize incentive zoning to encourage land conservation. Any increase in density beyond existing figures should directly relate to provision of community amenities (for example, contributions to the town's open space conservation efforts either in terms of funds or outright purchase of target parcels).
- Coordinate all trail, pedestrian, and bicycle amenities with local and regional support groups.
- Utilize local, state, and federal funds for open space acquisition and park enhancements to the largest extent possible. Saratoga County, New York State, and the federal government each offer grant funds for the protection of open space and farmland. Letters of intent (described above), would strengthen applications for funding, demonstrating that the town and landowners are serious about pursuing land conservation.
- Develop a "conservation subdivision" ordinance for use in site planning and layout requiring permanent protection of open space as a trade-off for density bonuses. Note: the conservation subdivision technique is an enhanced form of clustering which promotes conservation of the priority natural resources of a development site.
- Bring town staff as well as developers up to speed on the possibilities of Low Impact Development (LID) and consider the establishment of incentives to encourage such practices.

A bio-retention cell: Planted in low-lying areas, the gardens contain specific layers of soil, sand, and organic mulch. These layers naturally filter the site's runoff, substantially reducing common homeowner pollutants such as lawn fertilizers and driveway oils and providing protection for the receiving waterways. Source: Low Impact Development Center, Inc.

Transportation and Linkages

Establishment of alternative travel-ways via the cross-town connector linking Route 236, Route 9 and Route 146 and providing access to the internal portions of the study area will have numerous benefits to Halfmoon. One of the major benefits will be that local residents will have alternate routes between the proposed hamlet and the major commercial areas on US 9 that will allow them to avoid the congested bottleneck intersections. Moreover, the new connector can be designed to provide safe, comfortable bicycle and pedestrian transportation, further increasing transportation options.

The new street connections described in this plan will improve the overall connectivity of Halfmoon. As is typical of most growing suburban areas, Halfmoon has seen tremendous growth in both residential and commercial land uses, but its network of connected streets has not kept pace with this growth. Instead, subdivision streets or major commercial developments generate traffic on the existing, sparse network of local streets, county routes, and state highways. Congestion has ensued, and there are no alternate routes available.

Recent patterns of growth and street network design contrast sharply with traditional development patterns, in which densely spaced, highly connected street networks accompanied development, and provide numerous alternative routings through a community. The following images show this contrast between traditional, highly connected street networks and the more contemporary street patterns of local dead-end or cul-de-sac streets accessing major arterials.

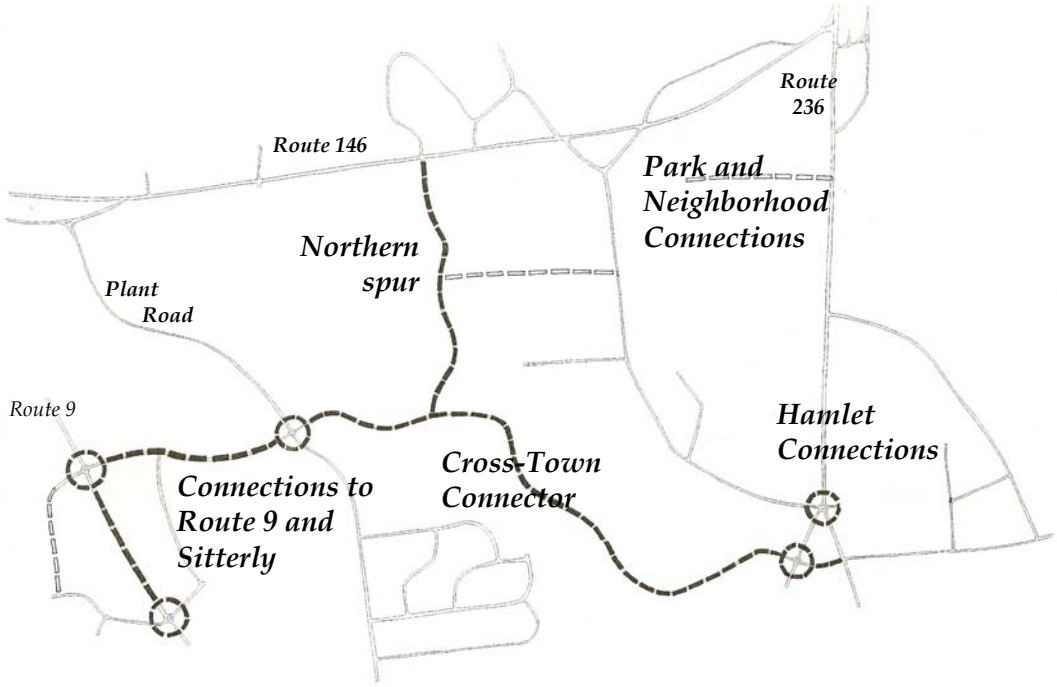
Conventional cul-de-sac road pattern

Traditional, connected road system

The implications for the traffic operations in the conventional pattern result in all trips between the local land uses using the major arterial street. This creates congestion for all traffic along the arterial by adding significant turning traffic to an arterial that is already serving through traffic. In contrast, a traditional street network serves the local trips, so that the arterial street is not burdened with local traffic and turning movements. In this pattern, the arterial operates with much less congestion and lower traffic volumes.

These graphics illustrate the opportunities and benefits of increasing Halfmoon's network of connecting streets. New street connections will provide better access to local destinations, especially the hamlet center and mixed use town center, without as much reliance on the congested arterial corridors. Pedestrians and bicyclists will also benefit from more direct routes, better designed facilities, and the more compact land use patterns.

The primary new street connection proposed in this plan is the Cross Town Connector, roughly connecting the proposed mixed use town center with the Halfmoon Hamlet area in the vicinity of the intersection of Route 236 with Fellows Road. An additional connection to Route 146 is also proposed to further improve the utility and connectivity



Above: Proposed Roadway System

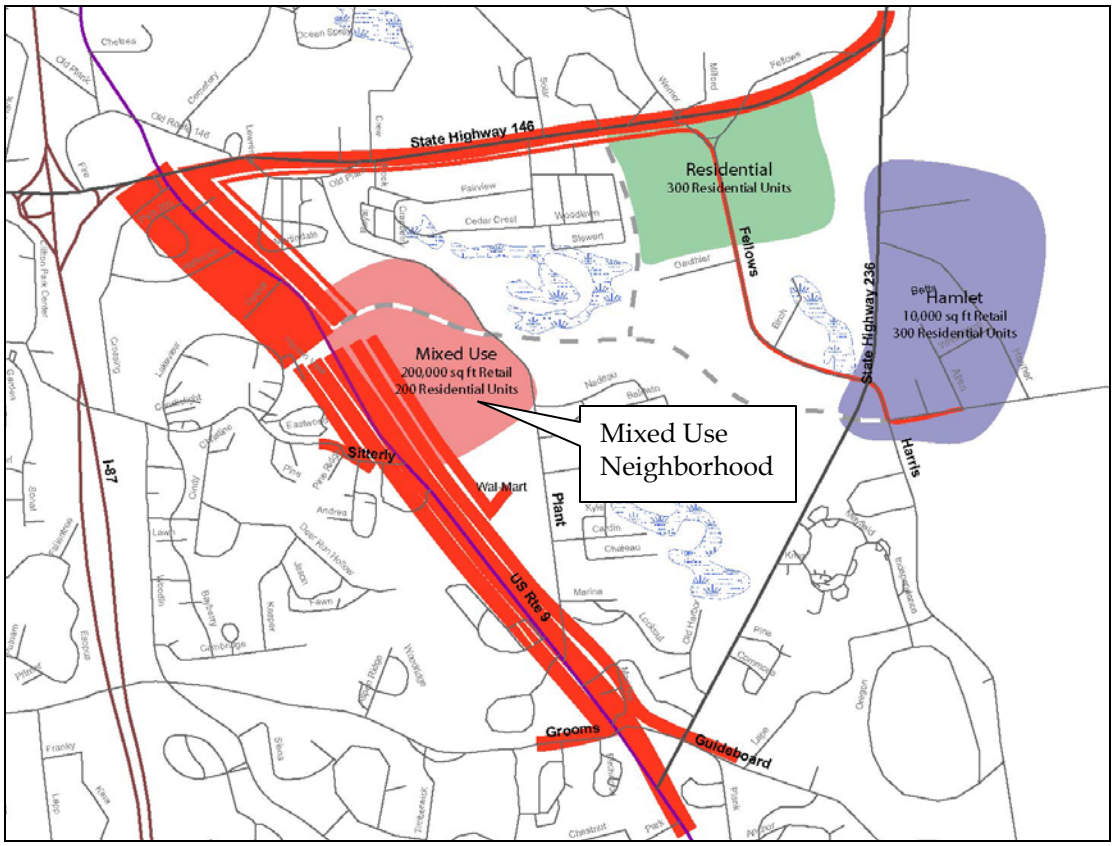
of the corridor. These connections are illustrated on the roadway concept plan on the preceding page. (Note: project cost estimates for each major roadway improvement are provided at the end of this section)

Cross-town Connector

The cross-town connector is one of the primary unifying features of the town center area. It will provide access to the proposed Hamlet area for vehicles, bicyclists and pedestrians. This link provides access to the internal portions of the study area and is the initial phase of establishing improved street connectivity through the core area of Halfmoon.

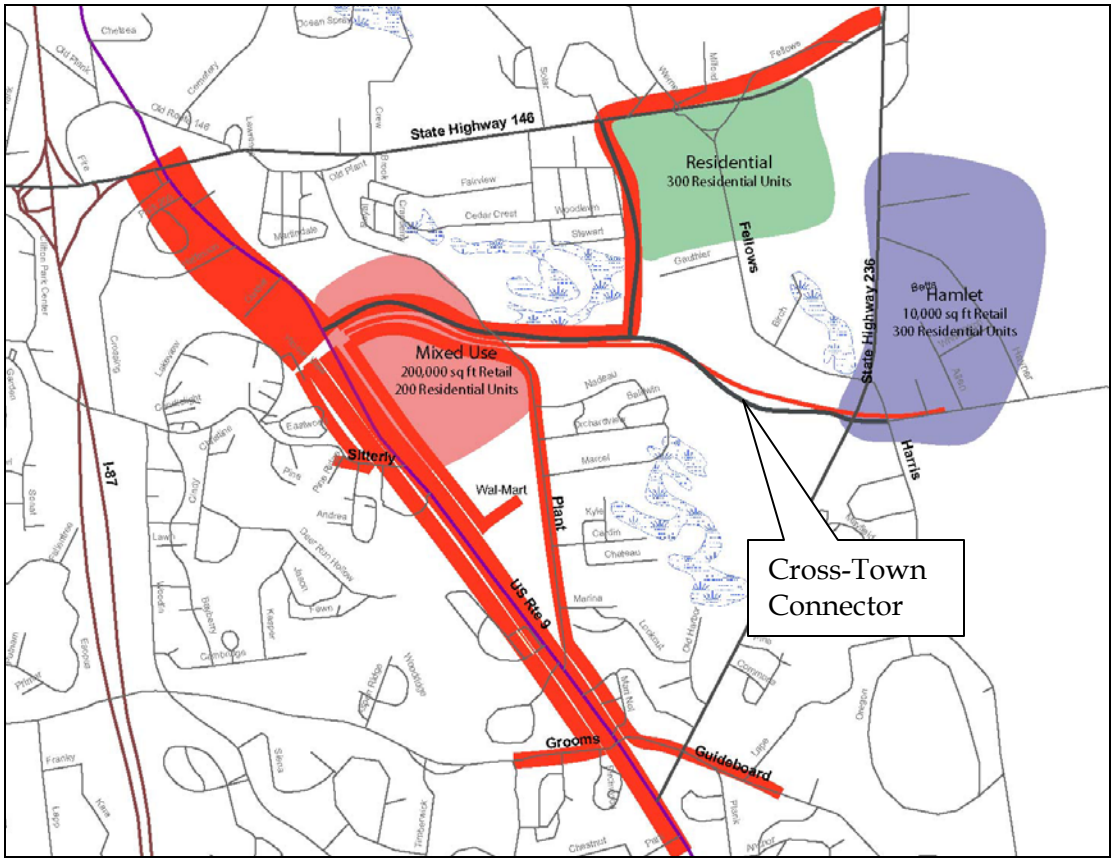
A traffic projection and modeling analysis shows that this connector will substantially reduce miles of travel in the core area, and would reduce traffic volume at the key bottleneck intersections. The following illustrations show an example of how traffic that would be generated from the proposed mixed use development off Route 9 would be affected by the Cross Town Connector. The first graphic below shows the routes that traffic generated by this development is likely to use, with the widths of each route proportional to the volume.

Traffic patterns from Mixed Use Town Center with the existing street network



The next map shows the traffic patterns that would be generated by the mixed use development with the Cross Town Connector in place. The traffic benefits include shorter trips for many Halfmoon residents, and lower traffic volumes at the key bottleneck intersections.

Traffic patterns from Conceptual Mixed Use Center development with Cross Town Connector network



Note: the development potential demonstrated in the preceding two graphics (number of residential units and square feet of commercial) are generally based on the development potential of these areas based on existing proposals and the recommendations for the hamlet and mixed use areas.

In addition to limiting the impact of new development, the connecter would have a beneficial impact on existing traffic circulation by providing alternate routes around congested intersections in the study area. The table below shows the traffic volume reductions at the major arterial intersections in the Halfmoon Core study area, and

shows estimates of the traffic volume reductions that could result traffic diverted onto the Cross Town Connector.

Table: Traffic volume reduction at key bottleneck intersections

Intersection	Total ADT	Traffic Reduction from Connector
Rte 9/Rte 146	41,700	9%
Rte 146/Guideboard	17,600	4%
Rte 9/Guideboard	29,800	6%
Rte 146/Rte 236	14,800	30%

Design Criteria for the Cross Town Connector

The connector is envisioned as a tree-lined parkway with parallel bicycle facilities. It will not be designed as a linear road for high speeds, but rather as a curved road that avoids wetlands, existing private property and homes, and other fragile areas.

Potential design and character of the cross-town connector
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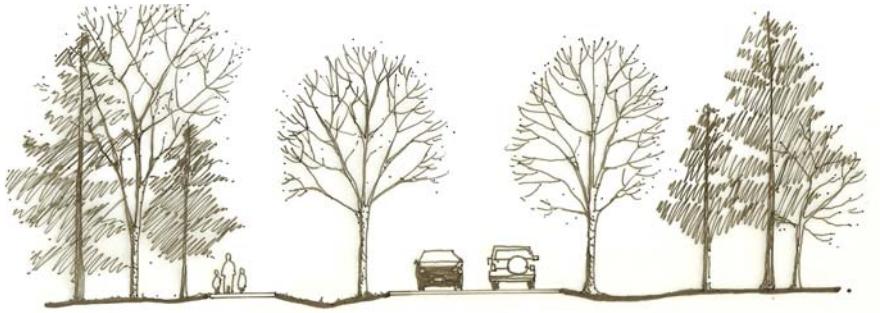
The Cross Town Connector is intended to serve relatively local trips, and should be designed in conformance with Local Street or "Collector Road" standards. Traffic volumes may grow to between 6,000 and 12,000 vehicles per day, depending on future

development in the area. The connector could be restricted to prohibit through truck use and design techniques to keep speeds to moderate levels of 35 to 40 mph should be used. Among these are roundabout intersections at Plant Road and the Route 146 connection; a narrow cross section (i.e. 10 or 11 feet travel lanes and 2 to 3 feet shoulders), landscaping with closely spaced trees to provide visual "enclosure" of the street, and a curved road alignment that will allow the road to avoid sensitive locations and reinforce the desired moderate speed. A bicycle/pedestrian, or shared use path would run parallel to the road. The following drawing shows a possible cross section of the Cross Town Connector.

Image: Possible Cross Section of the Cross Town Connector



Buffer	Sidewalk / Trail	Drainage and Planting	22′ to 24′ right-of-way	Drainage and Planting	Buffer

Intersections with Plant Road and the Route 146 Connector could be single lane roundabouts, which are the safest type of intersection design, and would provide ample traffic capacity. Another important feature of roundabouts is that they enforce the lower desired speeds for the new street, as well as on intersecting streets such as Plant Road. Roundabouts can be attractively landscaped to form neighborhood landmarks, and will

Small roundabouts can be designed to handle a variety of vehcile types including truck traffic

contribute to the aesthetic design of the Cross Town Connector.

Functional Classification

The Cross Town Connector is proposed to be designated as an Urban Collector, in the Functional Classification scheme adopted by the Federal Highway Administration. The following excerpt from FHWA Functional Classification Guidelines-Concepts, Criteria and Procedures describes the role of collector streets for a small urban transportation network.

> Urban collector street system
> The collector street system provides both land access service and traffic circulation within residential neighborhoods, commercial and industrial areas. It differs from the arterial system in that facilities on the collector system may penetrate residential neighborhoods, distributing trips from the arterials through the area to the ultimate destination. Conversely, the collector street also collects traffic from local streets in residential neighborhoods and channels it into the arterial system. In the central business district, and in other areas of like development and traffic density, the collector system may include the street grid which forms a logical entity for traffic circulation.

Collector roads in Capital District area generally have volumes less than 7,000 vehicles per day, significantly less than the major arterials. The street network in the Halfmoon Center area is quite sparse, particularly for east-west routes. With the Town of Halfmoon's goals of promoting development in both the hamlet area on the east side of the core area, and the mixed use center on the west side, the new Cross Town Connector will have an important role in the street network, consistent with that described as a collector.

Design Traffic Volumes for the Cross Town Connector

A spreadsheet model was developed to project potential future traffic volumes of the Cross Town Connector, including both traffic diverted from existing roads, and additional traffic from several proposed developments. This analysis assumes that traffic was distributed through the core area network based on total traffic counts at the major intersections, and that traffic used the route with the shortest distance. Based on this analysis, the daily traffic volume diverted from other routes would be a maximum of 6,000 vehicles per day (vpd). In addition, the connector could serve traffic from

developments planned in the core area. Traffic from several possible future developments shown in the Illustrative Plan was also estimated. The figures below show a baseline estimate of development potential and a conservative estimate of total daily traffic generated from these areas.

Development Area	Size	Units	Daily Trip Rate	Daily Trips
Route 9 Mixed Use	200	thousand sq ft commercial	40	8,000
	200	residential units	10	2,000
Fellows Rd	300	residential units	10	3,000
Hamlet/Beck Rd	300	residential units	10	3,000
	10	thousand sq ft commercial	40	400
TOTAL Daily Trips				**16,400**

Note: *These are ITE trip generation rates for single family housing, and averages for commercial development. Source: "Trip Generation, Institute of Transportation Engineers, 6th edition, 1997."*

Based on the estimated traffic diversion onto the Cross Town Collector, up to 6,000 trips per day of the total development might use the new road, bringing the total projected traffic on the Cross Town Connector to a maximum of 12,000 vehicles per day with full development. The proposed design, with 2 lanes of traffic, multiuse trails paralleling the road, and single lane roundabouts at the major intersections, should be able to serve traffic volumes of up to 15,000 to 20,000 ADT, depending on intersecting volumes and intersection design.

Impact to Plant Road and Local Streets

There is legitimate concern that the cross town connector could bring more traffic onto other local streets, in particular Plant Road. This is of particular concern as the intersection of Plant Road with Route 146 has very poor sight distance for traffic turning east on Route 146 from Plant Road, and without improvements to this intersection, additional traffic volume could lead to increased accidents. However, it is difficult to predict the precise impacts. With additional street connectivity provided by the Cross Town Connector, traffic that currently uses Plant Road may choose alternate routes, possibly offsetting any increased use of Plant Road from the proposed developments.

If the northern spur is constructed at the same time as the cross town connector, there should be little or no increase of traffic on the northern part of Plant Road, as the

northern spur will provide a much more direct and convenient route to Route 146. If the northern spur is not constructed at the same time, it is recommended that the Town of Halfmoon take measures to increase the safety of Plant Road and especially its intersection with Route 146. This could include traffic calming measures to reduce the speeds, and a redesign of the intersection of Plant Road and Route 146 to address the existing sight distance restriction.

Also of note, the town is currently working to alleviate the traffic issues related to the northern section of Plant Road where it connects with Route 146. The current alignment includes two "sweeping" intersections which encourage higher speeds along Plant Road and necessitate two intersections with Route 146. Under the town's plan, the two connections to Route 146 would be consolidated into one "T" intersection, eliminating one curb cut and reducing automobile speeds entering Plant Road. (Note: a second option would maintain the existing access along Route 146 with an established "T" intersection where the two roads connect.)

Pedestrian Network

The Cross Town Connector will provide a much needed pedestrian route through the Halfmoon Core Area. However, in order to provide a pedestrian system, connections between this corridor and the ultimate origins or destinations of pedestrian trips should be planned. These include the Town Offices, the Senior Center and Senior Housing, residential neighborhoods within the Core Area, and commercial establishments along Route 9. Future destinations should be planned to provide pedestrian connections to this corridor, especially the proposed town recreational complex, future school site off Fellows Road, and possible future sites for a town library or post office. Sidewalks or shared use paths may be appropriate for these connections.

<u>Policy and Regulatory Implementation</u>

- Cross town Connector
    - Continue community outreach – particularly focused to residents within the study area. Consider using the town center master plan advisory

committee as a review entity during implementation (the committee includes a diverse cross-section of town officials, staff, and regional transportation groups).

- Undertake roadway design, establishing final dimensions for roadway widths, pedestrian features, intersections and roundabouts.
- Mitigate the impacts to local streets such as Plant Road through traffic calming (in particular, reduced traffic speeds).
- Adopt the master plan as part of the town's "official map" per town law to require implementation through the development process.
- Utilize amenity zoning to allow for density bonuses in exchange for development of community infrastructure (per town map and master plan).
- Consider a Generic Environmental Impact Statement (GEIS) as a method to establish development thresholds and mitigation measures to contribute to roadway construction.

Hamlet Intersection and Street Network Design

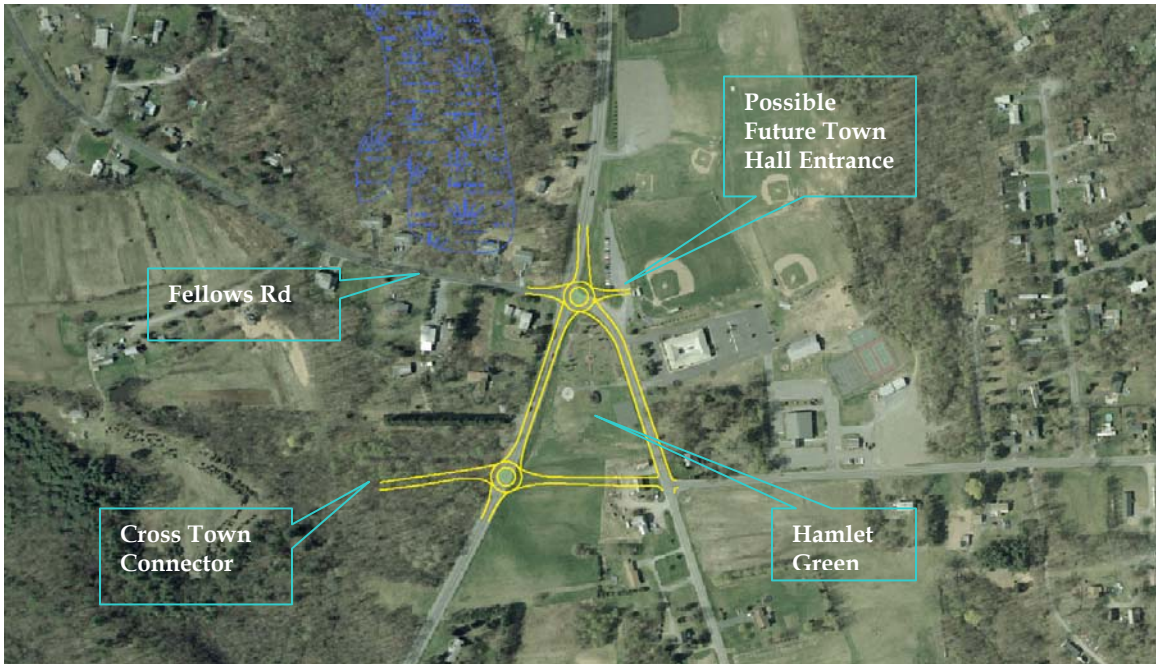
The country hamlet area is envisioned as a community center of civic facilities and gathering places. The street network in this area lends itself well to the hamlet concept, as several roads intersect at this location, and provide a unique opportunity to develop a traditional style village green at the center of this area.

Traffic safety and livability should be primary concerns when considering the street design of the Hamlet area. State Route 236 skirts along the edge of the proposed village green, and currently serves relatively high speed traffic. Reducing speeds for Route 236 in the Hamlet area would be highly desirable in order to maximize safety, reduce noise, and provide a more traditional, identifiable hamlet area. To accomplish this, future development should include traffic calming

Hamlet Area along Route 236

features designed to slow traffic such as roundabouts, curb bulbs for pedestrians, street trees, and other design elements. As the hamlet area grows and the amount of pedestrian usage increases, the town should work with the New York State Department of Transportation to investigate and consider a speed limit reduction for this portion of Route 236. While earlier intersection design concepts suggested closing the Fellows Rd intersection once the Cross Town Connector was built, this would not be necessary with a reduced speed zone. In fact keeping both intersections would contribute to improved street connectivity, be very consistent with a traditional hamlet design, and would further help reinforce the reduced speed zone. Roundabouts at each of these intersections would have several positive effects, including reinforcing the reduced speed limit, and safety for pedestrian and vehicular traffic. Roundabouts could also be designed and landscaped to further enhance the identity and character of the Halfmoon hamlet area.

The graphic below shows a conceptual layout of how two roundabout intersections in the Hamlet area, at Fellows/Harris and the future Cross Town Connector, would fit into the area.



Policy and Regulatory Implementation

- Continue outreach and discussions with New York State Department of Transportation regarding utilization of roundabouts on Route 236 at the Cross Town Connector and at Fellows Road (and possibly other locations) to encourage slower speeds and safer intersections for automobiles and pedestrians. They can also provide an attractive gateway and reinforce the identity of the hamlet.
- Encourage connectivity throughout the planning area. Keep the Fellows Road intersection open as a connection between the hamlet and Route 146 (as well as the future residential area proposed for the northern portion of this road).
- Consider additional connections between Fellows Road, the future town athletic fields, and Route 236. This roadway could be designed to allow for through-traffic and access to the eastern side of the park without significant impact upon park resources or the overall park environment. Allowing for this connection will help reduce impacts of development in the area on Route 146 and the intersections near the town hall.
- Utilize traffic calming measures (roundabouts, narrow road widths, raised crosswalks, tree-lined streets, etc.) to provide for pedestrian safety and encourage walking.

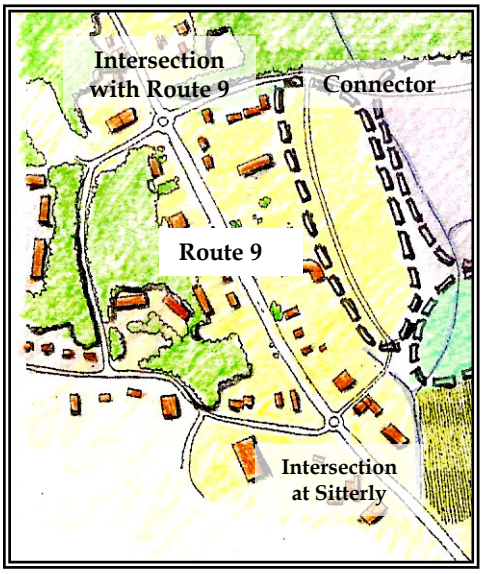
Route 9 Intersection and Corridor Options

The Cross Town Connector as proposed in this plan will require a new traffic controlled intersection with Route 9. The Route 9 corridor already has several congested intersections, so careful planning of this new intersection is warranted. Additional traffic signals and development added to the Route 9 corridor could further reduce travel times and increase congestion if not properly planned. The NYSDOT is currently considering and updating its policies related to roundabouts and intersections and in general, is promoting the roundabout concept where appropriate. The current version of the draft policy, still being considered by the DOT, would require the consideration of roundabouts for any new traffic controlled intersections, as well as those with "major improvements."

Within the neighboring Town of Malta, construction recently began on the replacement of a bridge traversing the Northway and other improvements along Route 67. In conjunction with this work, several roundabouts will be developed, including at the intersection of Route 67 and Route 9 as well as along Route 67 to the west. This project will certainly provide insight into public acceptance of roundabouts and feasibility for establishment of similar treatments of intersections throughout the Capital District.

The mixed use development portion of the plan includes a primary access point from the connector road to Route 9 at the northern section of the study area (see graphic). A second location, across from Sitterly Road to the south, could also be established if coordinated with intersection improvements. Between these two locations, a long term plan to combine access points between properties could be implemented to improve the traffic operations, safety and aesthetics.

Establishing roundabout intersections at the main access to the mixed use neighborhood, as well as an additional access point at the US 9/Sitterly Road intersection, would also allow for an access management zone between these two intersections. This treatment could be accompanied by street landscaping, sidewalks, and bike lanes to create an attractive, multimodal corridor along US 9 near the new town mixed use area. As the new neighborhood would have a pedestrian orientation, this treatment could extend a more pedestrian friendly treatment along US 9.



Areas along Route 9 where roundabout and access management strategies should be considered.

The possible elements of an access management and intersection improvement strategy for this area are outlined below:

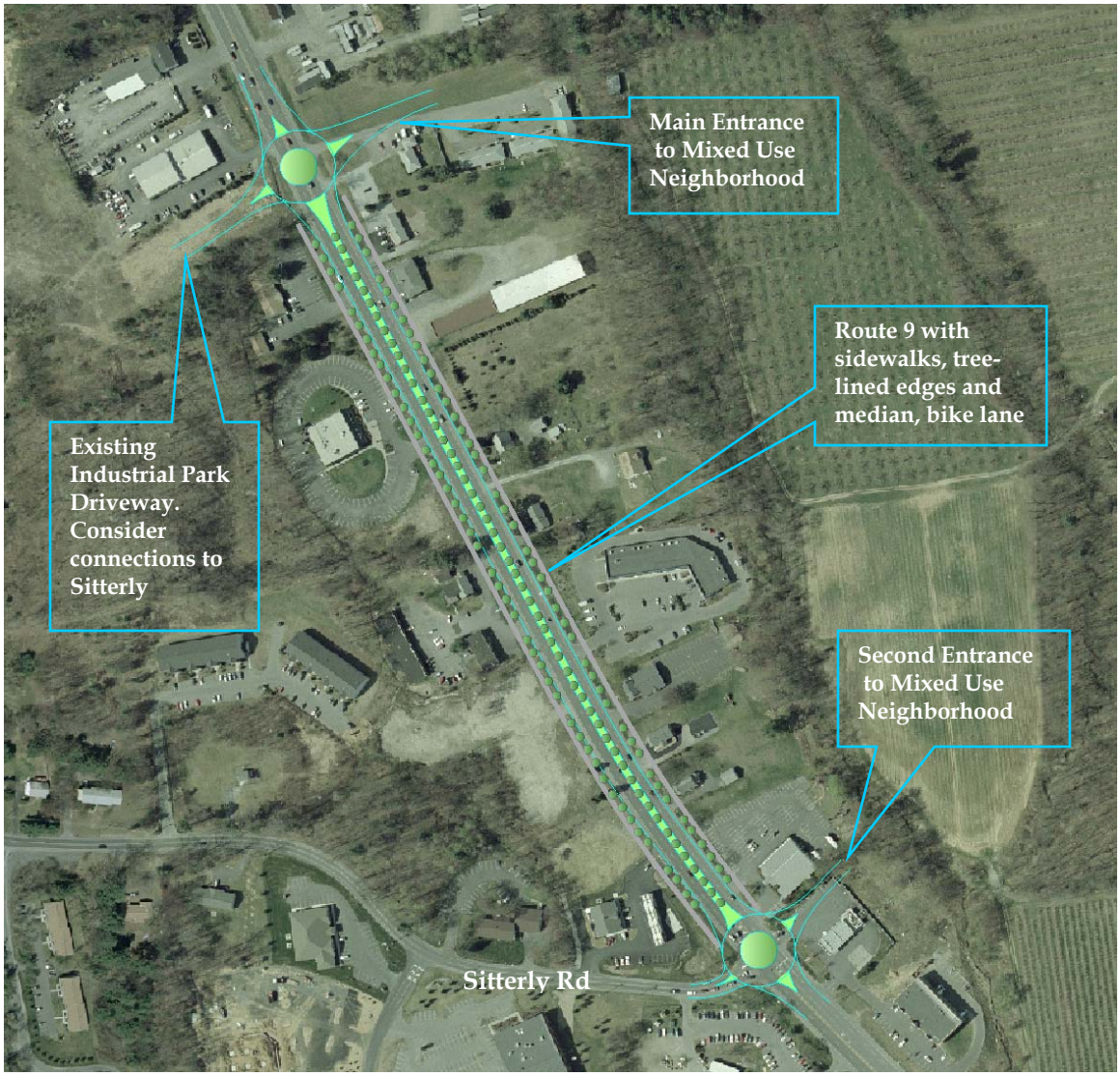
- Improved intersections as two lane roundabouts, at the Sitterly Road and development access locations.

- Establish and enforce access management strategies such as limited curb cuts, service roads, and shared parking arrangements between Sitterly and the proposed northern connector intersection. Further, consider opportunities for a landscaped median between these two intersections, establishing a boulevard aesthetic (similar to Route 9 in Saratoga Springs – see below).
- Provide pedestrian and bicycle facilities and landscaping along Route 9 between these intersections.
- As properties are redeveloped, combine entrances and link parking areas to provide connections between parcels without entering Route 9.

Transportation design can be an excellent tool in placemaking, and can be applied to Route 9 as well as the new mixed use neighborhood. Below is an example of how a high traffic volume arterial corridor in Saratoga Springs helped to transform the southern gateway to that community.

Route 9 into Saratoga Springs was completely transformed through improvements to the roadway design. Photo source: Capital District Transportation Committee

The following graphic (next page) shows a schematic of this portion of Route 9, with these types of improvements in place:



This concept would have numerous benefits, including improved levels of service at the roundabout intersections, improved safety at the Sitterly Road intersection (frequent accidents occur here), a beginning of a beautification project for Route 9, and improved pedestrian safety and access. Eventually this type of treatment could be extended along US 9, to create a safer and more efficient corridor and set the stage for quality, walkable development that creates more of an identity for Halfmoon. Such a built environment would be more transit friendly as there will be both higher density in the mixed use area and safe, attractive pedestrian connections between the new town center and US 9, leading to a possible future transit corridor.

Environmental Justice

Throughout the planning process, recommendations were crafted to be sensitive to all adjacent residences and other surrounding land uses. However, special attention must be paid to households in the areas of special concern identified on page 21 as the planning concepts evolve into specific projects. The town will need to ensure that these environmental justice population groups are engaged in the process and that appropriate outreach is undertaken to adequately address their concerns and any potential adverse impacts of projects.

<u>Policy and Regulatory Implementation</u>

- Promote enhancement of Route 9 in terms of traffic safety, connectivity, beautification and aesthetics, and incorporation into the town center area.
    - Continue outreach and discussions with NYS DOT regarding options and opportunities for Route 9.
    - Undertake a corridor planning study to identify opportunities for access management strategies, traffic mitigation, and integration of the recommendations of this plan into Route 9. Consider application for local technical assistance grants through CDTC (e.g., linkage funds for a Route 9 corridor study) or New York State's Quality Communities Grant Program (perhaps in conjunction with the Town of Clifton Park)
    - Through the planning process continue outreach to businesses and landowners along the corridor to identify concerns regarding modifications to Route 9
    - Ensure that the strategies and recommendations regarding land use are in place prior to significant modification of infrastructure in this area.

Project Cost Estimates

Planning level construction cost estimates have been prepared, based on actual costs of similar projects. However, as construction costs are escalating due to recent increases in costs of concrete, steel, asphalt, fuel and other materials; cost escalation of these estimates may be warranted when funds are actually sought. These estimates include construction costs only, and do not include right of way acquisition, wetland mitigation, environmental permitting and construction inspection costs. An allowance for engineering design of 20% is included in these estimates.

Route 9 Improvements

Project Element	Unit Cost	Quantity	Total Cost
Two Lane Roundabouts	$2,200,000 each	2	$4,400,000
Streetscape, Sidewalks, Median and Access Management between roundabouts	$1,400,000 per mile	0.4 miles	$560,000
		Subtotal	$4,960,000
	Engineering Allowance		$992,000
		TOTAL	**$5,852,000**

Hamlet Area Improvements

Project Element	Unit Cost	Quantity	Total Cost
Single Lane Roundabouts	$1,000,000	2	$2,000,000
Multi Use Path/Sidewalk to Rec Fields	$300,000	0.8	$240,000
		Subtotal	$2,240,000
	Engineering Allowance		$448,000
		TOTAL	**$2,688,000**

Cross Town Connector Improvements

Project Element	Unit Cost	Quantity	Total Cost
Single Lane Roundabouts	$500,000 to $1,000,000 each	2	$1,000,000 to $2,000,000
Cross Town Connector (2 lanes with multi-use path)	$4,000,000 to $10,000,000 per mile*	1.75 miles	$7,000,000 to $17,500,000
North Branch of the Cross Town Connector	$4,000,000 to $10,000,000 per mile*	0.75	$3,000,000 to $7,500,000
		Subtotal	$11,000,000 to $27,000,000
	Engineering Allowance		$2,200,000 to $5,400,000
		TOTAL	**$13,200,000 to $32,400,000**

** Costs are highly uncertain, depending on whether or not this road is designed to accommodate heavy trucks. Therefore, low and high range estimates are provided.*

CONCLUSION AND IMPLEMENTATION

Conclusion

The Town Center area presents a number of opportunities related to conservation, development, transportation, and recreation resources for the Halfmoon community. This strategic plan describes a land use pattern based in the traditional concepts of growth of country hamlets surrounded by open space and recreation amenities. The plan also highlights the importance of connectivity – in terms of both roadways for automobiles and facilities for non-motorized travel. Combined with a well thought-out land use pattern, connectivity and linkages are keys to limiting the future adverse impacts of growth and development on the town's transportation infrastructure. Creating the connections recommended within this plan will require continued effort on part of the town officials, residents, and other stakeholders. The following section outlines a potential starting point for implementing this plan and moving Halfmoon forward to realizing its planning and quality of life goals.

Implementation

The overall recommended approach to implementation of the plan is a comprehensive strategy that will continue to involve town staff, officials, landowners, residents, and other stakeholders. As the plan highlights a land use pattern that is significantly divergent from the underlying, existing zoning, there is a need to move forward quickly – particularly related to the land use and regulatory framework. This will ensure that future near and long-term development is consistent with the vision and goals set out by the community. Initially, the town should adopt this plan as an amendment to the comprehensive plan. This will give both the recommendations and the implementation actions undertaken by the town more strength. There are a number of policy and regulatory implementation activities detailed within the body of this plan. These strategies provide the town with specific guidance related to future planning and zoning work. However, all of these activities will not occur simultaneously. With this in mind, a three-pronged approach to preliminary implementation of the plan is presented below.

This approach targets the initial implementation steps related to Open Space, Land Use, and the Cross-town Connector. Each is described in detail below.

1. Open Space: initiate open space protection efforts within the study area. There are a small number of large parcels within the study area that contribute to the unique character and rural qualities of the town. The town should work closely with landowners to investigate conservation scenarios. A potential first parcel is the property along Route 236 just west of the recommended access point for the cross-town connector. Additionally, acquisition of the central parcel just west of Gauthier Road should be pursued. Due to the amount of wetlands the value of this piece is likely to be relatively low. However, the property would serve as a central component to the connector – providing for northern access to Route 146. Outreach efforts with individual landowners could follow the following process:

A. Regular meetings with landowners to refine the conservation scenario
B. Signed letter of intent demonstrating landowner interest in pursuing conservation. This letter strengthens grant applications and helps to move conservation efforts forward.
C. Grant applications to county, state, and federal sources for open space funding.

Note: simple trail access to open space areas would be an excellent first step in establishing connections within the town center area. Prior to development of the connector, the town should provide public access through trails to encourage use of the area and highlight achievements.

2. Land Use: develop new zoning regulations that follow the recommendations of this plan. A number of regulatory measures are outlined within the plan including establishment of a new country hamlet district, mixed-use traditional neighborhood, incentive zoning, and development of design guidelines.

3. Cross Town Connector: This plan includes a recommended route for establishment of the cross town connector that protects existing neighborhoods while helping to make important links to community resources.

A. Ensure that ongoing development within the study area does not impede the ability to locate the roadway in the future. The town is already actively pursuing the acquisition of easements for future links through the development and review process and this should be continued. To strengthen this position, the town could adopt the recommended route of the connector as part of the town map. This will help ensure that future connections are made and areas are not cut-off.

   Further, to the greatest extent possible, the town should pursue incorporating the actual construction of the connector in conjunction with site planning and development. The utilization of incentive zoning where a bonus in units is traded for a community amenity (in this case, the connector) could be used to implement this recommendation.

B. Coordinate development of the roadway with open space protection. The first piece of the connector could be established along Route 236 where the town already owns a small amount of road frontage. As open space efforts move forward, this would make a logical initial piece of the connector by providing access to the preserve and connecting with improvements at the town's municipal center (new town hall).

C. Design: This plan describes the connector as a tree-lined, rural boulevard with amenities for bicyclists and pedestrians (a potential roadway design is included on page 51). However, for the most part detailed design efforts should not be undertaken until high quality survey data becomes available (for example, through the site plan review process or through development of a GEIS).

D. Funding of Infrastructure: As mentioned within the plan, development of infrastructure should be coordinated with the private development process to the greatest extent practical. Using incentive zoning tools already available, the town could encourage and "trade-off" bonuses in exchange for construction of infrastructure. However, other alternatives should be considered including the development of an area-specific Generic Environmental Impact Statement (GEIS). This tool has been used successfully in Halfmoon to mitigate the impacts of growth and development (Northern Area GEIS) and other local communities, notably the Town of Colonie in Albany County, to help fund major infrastructure and development projects. Related to the town center project and the cross-town connector, the GEIS could be used to quantify costs related to new development and allow the town to recoup investments in infrastructure (as well as costs for the GEIS work) through the development process.