

TROY TOWN PLAN



Historic Postcard of Big Falls
Troy, Vermont

ADOPTED MARCH 20, 2008

DEDICATION

Lucille Cadioux

For her many years of service to the Town of Troy

TABLE OF CONTENTS

Introduction	1
History of Troy	1
Objectives & Policies	2
Land Use	3
Future Vision	7
Zoning	8
Land Use Goals & Strategies	9
Housing	11
Housing Goals & Strategies	15
Transportation	16
Transportation Goals & Strategies	19
Utilities & Public Facilities	21
Utilities and Public Facilities Goals & Strategies	25
Energy	27
Energy Goals & Strategies	29
Educational Facilities	30
Education Goals & Strategies	30
Natural & Historic Resources	31
Natural Resources Goals, Objectives & Strategies	36
Historic Resource Goals, Objectives & Strategies	36
Adjacent Municipalities & the Region	37
Project Summary	39
Appendix A: Municipal Lands	
Maps*	
Troy Base Map	
Troy Existing Land Use Map	
Troy Proposed Land Use Map	
Troy Natural Resources Map	
Troy Soils Map	

* The Official Town Plan Maps are available for reference at the Town and Village Clerks Offices.

INTRODUCTION

The original town plan was adopted on August 9, 1995. This updated version of the Troy Town Plan is an effort to adequately reflect the Troy existing today and effectively plan for its future. The town plan serves as a guidance document for the Select Board and Planning Commission, and as a resource for anyone interested in the future of the Town of Troy and the Village of North Troy.

Context of Troy

The Town of Troy is located on the Canadian Border in North Central Vermont. It lies in the Northwestern part of Orleans County. The Green Mountains lay to the west and the Vermont Piedmont lies to the east. The Towns of Jay and Westfield border Troy on the west; the town of Newport borders Troy to the East, and the town of Lowell borders Troy to the south. The town boundaries contain 22,617 acres.

History of Troy

The settlement of the town of Troy began about 1796-97. Most of the early settlers built their homesteads along the Missisquoi River where the soils were productive and small-scale agriculture was feasible. By 1802, enough settlers had arrived from Peacham and New Hampshire that a town was organized and called Missisco. The increased population brought industry such as the Iron Works south of Big Falls, a sawmill at Bakers Falls, a gristmill and wool-carding mill in 1816. The majority of the settlers farmed in south Troy, and it wasn't until the Railroad came through North Troy in the 1870's that the population center shifted to North Troy. In October of 1876 the Village of North Troy was incorporated and remains so today.

The accessibility of North Troy, as a result of the railroad, changed the town from an area more concerned with self-sufficiency to an area where industry could exist and export goods. The Blair Veneer Company was established in 1903 and employed a large number of residents through out its existence under several owners. Over time the Village of North Troy continued to grow as the main commercial center while agriculture remained an important industry throughout the rest of Troy. Over the years, the Town and Village have seen a great variation in the number of local industries, commercial establishments, local farms, and rural agricultural-related businesses.

Today, the Village of North Troy and the Hamlet of Troy are the main activity centers within Troy. Both areas include a compact mixture of housing options, commercial enterprises, public facilities, and local services. The outlying areas are now a mixture of farms and rural homesteads, with a few rural businesses and properties under conservation scattered about town.

OBJECTIVES & POLICIES

The development of this plan has yielded the following objectives and policies. The objectives and policies are meant to be an overall guide for future decision making and have been developed through a mixture of planning analysis and citizen input.

1. This plan and the zoning bylaws shall be updated periodically to account for the changing needs of the town and surrounding towns.
2. Communication will be maintained amongst the Towns of Troy, Westfield, Lowell, Newport Center, and Jay. Issues such as the wastewater treatment facility, zoning regulations and adjacent zones will be discussed and coordinated.
3. An ongoing dialogue shall be further established and maintained between the town of Troy and the Northeastern Vermont Development Association.
4. Local citizens shall be encouraged at all times to be involved in and make decisions regarding the future of Troy and the planning process.
5. The Town Plan Maps will remain available to the public at the Town Clerk's Office so that the following applications can occur:
 - a) The Planning Commission can utilize these maps for planning purposes.
 - b) The Zoning Administrator can utilize this inventory to assess if a planned use of a parcel of land would adversely affect the community.
 - c) The Troy Planning Commission can utilize this inventory to ascertain where they would foresee zoning changes.
 - d) A property owner can utilize these maps to assess the resources on his/her land and plan accordingly what may be the best use for the land. If the property owner is considering a development, which requires Act 250 approval, these maps can be used for an initial overview of how the project may relate to Act 250.
 - e) A Real Estate Agent can utilize this inventory to show a client the resources, which exist on a given piece of property or the proximity of the piece of property to other resources.
6. The town shall encourage energy conservation measures. (State standards are available and can be utilized at the local level).
7. The town shall promote Troy's outdoor recreational opportunities.
8. The town will explore opportunities to protect the existing natural areas and special scenic areas.
9. The town will provide zoning densities to encourage settlement in existing population centers such as North Troy Village and the Hamlet of Troy.
10. The town will encourage commercial development at the intersections of Route 101 and 242 and Route 101 and 105, in such a way that strip development is discouraged.
 - a) Encourage single entrances and exits to multiple enterprises or residences.
 - b) Encourage appropriate landscaping where necessary. Encourage parking behind or to the side of the building rather than between the building and the roadway.
 - c) Encourage development that is complementary to the existing residential areas.
11. Well protection zones shall be protected against any development, which would adversely affect the water quality.

LAND USE

The town of Troy displays the traditional picturesque New England character. It has two distinct village centers surrounded by hillsides of mixed use open land and flanked by peaks of the Green Mountains. The town is located adjacent to Canada and the towns of Jay, Westfield, Lowell, and Newport. Troy’s current development incorporates a mixture of residential and commercial areas surrounded by working farms and conserved lands with recreational opportunities.

Demographic Profile

The population of Troy reached its zenith in 1930 with 1,898 residents and since that time, the numbers have slowly declined to the present population of 1,564 (Chart A). In the 1960s and 1970s, the change in population was nearly at a 10% decline (Table 2). The 1980s and 1990s saw some gradual repopulation, but the numbers dropped again between 1990 and 2000.

Chart A: Troy Population 1790 - 2000

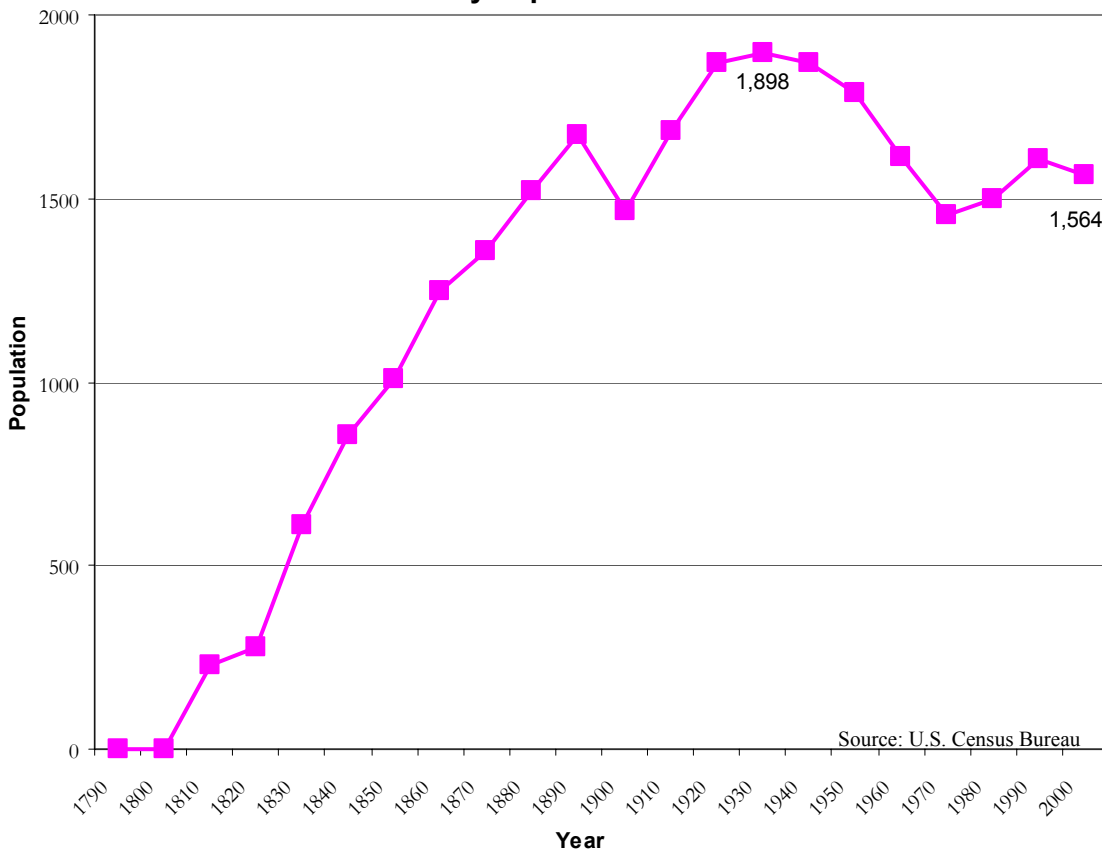


Table 1: Surrounding Towns Population Change 1990- 2000

Town	2000 Pop.	% Change 90-00
Town of Troy	1,564	-2.80 %
Village of North Troy	593	-17.98 %
Newport Town	1,511	10.53 %
Lowell	738	24.24 %
Westfield	503	19.19 %
Jay	426	11.81 %
Orleans County	26,277	9.25 %

U.S. Census Bureau, 2000

This steady decline in total population does not match the growth trends in the immediate surrounding towns (Table 1), the whole of Orleans County or the State (Table 2.). Even more alarming is the 17.98% drop in population in the village of North Troy (Table 2). For the past 35 years, North Troy has witnessed an exodus out of the village. This trend can be attributed to several factors,

including: the loss of major employers in town; the subdivision of former farmland for residential use throughout town; a reduction in the average family size; and, the lower taxes and service fees available outside the Village.

Table 2: Population Change 1950-2000 for Troy, North Troy, Orleans County, Vermont

Year	Troy	% Change	North Troy	% Change	Orleans Co.	% Change	Vermont	% Change
1950	1,786	-4.44%	N/A	N/A	21,190	-2.43%	377,747	5.14%
1960	1,613	-9.69%	N/A	N/A	20,143	-4.94%	389,881	3.21%
1970	1,457	-9.67%	774	N/A	20,153	0.05%	444,731	14.07%
1980	1,498	2.81%	717	-7.36%	23,440	16.31%	511,466	15.01%
1990	1,609	7.41%	723	0.84%	24,053	2.62%	562,767	10.03%
2000	1,564	-2.80%	593	-17.98%	26,277	9.25%	608,827	8.18%

At this time the Vermont Indicators suggest that these local population trends have turned around. The 2005 population for the Village of North Troy and Town of Troy have been estimated at 621 and 1,710 respectively, which translates to a growth of 4.5% for the Village and 8.5% for the Town. According to these estimates the Town is growing at roughly twice the rate of the Village and this trend is expected to continue.

Agricultural

Throughout Troy's history, farming has been an important resource. Over the past 50-100 years, dairy farming has been very important to the economy. However, in the past 20-30 years, most of the farms have been abandoned and the land has been subdivided for homes, hayed by other farmers, or let to revert to woodland.

The shift away from agriculture in the town of Troy is illustrated by the decrease in farms over the past 50 plus years. In 1953, there were 89 dairy farms, in 1967, there were 47 dairy farms and in 1990 there were approximately 20 dairy farms. The average size of the dairy herds increased during the 1950s and 1960s from 30.2 to 47.2 which had reached a high of 950 head in 1995, illustrating the current trend in dairying toward larger herds on fewer farms.

As can be seen in Table 3, farm operations throughout Orleans County have seen drops in the total number of farms. However to offset this loss of farms, the average size has increased in acreage, so that the amount of land dedicated to farming has only dropped slightly. In addition, the estimated market value of the land and buildings on these farms has increased dramatically which adds to the pressure of putting the farms up for sale.

Table 3: Orleans County Farm Data: 1997 and 2002

	1997	2002
Land in farms (acres)	142,252	132,240
Number of Farms	649	583
Percentage of overall land area in farms	31.9%	29.6%
Average size of farm (acres)	219	227
Average per farm estimated market value of land and buildings	\$259,900	\$390,921
Average per acre estimated market value of land and buildings	\$1,244	\$1,536

Source: 2002 Census of Agriculture, Vermont County Data, USDA National Agricultural Statistics Service

Industrial & Commercial

Troy is home to a few small manufacturing plants, including Newport Panel and Rozelle Cosmetics. However, Troy is still trying to attract additional industrial development at this time.

Most of the industrial development is scattered throughout town. For the future Troy would like to concentrate industrial development within the Village and Hamlet, especially within the established industrial park in North Troy. The park consists of 10.5 acres and is currently undeveloped, but has a nearby water and sewer connection. It is also surrounded by residential property and its development would help create a work-live type of community in the Village.

In order to attract additional industrial development, the Village will need to designate additional land for this use and make sure local water and sewer capacity can be obtained. Areas appropriate for new industrial development, which complement the existing village land use, include an area of land north of the railroad tracks, between Dominion Ave and the Mississquoi River watershed. Other appropriate areas include along Route 243 between Elm Street and the Canadian Border.

Historically, industrial use in the Hamlet has been limited and should remain a minor land-use. Properties, such as the former Cheese Factory, have great potential for industrial reuse as it already has water and sewer allocation. There is also easy access to truck routes, a stable local workforce, and affordable housing. Beyond these sites, new industry may be appropriately located along Route 101 and areas adjacent to the Hamlet.

In order to attract additional industrial development in Troy, the town should work with the U.S. Customs and Border Protection to return the Route 243 Port to full commercial port status. As it stands now, the port has limited permit access for commercial trucks, which is a limiting factor in the economic growth of the area.

Commercial development is currently concentrated on Main Street in the Village and along Route 100 within the Hamlet of Troy. There are also a number of rural-based businesses that are scattered along the major routes throughout town. For the future, Troy would like to concentrate people-oriented and service-type commercial development along the centralized areas of the Village and Hamlet and allow for some larger scale rural-based and tourism-based businesses to locate in more convenient “hub” areas, such as at the intersections of Route 105 and 101, and Route 101 and 242. More specifically, these businesses should be encouraged within or adjacent to the existing village and hamlet. Starr Trucking, Laliberty Trucking, and Cote Trucking are an example of this type of development, and their operations require more room than traditional small-scale commercial enterprises but, as major employers in town, their location in the village and hamlet complements the work-live atmosphere of these areas.

A primary way to attract industrial and commercial development is the use of special designated zones or benefit areas. Orleans County is part of three special federal district designations related to economic development assistance. These include a Rural Economic Action Plan (REAP) Zone, an Economic Development Authority (EDA) Economic Development District, and a Historically Underutilized Business (HUB) Zone classification. Each federal district addresses the issues of economic distress and works to alleviate the conditions of the areas designated, through grants and funding programs. Troy should take advantage of the programs offered to support new industry in the industrial park and recognize the federal designations in grant applications to receive a more competitive status. Village Center Designation is another tool to attract new commercial and industrial development into these population centers and should be pursued for the Village of North Troy. As a designated Village Center new and existing businesses will be eligible for tax benefits, have priority for state grants, and locating state buildings.

Open Space & Conserved Lands

Outside the Village and Hamlet, Troy maintains a visual landscape full of open fields on rolling hills. Some of these fields are in productive use for farming purposes and others remain open due to conservation easements or current use restrictions. The Vermont Land Trust uses conservation easements as a way to preserve prime agricultural lands, protect natural areas, and limit the amount of subdivision that can occur on a parcel. Conservation easements may be placed on a property title when the property owner requests to conserve an area or sells the development rights. Conservation easements are a permanent element within a property's title and are maintained through property transfer. They may only be removed through the permission of the land trust, which usually requires swapping for other land and a detailed case as to why the property now needs to allow development. The majority of Troy's conserved land sits adjacent to Route 100, Route 105 East, and the Newport Town border. Less than 15 % of Troy's land is currently in conservation.

Current use restrictions, unlike conservation easements, can be removed from a property at any time. Current Use restrictions allow property owners to reduce their property taxes by enrolling in the Vermont Current Use Program. The program allows property owners to pay property taxes based on a reduced per/acre amount set by the state for agricultural or forestry use. If the property is ever taken out of current use or developed, then the property owner must pay a Land Use Change Tax, which is 20% of the fair market value of the property. In most cases this is a hefty sum, which ultimately encourages land to maintain its current use. This program helps to subsidize farmland and forestland in the state and reduces the loss of these valuable lands to residential development. Today, Troy has a total of 6,006.48 acres of land enrolled in the Current Use Program, approximately 26.6% of Troy's total acreage.

With a Conservation Overlay in the zoning bylaws, the Town of Troy can provide a more simplified way of conserving important natural environments in town, without some of the drawbacks of conservation easements and current use restrictions. Conservation Overlays are an extra coverage over smaller parts of regular zoning districts that can impose extra precautions for development in those areas. This is usually accomplished by making development a conditional use. Conditional uses are subject to design review prior to being permitted. Design review may protect natural habitats by limiting the amount of clear-cutting that can occur on a site; encourage the preservation of open space by requiring home sites to be established near the perimeter of the property; and, even lessen the impact on watersheds by requiring vegetative buffers along waterways. The best part of a Conservation Overlay is that it can be tailored to the specifics of a town's values, whether it is protecting existing forested areas, higher elevations, watersheds, prime agricultural soils, or important wildlife areas. As a part of the zoning bylaws, overlays are also not necessarily permanent; zoning regulations can be changed in the future if needed.

Land Use Trends

The Town of Troy has not yet felt major development pressures, which has allowed the Town to focus on planning for possible future development. However, Troy remains a major transportation route between Newport City, Canada, the Town of Jay and the Jay Peak Ski Resort, making the town very attractive for commercial ventures and second-home buyers. This growing development attraction is evident in the increased number of building permits being issued annually and the increased rate of farm land-to-residential turn over. In the coming years, Troy's development pressure is expected to grow due to the Jay Peak Ski Resort expansion. The Jay Peak Ski Area development plan includes additional ski trails, additional ski lodge buildings,

an 18-hole golf course, and a large amount of new condominiums and vacation rental units. There is also new residential and commercial development planned for the Village of Jay, located just across the Troy town line on Route 242.

Troy should anticipate some secondary development attracted to the expanding tourism market and second-home market of the Jay area. A rise in vacation properties in Jay, and subsequently the property values, may require Troy to meet majority of the affordable development needs associated with ski resort expansions, such as worker housing. Much of this development will aim to locate in areas where town infrastructure is already available (water and sewer capacity), such as along Route 105 West, Route 101, Route 242, and around the Hamlet.

Because of this forecasted increase in development pressure the Town should look to guide the development to appropriate areas, that will maintain the character of Troy, foster economic development, maintain a mixture of uses in the village and hamlet, and protect local natural resources.

Future Vision

The Town of Troy and the Village of North Troy are welcoming an increase in development. Both communities are still recovering from the loss of major employers several decades ago. While attracting replacement industries has proven to be difficult, there now is significant potential to build upon the local tourist industry as the Jay Peak Ski Resort expands.

Facing this new growth, the revision of this plan has yielded several goals for the town and village. Primarily, both communities feel it is important to concentrate growth in the Village of North Troy and the Troy Hamlet. The village still has a significant amount of development potential and needs new development to lessen the tax burden on village residents. The current design of the village as a high-density, pedestrian friendly, civic and commercial center will attract future businesses that utilize the image of Vermont downtowns. Therefore, the village would like to maintain its traditional design through small-lot sizes, mixed building uses, pedestrian elements (such as sidewalks and cross walks), and neighborhood green space. In-fill development and adaptive reuse is also encouraged, so as to revitalize neglected properties before adding on to existing neighborhoods. The village would like to see the commercial sections of Main Street become a popular public gathering area with additional shops, restaurants, and service businesses. As the village grows, areas for new residential blocks and streets should be designated to attract development that will fit in with existing neighborhood design and require less municipal infrastructure and resources in the future.

The town has similar goals for the Troy Hamlet; however this community is slightly different from the village in that it is traditionally smaller in scale with its commercial and civic uses concentrated on the Common. The town would like to maintain the hamlet as a busy residential area with a few amenities and also encourage reuse of vacant commercial and industrial property. The Common is currently much more automotive oriented and would like to continue to accommodate through-traffic, but also incorporate safety features for pedestrians and bicyclists. Overall the hamlet would like to maintain its mixture of uses (mostly residential) and small-lot sizes (1 acre or less).

Besides the village and hamlet, Route 101, 105 and 242 are seen as areas that will receive the most development pressure related to growth in Jay. The town would like to accommodate for

new rural and tourism-oriented businesses within a limited area along these Routes, more specifically the intersections of Route 101 and 105 and Route 101 and 242.

Throughout the rest of town, there is a mixture of large agricultural corridors, large-to-small lot residential streets, recreation land, wetland areas, open space, forested areas, and a few commercial and industrial enterprises. For the future the town would like to maintain the sense of rural open space. To accomplish this, residential development and other uses can continue to be allowed but encouraged to have the least impact on the surrounding landscape. To maintain natural, scenic, and environmentally sensitive areas the development permitting process should address these elements. Some of these sensitive areas identified by residents include the Missisquoi River and its floodways, traditional farming areas, prominent local hills, scenic view sheds, significant forest areas, and important wildlife habitats. As the town grows, these sensitive areas should not end up in isolated pockets due to residential sprawl, but rather maintained in corridors that complement the local landscape, encourage connectivity to the village and hamlet, and provide significant recreation opportunities.

Overall the future vision of Troy includes bustling village centers surrounded by a scenic rural landscape with all of the elements identified in this plan cooperatively working together to accommodate growth and ensure a rich quality of life.

Zoning

The existing zoning in the Town of Troy is guided by four district areas, which include a Rural District, Village District, Commercial-Residential District, and Industrial District. Although these zones have worked well over the past several years, Troy has re-evaluated the current zoning bylaws in light of future development and current land use trends. From this re-evaluation Troy recommends the following updates for the zoning bylaws to both reflect the values of the community and guide future community development.

Village District - The objective of this district is to maintain the village areas of Troy as the centers for commercial and social activities. All areas within the Village of North Troy and Hamlet of Troy are zoned Village District except where otherwise noted.

Recommendation

The Village District should continue to include the Village of North Troy and the Troy Hamlet. The boundary for the Village of North Troy should match the existing incorporated boundary of the Village, but the boundary for the Hamlet should be expanded to accommodate this area as a growth center for the Town. Both the Village and the Hamlet areas should encourage small lot sizes, density, and appropriate street design that support mixed-uses and alternative transportation modes. Parking regulations should be developed as well.

Commercial Residential - The objective of this district is to provide areas for residential and commercial development.

Recommendation

Due to the increasing traffic along Route 101 and Route 105 outside of the village areas, the Town would like to allow commercial enterprises within two new “hub” areas. These areas will concentrate around the intersections of Route 101 and 105 and Route 101 and 242. This district aims to encourage both rural-scale and tourism-oriented businesses that

will complement the existing residential development in these areas. The “hubs” are envisioned as a way to better accommodate new development related to the Jay Peak Ski Resort expansion without affecting the functionality of Route 105 and 101 as major thru-routes or compromising the future prosperity of the local village areas.

Industrial District - The objective of the industrial district is to increase the Town's tax and employment base by providing areas for the development of industrial uses. These areas are primarily in the village of North Troy.

Recommendation

In order to better accommodate industrial uses in both the Town and Village the zoning bylaws should concentrate on maintaining the Industrial District for “heavy” industry and allowing “light” industrial uses within other districts. The original purpose of an industrial district was to limit the intrusive affect industry had on the quality of life for local residents. However, as industry evolves there are more and more “light” industrial uses that prove to be less intrusive and may be appropriate within existing neighborhoods.

The Town should look into incorporating “light” industrial uses as a conditional use within the existing Village District. This way non-intrusive “light” industry will have more siting options. As a conditional use the planning commission will still be able to regulate its design based on intrusive aspects, such as noise, odors, lighting, truck traffic, and storage.

Rural District - The objective of the rural district is to provide medium density development of various types while maintaining the natural qualities and rural character of the Town. The area, which is designated as the rural district, is all areas outside of the Village of North Troy and the Hamlet of Troy.

Recommendation

The Rural District should remain relatively the same and continue to include all the remaining land areas in Town, outside of the other districts. The district should also continue to provide for medium-to-low density development that maintains the natural qualities and rural character of the Town.

The Town of Troy should also consider creating a Conservation Overlay for areas within the Rural District that might be extra-sensitive to development (as mentioned under Open space & Conserved Lands).

Land Use Goals

- New development should complement traditional development patterns and land-uses.
- Traditional uses that maintain the rural character of Troy, such as farming and forestry, should continue to be preserved.
- Growth should be sustainable, orderly, and consistent with the future vision for the Town and Village.
- Land development should retain natural features and special scenic areas.
- Encourage community pride, reinvestment, and adaptive reuse in the Village of North Troy.
- Maintain the Village areas with high-density mixed use development that provides for a live, work & play environment.

Strategies

1. Update the Zoning Bylaws to allow for the implementation of the Town Plan.
2. Designate additional land for industrial development in the Village of North Troy and Hamlet of Troy.
3. Work with the economic development assistance programs and the Northeastern Vermont Development Association to attract and support new industry in town.
4. Investigate the creation of a conservation overlay district as a means to protect historic land uses, natural features and special areas in town.
5. Collaborate with the Town of Jay and area towns in preparing for increased development and infrastructure.
6. Focus anticipated tourism-related development into the Hamlet, Village, and new “hub” areas.
7. Allow for the development of small lots in the Village areas.
8. Concentrate residential and industrial development in areas where municipal infrastructure, such as water and sewer, is already available.
9. Encourage the expansion of telecommunications infrastructure in town to attract new business development.

HOUSING

Troy is a community of mixed-income residents. With the expansion of the Jay-Troy wastewater treatment plant, the towns foresee more development in the area. Increased commercial development will result in a need for more service sector employees who will fall in the low and moderate-income bracket. Traditionally, these people live in towns surrounding the resort community. Therefore, Troy sees potential population growth of low and moderate-income residents. Troy is committed to ensuring that these people can buy homes in the region.

Table 4: Population 1960 - 2000

Present Housing Status

The population of Troy has seen fluctuations over the past forty years, which does not reflect the status in the county or Vermont.

	1960	1970	1980	1990	2000
Troy	1,613	1,457	1,498	1,609	1,564
N. Troy Village	—	—	717	723	593
Orleans County	20,143	20,153	23,440	24,053	26,277
Vermont	389,881	444,330	511,456	562,758	608,827

Source: Vermont Indicators Online based on U.S. Census 1960 - 2000

A look at the housing stock in Tables 5 shows that the majority of the buildings are holding one household unit. These tables also show that there are a significant number of vacant units. It can be inferred that there is room for creating accessory units in the single-unit buildings as well as the ability to utilize more of the vacant units.

Table 5: 2000 Housing Stock - Town of Troy & Village of North Troy

	Town of Troy			Village of North Troy		
	Owner occupied	Renter occupied	Vacant units*	Owner occupied	Renter occupied	Vacant units*
Total	440	174	117	158	94	46
Buildings with 1 unit	412	87	79	154	27	28
Buildings with 2 units	8	59	21	4	47	15
Buildings with 3+ units	0	20	8	0	18	3
Mobile homes	20	8	7	0	2	0
Boats, RVs, vans or other	0	0	2	0	0	0

*A housing unit is vacant if no one is living in it at the time of enumeration, unless its occupants are only temporarily absent. Units temporarily occupied at the time of enumeration entirely by people who have a usual residence elsewhere are also classified as vacant.

Source: Vermont Housing Data: Main Housing Data Profile Online at www.housingdata.org

As shown on the following page in Table 6, there has been a large jump in the past decade for the number of occupants who have moved into both the Town and the Village, especially among renters. This same trend is reflected throughout the county and state. As reported by the Vermont Housing Council and the Vermont Housing Awareness Campaign in the annual report, *Between a Rock and a Hard Place: Housing and Wages in Vermont 2006 Update*, there is an upward spiral of housing costs in Vermont coupled with a shortage of construction. Vermont currently has a shortage of 21,000 affordable rental units and will need 12,300 more owner-occupied units by 2010 to meet the demand¹. This has created a very tight housing market, meaning higher rents and home prices.

¹ Between a Rock and a Hard Place: Housing and Wages in Vermont 2006 Update.

Table 6: Year Householder Moved Into Unit

	Troy	N. Troy Village	Orleans County	Vermont
For owner-occupied units				
1990 to March 2000	170	37	3,379	80,036
1980-1989	125	36	1,972	42,197
1970-1979	80	37	1,329	24,482
1969 or earlier	65	48	1,056	23,062
For renter-occupied units				
1990 to March 2000	145	74	2,313	61,665
1980-1989	17	12	228	5,777
1970-1979	12	8	94	1,708
1969 or earlier	0	0	75	1,707

Source: Vermont Housing Data: Main Housing Data Profile Online at www.housingdata.org

A look at historical data since 1990 (Table 7) shows an undulating average sale price for single family homes in Troy. In 1990 the average sale price for a single family home in Troy was \$57,350 and in 2005 the average sale price had nearly doubled to \$103,376. This same trend was experienced throughout Orleans County and the State of Vermont. Unfortunately, the sale prices for mobile homes (with land) have spotty data due to the fact that few have been sold recently. However, if the county and state experienced the same growth in single family home sale prices, we can assume recent mobile home sale prices in Troy would have seen the same percentage growth as the County and State.

Table 7: Historical Data: Average Price of Primary Residence 1990 - 2005

Year	Single Family Homes				Mobile Homes with Land			
	Troy	# Sold in Troy	Orleans County	Vermont	Troy	# Sold in Troy	Orleans County	Vermont
1990	\$57,350	10	\$77,311	\$117,131	\$34,000	1	\$33,600	\$44,848
1991	\$75,036	7	\$78,224	\$114,112	\$31,000	2	\$36,750	\$48,140
1992	\$65,811	9	\$79,724	\$113,213	—	0	\$23,604	\$43,405
1993	\$63,113	8	\$69,727	\$113,416	—	0	\$29,523	\$43,495
1994	\$52,900	5	\$74,514	\$117,800	—	0	\$31,740	\$43,043
1995	\$91,281	8	\$80,226	\$119,808	\$32,000	2	\$32,162	\$46,652
1996	\$64,883	8	\$80,337	\$120,840	—	0	\$23,835	\$41,921
1997	\$79,515	13	\$78,184	\$128,856	—	0	\$24,000	\$38,134
1998	\$81,122	18	\$87,784	\$132,399	—	0	\$30,614	\$50,964
1999	\$109,029	17	\$90,291	\$135,741	\$23,600	1	\$31,638	\$47,040
2000	\$95,669	16	\$89,138	\$144,346	\$25,000	1	\$34,533	\$48,342
2001	\$86,114	11	\$96,274	\$154,059	—	0	\$33,746	\$53,948
2002	\$118,804	24	\$98,995	\$167,601	\$29,167	3	\$41,450	\$61,096
2003	\$135,892	13	\$106,524	\$183,331	—	0	\$54,435	\$65,748
2004	\$93,566	32	\$122,988	\$199,613	\$50,917	3	\$50,413	\$75,498
2005	\$103,376	21	\$141,236	\$231,968	—	0	\$52,406	\$84,324

*Data for North Troy Village unavailable

Source: VT Housing Data Online (www.housingdata.org) based on VT Property Transfer Tax

Data in Table 8 shows standards for evaluating substandard housing. It appears that although the median year of structures built is more than 50 years old, there are few structures that would be considered “substandard.”

Table 8: Substandard Housing 2000

	Town of Troy			Village of North Troy		
	Total*	Owner Occupied	Renter Occupied	Total*	Owner Occupied	Renter Occupied
Housing units lacking complete plumbing facilities	11	2	0	0	0	0
Housing units lacking complete kitchen facilities	4	2	0	0	0	0
No telephone service available (occupied)	9	2	7	17	4	13
Median year structure built	1956	1961	1955	before 1940	before 1940	before 1940

*Occupied & Vacant

Source: VT Housing Data: Directory of Affordable Rental Housing - Special Needs Data Profile Online at www.housingdata.org

Low Income Population²

In the town of Troy, there were 440 owner occupied housing units in 2000. Of the owner occupied housing units, forty-five or 10% had householders below the poverty level in 1999. Out of 174 renter occupied units, the number of renters below the poverty level was 35 or 20%.

In the village of North Troy, there were 158 owner occupied housing units in 2000, seventeen of which (or 11%) had householders below the poverty level in 1999. Out of 94 renter occupied units, the number of renters below the poverty level was 27 or 29%.

People with Special Needs³

People with special needs such as the elderly and disabled often require housing with more services. The only federally subsidized rental facility in town serving people with special needs is located on Pine and South Streets in the Village of North Troy. Pine Grove, which opened in 1981, has 14 units available for Section 8 rental assistance (income eligible). Six of these units are designed specifically for the elderly.

There are no mobile home parks in town. There are no residential care homes or nursing homes in Troy, although there are a few options in the neighboring towns of Westfield and Newport.

Statistically speaking it is possible that the Town of Troy needs more special needs housing – especially in light of the fact that nearly thirteen percent of the Town’s population (198 people) and fifteen percent of the Village’s population (90 people) are 65 years and over, and 40% of this age bracket is deemed to have a disability.

Addressing Affordable Housing

Affordable housing, as defined in Title 24 V.S.A. Chapter 117, §4303(1) is:

- a) housing that is owned by its inhabitants whose gross household incomes does not exceed 80% of the county median income, and the total annual cost of the housing, including principal, interest, insurance, and association fees is not more than 30% of the household’s gross income; OR
- b) housing that is rented by its inhabitants whose gross annual household income does not exceed 80% of the county median income, and the total annual cost of the housing,

² Vermont Indicators Online

³ Source: Vermont Housing Data: Directory of Affordable Rental Housing: Special Needs Data Profile (www.housingdata.org)

including rent, utilities, and association fees is not more than 30% of the household's gross annual income.

Table 10 details one method for calculating "affordable housing" using the State of Vermont's definition. The calculation shows that for a family of four in Orleans County, a rent or mortgage payment of \$638.00 per month is considered "affordable".

Table 10: Affordable Housing Calculation - For a Family of Four in Troy

\$46,900.00	The median income for a family of four in Orleans County*
x 0.80	Multiply by 80%
<hr/> \$37,520.00	/12
\$3,127.00	Monthly Income
x 0.30	
<hr/> \$938.00	Amount available for monthly housing cost (no more than 30%)
<hr/> -\$300.00	Subtract average monthly cost for heat, hot water & electric (\$300)
<hr/> \$638.00	

\$638 is affordable rent or mortgage for a family of 4 earning 80% of area's median income

*Based on HUD 2006 figures.

Source: Vermont Housing Data: Main Housing Data Profile and Vermont Housing Needs Assessment Guide Online at www.housingdata.org

Table 11 details the hourly wage necessary in order for a householder to rent "affordably" in Orleans County. For instance, if a householder is renting a one bedroom unit, the unit would meet the state's definition of "affordable" (see above) if the householder earned \$8.88 per hour. Unfortunately, the Vermont Minimum Wage is currently set at \$7.25 per hour, creating an incredible gap in affordability for households renting units with multiple bedrooms, for single parent households, or for families with one primary earner.

Table 11: Hourly Wage Necessary for "Affordable" Rental Unit* (2005)

	Town of Troy	Village of North Troy	Orleans County	Vermont
0 bedroom unit	\$6.42	\$6.42	\$6.42	\$9.88
1 bedroom unit	\$8.88	\$8.88	\$8.88	\$11.35
2 bedroom unit	\$9.92	\$9.92	\$9.92	\$13.90
3 bedroom unit	\$12.54	\$12.54	\$12.54	\$18.09
4 bedroom unit	\$15.75	\$15.75	\$15.75	\$20.83

*Housing affordability is defined according to State Definition 24 V.S.A. Chapter 117 §4303(1)

Source: Vermont Housing Data: Main Housing Data Profile (www.housingdata.org)

At this point in time, two areas of low-income rental housing exist. Both housing units were built in the early 1980's utilizing Housing and Urban Development Funds. The first site is located east of Pine Street and south of Geraldine Avenue and consists of eight units in four duplexes. The second site is located on South Street and includes 6 units. The tenants of each site are required to meet income eligibility requirements.

According to Table 12, it still seems that rental units may be relatively affordable to Troy residents. In calculations on gross rent as a percentage of household income, it seems that majority of Troy renters spent under 30% of their income on their housing costs.

Table 12: Gross Rent as a % of Household Income 1999

	Town of Troy
Below 30 percent	81
30 to 49 percent	27
50 percent or more	18
Households Not Computed	23
Total	149
Median Percentage	25.30%

Source: 2000 Census

This Plan attempts to analyze present data and future trends to determine the levels and types of housing needed. Stable, affordable housing allows families to establish long-term community involvement. This plan, therefore, makes the following recommendations that will promote affordable housing opportunities to protect and enhance the quality of life in Troy:

Housing Goals

- Residents should have an adequate supply of safe, healthy, attractive and affordable housing, which satisfies activities of daily living.
- There should be a reasonable diversity of housing types and choice between rental and ownership for all citizens in a variety of locations.
- New housing units created within village centers should conform to existing and traditional patterns.
- The public should be made aware of housing needs within the community.

Strategies

1. Support a detailed housing needs assessment for the Town to guide future planning.
2. Identify the community infrastructure and services that could support affordable housing capacity.
3. Support projects that assist with meeting the housing needs for the Town of Troy, especially for those citizens of low or moderate income.
4. Collaborate with area housing agencies that provide safe and affordable housing, such as the Gilman Housing Trust and Northern Communities Management Corporation (NCMC).
5. Support home ownership and property upkeep efforts of citizens.
6. Support the use and the renovation of historic buildings to meet various housing needs where feasible.

TRANSPORTATION

Located along the Canadian Border, Troy hosts a very important transportation network for Orleans County. The town is a port of entry for permitted trucking and railway shipments, as well as for Canadians visiting the region. State and local roadways also prove to be some of the most popular cycling routes in the region and some of the most scenic.

Road Network

Vermont State Routes 105 and 100 are the two major routes within town and carry the bulk of the town’s through traffic. Route 105 runs east-west from Newport Town into the Village of North Troy and then south where it meets Route 101 and turns west into the Town of Jay (See the official Troy Base Map located at the Town Clerks Office). Route 100 is the other major east-west route and is located approximately 6 miles south of Route 105. East Hill Road, River Road, and Route 101 act as the north-south connectors between Routes 105 and 100. The remaining state roads include Route 242 and 243. Route 242 accesses Jay Village to the west of Route 101 and Route 243 is the main route across the Canadian Border in the Village of North Troy. These routes commonly carry over 2,000 vehicles per day (VTrans 2004 AADTs State Highways data).

The remainder of the road network is comprised of rural local roads. The majority of these roads are gravel with the exception of East Hill Road, a portion of Loop Road, a portion of River Road, a portion of Bonneau Road, and the roads within the Hamlet of Troy and the Village of North Troy. Altogether there are 62.835 miles of roadways in Troy, including Class 4 roads. The Town maintains approximately 43.420 miles and the Village maintains 5.051 miles of these roads. The rest are the responsibility of the State. It is the goal of the selectmen to maintain these roads in the best possible manner at the least cost to the taxpayer.

Table 13: Road Classification Breakdown (mi.)

Class	Town	Village	Total
State Hwy	12.329	2.035	14.364
Class 1	0	0.961	0.961
Class 2	6.020	0.290	6.310
Class 3	29.600	3.800	33.400
Class 4	7.800	0	7.800
Total	55.749	7.086	62.835

At this time the main roads are considered in good condition, with the exception of Route 105 between the Village of North Troy and Route 101. In this section, Route 105 is cracked and rough to the point that it is a safety concern. The road is also part of a popular bicyclist route despite its lack of adequate shoulders for this activity.

The other major areas of concern for the town transportation network involve major intersections and issues with sight distance. Specifically the following intersections are cause for concern:

Intersection	Problem/Issue	Proposed Solution
Route 105 & Route 101*	When traveling into Troy from Jay the stop signs for these intersections are located at the bottom of a hill and do not give drivers adequate warning to stop. Because of the high speeds, vehicles often run the stop signs.	Install “stop ahead” warnings to give adequate notice for motorists to stop.
Route 242 & Route 101		
N Pleasant St. intersections*	There are sight distance and speed issues with the intersections along N. Pleasant St. in the Village of North Troy making turning out onto N. Pleasant Street difficult.	Enforce village speed limits and maintain appropriate sight distances with ROW grooming.

East Hill Rd., River Rd. & Route 100*	The rolling hills of Route 100 cause sight distance issues for motorists turning onto Route 100 from East Hill Rd., River Rd., and area driveways.	Caution motorists, enforce speed limits, re-grade certain areas, and limit new accesses to areas with adequate site distances.
Route 100 & Route 101*	There is a sight distance issue for traffic traveling North on Route 100 from the Town of Westfield into the Hamlet. Approaching traffic does not have adequate distance to stop for vehicles waiting to make a left turn onto Route 101.	Investigate re-grading, traffic re-routing, or the creation of a left-hand turning lane to fix the problem.
School St. & Main St.	Main Street's unmarked lanes and excessive width cause confusion with some motorists.	Shoulders and parking areas should be painted.

*Identified as High Accident Locations (HAL) by the Agency of Transportation.

Speeding also seems to be a minor issue for the Village of North Troy and the Hamlet of Troy. Both areas receive a large amount of through traffic, seasonal traffic, and truck traffic. For these pedestrian areas the speed limits should be strictly enforced and pedestrian facilities, such as crosswalks and sidewalks, should be maintained.

Scenic Roads

While majority of the roadways in Troy are considered scenic, the Town would like to identify areas of significant scenic importance. These areas include:

Road	Scenic Area
Route 105 East	Heading both East & West between North Troy Village and Newport Center. This road has scenic views of rolling hills, farmland, the Green Mountains off to the West, and the Mountains of Southern Quebec.
Route 101	Traveling South along the Missisquoi Valley there are scenic views to the East.
Route 100	Looking South on scenic rolling hills and farms and Green Mountains.
East Hill Road	Looking West over the Missisquoi Valley, the Green Mountains, and Jay Peak.
Bear Mountain Road	Looking South the whole road offers a scenic vista of the Missisquoi Valley, the Green Mountain Range, Jay Peak and the Village of North Troy.
Sanville Road	There is a regional vantage point looking North, West and South along this road.

Truck Traffic

There is a considerable amount of truck traffic in town due to the Border Crossing and four large trucking companies, Starr Trucking, Couture Transportation, Laliberty Trucking, and Cote Trucking. Route 101, 105, and 243 see the majority of the truck traffic in town. Route 105 is also part of the Vermont Truck Route Network and doesn't require trucks under 72 ft. in length to have a permit. Trucking is an integral part of the local economy and should be taken into account when upgrading local infrastructure.

Budget & Maintenance Schedule

In the town of Troy, the maintenance of the road system is the second largest part of the municipal budget. Large amounts of capital are needed in order to maintain roads. In 2006, snow removal and maintenance cost the town a total of \$232,133.00. At this time the Road Commissioner re-evaluates the road network every spring for maintenance needs and prioritizes projects for completion during the summer months.

Border Station

The North Troy station is presently considered a secondary border station in the region and mostly accommodates permitted truck traffic. The facility, located along Route 243, was recently rebuilt in 2005 and is currently meeting local demand. In the winter months the border receives an influx of passenger traffic from Canadians heading to the Jay Peak Ski Resort. The resort is currently in the process of expanding to an all-seasons resort. According to the U.S. Border Patrol, customs and patrol agents will be increased to meet the new demands. At this time the only concerns with the Border Station include the limited access for commercial truck traffic and its secondary status.

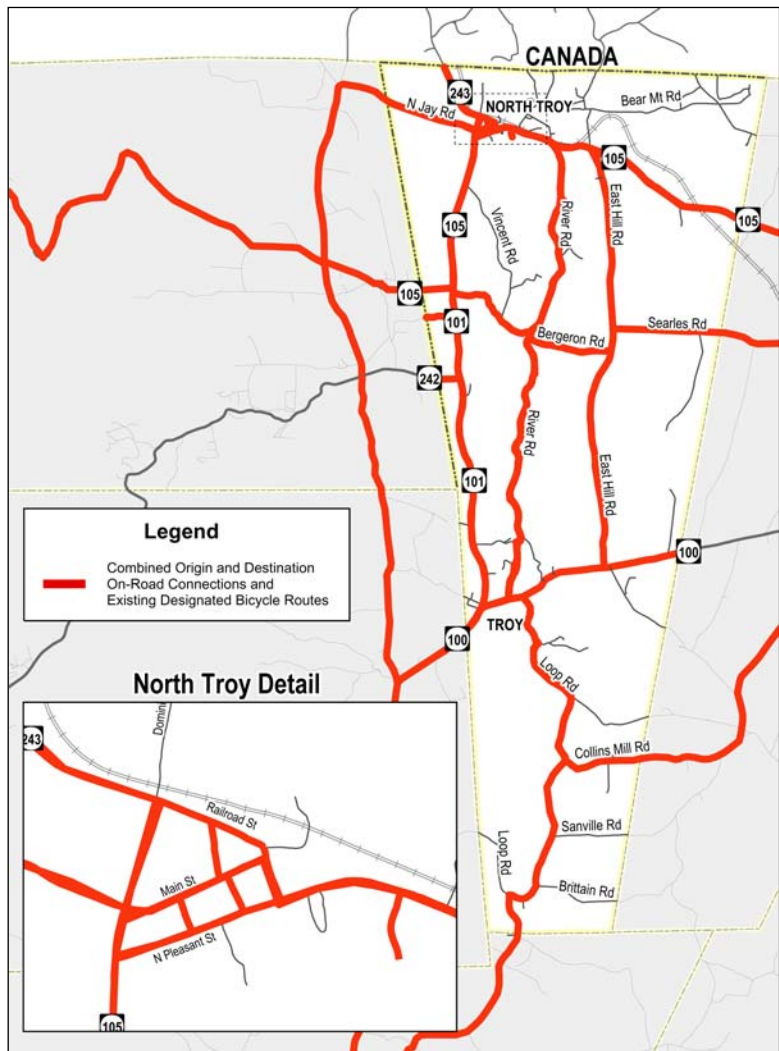
Bicycle Facilities

Troy is increasing in popularity for on-road bicyclists due to its scenic roadways, low rolling hills, and proximity to Jay Peak and Newport City.

The regional cycling guide, *Cycling the Northeast Kingdom* (May 2004), notes five major bicycle routes through town. These include the North-South Link (#5), the East-West Link (#2), the Back Roads to Big Falls loop, A Peek at Jay Peak loop, and the North Troy to Lowell Spur. The *Troy Bicycle & Pedestrian Master Plan* (June 2005)⁴ also identifies additional bicycle routes that connect major trip origins and destinations in town (See the Combined Bicycle Route Map). Together they include a total of 21 roadways promoted for bicycle travel.

Unfortunately, not all of the roads are considered suitable for this type of travel. Specifically, Route 105 does not meet the standard guidelines put forth by the Vermont Agency of Transportation. As noted earlier, Route 105 is in rough condition and would also require paved shoulders to safely allow this usage. The town is interested in accommodating traveling cyclists and hopes to expand this type of tourism in the future.

Map 1: Combined Bicycle Route Map



Source: Troy Bicycle & Pedestrian Master Plan (June 2005)

⁴ *Troy Bicycle & Pedestrian Master Plan* is available for reference at the Troy Town Clerks Office.

Pedestrian Facilities

At this time, the North Troy Village is the only area in town with pedestrian facilities, even though the Hamlet of Troy also has a significant amount of pedestrian activity. In 2005, the *Troy Bicycle & Pedestrian Master Plan* did an evaluation of the pedestrian facilities in the Village and found that most of the sidewalks were considered ‘fair’ or ‘poor’. The plan goes on to recommend a prioritized set of improvements to be made in the Village and areas to place sidewalks and crosswalks in the Hamlet. Phase 1 of the Hamlet project has already begun with the help of a Transportation Enhancement Grant. The town should seek additional funding to implement the remainder of the recommendations. For a complete list of the prioritized improvements, see the *Troy Bicycle & Pedestrian Master Plan*, available at the Troy Town Clerks Office.

Air

The Newport State Airport is the nearest airport to Troy and is located in Coventry VT, approximately 15 miles south-east of North Troy Village. The facility contains two runways and serves small engine planes.

Rail

Troy contains one rail line that is an important connection for regional and international rail service. Locally the rail line runs east-west from Newport City to the Village of North Troy and then north into Canada. The line is currently owned by the State of Vermont and operated by Montreal, Maine and Atlantic RR (MM&A). Heading north, the line connects to a freight yard in Farnham, Quebec where it can join the Canadian Pacific and Canadian National rail systems. Heading south, the line connects Newport City to White River Junction. This segment of the line is operated by the Washington County Railroad and ultimately joins the Green Mountain Railroad system and New England Central Railroad.

According to the *Northeast Kingdom Railroad Assessment*, the segment of railway located in Troy is a Class 2 railway and will need significant improvements in the near future to maintain the current level of freight service. At this time the railroad runs approximately five freight trains a week.

Public Transportation

There is currently no public transportation available in Troy. The nearest public route connections are located in Newport City and are run by Rural Community Transportation, Inc. However, RCT does schedule pick-up and drop-off services within their standard fees on an individual basis.

Transportation Goals

- Maintain an adequate, safe, and efficient transportation network.
- Provide for and encourage the use of alternative modes of transportation.
- Return the North Troy Border Station to a primary port with full commercial truck access.
- Minimize local road maintenance and snow removal expenses.

Strategies

1. Maintain gravel roads and utilize local gravel resources.
2. Address the safety concern areas in town with local maintenance or encourage state improvements and maintenance, especially along Route 101 and 105.

3. Practice access management for new drives along major through traffic routes.
4. Develop a capital budget plan for road maintenance and equipment acquisition.
5. Guide truck related business development along main truck routes.
6. Repair bridges in a timely fashion.
7. Maintain and replace equipment in a timely fashion.
8. Encourage dense development in and around the Village of North Troy and the Hamlet of Troy to support these multi-modal areas.
9. Develop a maintenance plan for pedestrian facilities.
10. In order to decrease road maintenance, roads with limitations on weight capacities should be posted as such.
11. Encourage adequate bicycle facilities (wide-paved shoulders) to be added when substantial roadwork is to be undertaken, especially for Route 105.
12. Work with the congressional delegation to return the North Troy Border Station to full port status.

UTILITIES & PUBLIC FACILITIES

At this point in time, the town utilities and facilities include public water in the Hamlet of Troy and Village of North Troy, a wastewater treatment plant in the Village of North Troy, a wastewater treatment plant for the Hamlet of Troy, fire departments in the Hamlet and Village of North Troy, a library, Town and Village Offices, a municipal garage and recreational facilities. Each of these entities is functioning to provide the town with the necessary services. The employees and volunteers who service the town facilities are committed to the future of the Town and therefore the facilities are well maintained and provide an asset to the infrastructure of the Town.

The Town Selectmen should develop a capital improvement plan which prioritizes the utility and facility needs, and then, establish a phased plan as to when these needs will be met. With a capital improvement plan, the Town can project what increases in property taxes will be needed to maintain facilities and utilities. The Town will also have a clearer understanding of the costs of infrastructure and be able to make reasonable budget decisions.

Public Water

Public water is available to the residents of the Village of North Troy and the Hamlet of Troy. The sources of water for the Village of North Troy are from wells located south east of the Village along River Road that pump up hill to the reservoir. The Village demands approximately 150,000 gallons per day. At this time, the supply of water is not a limiting factor within the Village. However, the Village may have to add another tank or process water differently in order to meet the demand for additional housing in the near future. A lack of back-up power is another major concern for the Village, as blackouts shut down the pumps required to supply the system.

The Hamlet of Troy utilizes a well, which is just south of the Hamlet along the west side of the Missisquoi River. The well provides 120,000 gallons per day. The water is pumped to a reservoir north of the Hamlet on Route 101 from which it gravity feeds to the Hamlet inhabitants. This water system also lacks back up power. When there are large demands on this water supply, it recovers slowly. To address this issue, the town recently installed a telemetry system that runs the pump only when reservoir levels get low. This has proven to significantly improve the level of the aquifer. In addition, iron and arsenic are present in the water supply. The Town is currently in the process of looking for additional water resources for the Hamlet. The inhabitants of the outlying regions of the town utilize wells and springs for their water source.

Sewer

The Village of North Troy is served by its own sewer treatment plant. It is located on the Missisquoi River south of Route 105 and has a capacity of 110,000 gallons per day. The present committed capacity of the plant is 70,000 – 80,000 gallons per day. Future growth in the Village would easily be accommodated with the current level of capacity.

A wastewater treatment plant located off Route 101 serves the Hamlet of Troy, portions of Route 101 and Route 242. The plant is jointly owned with the Town of Jay and has a total capacity of 200,000 gallons per day. Troy's share is 80,000 gallons per day.

The majority of the residents of Troy outside the Hamlet have private sewage disposal systems consisting of septic tanks and leach fields.

Telephone & Cellular Service

Verizon provides telephone service in town. Rural customers appear to be discontent with the service due to the high cost, restricted local calling area, and poor service response time. Cellular service has limited coverage and is provided by UniceL and Verizon Wireless.

The Town of Troy would like to encourage telecommunications infrastructure in Town. It is preferred that the telecommunications infrastructure complements the existing character and aesthetics of Troy, by locating on local silos and within church steeples. The planning commission aims to guide this type of development through the addition of telecommunications regulations in the Zoning Bylaws.

Electricity

The Vermont Electric Cooperative services the Town of Troy. There is a major transmission line running east-west through the Town, just south of Village of North Troy. See the Energy section for additional information.

Internet Access

Dial-up access is available throughout the town, but high-speed connection is extremely limited at this time. Residents and businesses that want high-speed connections are required to pay for the infrastructure installation, which is sometimes miles away. Broadband internet access is only available from the local cable company, Comcast and again customers are required to pay for the “last mile” installation. Comcast Broadband Internet has a limited service area at this time and remains relatively expensive.

To address the need for telecommunication infrastructure in rural areas, the Economic Development Council of Northern Vermont has developed the Northeast Kingdom North-Link Project, which will construct a state-of-the-art fiber optic network loop as a backbone for lease by Internet Service Providers (ISPs), allowing them to build a customer base without the high cost of infrastructure. NEK North-Link will offer the ISPs high technology and a cost-effective transport for high-revenue “last-mile” marketing and servicing. North-Link will provide high-speed internet connection to Troy along VT Routes 105, 243, 242, and 101. Construction has already begun on the eastern portion of the loop (Norton, VT).

Town Garage

The Town Garage was built in 1984 to serve the needs of the Town of Troy. The structure is in good condition and little work is anticipated on the structure in the near future. The garage houses the equipment owned by the town, which includes a grader, three dump trucks and a bucket loader. The Troy Road Commissioner anticipates the town will need to replace the 1988 grader and the 1993 dump truck in the near future. Town Budget surpluses are commonly allocated to an equipment fund for any future equipment purchases.

Village Garage

The North Troy Village Garage serves the Village. It is located in the Village Office Building and houses a plow truck, backhoe, police cruiser and utility truck.

Town Office

The Troy Town Office is located in North Troy at 142 Main Street directly in front of the Elementary School. The town office is also designated to serve as the local Emergency Operations Center (EOC) for the town during local emergencies and natural disaster situations.

Over the past 5-10 years, the Town Office has been renovated which presently fulfills the needs of the Town Clerk. However, there are some concerns, which were expressed in regard to limitations of the facility and its ability to fulfill the needs of the town in the future. Future vault space is limited. The town clerk feels that in ten years there may be a problem and more vault space will be needed as the Town grows and the demands of documentation increase. There is also limited parking for the Town Offices, due to a parking problem at the elementary school, which tends to push overflow parking into Town Office spaces. Therefore, a parking problem exists solely for the town office during school hours.

Village Office Building

The Village Office Building located at 160 Railroad Street houses the Village Offices, Clerk's Office, Meeting Room, Rand Memorial Library, Community Room, Village Garage, and the Village Fire and Police Departments. The building was originally built in the 1950's, was given to the Village in 2000, and was renovated in 2002 to incorporate these facilities. The oldest part of the building, underneath the Clerk's Office, Meeting Room and Police Department, needs the foundation enclosed for better insulation and to keep out animals.

Rand Memorial Library

The Rand Memorial Library is located in the Village Office Building and services the towns of Troy, Westfield, and Jay. The Library offers a variety of programs throughout the year, including story hour and discussion groups. In addition to the usual library volumes, the facility offers audio books, movies, large print publications, a Vermont section, and a computer lab with four computers. Inter-library loan is conducted through the St. Johnsbury Athenaeum.

The library is run through a Board of Trustees and is supported mainly through the Village of North Troy and the Town of Troy, although the Town of Jay also contributes. At this time the facility adequately meets the needs of the library. Although, the library is always looking to develop new community programs and plans to develop an automated catalogue/check-out system in the future.

Recreational Facilities

The town is fortunate to have a variety of recreational facilities. There is a multi-functional facility in the Village which provides a basketball court, skating rink, and tennis courts. The School also has multi-functional facilities for use by the public. The town ballpark is located off Dominion Avenue behind the American Legion. The park includes a baseball diamond, dugouts, and bleachers. The ball field is also lighted for night games. It is also configured for use as a soccer field.

A five-acre parcel of land off Dominion Avenue was given to the town in the Village of North Troy to be used for recreational purposes. Some work has been done to establish a trail through the property and a clearing for recreational purposes. However, the trails have not been maintained and are only used for cross-country skiing in the winter. It is the hope of North Troy residents that more extensive cross-country trails can be developed.

Child Care Facilities

There are currently 12 In-Home Registered day cares throughout the Town and Village. In-Home Registered facilities are allowed to care for up to 4 school age children (part-time) in addition to 6 children below school-age. The definition "of school age" includes children from kindergarten up to the age of twelve, when typically they no longer require child care services. In the summer

months, these facilities are allowed two additional school age children. In-Home registered facilities are also limited in the amount of infant care they can provide. Infant care includes children under the age of two and each facility can only have two children meeting this definition.

It seems that there is a considerable demand for child care services in Troy at this time. Of the 12 facilities, the maximum number of school age children they can care for is 48 during the school year and 72 in the summer. The current capacity for children below school age is 72 and infant care is limited to 24 children. From the figures represented above, only 30% of school age children have access to in-town day care services based on average school enrollment. The 2005 and 2006 birth rates for the town were 23 and 26 respectively. Again only 50% of infant care needs can be met in town.

Of course it is difficult to assess the amount of children that do not require day care services because of parent, relative or guardian care and children that receive care in adjacent communities. Although we should recognize that there is a definite lack of local day care services, especially infant care, based on the waiting lists held by several providers and how new facilities fill capacity even before they officially open.

Emergency Facilities and Disaster Response

Troy's emergency response facilities include two fire stations, the Town Office (EOC), and locally designated shelters. The Village of North Troy also includes a Federal Border Crossing Station along Rt. 243. The American Legion, Masonic Hall, and Troy School are the three primary shelters designated and VT Routes 100, 105, 243 and 101 are the designated emergency evacuation routes for the town. Missisquoi Valley Ambulance, located in Jay, provides local EMS service and is dispatched (along with fire and police dispatch services) through the Derby E911 – Public Safety Answering Point. The Town Constables, Orleans County Sheriff Department, and Vermont State Police Troop B (Derby Base) all provide Troy with local policing.

Troy belongs to the State Police Troop B Terrorism District and Local Emergency Planning Committee (LEPC) 10, both of which coordinate emergency response and planning for the towns in Orleans County. According to the Local All-Hazards Mitigation Plan, Troy's biggest disaster threats are from flooding, severe winter weather, ice storms, and chemical/biological incidents. In the past, there have been four FEMA disaster declarations and funding allocations due to severe flooding. Winter storms are another major concern, as they commonly knock out power, complicating emergency response, shutting down communications in town and limiting the Village and Hamlet water supply.

Troy Fire Station

The Fire Station is located in South Troy and services all parts of Troy to the south of Route 105, Veilleux Road (Town Road #12), Bergeron Road (Town Road #16) and Searles Road (Town Road #19). The Troy Volunteer Fire Department owns the facility and is also contracted by the town of Westfield to respond to calls within the entire town of Westfield. In an average year, the fire department covers approximately 40 fires with twenty-three volunteers.

The fire station is in desperate need of an addition and is considered under code for the amount of equipment it houses. The fire equipment includes a 1989 Pumper, a 1979 Arial Platform, one Tanker truck (2005) and a 2008 Rescue Van. The fire department is looking to add on to the

facility with an additional 1,000 sq. ft. Emergency Communication systems have recently been upgraded to the regional and state UHF/VHF call network, however the fire station needs a generator to maintain emergency communications when the power is out.

North Troy Fire Station

The North Troy Fire Station services the Village of North Troy and residents within the town living north of Route 105, and along Veilleux Road (Town Road #12), Bergeron Road (Town Road #16) and Searles Road (Town Road #19). In an average year, the fire department handles 18-25 fires including structure fires, brush fires, and automobile fires. The department has operated out of the Village Office Building since 2003. The new station adequately serves the needs of the 23 member department.

The equipment owned and used by the North Troy Fire Station includes a 1,000 gallon pumper, a 750 gallon pumper, one 1,000 gallon tanker and a utility van. The 1,000 gallon pumper and the utility van are the newest vehicles and were purchased by the department in 2003. Funding for the department comes from a combination of municipal funds, village funds, and department fundraisers.

Department volunteers are dispatched through the regional Derby Dispatch frequency 154.175 and belong to Orleans County Mutual Aid. Village emergency communications systems have also recently upgraded to the UHF/VHF call network.

Utility & Facility Goals

- Maintain and improve area utilities and facilities to meet community needs.
- The rate of growth shall not exceed the ability of the town and the area to provide facilities and services.

Strategies

1. Use the Municipal Lands information from Appendix A to:
 - a. Guide future acquisitions and sales of land;
 - b. Evaluate the impact of adjacent development on town lands;
 - c. Propose zoning in relation to town lands; and
 - d. Utilize “no-use” parcels for potential recreation/conservation sites.
2. Support and participate in the North Link Project to increase communication services and high speed internet access for the region.
3. Develop telecommunications regulations within the zoning bylaws.
4. Explore possible solutions for Town Office vault expansion and parking issues.
5. Explore solutions for enclosing foundation underneath the Village Office Building.
6. Support Library enhancement projects.
7. Support the maintenance and development of the town’s Recreational Facilities.
8. Develop future forecasts for Town water and sewer capacity demand and plan upgrades accordingly.
9. Pursue the purchase and installation of generators for the most critical town utilities and facilities.
10. Investigate the grant funding potential to meet facility needs.
11. Develop a capital improvement plan to guide budgeting and expenditures for future infrastructure needs.
12. Support the establishment of additional local day-care services.

ENERGY

Electricity

Today, all of Troy’s electric needs are provided by the Vermont Electric Cooperative (VEC), which serves majority of Vermont’s northern boarder communities. Troy was originally serviced by both VEC and the Citizens Communications Company. In April 2004, the Citizens Communications Company’s Vermont Electric Division was acquired by Vermont Electric Co-op. From this acquisition, VEC became the third largest utility in the state and the consolidated operations, planning and distribution in the area. Since the acquisition, some residents of Troy feel that electric services have decreased while costs have continued to rise.

Vermont Electric Cooperative doesn’t own or run any generation facilities. All of their power is provided through contracts with independent power producers. The largest portion of their power, approximately 38%, is provided through contracts with Hydro Quebec. Of the remaining contracts with independent power producers, 5.2% of their power is generated from renewable resources. By 2012, VEC will need to have met their growth in electricity demand (since 2005) with renewable resources in order to comply with Vermont’s Renewable Portfolio Goals. If the state’s goals are not met by 2013, they will become mandatory.

Vermont Electric Co-op’s residential customers have the third highest rates of all the utilities serving Northeastern Vermont. In January 2006, the typical residential electric bill for VEC customers was \$72.11 (500 kWh). Although when broken down to the price/kWh, the VEC rate of 14.4 cents/kWh is not far off from the lowest regional rate of 11.4 cents/kWh from Lyndonville Electric Department.

Table 14: Northeastern Vermont Electric Utility Residential Rates (January 2006)

Utility Name	2004 Customers	Typical Residential Bills (500 kWh)	Average Price/kWh
Central Vermont Public Service	149,424	\$68.38	\$0.137
Green Mountain Power Corporation	89,095	\$69.96	\$0.140
Vermont Electric Coop	38,861	\$72.11	\$0.144
Washington Electric Coop	9,847	\$78.26	\$0.157
Lyndonville Electric Department	5,282	\$57.24	\$0.114
Hardwick Electric Department	4,108	\$78.27	\$0.157
Barton Village, Inc.	2,100	\$71.82	\$0.144

Source: VT Dept. of Public Service

Troy contains minor elements of the region’s electric infrastructure. A major transmission line, owned by Vermont Electric Power Company (VELCO), runs through town, and the Missisquoi River is home to two hydro-generation facilities. One of the hydro facilities is owned by Great Bay Hydro Corporation, an independent power producer. At this time, neither facility is operating due to the expense of upgrading and re-licensing. The Portland Pipeline is another energy resource that runs through town. The Portland Pipeline is a major crude oil pipeline connecting the shipping ports of Portland Maine to the oil refineries in Canada.

Heating

The primary source of heating in Troy is fuel oil. Majority of the municipal buildings are heated by oil, with the exception of the Town Offices, which is partially heated by a baseboard electrical system. The basement storage area of the Town Offices is heated with propane.

Table 15: Housing Units by Heat Source (2000)

Heat Source	Troy	Orleans County	Vermont
Heated with Utility Gas	0	40	29,234
Heated with Bottled / Tank / LP Gas	61	991	34,715
Heated with Electricity	11	275	11,363
Heated with Fuel Oil / Kerosene	442	7,187	141,041
Heated with Coal / Coke	0	7	427
Heated with Wood	100	1,905	22,616
Heated with Solar Energy	0	4	90
Heated with Other Type of Fuel	0	29	817
That Are not Heated	0	8	331

Source: U.S. Census Bureau - 2000 Census, Summary File 3 Table H40

The historical data below shows that propane gas is slowly rising as a heating source. In addition, electricity as a source of heat is decreasing which reflects the increasing cost for electricity and the understanding this is not an efficient source of heating. It is interesting to note that as fuel oil and kerosene heating has fluctuated over the last three decades, wood heat seems to mimic the opposite of those fluctuations. In other words, when fuel oil costs are high, wood heat is preferred. This may reflect a number of Troy home owners that employ alternative heating systems to maintain steady heating costs in case source costs rise.

Table 16: Troy Housing Units by Heating Source

Heating Source	1980	1990	2000
Heated with Utility Gas	0	0	0
Heated with Bottled / Tank / LP Gas	15	39	61
Heated with Electricity	29	53	11
Heated with Fuel Oil / Kerosene	336	301	442
Heated with Coal / Coke	2	6	0
Heated with Wood	93	152	100
Heated with Solar Energy	N/A	0	0
Heated with Other Type of Fuel	0	0	0

Source: U.S. Census Bureau - 2000 Census, Summary File 3 Table H40

Energy Efficiency/Conservation

Energy Efficiency and Conservation can significantly reduce the energy being used in local homes and businesses. Through the use of energy saving products, such as insulation, efficient appliances, and winter weatherization products, energy consumption can be significantly reduced. In addition, conservation can include shutting off lights when leaving the room, turning the thermostat down at night, and utilizing low-flow water fixtures. Conservation should be taught and used at school, home, and in the workplace.

Efficiency Vermont, the state's energy efficiency utility, offers technical assistance and financial incentives to help Vermonters identify and pay for cost-effective approaches to energy-efficient building design, construction, renovation, equipment, lighting and appliances. They also provide technical and financial assistance to dairy farmers. Efficiency Vermont also provides tactics to reduce monthly energy costs.

New construction and renovation are commonly the optimum times to upgrade facilities with designs that maximize energy usage. Green Building Design principles provide simple building designs that can both reduce energy needs and maximize usage.

Renewable Resources

Biomass and manure-methane generation offer the best potential to utilize renewable energy in Troy. The level topography has become home to many of the region's large farms, which may

support the development of manure-methane generation facilities. Farms, such as the Chaput Family Farm, have the required number of cows to support a manure digester (200+). Digesters heat manure to optimum levels for methane production, then extract the methane to be burned for electricity generation on site. The resulting outputs from the process includes a dry product, which can be used as animal bedding, and a liquid fertilizer that has less water quality impacts and a significantly reduced odor. At this time, USDA Rural Development grants and loans exist to help farmers with the start up costs.

Farmers may also benefit from producing crops that are used for biofuels. Crops such as soybeans, rapeseed (canola), and sunflowers are now popular for the development of biodiesel. Biodiesel will have the most potential as a renewable fuel in Vermont, both through its incorporation into heating oil and transportation uses. Corn is a popular crop for the development of ethanol based fuels, another biofuel. However, ethanol-based fuels are less reliable for Vermont's colder climate. Local farmers may also gain from growing switchgrass, which is a relatively new resource that is used to produce pellets for heating. While grass-pellet heating is still in early-development stages, it has the potential to provide very economical heating.

According to the National Renewable Energy Laboratory, Vermont's daily solar levels are not considered high enough to generate sustainable solar power. Although, there are currently residential properties successfully employing solar technology for electric and hot water needs in Troy. With the increasing trend of rising heating oil and electric costs, solar power has a strong potential as a supplemental fuel source and should be considered viable as a renewable energy source in town.

According to the Vermont Environmental Research Associates' Wind Resource Maps, there are no suitable areas for commercial-scale wind development in Troy, but the neighboring towns of Lowell, Westfield, and Jay contain sites with classifications of six and seven (with 7 being the greatest potential). Land owners should look towards small-scale owner consumption towers as a feasible source of wind energy in town.

Energy Goals

- Maintain an adequate, reliable, and secure energy supply in town.
- Encourage the efficient and conservative use of our energy resources.
- Minimize local energy expenses.

Strategies

1. Support the development of renewable generation systems and small-scale net-metered systems in town.
2. Replace the expensive electrical heating system in the Town Offices with a more economical and efficient heating system.
3. Support the reuse of the existing hydro-generation facilities.
4. Encourage new buildings to have a high 'R' values and utilize low-flow fixtures.
5. Maintain gravel roads and utilize local gravel resources.
6. Conduct Energy Audits on all municipal buildings.

EDUCATIONAL FACILITIES

The town of Troy belongs to the Orleans Essex North Supervisory Union, which is geographically the largest school district in Vermont. Local students commonly attend Troy Elementary up to eighth grade and then move on to the North Country Senior High School located in Newport City. High school students also have the option to attend the North Country Career Center, which provides vocational education in a variety of subject areas.

Troy Elementary School

The Troy Elementary School servicing the Village of North Troy and Town of Troy is located on Main Street in the village of North Troy. The building was built in 1978 and has had only one addition, which provided an additional classroom. Over the years, school enrollment has remained consistently between 150 and 170 students. Enrollment is expected to continue to remain stable over the next several years unless the town receives a major industry or new housing developments. At present the school building is in good condition and adequately serves the needs of the town.

The school provides the usual K-8 curriculum, with the addition of music, art, health, and computer classes. Students have the opportunity for instrumental instruction and school sponsored sports, including: softball, basketball, and soccer. The school also provides Special Education and Summer School Reading to those students who require it. After-school programs are available for students in grades second thru eighth during the school year and continue during the day in the summer months.

Funding

The 2005-2006 school budget is approximately \$2,684,544 which includes a line item for Supervisory Union funding. State aid presently funds 45.5% of the budget. Student tuition is approximately \$8,835 for kindergarten thru sixth grade and \$5,171 for seventh and eighth grades. After state aid, 2005-2006 school taxes equate to \$.9876 per \$100 of assessment for residential properties and \$1.2185 per \$100 of assessment for non-residential properties. When compared to similar towns in the region, Troy maintains comparable tax rates.

Table 17: Educational Tax Rate Comparison (2004)

Town	2004 Population*	School	2004 -2005 Enrollment	Residential Tax Rate**	Non-Residential Tax Rate**
Newport	1,715	Newport Town (K-6)	142	1.1072	1.2994
Brighton	1,332	Brighton Elementary (K-8)	159	1.1640	1.5201
Coventry	1,038	Coventry Village (K-8)	123	1.0290	1.5092
Troy	1,676	Troy Elementary (K-8)	155	1.2763	1.6667

*Estimated Population

** Per \$100

Source: Vermont Indicators Online

Education Goals

- Ensure access to high-quality educational and vocational training opportunities.
- Maintain functionality of the Troy Elementary School building.
- Minimize educational expenses.

Strategies

1. Maintain a quality education that will prepare Troy's students for the future.
2. Make every effort to continue and improve upon the existing educational programs.

NATURAL & HISTORIC RESOURCES

The inhabitants of Troy are committed to preserving the natural resources within the town. These resources are irreplaceable and important for the continued livelihood of the town. It is the intent of the town to ensure that natural resources, which benefit the town, in general can be protected without unjustly infringing upon the rights of individual property owners.

Table 18: Natural Resources (Acreage)

Natural Resources	Town of Troy	Orleans County	Vermont
Area of Land, Acres, 2000	23,072	446,720	5,920,640
Area of Water, Acres, 2000	0	17,200	261,200
Total Private & Public Conserved Lands, Acres, 1999	2,549.23	42,217.10	1,148,249.29
Percent Private & Public Conserved Lands, 1999	10.90%	--	--
Federal Administered Conserved Lands, Acres, 1999	0	0	435,008.82
State Administered Conserved Lands, Acres, 1999	24.03	18,760.33	378,563.41

Source: Vermont Indicators Online derived from 2000 Census Data & UVM School of Natural Resources Spatial Analysis Lab

Topography

The topography⁵ of the town of Troy is characterized by the Missisquoi River, which runs from south to north. In the southeast portion of the town, undulating terrain lies above the Westfield flats, and rises to the east and the end of the Lowell Mountains. From the Hamlet of Troy (elevation 764 feet) to the village of North Troy (elevation 600 feet), the land slopes steeply up from the river to surrounding farmlands, which lie on moderately undulating terrain. The land to the east of the Missisquoi River slopes up towards East Hill Road and the hills on the Troy/Newport border. The land to the west slopes up towards Warner Hill and the Green Mountains.

Soils

Soils play a major role in ecology. The quality and the sustainability of our present standard of living can be attributed to the quality of our soil. The soil influences the quality of the water we drink for contaminated soil will contaminate ground water. The soil also has a direct effect on the nutritional value as well as the yield of food we gain from the land as a result of the levels of nutrients in the soil.

The town of Troy contains a complex array of soils due to its location along the Missisquoi River basin. The Natural Resources Map⁶ shows patterns of these soil associations. This map can be used for a general idea of the soils, which exist in a region or to compare different acres on large-scale basis. Large areas can be located on this map for a broad land use, but an accurate soil assessment for a small tract cannot be gleaned from this map.

Missisquoi River Watershed

Troy lies in the headwaters of the Missisquoi River Watershed. This Watershed drains into Lake Champlain through the Missisquoi River. Lake Champlain has been affected by nonpoint source pollution. Nonpoint source pollution occurs when runoff - as rainfall or snowmelt moves over the land surface picking up man-made or natural pollutants and then depositing them into lakes, rivers, wetlands and even groundwater. The main nonpoint source contaminants are sediment,

⁵ Source of Maps - These maps are generated from the United States Geological Service

⁶ Natural Resources Map is available in the Town Clerks Office. Orleans County Soil Data was developed in 1996 by the Natural Resource Conservation Service.

bacteria, nutrients, toxic chemicals and metals. Land uses such as agriculture, forestry, construction, residential areas and septic systems are all potential nonpoint sources. The Vermont Division of Water Quality is working through the Basin Planning Program to assess streams and rivers for such pollutants. The Missisquoi River Watershed Council is actively drafting a watershed plan to outline specific actions appropriate for ensuring high water quality throughout the area.

As can be seen in Table 18, there are no bodies of water in Town. The brooks, streams and rivers within Troy are classified by the state as Class B water-ways, indicating that they are suitable for boating, swimming and drinking with treatment. These waters also consistently exhibit good aesthetic value and high quality habitat for aquatic biota, fish and wildlife. They can also be used for irrigation and other agricultural uses.

Two areas within the town have been designated as Class C so that they could be used for effluent from wastewater treatment facilities. Class C Waters are considered suitable for recreational boating, irrigation of crops not used for consumption without cooking; habitat for wildlife and for common good and game fishes indigenous to the region; and such industrial uses as are consistent with other "C" uses. The Village of North Troy discharges effluent into a Class C Zone (1.4 miles) from their wastewater treatment facility, and the river is designated Class C from this point to the Canadian Border. Another Class C zone (1 mile), from the discharge line to the covered bridge, has been designated for effluent, which is generated by the Jay/Troy wastewater treatment facility.

Wetlands

Wetlands have been traditionally been viewed as wastelands - areas with no inherent value which require large amounts of work to become "valuable" land which can be used for development or agriculture. However, current ecological studies have shown that these wet meadows, marshes, swamps, and bogs have important environmental functions for members of the communities, which surround them. Wetlands have been found to be significant in control of flooding reduction of erosion, protection of public and private water supply, protection of ground water, prevention of pollution, control of insect populations and protection of fisheries and wildlife. Recent studies also show that these wetlands can be "put to work" by utilizing them to process human wastes, to produce food, and conserve wildlife. Management rather than destruction of wetlands appears to be their most beneficial use in the future.

The town of Troy contains over 150 wetlands as mapped⁷ on the National Wetlands Inventory prepared by the United States Fish and Wildlife Survey. These wetlands fall into two categories: Riverine meaning those, which are associated with rivers and Palustrine meaning those, which are characterized by marshes. Many of these wetlands are associated with the Missisquoi River and its' tributaries including marshes fed by springs which feed into streams and brooks, shore line reed and cattail swamps, beaver ponds, and man made ponds. The water level in these marshes and wet meadows vary according to the season and help define what plants and animals will be found in the area. The Vermont Significant Wetlands Inventory, developed by the VT Agency of Natural Resources, has mapped a significant number of Class II wetlands throughout the town. Class II wetlands, including a 50-foot protective buffer, are protected under the Vermont Wetland Rules. Any intrusion into the identified wetland or its protective buffer

⁷ Source of Maps - National Wetlands Inventory prepared by the United States Fish and Wildlife Survey. National Wetlands Inventories are available from the Water Quality Division of the VT Department of Natural Resources.

requires a Conditional Use Determination from the Water Quality Division of the Dept. of Environmental Conservation.

Well Protection Areas

The Village of North Troy and the Hamlet of Troy each maintain municipal water systems. It is a goal of the town to protect these water systems to ensure water quality and prevent costly treatment and purification, which would become necessary if the water was contaminated. The Water Quality division of the Agency of Natural Resources has mapped⁸ Well Protection Areas, which need to remain free of adverse impacts. There are two water systems in Troy – North Troy Water System (WSID 5205) with one well and Troy Water System (WSID 5206) with one well. Each of these wells has a three-zone source protection area delineated.

Flood Plains

Portions of the Missisquoi River, Beetle Brook and the Jay Branch have all been designated as flood hazard areas. Many of these areas are presently used for agricultural purposes and are not severely impacted by seasonal flooding. However, Troy has had four FEMA flood declarations and has received a total of \$162,860.00 in the past from the National Flood Insurance Program. Most of the flooding has been caused by undersized culverts, which are being actively replaced by the town. Two other flood problem properties are now owned by the town and were purchased in 2003 with the help of a FEMA Hazard Mitigation Grant.

The Town's All Hazards Mitigation Plan lists severe flooding as a 'high' likelihood with a 'high' level of community impact. Because of this, the town should maintain its status as a member of the National Flood Insurance Program and review its Flood Hazard Bylaws in order to assure no inappropriate development is occurring within the Flood Plain.

Unique Natural Features

Both the Missisquoi River and its tributaries such as the Jay Branch contribute to myriad of interesting geological features including gorges, waterfalls, cascades, and swimming holes. These Unique Natural features are labeled on the Town Base Map⁹ as Unique Features and include:

Big Falls - This waterfall is located on the Missisquoi River and can be accessed off the River Road (1.3 miles south of Route 105). It has the distinction of being the largest falls in Vermont, which is unaltered by a dam. The Missisquoi River is about 60-75 feet wide above the falls with clear and fertile water. Rapids with many channels bordered by low cliffs culminating in a large pool characterize the area above the falls. Three channels dropping 25 feet including a spectacular and loud middle channel constitute the falls. The area below the falls is a 75-foot long gorge with walls rising 60 feet high. Below the gorge, there is an area, which is good for swimming due to its deeper water and sandy beaches. The falls is also the site of 5 uncommon plant species making it an important botanical site as well. Due to its importance as the only large falls without a dam, as a major area for rare plants and an important recreational area, *The Waterfalls, Cascades and Gorges of Vermont Study* recommends that the falls be protected against any proposal to dam it. This land has recently been turned over to the State of Vermont.

⁸ Source of maps: The well protection areas are mapped by the Agency of Natural Resources, Department of Environmental Conservation, Water Quality Division.

⁹ Source of Maps - The information for these maps was generated from *The Vermont Rivers Study* created by the VT ANR DEC and the *1988 Vermont Recreation Plan* created by the VT ANR FP&R and *The Waterfalls, Cascades and Gorges of Vermont* by Jerry Jenkins and Peter Zika for the VT ANR DEC and VT ANR FP&R.

Bakers Falls - Bakers Falls is located approximately one mile north of Route 100 on the River Road (south of the Great Bay Hydro Dam). Several cascades ranging ten to twenty five feet exist below the dam.

Jay Branch Gorge & Troy Four-Corners Swimming Hole - This area is located to the east of Route 101 and is characterized by a 15-foot drop over a ledge. The banks of the stream are ledges and steep soil less than 15 feet high. Several pools are deep enough for bathing and the water is clean and cool. *The Waterfalls, Cascades and Gorges of Vermont Study* states this is a locally important natural area, which deserves further study.

Rare plant Communities

The Vermont Non-game and Natural Heritage Program through the Vermont Department of Fish and Wildlife tracks and monitors sites that have either been identified as state-significant natural communities or include rare, threatened or endangered plant or animal species. This information is reviewed in permitting processes such as Act 250.

Three sites¹⁰ have been designated in Troy as areas of significant natural communities and rare plants. These sites are the only designated rare plant/animal/natural communities within the town of Troy. However, this does not mean that they are the only sites to exist. Other significant sites may exist but have not yet been mapped due to the small percentage of areas that have been inventoried. Due to this fact, the Planning Commission feels it would be unfair to restrict property owners' rights on certain properties simply because their property has been inventoried.

The Natural Heritage sites are protected information because of the sensitivity of the natural resource. If residents may think there are natural communities or animal species of great significance on their land, they can consult the Non-game Natural Heritage Program through the Vermont Department of Fish and Wildlife.

Historical Sites

The town of Troy has a rich historical past. The use of the Missisquoi River by the Abenaki offers interesting archaeological potential, and the agricultural and industrial history of the town offers historical landmarks¹¹. Some of these important historical sites are as follows:

Known Archaeological Sensitivity¹² - Two archeological pre-contact sites are located within the town. The first site is situated on a high glacial terrace approximately 12-15m above the Missisquoi River, adjacent to River Road, several hundred feet north of the bridge. The second site is located on the east bank of the Missisquoi River several hundred feet south of Route 100.

River Road Covered Bridge - The Covered Bridge located on the River Road in Troy is listed in the National Register of Historical Landmarks: This bridge is the only covered wood bridge remaining in the town of Troy and its unusual trusses, structural variations, and its steep pitched gable roof with wide overhangs gives it a unique place among covered bridges in Vermont.

¹⁰ Source of maps - Maps are available from the Vermont Natural Heritage program of the Department of Natural Resources.

¹¹ Source of Information - Information concerning the Historical Sites in the town of Troy was generated from the *Vermont Rivers Study* as well as Nancy Boone, the Architecture Section Chief of the Division for Historic Preservation of the Agency of Development and Community Affairs of the State of Vermont.

¹² Complete Archeological Assessment conducted in August 2004 by Hartgen Archeological Associates, Inc.

North Troy Border Station - This building had been determined as eligible for distinction in the National Register of Historical Places. This building was constructed in the 1930's of brick and represents the importance of Federal presence in small, rural towns where no other federal facilities existed. A simple Georgian Revival design, consisting of a two-story gable-roof core flanked by two one-story hipped-roof wings, built on a concrete foundation.

North Troy Freight Station House – This is a circa 1873 station house, which was built when the railroad track joining Newport and Richford was built. It is listed on the Vermont State Register of Historic Places. It is now owned by the Village of North Troy and rented out for commercial use.

Cemeteries

There are five cemeteries located in Troy, ranging from abandoned to being in very good condition¹³. One is on West Road with approximately 30 graves, dating from 1801 to 1895. The “Catholic Cemetery” on River Road, which dates back to 1919 but only has 9 burials, is abandoned. The “Troy Cemetery” dates back to 1827; it has been kept in good condition while housing more than 500 graves. The “Evergreen Cemetery,” located off Route 100 on the Loop Road, holds 75 graves and is in good condition, but is seldom used and dates back to 1840. The largest cemetery in town is the “North Troy Cemetery” with over one thousand graves. The first burial date is unknown, but the cemetery remains in very good condition. Adjacent to this protestant cemetery is the Notre Dame Catholic Cemetery.

Missisquoi Valley Historical Society

The Missisquoi Valley Historical Society opened its doors in the Village of North Troy in 1976. The origin of the building dates back to 1892 when John Currier donated it to become St. Augustine’s Episcopal Church. The first service was held in 1893 as a mission church. As part of the town Bicentennial project in 1976, Mrs. Anne Butterfield contacted her nephew, Bishop Harvey Butterfield, who arranged to transfer the title of the little church to the Village of North Troy to be used as a museum to house memorabilia and artifacts of historic value. The village helped with the building’s renovation and remodeling. Items which had been on display in the Troy Room at the Old Stone House in Brownington, VT came home. Many items connected with Troy’s past continue to be donated. In the 1990s, the building was moved to allow a new foundation to be constructed, which allowed for more storage. In 2000, a handicapped accessible bathroom was completed with funding from a state grant. The maintenance of the building is funded by membership, donations and fund raisers. The building is insured by the Village of North Troy.

The goal of the Missisquoi Valley Historical Society is to discover, collect, print, disseminate and preserve information and material concerning the history of the Missisquoi Valley. The Society has a Board, Officers, and Memberships. The Society also has a membership with the Vermont Historical Society. The Society would like to construct a library in the entrance to the left of the building.

¹³ Data originally prepared by Carrie St. Onge, North Troy, VT, September 15, 1973. Updated by Arthur Hyde, 1990.

Natural Resources Goals

Protect and manage Troy's natural resources and biodiversity for the benefit of current and future generations.

Strategies:

1. Identify and understand the natural resources within Troy and the regional significance to the surrounding landscape.
2. Conserve the natural resources through local conservation planning and land stewardship.
3. Encourage opportunities to raise community awareness about Troy's natural heritage through education.
4. Manage our municipal lands as models of land stewardship.
5. Work with regional and state agencies and private organizations to support natural heritage protection, conservation and restoration of degraded sites.
6. Collect and utilize maps and other data to identify important wildlife corridors, connective habitats and linkages.
7. The Town should help to improve the quality of water within the newly upgraded portion of the Missisquoi River which flows through the Hamlet of Troy by encouraging residents to hook on to the new sewer lines where possible.
8. Investigate the designation of the Missisquoi River as a "Wild and Scenic River" under U.S. Parks Department.
9. Continue to plan for and protect future water resources for the Hamlet of Troy.

Historic Resources Goal:

Preserve the historical features of the community.

Strategies:

1. Encourage the maintenance of both public and private buildings of historic significance.
2. Explore the possibility of preparing a comprehensive history of the Town of Troy.
3. Explore the possibility of publishing a booklet illustrating the historic structures that have been preserved to date.
4. Support the efforts of the Missisquoi Valley Historical Society to inventory, educate, and collaborate on historic projects.
5. Support efforts of the Missisquoi Valley Historical Society to construct a library to house the historical information it has collected.

ADJACENT MUNICIPALITIES & THE REGION

Troy

2000 Census population = 1,564 Town, 593 Village of N. Troy*

The unique geographical and topographical features of Troy's pie-shaped, rolling valley make this town a valuable transportation thruway as well as a scenic residential and agricultural landscape. Its length and narrow width mimics the shape of Vermont while mirroring the rural qualities enjoyed in this state. Troy is mainly a residential community with some industry and a few retail and commercial endeavors. Because of the short width of the town, the community is closely connected with its neighbors.

Troy is committed to working with the adjacent municipalities in solving the problems which affect the northwestern section of Orleans County. Over the past several years, Jay and Troy have successfully planned a joint wastewater treatment plant, which was constructed and completed in the fall of 1991. In addition, Jay shares a recycling facility with Troy at the wastewater treatment plant. The Troy Fire Department has also provided service to Westfield for many years. The small size of these communities requires cooperation and joint ventures.

**Town population includes Village population figures.*

Newport Town

2000 Census population = 1,511

Troy shares its eastern border with Newport as well as Routes 100 and 105. Currently the land use along this border is mainly agricultural and residential. Newport Town adopted its most recent version of a Town Plan in November 2004. This plan is consistent with the development plans of Troy. Newport Town wants to focus on village growth and acknowledges that their development trends are changing from agricultural to residential. Newport Town is considering establishing more zoning districts to reflect the different character and uses in town. Presently there is only a single zoning district in town. Much of the bordering property with Newport, both in Troy and in Newport town, is in conservation easements through the Vermont Land Trust. This will limit the amount of development pressures in this area.

Lowell

2000 Census population = 738

Although Troy and Lowell only share a few miles on Troy's southern border which includes only one secondary road (Carter Road), the traffic generated through Lowell on Route 100 generally continues on through Troy into Newport or further north. Lowell's Town Plan adopted in January 2003 encourages the development along Route 100 that compliments and does not distract from the scenic quality of this route. The Plan also encourages "light, non-polluting" industry and business which is consistent with Troy's goals.

Westfield

2000 Census population = 503

Troy shares the bottom half of its western border with Westfield and one of the State's major north-south routes. Route 100 is the only significant road in Westfield and hence, is the source of most of the development in town. However, being a small, residential community, there does not appear to be any development pressures from Westfield. If development was to continue in the Jay Peak Resort area, it is possible that development pressures could increase in Westfield along Route 100, but this is yet to be seen. Westfield's Town Plan adopted in January 2003, points out that several farms along this corridor sold their development rights which will control, to some extent, the development pressures in this area.

Jay

2000 Census population = 426

Troy's upper western border is connected with Jay. Troy acts as a major thruway for traffic going to Jay Peak. Route 242, the main route into Jay, spurs from 101 and has the potential to see much more development in the future. The Jay Peak Ski Resort has plans for future expansion, including the 18-hole golf course, which opened this season. Troy has been working cooperatively with the Towns of Jay and Westfield, the Jay Peak Ski Resort, NVDA, VTrans, and local businesses and residences to develop a transportation improvement plan to accommodate this growth. A study of the area projects an increase in traffic on Troy's roads and intersections due to this growth. It is also possible that the economic growth of the resort could bring more commercial and residential development to Troy. There is likely to be many more cooperative ventures like the transportation plan in the future.

The Jay Community Development Plan adopted in 2002 points out that the Jay Peak Ski Resort greatly impacts the surrounding towns of Jay. In fact, the Town of Jay considers the operations of the Resort to be the single greatest impact on the development of Jay as well as the surrounding towns. Jay's Plan also recognizes that the development will increase along the Troy town line and on Routes 242, 105 and the Cross Road. This will require Troy to continually evaluate this development pressure.

Canada

Troy shares its entire northern border with Canada as well as one of the five border stations in the Northeast Kingdom. The border crossing enters Canada via Route 243 in Troy's northwest corner, with the rail line running parallel. These two transportation lines mostly connect regional and international trade and localized passenger traffic. There is a potential for development in relation to this international crossing route. However, presently the area is mostly rural residential and agricultural.

The headwaters of the Missisquoi River watershed run through Troy and enter Canada via the Missisquoi River and Mud Creek. Canada has been collaborating with the Missisquoi River Watershed Council to create a watershed plan that incorporates all watershed communities. This could enhance future collaboration with Troy's Canadian neighbors.

The Regional Plan for the Northeast Kingdom 2006¹⁴

2000 Census Population = 62,438

The Regional Plan defines the Village of North Troy as a "service center", an "important center for commerce, services, employment and community life". It further explains that a service center is generally a bedroom community that does not provide enough employment to be completely self-contained, but does have capacity for industrial development. In fact, the Industrial Park in North Troy still has land set aside for future industrial growth. The land use patterns in these service centers, as seen in North Troy, remain relatively stable over time, with gradual changes. The top land use goal recommends that "Traditional development patterns should be maintained and new development should be encouraged to follow these patterns". Troy's Town Plan follows the Regional Plan goals and recommendations, as it will continue to serve as a "service center" for the region.

¹⁴ The Regional Plan for the Northeast Kingdom 2006 is a regulatory planning tool developed by the Regional Planning Commission, Northeastern Vermont Development Association, and encompasses the counties of Orleans, Essex, and Caledonia, Vermont.

PROJECT SUMMARY

The Troy Planning Commission originally began this project in the fall of 2005 as an update to the previous Town Plan, which was written in 1995 and later readopted in 1999. As the journey progressed, it became more evident that the old plan no longer represented the values and future direction the town had envisioned. Soon a full rewrite of the Town Plan began, and with the help the Northeastern Vermont Development Association (Regional Planning Commission) a draft was developed by the following fall. This draft included a basic analysis of the current conditions and trends of each plan topic. Data from several resources, including the 2000 Census, Housing Vermont, the Agency of Transportation, local permitting information and previous local studies, were all incorporated to paint an accurate picture of Troy at the present time.

A Municipal Planning Grant was then awarded to assist the Planning Commission in extending its planning efforts to include local resident input. In January, 2007 a Community Planning and Design Workshop was held to present the findings of the draft plan and discuss Troy's future. The workshop produced very interesting discussions on topics related to conservation, village improvements, historic preservation, new development areas, senior housing, tourism, traditional land uses (farms and forests), education, and zoning. From the workshop, the Troy Planning Commission was able to develop a shared future vision for the Town of Troy and the Village of North Troy, which is represented in the final Town Plan presented here.

APPENDIX A

MUNICIPAL LANDS

The Municipal Lands were mapped and categorized with reference to the tax map sheets provided by Cartographics, Inc. and the assistance of Lucille Cadieux, Town Clerk of Troy. These maps were compiled to provide perspective on location and use of municipal lands. The municipal lands are listed in the following table:

Name	Owner	Local Map #	State Map #	Acres	Specific Use	Total Acreage
Cemetery	Village of North Troy	202152	159276	5.48	Cemetery	15.78
	Town of Troy	080142	160268	0.75	Cemetery	
	Town of Troy	100108	156264	0.15	Cemetery	
	North Troy Cemetery Association	202151.3		4.0	Cemetery	
	North Troy Cemetery Association	202152		5.40	Cemetery	
Common	Town of Troy	100141	156264	0.45	Right of Way	0.78
	Town of Troy	100221	156264	0.25	Common at Jct of Rte. 100 & 101	
	Village of North Troy	202359	159276	0.08	Triangular common at Main & Elm Streets	
Fire Department	Village of North Troy Fire Dept.	202020		0.10	Village Office, Fire Station & Library	0.10
Municipal Services	Town of Troy	202331	159276	0.23	Town Office	13.61
	Town of Troy	202272		1.30	Municipal Garage & Land	
	Town of Troy	202271		0.41	Municipal Garage & Land	
	Village of North Troy	202344,	159276	0.24	Missisquoi Valley Historical Society	
	Village of North Troy	202318	159276	0.08	Small parcel of land behind Library	
	Village of North Troy	202233		0.70	Park	
	Village of North Troy	202239		5.30	Park	
	Village of North Troy	202242		0.35	Park	
	Village of North Troy	010015	156272	5.0	Recreation & Nature Trails	

No Use	Village of North Troy	202009	159276	0.05	Potential ROW to Standish Farm	14.72
	Village of North Troy	202268	159276	0.17	Potential Municipal Storage Site	
	Town of Troy & Village of North Troy	202266	159276	1.30	Old Land Fill Site/Covered Dump	
	Town of Troy & Village of North Troy	202278	159276	4.90	Old Land Fill Site/Covered Dump	
	Town of Troy	202269	159276	8.30	Potential Municipal Garage Expansion	
School District	Town of Troy School District	202006	159276	3.23	Ball Park	7.68
	Town of Troy School District	202330	154276	4.45	Troy Town School	
Sewage Treatment	Village of North Troy	202239	159276	5.30	North Troy Sewer Treatment Plant	34.71
	Village of North Troy	202238	159276	0.19	North Troy Sewer Treatment Plant	
	Village of North Troy	202233	159276	0.70	North Troy Sewer Treatment Plant	
	Village of North Troy	202240	159276	0.13	North Troy Sewer Treatment Plant	
	Village of North Troy	202241	159276	0.69	North Troy Sewer Treatment Plant	
	Town of Troy	100230	156264	10.94	Pump Station	
	Town of Troy/Jay	070031.2		16.55	Troy/Jay Sewer Treatment Plan	
	Village of North Troy	202017		0.21	Ejector Station Sewer Treatment Plan	
Water Resources	Village of North Troy	010027	156276	0.01	Village of North Troy Well	16.97
	Village of North Troy	010028	156276	3.40	Reservoir	
	Village of North Troy	050115.2?	160272	6.77	Water System	
	Town of Troy	070052	156268	0.70	Hamlet of Troy Water System	
	Town of Troy	100228	156264	5.60	Hamlet of Troy Well	
	Town of Troy	100229	156264	0.49	Access to Well	
Other	Village of North Troy	202001.1 & 202007		116.6	Housing, Recreation & Farm Land Preservation	116.6

Acreage Totals	
Town of Troy	46.12
Village of North Troy	151.45
North Troy Fire Dept.	0.10
Joint Ownership: Village & Town	6.20
North Troy Cemetery Association	9.40
Troy School District	7.68
Total	220.95