

TROY TOWN PLAN



Historic Postcard of Big Falls
Troy, Vermont

ADOPTED: July 15, 2013

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* 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.

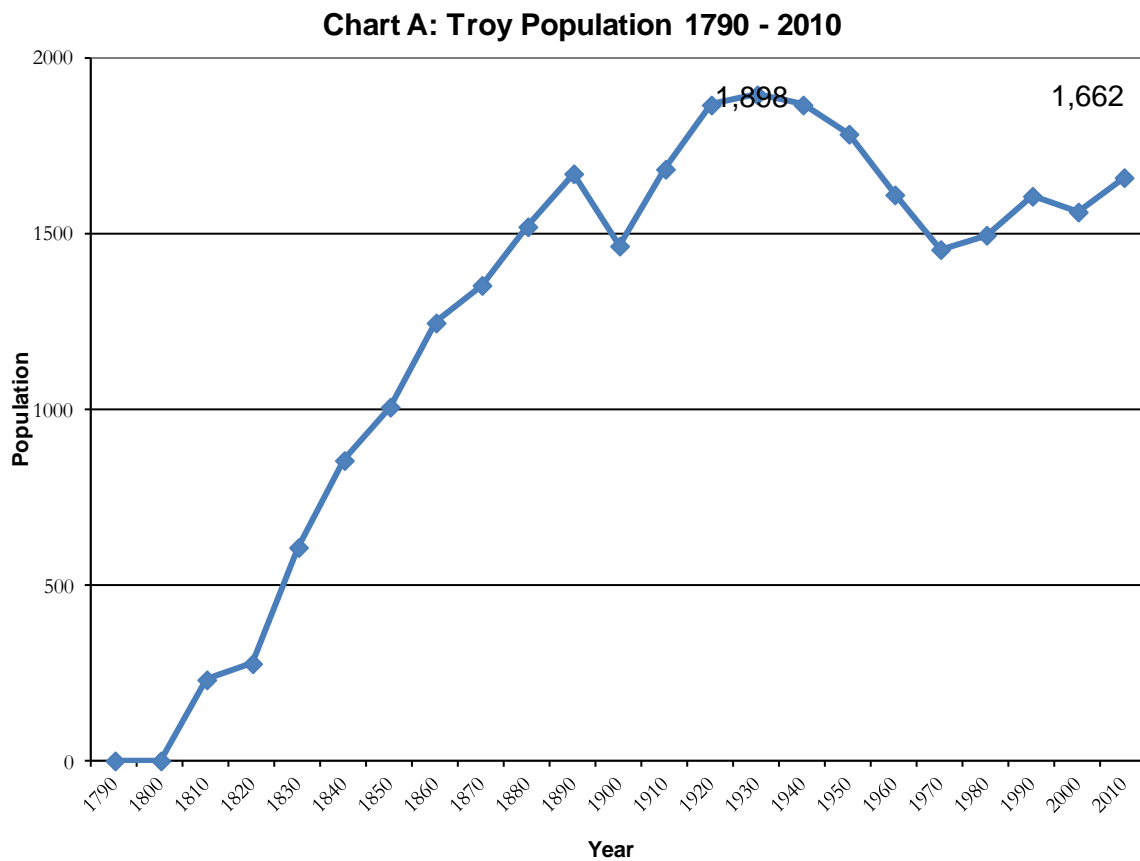
1. This plan and the zoning bylaws shall be updated periodically to account for the changing needs of the town and surrounding towns.
2. Communication will be maintained amongst the Towns of Troy, Westfield, Lowell, Newport Center, and Jay. Issues such as the wastewater treatment facility, zoning regulations 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 and residential development at the intersection of Route 101 and 242, 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 1,662 (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 with an overall continuation of that trend through 2010.



Over the last decade, population change trends in North Troy Village and the Town of Troy have come to more closely reflect those in the immediate surrounding towns. (Table 1). The ongoing loss of population in North Troy Village from 1970 through 2000 has stopped, as 2010 Census results show growth in the village population (Table 2).

Table 1: Surrounding Towns Population Change 2000-2010

Town	2000 Pop.	2010 Pop.	% Change 2000-2010
Town of Troy	1,564	1,662	6.27%
Village of North Troy	593	620	4.55%
Newport Town	1,511	1,594	5.49%
Lowell	738	879	19.11%
Westfield	503	536	6.56%
Jay	426	521	22.30%
Orleans County	26,277	27,231	3.63%

Source: U.S Census Bureau, 2010

At this time the Vermont Indicators suggest that these local population trends have turned around. According to these estimates the Town is growing at roughly twice the rate of the Village. Estimates available for the period after the 2010 U.S. Census do not indicate any significant change in the population of North Troy Village or the Town of Troy (2011 American Community Survey 5-year Estimates).

Table 2: Population Change 1950-2010 for Troy, North Troy, Orleans County, Vermont

Year	Troy Population	% Change	N. Troy Population	% Change	Orleans Co. Population	% Change	Vermont Population	% 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%
2010	1,662	6.27%	620	4.55%	27,231	3.63%	625,741	2.78%

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 left 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, this trend of fewer but larger farms has been maintained in Orleans county over the decade from 1997 to 2007. The percentage of total land area dedicated to farming has remained consistent during this decade of most recently available Census of Agriculture surveys. The estimated market value of the land and buildings on these farms continues to increase, which adds to the pressure of putting the farms up for sale.

Table 3: Orleans County Farm Data: 1997 through 2007

	1997	2002	2007
Land in farms (acres)	142,252	132,240	130,308
Number of Farms	649	583	635
Percentage of overall land area in farms	31.90%	29.60%	29.19%
Average size of farm (acres)	219	227	205
Average per farm estimated market value of land and buildings	\$259,900	\$390,921	\$474,493
Average per acre estimated market value of land and buildings	\$1,244	\$1,536	\$2,312

Source: 2007 Census of Agriculture, Vermont County Data, USDA National Agricultural Statistics Service

Industrial & Commercial

Troy is home to a few small manufacturing plants, including Appalachian Engineered Flooring 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 currently hosts one operation and has additional land available for development, with 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.

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 intersection of Route 101 and 242. More specifically, these businesses should be encouraged within or adjacent to the existing village and hamlet. Laliberty Trucking and Couture Transportation 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.

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 17 % 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. In 2010, Troy had approximately 6,500 acres of land enrolled in the Current Use Program, approximately 28% 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 inquiries regarding building permits 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 continued expansions at the Jay Peak Ski Resort. In the past five years, Jay Peak Ski Area has added ski trails, an ice arena, an indoor water park, a new ski lodge, an 18-hole golf course, and a 176 suite hotel and conference center.

There is also new residential and commercial development in the Village of Jay, located just across the Troy town line on Route 242.

Further major developments are planned in Jay as well as in the region to the east of Troy, in Newport City and Coventry. These developments are at a scale that Orleans county has not experienced in several decades. Development of a biotechnology manufacturing and research campus, new Main Street commercial block, and 150 suite hotel and conference center is planned for Newport City. The regional airport in Coventry will undergo expansion, and Jay Peak will expand its terrain by 50%, adding three new lifts, a 100 suite hotel, and 70 condominium units.

Troy should anticipate some secondary development due to the increased activity in these neighboring communities. Especially likely is growth 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 community would like to maintain 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 intersection of 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 the “hub” area. This area will concentrate around the intersection of 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 “hub” is 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. Investigate the creation of a conservation overlay district as a means to protect historic land uses, natural features and special areas in town.
4. Collaborate with the Town of Jay and area towns in preparing for increased development and infrastructure.
5. Focus anticipated tourism-related development into the Hamlet, Village, and new “hub” area.
6. Allow for the development of small lots in the Village areas.
7. Concentrate residential and industrial development in areas where municipal infrastructure, such as water and sewer, is already available.

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.

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.

Table 4: Population 1960 - 2010

	1960	1970	1980	1990	2000	2010
Troy	1,613	1,457	1,498	1,609	1,564	1,662
N. Troy Village	—	—	717	723	593	620
Orleans County	20,143	20,153	23,440	24,053	26,277	27,231
Vermont	389,881	444,330	511,456	562,758	608,827	625,741

Source: U.S. Census 1960 - 2010

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: 2005-2009 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	541	144	153	188	70	41
Buildings with 1 unit	499	66	-	183	18	-
Buildings with 2 units	5	47	-	5	43	-
Buildings with 3+ units	0	3	-	0	3	-
Mobile homes	36	28	-	0	6	-
Boats, RVs, vans or other	0	0	-	0	0	-

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

*data collected in 2010, count by number of housing units not available

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. 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.

Table 6: Year Householder Moved Into Unit

	Troy	N. Troy Village	Orleans County	Vermont
For owner-occupied units				
2000-2009	230	86	2,476	62,898
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				
2000-2009	131	67	1,926	56,390
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, following page) 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 2011 the average sale price had nearly tripled to \$167,292. 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.

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

Table 7: Historical Data: Average Price of Primary Residence 1990 - 2011

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
2006	\$132,423	22	\$155,455	\$238,006	\$47,700	3	\$59,967	\$96,133
2007	\$135,125	16	\$162,061	\$243,866	\$27,000	1	\$76,706	\$87,649
2008	\$145,068	11	\$158,321	\$238,696	\$90,000	1	\$67,672	\$89,512
2009	\$120,500	9	\$157,381	\$221,598	—	0	\$50,725	\$65,984
2010	\$77,667	3	\$152,903	\$227,733	—	0	\$58,839	\$84,523
2011	\$167,292	12	\$143,604	\$229,038	—	0	\$64,333	\$92,221

*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

Note: More recent data unavailable

Source: VT Housing Data: 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%. Data more recent than the year 2000 for both the Town of Troy and North Troy Village is currently unavailable.

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 fifteen percent of the Town’s population (254 people) and sixteen percent of the Village’s population (97 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, 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 \$722.00 per month is considered “affordable”.

² Vermont Indicators Online

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

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

52,600	The median income for a family of four in Orleans County*
x 0.80	Multiply by 80%
<u>\$42,080.00</u>	/12
\$3,507.00	Monthly income
x 0.30	
<u>\$1,052.00</u>	Amount available for monthly housing cost (no more than 30%)
<u>-\$330.00</u>	Subtract average monthly cost for heat, hot water & electric (\$1,052 - \$330)
<u>\$722.00</u>	

\$722 is affordable rent or mortgage for a family of 4 earning 80% of area's median income

*Based on HUD 2012 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” anywhere 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 \$12.19 per hour. Unfortunately, the Vermont Minimum Wage is currently set at \$8.60 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*

	Orleans County
0 bedroom unit	\$11.77
1 bedroom unit	\$12.19
2 bedroom unit	\$14.58
3 bedroom unit	\$18.25
4 bedroom unit	\$19.77

*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)

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:

Table 12 also demonstrates the challenge to many Troy residents in affording rental housing. In calculations on gross rent as a percentage of household income, the majority of renters spend over 30% of their income on housing costs.

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.

Table 12: Gross Rent as a % of Household Income 2009

	Town of Troy
Below 30 percent	64
30 to 34.9 percent	38
35 percent or more	61
Households Not Computed	22
Total	185

Source: 2010 Census

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 Rural Edge (formerly Gilman Housing Trust) and Northern Communities Management Corporation (NCCMC).
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 2010 Annual Average Daily Traffic 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, and Route 105 was recently repaved. The road is also part of a popular bicyclist route despite its continued 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 two large trucking companies, Couture Transportation and Laliberty 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 2012, snow removal and maintenance cost the town a total of \$370,166. 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 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 has added significant capacity in the past few years and is in the process of further expanding. 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.

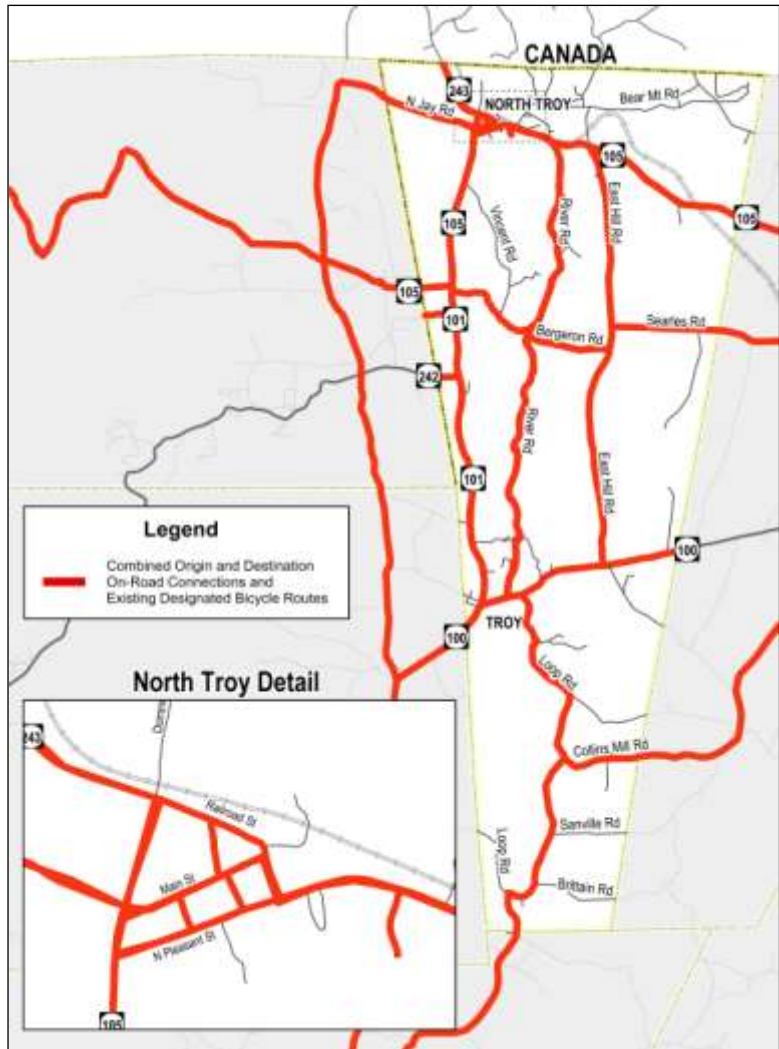
Bicycle Facilities

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. Route 105 would 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. Engineering designs for Phase 1 of the Hamlet project have been generated 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 is currently slated for expansion to include a runway extension, a 5,000 square foot terminal, two 4,000 square foot hangars, a warehouse for international trade, 4-season flight school and aviation assembly and maintenance activities.

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 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.
13. Investigate opportunities to coordinate implementation of the *Troy Bicycle & Pedestrian Master Plan* (June 2005) with the Safe Routes to School – Bike and Walk to School Program

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 Mississquoi River. The well provides 120,000 gallons per day. The water is pumped to a tower 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 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, a filtration system has been installed to lower iron and arsenic levels in the water supply. 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 Mississquoi 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 recently undergone an expansion. Currently the plant is operating at 150,000 gallons per day and is designed to eventually allow 800,000 gallons per day. Troy's share is 110,000 gallons per day, although usage is not currently at this level. The added capacity is expected to be adequate for the planned expansions at Jay Peak, with additional capacity for related growth in Jay and the Hamlet of Troy.

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

Fairpoint 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. Cellularservice has limited coverage and is provided by AT&T Mobility 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.

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 limited at this time. Areas with higher density of residences and commercial buildings are fairly well served, however buildings in the lower density areas of town struggle with hit or miss availability of fast, reliable, affordable service. Residents and businesses in this situation are often required to pay for the infrastructure installation, which is sometimes miles away.

Information on broadband service providers has been compiled by the Vermont Center for Geographic Information (VCGI) and partners including the Vermont Telecommunications Authority (VTA). This information is available at BroadbandVT.org. Cable modem service is offered in some parts of Troy by Comcast, and Fairpoint Communications provides DSL service also only in certain areas. Several other companies provide fixed wireless to possibly half of town, and mobile wireless (mobile phone data) and satellite coverage is offered ubiquitously. Many factors, such as data upload/download needs and habits, data usage limits, adequacy of hardware and software used and high-traffic time periods affect whether or not residents and businesses find these available services adequate.

Town Garage

The Town Garage was built in 1984 to serve the needs of the Town of Troy. The structure is in poor condition and the Town has allocated funding for major renovations. 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 loader and the 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 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. The Town Office 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. Primarily, parking is limited 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 Department. 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 and Meeting Room, 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 school 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 2009 birth rate for the town was 24, and similar rates were seen in 2005 and 2006. . Assuming this rate carries from year to year, current capacity for infant care is not adequate.

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 equipment includes a 1989 Spartan 10 man cab, a 2,000 gallon Pumper, a 1991 95 foot Aerial Platform, one 1,800 gallon Tanker truck (2006) and a 2007 Emergency Van. Emergency Communication systems have 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. Develop telecommunications regulations within the zoning bylaws.
3. Explore possible solutions for Town Office parking issues.
4. Explore solutions for enclosing foundation underneath the Village Office Building.
5. Support Library enhancement projects.
6. Support the maintenance and development of the town’s Recreational Facilities.
7. Develop future forecasts for Town water and sewer capacity demand and plan upgrades accordingly.
8. Pursue the purchase and installation of generators for the most critical town utilities and facilities.
9. Investigate the grant funding potential to meet facility needs.
10. Develop a capital improvement plan to guide budgeting and expenditures for future infrastructure needs.
11. 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 border 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 44%, is provided through contracts with Hydro Quebec. Of the remaining contracts with independent power producers, 14% of their power is generated from renewable resources.

Vermont Electric Co-op’s residential customers have the highest rates of all the utilities serving Northeastern Vermont. In November 2012, the typical residential electric bill for VEC customers was \$98.34 (500 kWh). When broken down to the price/kWh, the VEC rate of 15.6 cents/kWh is also in the upper half of rates for regional electric utilities.

Table 14: Northeastern Vermont Electric Utility Residential Rates

Utility Name	Customers	Typical Residential Bills Nov. 2012 (500 kWh)	Average Price/kWh 2009
Green Mountain Power (former Central Vermont Public Service customers)	149,424	\$89.95	\$0.127
Green Mountain Power Corporation	89,095	\$87.32	\$0.119
Vermont Electric Coop	34,000	\$98.34	\$0.156
Washington Electric Coop	10,500 plus	\$96.42	\$0.158
Lyndonville Electric Department	5,578	\$78.04	\$0.146
Hardwick Electric Department	4,336	\$94.31	\$0.177
Barton Village, Inc.	2,176	\$88.26	\$0.156
Orleans Electric Department	667	\$69.83	\$0.132

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. The 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 (2006-2010)

Heat Source	Troy	Orleans County	Vermont
Heated with Utility Gas	3	42	37,904
Heated with Bottled / Tank / LP Gas	62	972	37,355
Heated with Electricity	9	168	11,225
Heated with Fuel Oil / Kerosene	504	6,958	13,261
Heated with Coal / Coke	0	10	492
Heated with Wood	145	2,569	33,772
Heated with Solar Energy	0	0	107
Heated with Other Type of Fuel	7	54	2,260
That Are not Heated	0	12	836

Source: SELECTED HOUSING CHARACTERISTICS 2006-2010 American Community Survey 5-Year Estimates

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	2006-2010
Heated with Utility Gas	0	0	0	3
Heated with Bottled / Tank / LP Gas	15	39	61	62
Heated with Electricity	29	53	11	9
Heated with Fuel Oil / Kerosene	336	301	442	504
Heated with Coal / Coke	2	6	0	0
Heated with Wood	93	152	100	145
Heated with Solar Energy	N/A	0	0	0
Heated with Other Type of Fuel	0	0	0	7

Source: U.S. Census Bureau - 2000 Census, Summary File 3 Table H40, SELECTED HOUSING CHARACTERISTICS 2006-2010 American Community Survey 5-Year Estimates

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.

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

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 with 200 or more cows have the required volume of production to support a manure digester. The Chaput Family Farm, with approximately 1,900 head, has installed such a system. 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 North Country 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

In 2011-2012, Troy School District expenditures totaled \$2,490,444.90. Fifty-three percent of this budget is raised from local property taxes. Student tuition is \$10,100 per student for each grade.

Table 17: Educational Tax Rate Comparison * (2011)

Town	2010 Population*	School	2011 -2012 Enrollment	Residential Tax Rate 2011**	Non-Residential Tax Rate 2011**
Newport	1,594	Newport Town (K-6)	96	1.2048	1.3185
Brighton	1,222	Brighton Elementary (K-8)	98	1.182	1.3629
Coventry	1,086	Coventry Village (K-8)	99	1.1687	1.3765
Troy	1,662	Troy Elementary (K-8)	158	1.321	1.6541

*Estimated Population

** Per \$100

Source: Vermont Indicators Online, Vermont Agency of Education, U.S. Census 2010

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 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 Troy¹³. One is on West Road with approximately 30 graves, dating from 1801 to 1895. The “Catholic Cemetery” on River Road, dates back to 1919 but only has 9 burials. 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.

Natural Resources Goals

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

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

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.

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.

ECONOMIC DEVELOPMENT

Planning for economic development allows communities to intentionally foster the types of economic activity, businesses and employment opportunities they see as most complementary to their existing community character and their vision for the future.

Economic Profile

The economic base in Troy is primarily one of small businesses, with a handful of establishments which employ a proportionally large number of workers. The Troy Elementary School is the single largest employer, with approximately 46 faculty and staff. Economic activity in Troy is also driven by its location along major transportation routes between Newport City, Canada and the Jay Peak Resort. Two trucking companies in town employ nearly 40 people together. Small manufacturing is important as well, with 17 positions at Appalachian Engineered Flooring, and 20 at Rozelle Cosmetics. Agriculture also continues to play part in commerce despite conversion and/or consolidation of farms over the past six decades. Percentage of land in farms has remained relatively steady at about 30% in the last decade. The small businesses that make up the remainder Troy’s economy include four retail establishments, auto repair shops, restaurants, child care, one tent rental business, three fuel oil dealers as well as home based businesses.

The majority of residents in the Town of Troy commute to neighboring communities to find employment. With this proportion of the labor force leaving their hometown for work, Troy can be considered a bedroom community. Those who commute do not generally travel an inordinate distance to their place of employment, with the average commute to work being 23 minutes. The majority of employment is found in the neighboring communities of Newport City, Derby, and Jay.

Table 19: Selected Economic Characteristics

	Village of North Troy	Town of Troy	Orleans County
Mean Travel Time to Work (minutes)	23.1	23.8	22.2
Percent Working Outside Municipality of Residence	66%	65%	61%
Worked at Home	3.8%	7.6%	6.5%
Median Household Income (dollars)	26,250	34,342	40,202
Median Family Income (dollars)	33,636	52,083	48,845
Per Capita Income (dollars)	\$13,600	\$18,875	\$20,652
Percent Unemployed	5.4%	5.1%	7.2%
People Whose Income is Below the Poverty Level	21.9%	15.3%	14.3%
Percent Households Receiving Public Assistance or Food Stamps	19%	13%	12%

Source: U.S. Census Bureau, 2006-2010 American Community Survey 5-Year Estimates

Some basic goods and services are available in town, at the community’s four retail establishments. Newport City, Morrisville and establishments on the Derby Road are otherwise popular destinations for obtaining such needs. Littleton, New Hampshire and St. Johnsbury and Burlington, Vermont are accessed in some cases for a wider selection.

Troy is included in the service area of the Jay Area Chamber of Commerce, along with the communities of Jay, Montgomery, Westfield and Lowell. Troy is also served by the

Northeastern Vermont Development Association. In addition to being the region's economic development corporation, NVDA owns the Troy Industrial Park located at the edge of North Troy Village.

Industrial & Commercial Development

In order to provide more employment opportunities in town, and especially create a work-live environment in the Village and Hamlet, the community would like to attract additional industrial and commercial development. The Land Use section of the Plan describes land use designation strategies to guide such growth into desired areas, such as the Troy Industrial Park, the "hub" at Routes 101 and 242, as well as the designation of the Village and Hamlet as the appropriate areas in town for commercial and industrial development. There are also direct incentives which create a more favorable business environment.

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 Troy's 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.

Specific to attracting 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.

Lastly, the NVDA region, including Orleans county and Troy, has received a Foreign Trade Zone designation, providing savings on international trade as well as streamlined customs procedures for eligible business activities located in the zone. Businesses already engaged in international trade, or locating in Troy for such trade, may be eligible to take advantage of the Foreign Trade Zone benefits.

Opportunities & Challenges

Recent and future proposed growth in the neighboring community of Jay is a very important opportunity for fostering economic development in Troy. Due in large part to expansions at Jay Peak Ski Resort, as well as development in Jay Village, the community of Jay has seen greater population growth in the last five years than most of its neighbors. As mentioned in the Land Use section of the Town Plan, Troy can expect to see development as a bedroom community, providing housing for hospitality and other tourism industry workers. There is also interest in

the community in generating additional economic activity in Troy by attracting Jay Peak guests and businesses which serve them.

Visitors destined for Jay Peak Ski Resort coming from the east must pass through the Town of Troy on Routes 100, 101, 105, 243 and 242. Troy is also en route to Newport City from the ski resort, Newport City providing the nearest downtown shopping district. Any increase in tourist traffic through Troy poses an opportunity to provide goods, services, lodging or other attractions which could generate revenue or local employment.

In addition to economic growth in Jay, tourism, biotechnology and other commercial developments are planned for the nearby communities of Newport City and Coventry. Expectations for the effects of these changes on Troy and other surrounding communities is somewhat unclear at this time. Multiple communities have expressed concerns about planning for changes in property values, increased housing demand, subsequent public infrastructure and service expansions, adequate school capacity, and other impacts. As planning studies and projects are initiated to address these concerns, residents of Troy will be encouraged to provide information and feedback. Results and findings of these processes will be shared with the community, allowing well-informed consideration of the proposed developments' impact on Troy's long term economic and community planning vision.

With an increase in four-season visitors to the area, Troy has several assets which could be promoted to attract recreationalists and possibly outdoor recreation based businesses. The Missiquoi River and its falls are unique features in the region, and Troy's byways and gentle terrain have highlighted it as an ideal bicycling destination. Further description of these assets is provided in the Natural & Historic Resources and Transportation sections of the Plan.

Workforce development and k-12 education are important issues that the community would like to address while setting goals for economic development. The community would like to provide the opportunity for all residents to prepare themselves in skills important to any profession, as well as to develop the foundation necessary to seek specialized training. As mentioned in the Educational Facilities section, the Town of Troy provides k-8 education to resident children.

Improvement of high speed broadband internet and cellular phone service is also key to providing a favorable business and economic environment in the Town of Troy. As described in the Utilities and Public Facilities section, obtaining fast, reliable, and affordable service is quite challenging in some parts of town. As technology and transfer of information increasingly drive and facilitate the state, national and global economy, adequate service is more critical to economic participation. Rural areas also particularly stand to benefit if adequate service can be established, by accessing otherwise distant markets. E-commerce and other broadband economic development tools, such as online education and workforce training, present the opportunity to increase activity while maintaining tenets of rural character such as minimal land, building and infrastructure development, as well as smaller population levels.

Economic Development Goals

- Encourage commercial and residential development at the intersection of Route 101 and 242, in an effort to discourage strip development along these corridors.

- Guide secondary development as a result of Jay Peak and Newport City growth to appropriate parts of town as described in the Land Use section of the Town Plan.
- Attract industrial development within the Village and Hamlet, with particular emphasis given to attracting development in the established Industrial Park in North Troy.
- Develop existing assets in the Town and Village which have the potential to attract a tourist market, both from visitors to Jay Peak Ski Resort and elsewhere (such as recreational assets)
- Encourage new economic endeavors that also build upon the growing local tourism industry
- Develop the commercial section of Main Street into a popular public gathering area, with additional shops, restaurants and service businesses.
- Support the trucking sector as an integral part of Troy's local economy by implementing related goals and strategies outlined in the Transportation section.
- Consider closer ties with Canada through international trade and commerce.

Strategies

1. Work with the economic development assistance programs and the Northeastern Vermont Development Association to attract and support new industry in town, as well as explore opportunities for Foreign Trade Zone utilization.
2. Establish the number of buildable acres in the North Troy Industrial Park.
3. Access resources and ideas provided by the Jay Area Chamber of Commerce and the Northeast Kingdom Travel and Tourism Association for development and promotion of outdoor recreation and tourism assets in Troy.
4. Encourage the expansion of telecommunications infrastructure in town to attract new business development.
5. Implement improvements to pedestrian and bicycle facilities as prioritized in the *Troy Bicycle & Pedestrian Master Plan* (June 2005)
6. Conserve or protect the natural, scenic, historical and other resources in town which can be harnessed as tourism assets.
7. Continue to develop and expand important collaborative relationships with Canadian representatives, such as the Missisquoi River Watershed Council or other interested organizations.
8. Investigate the possibility of altering signage at the intersection of Routes 101 and 242 to direct motorists to Newport via North Troy. Alternatively, official business directional signs could be installed directing motorists to businesses in North Troy.

ADJACENT MUNICIPALITIES & THE REGION

Troy

2010 Census population = 1,662 Town, 620 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 which will soon be located at the Jay Town Garage. 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

2010 Census population = 1,594

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 September 2009. 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

2010 Census population = 879

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 April 2009 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

2010 Census population = 536

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 November 2009, 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

2010 Census population = 521

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 in the West Bowl, in addition to completed expansions at the main base lodge area. 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 2010 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

2010 Census Population = 64,764

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 2008 Troy Town Plan was written with the help the Northeastern Vermont Development Association (Regional Planning Commission). The process of Plan development included a basic analysis of the conditions and trends of each plan topic as well as a Community Planning and Design Workshop. Data from several resources, including the Census, Housing Vermont, the Agency of Transportation, local permitting information and previous local studies, were all incorporated to paint an accurate picture of Troy.

The Community Planning and Design Workshop was held in January 2007 to present the findings of a 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 goals, recommendations and strategies of the 2008 Town Plan.

In preparation for update and re-adoption of the Town Plan in 2013, the Planning Commission reevaluated the vision, goals and strategies generated over the course of 2005 to 2008 in light of community and development trends over the past 5 years. The Planning Commission found that the thorough examination of community status, values and vision for the 2008 Plan constructed a very strong base of goals and strategies, and that nearly all policies continued to reflect the desires of the community. Again with the assistance of the Northeastern Vermont Development Association, the Town Plan was updated with the most current statistics and data. A work session was held to develop a new economic development section for the Plan, with corresponding goals and strategies. Other significant revisions include removing the "hub" designation at the intersection of Routes 101 and 105.