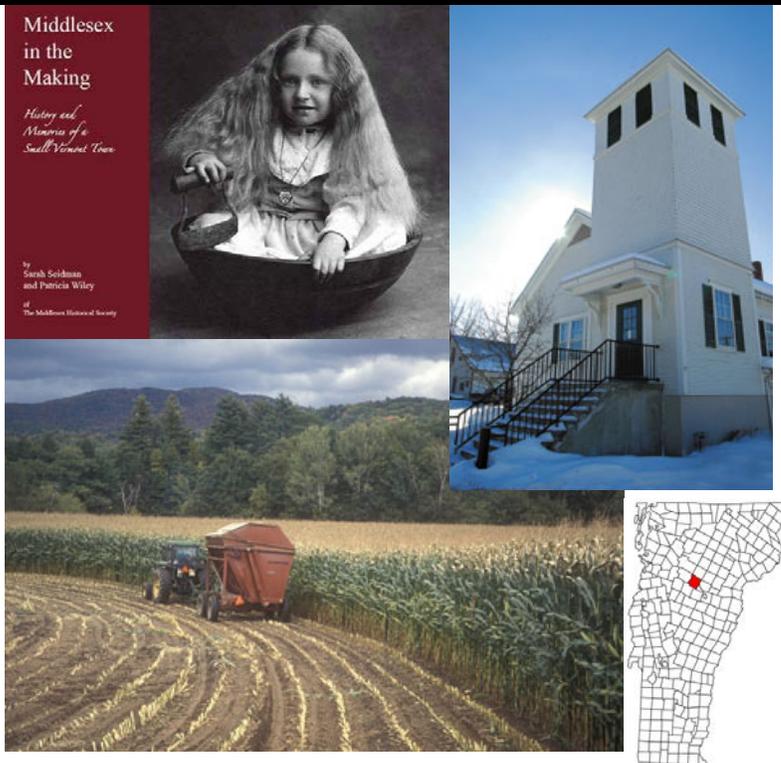


# Middlesex Town Plan 2013



As approved by the voters on March 5, 2013

## Table of Contents

<b>CHAPTER 1: INTRODUCTION</b>	<b>3</b>
<hr/>	
PURPOSE OF THE TOWN PLAN	3
THE PLANNING PROCESS	3
RECENT SURVEY RESULTS	4
VISION FOR THE FUTURE	6
<b>CHAPTER 2: COMMUNITY HISTORY</b>	<b>7</b>
<hr/>	
GOALS, OBJECTIVES, & IMPLEMENTATION STRATEGIES	10
<b>CHAPTER 3: COMMUNITY PROFILE</b>	<b>12</b>
<hr/>	
POPULATION TRENDS	12
POPULATION PROJECTIONS	12
CURRENT CHARACTERISTICS	ERROR! BOOKMARK NOT DEFINED.
INCOME & EDUCATION	15
<b>CHAPTER 4: ECONOMIC DEVELOPMENT</b>	<b>17</b>
<hr/>	
OVERVIEW	17
EMPLOYMENT OPPORTUNITIES IN MIDDLESEX	18
GOALS, OBJECTIVES, AND IMPLEMENTATION STRATEGIES	20
<b>CHAPTER 5: HOUSING</b>	<b>22</b>
<hr/>	
HOUSEHOLD CHARACTERISTICS	22
HOUSING SUPPLY	23
HOUSING DEMAND	24
HOUSING AFFORDABILITY	25
GOALS, OBJECTIVES, AND IMPLEMENTATION STRATEGIES	26
<b>CHAPTER 6: NATURAL RESOURCES</b>	<b>29</b>
<hr/>	
FORESTS AND FIELDS	29
STREAMS, RIVERS, PONDS, WETLANDS, AND GROUNDWATER	29
EARTH RESOURCES - EXTRACTIONS	30
PLANTS AND ANIMALS	30
GOALS, OBJECTIVES, & IMPLEMENTATION STRATEGIES	31

<b>CHAPTER 7: ENERGY</b>	<b>34</b>
OVERVIEW	34
GOALS, OBJECTIVES, & IMPLEMENTATION STRATEGIES	35
<b>CHAPTER 8: TRANSPORTATION</b>	<b>37</b>
GOALS, OBJECTIVES, & IMPLEMENTATION STRATEGIES	39
<b>CHAPTER 9: COMMUNITY FACILITIES &amp; SERVICES</b>	<b>41</b>
EDUCATION	41
EDUCATION GOALS, OBJECTIVES, AND IMPLEMENTATION STRATEGIES	43
CHILD CARE	41
EMERGENCY SERVICES	47
EMERGENCY SERVICE GOALS, OBJECTIVES, AND IMPLEMENTATION STRATEGIES	48
RECREATION	50
STATE LANDS	50
CLASS 4 ROADS AND LEGAL TRAILS	52
FUTURE RECREATION USE	54
RECREATION GOALS, OBJECTIVES, AND IMPLEMENTATION STRATEGIES	54
WATER & SEWAGE	55
WATER & SEWAGE GOALS, OBJECTIVES, AND IMPLEMENTATION STRATEGIES	55
SOLID WASTE	56
SOLID WASTE GOALS, OBJECTIVES, AND IMPLEMENTATION STRATEGIES	57
<b>CHAPTER 10: LAND USE</b>	<b>58</b>
MIDDLESEX VILLAGE/EXIT 9: LAND USE AND DEVELOPMENT PLAN	59
<b>CHAPTER 11: REGIONAL COORDINATION</b>	<b>61</b>
ADJACENT TOWNS	61
REGIONAL COOPERATION	61
COMPATIBILITY STATEMENT	62
<b>MAPS</b>	<b>63</b>
<b>APPENDIX I</b>	<b>71</b>

## Chapter 1: Introduction

### Purpose of the Town Plan

A Town Plan is meant to act as a guide for accomplishing the community's goals and vision for the Town's future. It documents present conditions and makes projections about what the future needs of the Town might be and how it might grow. A plan can then guide growth by:

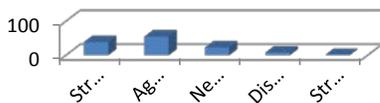
- directing Town, state, and federal investments in roads, buildings, and recreational facilities to areas where the Town most needs and desires them;
- informing the revision of land use regulations; and
- setting out a course of action for the Town's committees and Select Board.

**"A Plan is a vision, a vision tempered by reality and a course of action."**  
Darby Bradley,  
President, Vermont Land Trust

The population of Middlesex has grown by 50% over just the last 25 years. Such an increase can create challenges as the Town adapts to the changing needs of new and aging residents. However, it can also create opportunities if the Town manages this growth in a proactive way based on the priorities of Town residents.

This Town Plan provides the most recent available data on present conditions and projections for the Town's future in each plan element. It also includes results of the 2012 Town Plan survey the Town conducted which assessed the values and priorities of residents, as discussed below. For example, a majority of survey respondents (74%) believed that having a strong town plan to guide growth was important. This plan sets out to do this by presenting goals and implementation strategies for each section that, if carried out, can achieve the vision that residents have for the future of Middlesex.

### **The Town Plan should play a primary role in directing...**



#### SURVEY RESULTS

Having a strong town plan to guide growth in Middlesex was important to 74% of survey respondents.

### The Planning Process

The Town of Middlesex was awarded a Municipal Planning Grant from the Vermont Department of Housing and Community Affairs in 2007. The grant was divided into three different projects: creation of a tax parcel map in GIS format, the development of an outdoor recreation trails plan, and a town plan update. The tax parcel maps were completed with the cooperation of the Town Listers and through the use of digital scanning of existing paper maps. The recreation plan, which is inserted herein as an element of this town plan, was completed

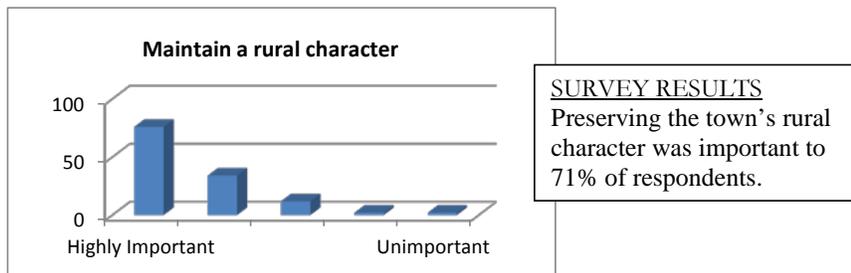
through the use of residential surveys, analysis of demographic data, focus groups, and field research. The remaining portions of the grant were dedicated to updating data and reaffirming goals and policies for the town plan. All 663 year round households were sent a survey via U.S. mail that asked about their feelings toward the future of the town. A total of 174 usable surveys were returned for a response rate of 26 percent. The plan was written with the information obtained through the surveys and interviews of residents and public meetings. The existing Town Plan was reviewed. The planning commission reviewed and edited the drafts, made changes as appropriate and submitted the draft for public review. A public hearing on the draft was held by the planning commission and the final draft was prepared from those comments and submitted to the Select Board for their approval.

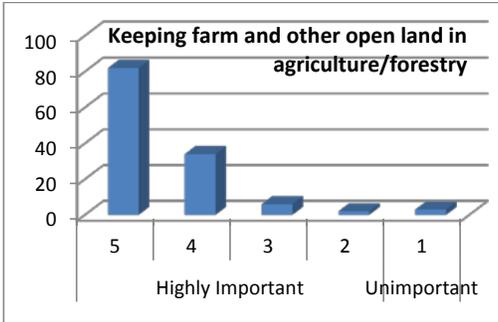
### 2012 Town Plan Survey Results

The Planning Commission sent a survey to all property owners via U.S. mail in 2012. Eight hundred and nine surveys were sent out with 127 surveys returned. The survey asked a series of questions on community values. On a 5-point scale from highly important to highly unimportant, the values that are most important to responding residents emerge as the responses that received over 50% of the highly important category. The questions that received this rating were:

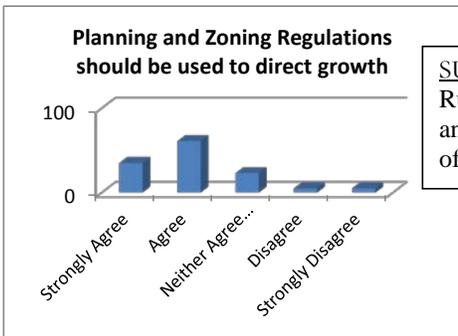
1. preserving rural character,
2. keeping farmland in agriculture, and
3. rules to guide growth.

It appears that most residents responding want to see the rural character and farmlands preserved and are willing to pass local ordinances to ensure it. The results of the questions are shown below by adding the highly important and important categories together.



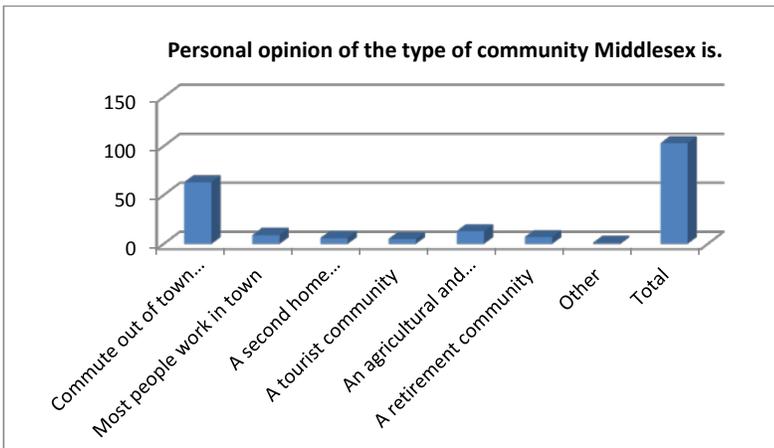


**SURVEY RESULTS**  
 Keeping farmland as active agriculture was important to 78% of respondents.



**SURVEY RESULTS**  
 Rules to guide growth was an important issue for 58% of respondents.

When asked specifically whether the rules to guide growth should be zoning bylaws, 58% considered them either important or highly important.



Residents were asked what type of community they thought Middlesex was. They were given a choice of six different community types: a community where residents commute out town for work; a community where most people work in town; retirement community; second home community; an agricultural and natural resources community; a tourism community. The

overwhelming response was that residents regard Middlesex as a community where residents commute out of town for work. The second most common response was an agricultural and natural resources community. All other choices received very little response.

When asked if this composition of community types for Middlesex was acceptable, 48% of the respondents said "yes." Most people leave Town to go to work and want to return to a rural community with open spaces, forests, low density housing, and dirt roads. The majority of residents want to preserve this type of community and want to use zoning ordinances and other local rules to ensure it stays this way.

### Vision for the Future

When respondents are asked to describe the town's characteristics that are important to them today, and what they would like to preserve for the future, here is what is mentioned most frequently:

- The Town's rural character should be preserved.
- There should be rules to guide growth in a way that respects the preservation of rural character.
- Our schools should deliver superior cost effective educations to our children.
- Small town, direct democracy should be preserved.
- The environment, including water, forests, and wildlife, should be protected.
- Elders and disabled residents should be well housed.
- Tax supported services should be cost-effective as judged by taxpayers.
- The right of residents to conduct home based businesses that are compatible with residential areas should be supported.
- Opportunities for residents to have good jobs should be supported.
- Farmland should be kept open.

The 2013 Middlesex Town plan sets out a course by which we can achieve this vision.

## Chapter 2: Community History

There has been a Native American presence in the area now known as Vermont for at least the past 11,500 years. Early permanent settlements included the Iroquois and Western Abenaki tribes in the Champlain Basin. Eventually, the Abenaki expanded their presence up the larger river valleys flowing into the eastern shores of Lake Champlain including the river now called the Winooski. The pre-Middlesex area along the Winooski witnessed early Indian habitation primarily in the form of seasonal hunting and fishing gathering camps.



The remains of early historic sites have been found along the river near and in Middlesex. One site on the town's eastern boundary contained, "evidence of an Indian village including a cornfield and burial place where Indian weapons were found". Native Americans lived in the area from 1750-60 before the arrival of explorers and settlers of European descent.

The township of Middlesex was chartered in the name of English King George III on June 8, 1763. Vermont declared itself an independent republic in 1777 and became the 14th state of the United States in 1791.

Middlesex was the first town settled in Washington County. The first settler was Thomas Mead who arrived in 1783 from Westfield, Massachusetts and staked his claim on the river near the present day Settlement Farm. By 1796, 60 more settlers had arrived and the 1800 census listed 262 Middlesex inhabitants. By 1810, the population had almost doubled to 401 and by 1830, to 1156. As the population of the town grew, Middlesex Village emerged as a thriving community and commercial center.

Grist and sawmills were constructed along the river beginning around 1800 just upstream from the Middlesex Narrows. Additional mills soon followed, including linseed oil, clothing-dressing, woolen and wood shingle. However, the river proved an unfriendly host for commerce as the mills were destroyed by floods in 1818, 1828, and 1830. There also was a fire in 1821. The mills were quickly rebuilt following each catastrophic event. These industries and the town's emerging farming community led to a growing local economy of craftsmen and merchants along with an active civic life centered in the village. The first record of a postmaster in town was 1826. By 1871, two large hotels had opened in the village.

The Central Vermont Railroad completed its rail line from Windsor, Vermont to Burlington in 1849. The new line included an important station in Middlesex Village. The station depot supported not only local commerce but an active stagecoach route that extended from the village up into the Mad River Valley. Water to the village was supplied from a spring located across the

river in Moretown with a pipe that ran under the covered wooden bridge spanning the Narrows. At the height of its development in the late 1800's, the village supported a church, schoolhouse, three stores, three blacksmith shops, a public house and about 200 inhabitants. The majesty of Middlesex Narrows was tamed in 1895 by the construction of a wooden crib power dam for electricity generation. The bulk of the electricity was transported by poles and wires not to the town or village but upstream to the capitol city of Montpelier and to a rapidly growing granite industry. Much of Middlesex had to wait until the early 1940's and the assistance of the U. S. Department of Agriculture's Rural Electrification Agency before becoming electrified.

Flooding of the Winooski continued to be a frequent occurrence culminating in the Great Flood of 1927. The rampaging waters severely damaged the power dam and took out the High Bridge across the Narrows and the Buck Bridge, a 214' covered doubleway over the river west of the village into Moretown. In his book, *Vermont in Floodtime*, Luther Johnson describes the wet summer and fall of 1927. Then, "On November 3, there was a downpour of eight or nine inches over 24 hours causing the river to rise beyond all expectation and with great rapidity. A huge volume of water rose and bypassed the upstream bend and flowed directly into the lower level of the village, removing structures and excavating the north bank until it scoured the bedrock clean nearly around to the Narrows High Bridge."

The bridges were later replaced and the power dam repaired but most of the village's commercial facilities lost in the flood were not rebuilt. In addition, the calamity heralded a decline of rail service to and through Middlesex. The decline was hastened in later years by an improving highway system and a growing emphasis on highway travel throughout the state.

Then, in the 1950's, the new Federal Interstate System came to Middlesex in the name of Interstate 89. Although the new divided highway bypasses the village to the north, its arrival has had a profound impact on the village and the town. The construction of the road bisected several large farms and replaced U. S. Route 2 as the primary east-west route between Montpelier and Burlington. Much of the tremendous amount of sand and gravel required was mined from local sources. The extensive removal of this material is still evident on the local landscape. An interchange, Exit 9, was constructed just outside the village where I-89 crosses Center Road. The interchange has proven to be a catalyst for the Middlesex economy prompting construction of a State Highway maintenance facility, barracks for the Vermont State Police, a State Records facility and a florist distribution center.

The Welch Park Development was created near Exit 9 in 1993, an eight-lot subdivision initially intended for a mix of commercial and residential uses. Eventually, it became exclusively an industrial park. Bell Atlantic (now Fairpoint) constructed a 52,650 square foot regional garage and administrative facility in the park becoming the largest commercial enterprise in town. The town's new fire station was built on another lot in 2009. A lot bordering the river was deeded to the town to be used for public recreation and conservation purposes which, as of 2011 is the Walter H. Kelley Memorial Park.

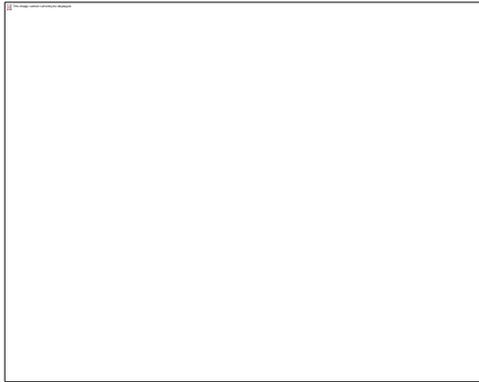
Middlesex adopted zoning regulations in 1987 with Commercial Zoning mainly confined to lands lying between U.S. Route 2 and the Winooski River both to the west and east of the village. Welch Park takes up most of the Commercial Zone to the west. Another section of

commercial development emerged in the east section of the Zone between Cross Road and the Middlesex Town Line mainly in response to property tax incentives issued by the town around 1990. Commercial activity here intermingles with residential uses and currently includes construction, propane storage, trucking, metal and plastic milling and public self-storage. Because of the rich bottomland along the river, the area of Commercial Zoning between this eastern section and the village has remained primarily in agriculture.

---

Sites of historical significance in town include the following:

- three large cemeteries and many private small burial grounds;
- three church buildings (including the present Town Hall);
- the cluster of homes in Middlesex Village and Putnamville;
- seven former one-room schoolhouses that have become private homes,
- old farmhouses, barns, and cellar holes scattered throughout the rural sections of Middlesex; and
- stone walls and old trees lining the town's roads.
- Wrightsville Beach and Wrightsville Dam, a recreation area and flood protection area created after the Flood of 1927 which destroyed the small hamlet of Wrightsville in Middlesex



Above, a quilting bee, circa 1900, at the Densmore Farm in Middlesex Center.  
Photo courtesy Middlesex Historical Society.

Goals, Objectives, & Implementation Strategies

**Community History Goals:**

1. Significant sites will be preserved in cooperation with property owners.
2. Ongoing preservation efforts will not place a burden on taxpayers.
3. Children will learn about the town's past while they are in elementary school.
4. Historical information will be readily available and centralized so that people can easily find what they are looking for, and so that historical artifacts are preserved.
5. Both new and old residents will possess an increased sense of belonging to a community, based on knowledge of the rich traditions and contributions made by those who came before them.

**Objective 1:** To preserve significant historical sites in cooperation with property owners

*Implementation Strategy:* Owners of sites of historical significance will be encouraged to preserve their property, with assistance as possible from the Middlesex Historical Society and/or state and federal agencies

*Policy:* The town will work closely with state and federal agencies, as well as with the Middlesex Historical Society, to assist with preservation and community education projects.

**Objective 2:** To educate residents about the town's history.

*Implementation Strategies:* In 2006, Sarah Seidman and Patricia Wiley of the Middlesex Historical Society completed an award-winning history of Middlesex called Middlesex in the Making: History and Memories of a Small Vermont Town. This book includes a historical map of Middlesex, allowing residents to easily learn the locations of old houses, school houses, cemeteries, and other sites of historic interest in town. It is available at the Town Hall as well as through local bookstores and Society members.

Existing written history of Middlesex, such as old maps, books, letters and articles, as well as oral history tapes, have already been compiled. The Middlesex Historical Society will continue to collect and centralize this material (as their volunteer staffing and funding allow) to make it more easily accessible. The lack of a town facility in which to display the Society's collection of photos, artifacts and written materials continues to significantly hamper the accessibility of this information to residents.

Continuing additional oral history is an ongoing project, to be completed by interested volunteers and school children as well as Society members.

***Policies:***

The Middlesex Historical Society will continue to work with teachers, staff and volunteers at the Rumney Elementary School to incorporate the study of Middlesex history into the third-fourth grade school curriculum.

Rumney School and the Middlesex Historical Society will continue to educate residents about the history of our town through efforts such as regular meetings of the Society, public events, the published History, and continued research (as their volunteer staffing allows) into specific historic sites in town and people important to Middlesex history.

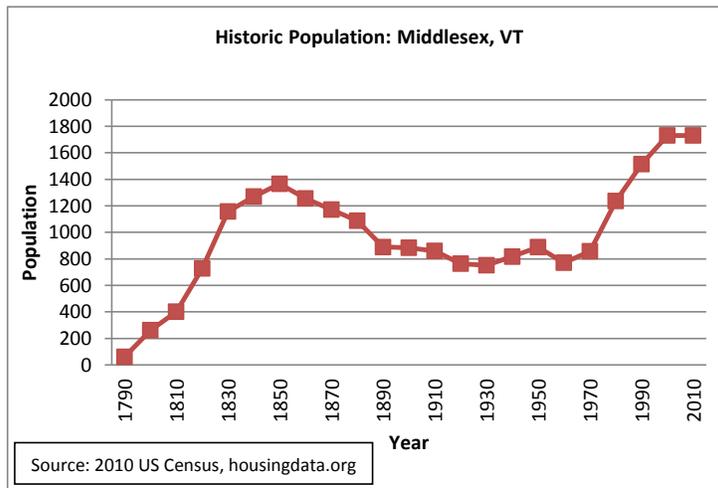
## Chapter 3: Community Profile

In any planning process it is important to know who exactly we are planning for. The purpose of this section is to answer that question. Knowing how many current and future residents will live in Middlesex, what ages they will be, their incomes and education will help the town target limited resources to those services needed most by the greatest number of residents. Also, as shown in the survey results at the end of this section, Middlesex residents responding feel that it is important to provide the opportunity for people with a mix of incomes and of all ages to live in Middlesex.



### Population Trends

As the Historic Population table shows, Middlesex experienced a decline in population between 1850 and 1970. However, since the 1970's the population has been steadily increasing at an average rate of 25% every ten years. Middlesex's 0.12% growth rate between the last two Censuses in 2000 and 2010, was under that of Washington County (2.78%) and the state as a whole (2.78%). The town's 2010 population is 1,731 according to the 2010 U.S. Census. Because Middlesex has less than 2,500 residents, under the Vermont Municipal Planning and Development Act, it is classified as rural.



### Population Projections

There are two studies available that provide projections of what the population in Middlesex will be in the year 2020. It should be noted that projecting population growth is difficult especially at the town level and is not an exact science. Therefore comparing these two

projections may be helpful to show the range within which population growth in Middlesex is expected to fall. The first projection shown in the chart below was done by the Massachusetts Institute for Social and Economic Research and includes each town in the state. This projection is a bit more conservative and projects that Middlesex will have 1,944 residents by 2020. The second projection was commissioned by the Central Vermont Regional Planning Commission, Chamber of Commerce, and Economic Development Corporation. This study projects growth at a faster rate and puts the town at 2,460 residents by 2020.

	Census	Projections				% Change				Abs Change
	2000	2005	2010	2015	2020	2000-2005	2005-2010	2010-2015	2015-2020	2000-2020
<b>Projection 1</b>	1,729	1,798	1,840	1,883	1,944	4.0	2.4	2.3	3.3	215
<b>Projection 2</b>	1,729	1,874	2,026	2,230	2,460	8.4	8.1	10.1	10.3	731

SOURCE: Projection 1- MISER Population Projections for Vermont 2000-2020 by Massachusetts Institute for Social and Economic Research  
 Projection 2- Central Vermont Planning Region 2000-2020 by Economic & Policy Resources, Inc.

The population of Middlesex according to the 2010 US Census is 1,731. If we use these two studies to predict a range of population growth, it is likely that the 2020 population of Middlesex will fall somewhere between 1,944 and 2,460. It should be noted that both of these studies were modeled prior to the economic downturn of 2008. The downturn may be a factor in the slower growth rates experienced than what was modeled.

Current Characteristics

The adjacent age groups table shows that Middlesex has a higher proportion of 35-64 year olds than the State. Middlesex has a lower proportion of 20-24 year olds than the State, most likely due to young adults going away for college. Middlesex has a smaller proportion of 25-34 year olds that may be attributable to housing options or job opportunities available to that age bracket.

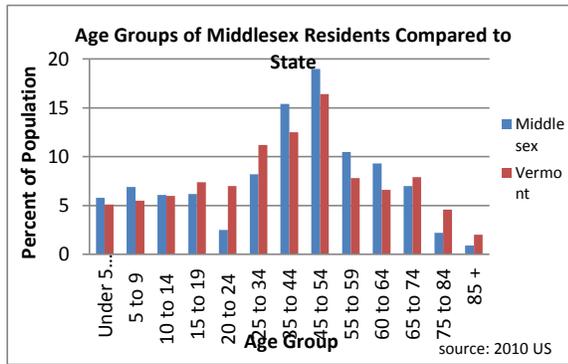


Table 1 below describes some of the general demographic characteristics of Middlesex residents, compared to the county and state, as reflected in the 2010 Census. Data from the 2010 U.S. Census are generally more reliable and complete than estimates posted during intercensal years.

The median age in Middlesex is 44.3 years which is higher than the state (41.5 years) and county median (42.3 years). The median age of Middlesex increased by 5.7 years between the 2000 and 2010 census. Although Middlesex has a smaller percentage of those over 65 years than the State, Middlesex does contain a higher percentage of residents in the 35-64 range.

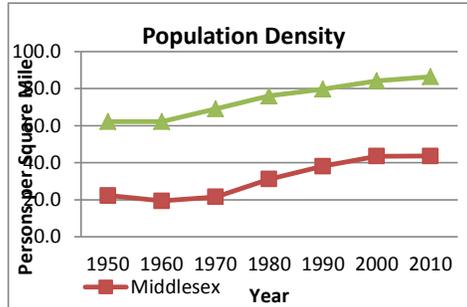
The Town has 687 households, of which 508 are family households. 33.2% of the family households have children under 18. This is greater than both the State and County.

<b>Table 1: Demographic Profile of Middlesex Residents Compared to the State &amp; County</b>			
	<b>Middlesex</b>	<b>Washington County</b>	<b>Vermont</b>
<b>Population (2010)</b>	<b>1,731</b>	<b>59,534</b>	<b>625,741</b>
% Male	50.1%	49.4%	49.3%
% Female	49.9%	50.6%	50.7%
% Born in Vermont	55.2%	55.6%	51.5%
% Foreign Born	1.4%	3.1%	4.0%
<b>Median Age</b>	<b>44.3</b>	<b>42.3</b>	<b>41.5</b>
% Children (under 18 years)	23.7%	20.7%	20.7%
% Elderly (65 and over)	10.1%	14.5%	14.6%
<b>Average Annual Wage (2010)</b>	<b>\$42,603</b>	<b>\$40,893</b>	<b>\$39,430</b>
% Below Poverty Level	4.5%	10.5%	11.1%
% Children Below Poverty Level	2.3%	13.8%	13.7%
% Elderly Below Poverty Level	7.3%	7.5%	8.0%
<b>Families</b>	<b>508</b>	<b>15,410</b>	<b>160,360</b>
% Families with Children (under 18 years)	33.2%	26.4%	26.2%
Average Family Size	2.84	2.81	2.85
Householder Living Alone	17.5%	29.7%	28.2%
<b>Median Family Adjusted Gross Income (2010)</b>	<b>\$70,221</b>	<b>\$60,726</b>	<b>\$57,665</b>
% Families Below Poverty Level	1.8%	5.9%	7.1%
% Families with Children under 18 Below Poverty Level	1.2%	11.0%	12.0%
SOURCE: U.S. Census 2010, 2006-2010 American Community Survey, Vermont Department of Taxes, Vermont Department of Labor/www.housingdata.org. Please note: All data which is not labeled with a year above, is from the 2000 Census.			

**Table 1: Demographic Profile of Middlesex Residents Compared to the State & County**

A little over half of the town's residents are native to Vermont which is similar to the state and the county as a whole. Only 1.4% of the town's residents were born in a different country.

Between 1950 - 2010, Middlesex's population density, or the number of people per square mile, has followed the county trends with a slight dip in 1960 but increasing steadily since until it leveled off between 2000 and 2010(see above). However, the population density in Middlesex (43.6) is still far below county average of 86.4 persons per square mile.



Next we will look at the income and education levels of Middlesex residents. Overall, Middlesex residents are comparatively well educated and make higher incomes, exceeding the state and county averages.

Income & Education

As shown in Table 1 above, both 2010 average annual wages and 2010 median family adjusted gross income in Middlesex are higher than state or county medians. As shown in the adjacent table and figures a majority of Middlesex residents have been in the management, professional, and related occupations. The next most common occupations have been those related to sales and then services. Though Middlesex residents enjoy the farmland scenes in town, less than one percent of working residents have made their living this way.

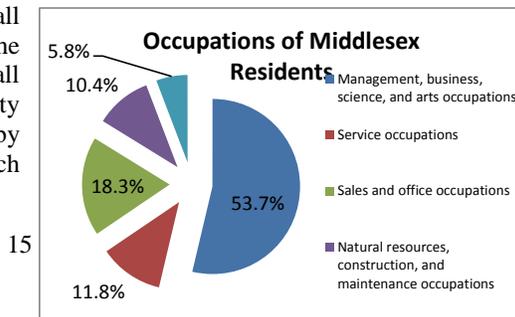
**Table 2: Occupations of Middlesex Residents**

OCCUPATION	Percent of Workers
Management, professional, and related occupations	53.7%
Service occupations	11.8%
Sales and office occupations	18.3%
Natural Resources, extraction, and maintenance occupations	10.4%
Production, transportation, and material moving occupations	5.8%

SOURCE: U.S. Census 2010

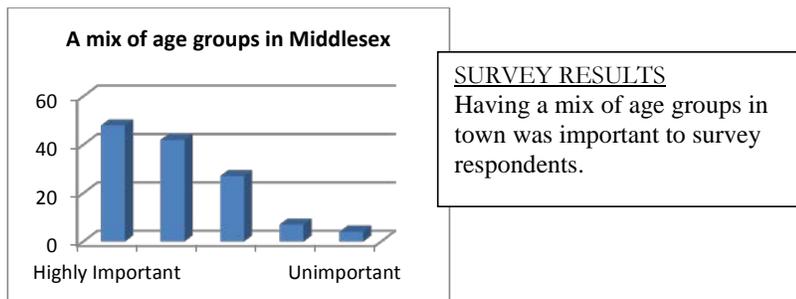
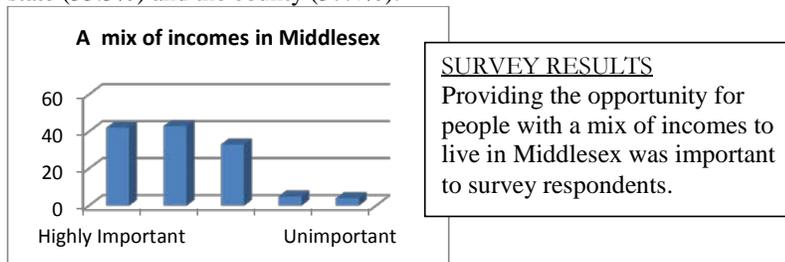
The percentage of Middlesex residents who were self-employed (15%) has been slightly higher than the county (10.9%) and the state (10.3%) averages. Also, many residents draw at least a portion of their income from social security (25.4%) income or retirement income (14.4%). We also know that of all workers, 26.6% were government workers, many of which are likely taking advantage of the town's close proximity to the state offices in Waterbury and Montpelier. Female full time year-round workers made about \$7,000 less per year than male workers. This is about the same as in other towns in the county.

There are less Middlesex residents that fall below the federal poverty level (4.5%) than the county (10.5%) or state (11.1%) averages at all ages. 1.8% of families were below the poverty level in 2010, poverty data is now collected by the American Community Survey which



provides 1, 3, and 5 year estimates. Although the ACS reports that 0 households with female householders and no husband present are living in poverty, there is a 33.1% margin of error. This means there are most likely some female headed households living in poverty that were not counted during the sampling period. The opportunity for lower income families to live in Middlesex, as deemed important in the survey shown below, is also addressed in the housing section of this plan.

According to the last Census, 92.1% of residents over 25 years old were high school graduates which is slightly lower than county residents (92.4%), but higher than the State (90.6%). Many more Middlesex residents (50.3%) had earned at least a bachelor's degree as compared to the state (33.3%) and the county (37.4%).



In order to provide the opportunity for a mix of incomes and ages to live in Middlesex, the housing types and employment options that are encouraged in town must be considered carefully. This will be done in the next two sections of this plan.

## Chapter 4: Economic Development

### Overview

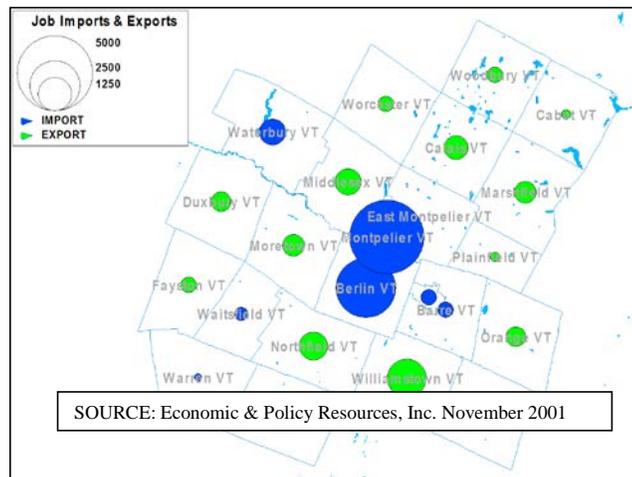
Understanding the town's current economic conditions will assist the town in planning for the types of economic development that best suits the town and its residents. Appropriate forms of economic development will:

- Preserve the town's rural and agricultural character,
- increase tax revenues,
- present employment opportunities, and
- provide services for town residents.

The survey results shown at the end of this section tell us that Middlesex residents believe in the importance of increasing local employment and small businesses in town. The goals and policies for future economic development in Middlesex reflect this priority.

Middlesex currently has a mix of businesses including some light industry, a laboratory, several excavating businesses, forestry businesses, several livestock enterprises, a produce and nursery business, a restaurant, a B&B, a building supply business, a utility, state warehouse, self-storage units, floral supply, and a number of home businesses. According to the Vermont Department of Labor, there were 55 town employers in 2011 employing 371 workers. This is an increase of two employers and a loss of 4 workers from 2010.

As shown in the figure to the right, Middlesex is a job exporting town. This means that the town has more workers than it does jobs. This is typical of a bedroom community and as the survey results presented in the first section of this plan reveal, 65% of respondents stated that being a bedroom community was acceptable. It can be inferred then that this is how residents would like Middlesex to remain. Montpelier, Berlin, and Waterbury are the job importing towns which surround



Middlesex, meaning that these towns have more jobs than workers. In the year 2010 there were 1,027 workers residing in Middlesex who were 16 years or older and 76% of them worked in jobs outside of Middlesex. This affects the length of time residents have to commute to work as will be discussed later in this section.

### Employment Opportunities in Middlesex

The table to the right shows the employment opportunities in Middlesex. According to the Vermont Department of Labor, in 2011 there were a total of 55 covered employers<sup>1</sup>, employing 371 workers. Two-thirds of these jobs are service producing, while only one-third are goods producing. The annual wages offered to those who work in Middlesex in 2011 are \$44,958. This is higher than the county (\$42,023) or the state averages (\$40,284). The highest average annual wages are being paid by state government employers while the lowest are being paid by local government and whole sale traders. Females hold about 17% of the highest paying State jobs

#### Unemployment

Middlesex's unemployment rate in 2011 was below that of the county (5.4%) and State (5.6%). Middlesex's unemployment peaked at 10.1% in 2003, but has steadily declined since then. This in part could be due to locally created start ups or economic expansion in surrounding towns.

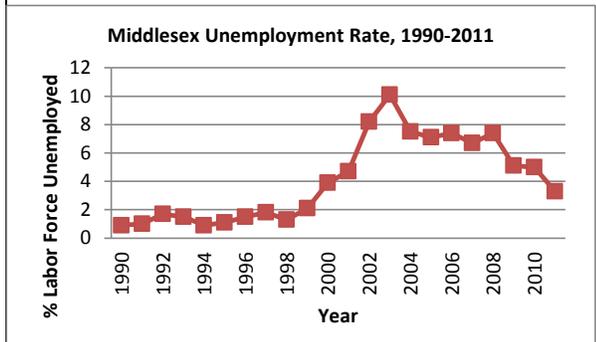
#### Commuting

Promoting economic development in Middlesex could provide more opportunities for residents to work closer to home as well as providing the services that residents need in town. Other than the 13.7% of the work force who work at home, most residents commute to work by car, of which 7.8% carpoled with at least one other person. The average travel time to work in 2010 was 24.3 minutes; however many residents have much longer commutes than this average. This data is from the American Community Survey Estimates 2006 - 2010.

**Table 3: 2011 Covered Employment & Wages in Middlesex by Industry**

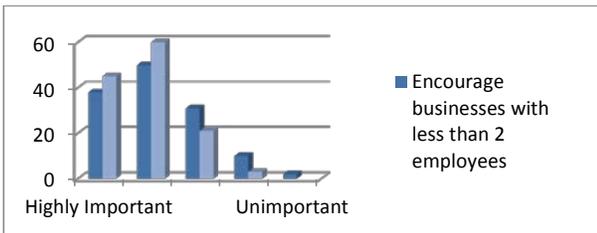
Industry	# of Employers	# of Jobs	% of Jobs	Average Wages
Construction total	9	46	12%	\$38,280
Professional and Business Services	9			
State Government	2	22	5.9%	\$37,267
Private Industry	14	16	4.3%	\$53,362
Education and Health Services	1	37	13%	\$ 27,048
Public administration				
<i>state government</i>	1	24	6.5	\$81,986
<i>local government</i>	2	9	2.5	\$23,630
Wholesale Trade, Transportation, and Utilities	11	37	13%	32,232

SOURCE: Vermont Department of Labor. Please note: information for 11 Middlesex employers were not available.



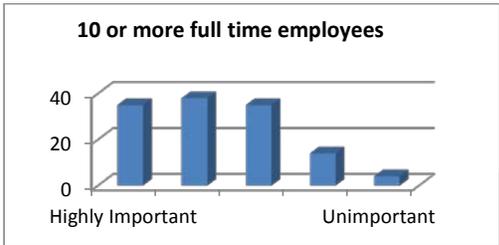
<sup>1</sup> "Covered" employment and wages goes not include workers who are self-employed, firm owners not incorporated and the following employee groups: elected officials, nonprofit religious, charitable and educational organizations, unpaid family members, farm (with some exceptions) and railroad.

The survey results shown below tell us that 69% of respondents believe that increasing local employment options is important. The 2010 Census showed that most Middlesex residents were employed in the following industries: education, health & social services and public administration. Middlesex may want to encourage the development of these industries so that more Middlesex residents could choose employers closer to home. However, most Middlesex residents employed in these industries are state government employees and it would require a long term strategy to recruit a new state office building in town. On the other hand the private sector does provide support services to government in terms of software development, a wide array of consultant services, legal services, and other professional services. An increase in office-based workers would help improve the local economy. This would serve two purposes 1) decreasing commute times and 2) increasing the town's commercial tax base. Industry types that have the highest average annual wages should also be encouraged, in order to keep Middlesex workers ranking high in this area compared to the state and county.



**SURVEY RESULTS**  
 A majority of survey respondents (69%) believed that Middlesex should work to attract small businesses.

While respondents want to recruit more small employers in town and they do not want to increase the tourism trade in Middlesex.



**SURVEY RESULTS**  
 A majority of survey respondents (57%) want to have businesses in town with more than 10 employees.

a)

Goals, Objectives, and Implementation Strategies

**Economic Development Goals**

1. Encourage light manufacturing activity and small scale commercial that will provide good-paying, highly skilled jobs and desired services to town residents.
2. Promote an active retail and service center in the Village District of the Town and numerous home based businesses throughout the town.
3. Support agriculture and forestry based businesses.

**Objective 1:** To encourage light industry and small scale commercial development in the Village District, while preserving natural and agricultural resources, fragile features and the scenic and rural character.

***Implementation Strategies:***

- Create an Economic Development Advisory Committee to develop an economic development plan for approval by the Planning Commission and the Select Board covering three sub-categories: a) light industry b) small scale commercial/service and c) agriculture and forestry. Members will be recommended by the Planning Commission and appointed by the Select Board.
- The Advisory Committee should develop a plan for retail and service businesses to meet the expected growth of the population by 2022.

***Policies:***

- There should be an active small scale retail and service sector in the village organized to meet the needs of local residents.
- Business enterprises owned and operated by residents of Middlesex and nearby towns should be encouraged and should be responsive to local needs.
- Small home-based business should be encouraged by the Town as a way to create good jobs in both residential and conservation zoning districts while faithfully maintaining the rural nature of the residential sections of town.
- Accessible and affordable child care should be encouraged by the Town in order to facilitate economic development.

**Objective 2:** To support agricultural enterprises through zoning and access to business capital.

***Implementation Strategy:***

The Advisory Committee should recommend specific steps the town can take including new zoning techniques and subdivision regulations to allow for greater development of agricultural/forestry based industries

**Objective 3:** To support agricultural and forestry based enterprises through non regulatory measures

***Implementation Strategy:***

The Advisory Committee should recommend specific steps the town can take, including grant applications, land trusts and tax incentives, as well as, events and programs to attract and nurture emerging agricultural and forestry enterprises and support those already in place. Examples include supporting farmer’s markets, local farm to school programs, enrolling properties into the current use program etc.

## Chapter 5: Housing

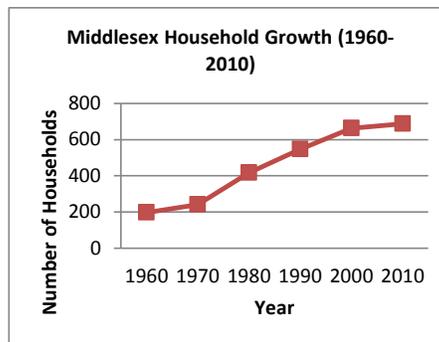
Housing is important to every family in Middlesex. Housing needs often change over a resident's lifetime. A younger resident may need rental housing or an affordable home for beginning a family. An older resident may want to retire to a townhouse or condominium where there is less space to take care of. Middlesex strives to provide a range of housing opportunities to meet the needs of all residents. This section describes the town's current housing stock and future housing demand. It then proposes strategies to meet the demand for housing in a way that also meets the goals listed in other sections of this report and preserves the town's current high quality of life for all residents.



Growth in housing creates increased demand for town services including schools and roads. While the residents of Middlesex do not necessarily seek an increase in housing, we recognize that growth pressures in the region will have a great impact on future housing in the town. Middlesex seeks to locate housing near existing facilities, infrastructure and employment centers to utilize and protect resources in the most efficient manner. The Regional Housing distribution map identifies Mixed Use, Rural Residential and Medium Residential, as well as Village District zones as targets for new housing developments.

### Household Characteristics

The number of households in Middlesex between 2000 and 2010 grew from 663 to 687 according to the 2010 U.S. Census. This rate of growth exceeds that of population growth. This may not seem to make sense but the reason that the number of households is increasing faster than the number of total residents has to do with household size. In 1990, the average number of people per household was 2.73 and in 2000 it was 2.61. In 2010, it was reported 2.52. Although there was a less than 1% increase in the population, the number of households continued to increase as residents spread themselves out in a greater number of houses.



Most Middlesex households, both owners and renters, are comprised of just two people as shown in Table 4. We also know that a majority of households in 2010 were owned by householders between the ages of 55-64 (Table 5). Renter householders were a bit younger; a majority of them were between 25- 44 years old. In 2000 however, a majority of the householders were younger—between the ages of 45-54. This may indicate that it is becoming increasingly difficult for younger householders to afford housing in town. Also those who purchased homes in Middlesex 20 years ago, may be residing in the same home or within Middlesex. As mentioned

in the previous chapter, Middlesex's median age has increased by roughly 6 years since the 2000 Census

	Owner	Renter
Total	618	69
1-person household	93	27
2-person household	261	27
3-person household	119	12
4-person household	112	3
5-person household	22	0
6-person household	6	0
>6 person household	5	0
SOURCE: US Census 2010		

Middlesex has a much higher homeownership rate than the state or the county averages. In 2010, 90% of occupied, year round homes in town were owned—the county average was 70.1% and the state average was 70.7%. 2010 American Community Survey also tells us that 28.2 of residents moved into Middlesex between 1990 and 1999, 20.6% between 1980 and 1989, and 18.7% between 2000 and 2004.

### Housing Supply

Over the thirty year period between 1980 and 2010, the number of homes in Middlesex grew by 57%. According to the 2011 Grand List (Table 6) Middlesex has 764 housing units. A significant majority of these units (82%) are primary residences, 5.5% are vacation homes, and an additional 9% of the homes are mobile homes. Almost 60% of all primary residences are located on more than 6 acres of land. This may be one reason why housing prices are high as housing on smaller lots is generally more affordable.

The 2010 Census provides us with the most recent data on the types of rental housing which have been available in Middlesex. As stated above, 90% of year round occupied housing was owned, while only 10% was rented.

	Owned	Rented
Total	618	69
Householder 15 to 24 years	3	4
Householder 25 to 34 years	42	17
Householder 35 to 44 years	122	16
Householder 45 to 54 years	167	10
Householder 55 to 64 years	187	12
Householder 65 to 74 years	69	5
Householder 75 to 84 years	20	3
Householder >84 years	8	2
SOURCE: US Census 2010		

	Owned	Rented
Total	618	69
Householder 15 to 24 years	3	4
Householder 25 to 34 years	42	17
Householder 35 to 44 years	122	16
Householder 45 to 54 years	167	10
Householder 55 to 64 years	187	12
Householder 65 to 74 years	69	5
Householder 75 to 84 years	20	3
Householder >84 years	8	2
SOURCE: US Census 2010		

Property Type	Number	Percent
Primary Residences < 6 acres	256	33.5%
Primary Residences > 6 acres	376	49.1%
Vacation homes < 6 acres	10	1.2%
Vacation homes > 6 acres	33	4.3%
Mobile homes with land	61	8%
Mobile homes without land	6	2.9%
<b>Total Housing Units</b>	<b>764</b>	<b>100%</b>
SOURCE: 2012 Municipal Listed Values Report – VT Department of Taxes		

The housing units in town seem to be of a fairly high quality in terms of age and facilities. A majority of the housing units are less than 39 years old. The median year that Middlesex homes were built was 1976, while in the county it was 1964. Of the 694 occupied housing units in the year 2010 American Community Survey, 12 homes (1.7%) lacked complete plumbing facilities and 9 homes (1.3%) lacked complete kitchen facilities. This is slightly higher than the county wide average of .5% lacking kitchen or plumbing.

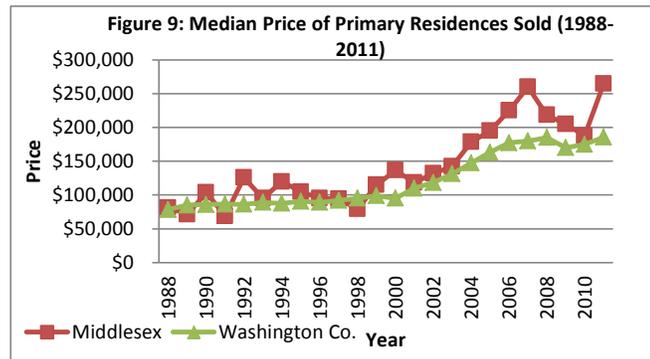
### Housing Demand

Housing demand is forecasted using population projections and a factor called “propensity to form households”. The forecast in Table 7 was developed by Economic & Policy Resources, Inc. (EPR) of Williston, Vermont for the Central Vermont Economic Development Corporation, Chamber of Commerce and Regional Planning Commission. It is difficult to develop accurate projections for towns with smaller populations; therefore EPR has combined Middlesex with its neighbor, Worcester. The Central Vermont Chamber of Commerce estimates Middlesex’s share of the 629 additional units that will be needed by both towns in 2020 to be 379 units. It follows then that by the year 2020, Middlesex could, if trends continue, have 1,098 households.

	History		Forecast				Abs. Chge.
	1990	2000	2005	2010	2015	2020	2000-2020
East Montpelier, Montpelier City	4,373	4,746	4,393	4,580	4,761	5,016	270
<b>Middlesex, Worcester</b>	<b>871</b>	<b>1,009</b>	<b>1,162</b>	<b>1,290</b>	<b>1,443</b>	<b>1,638</b>	<b>629</b>
Moretown	540	650	728	807	901	1,056	406
Berlin	938	1,109	1,239	1,350	1,463	1,613	504
Waterbury	1,754	2,011	2,063	2,116	2,189	2,283	272
<b>Washington County</b>	<b>20,948</b>	<b>23,659</b>	<b>27,052</b>	<b>26,196</b>	<b>27,946</b>	<b>30,409</b>	<b>6,750</b>

SOURCE: Economic and Demographic Forecast, Economic & Policy Resources, Inc. November 2011

Vacancy rates have historically been low in Middlesex, meaning there has been a small selection of homes available for sale or rent. The rules of supply and demand dictate that if demand is not met, prices will rise. As seen in Figure 9, this is exactly what they have been doing. Sales prices in Middlesex have been rising faster than the state or county medians over the last seventeen years. It should be noted that the fluctuations shown in Figure 9 are likely due to the fact that so few residences are actually sold that the median price can be thrown off by a few low



or high priced homes in any given year. The number of homes sold each year between 2000-2005 and the median prices are shown in Table 8. Rents in Middlesex are also higher than the state and county medians. In 2006 – 2010 American Community Survey, the median gross rent (which includes utilities) of all rental units in Middlesex was \$1167, the state median was \$809 and the county median was \$780.

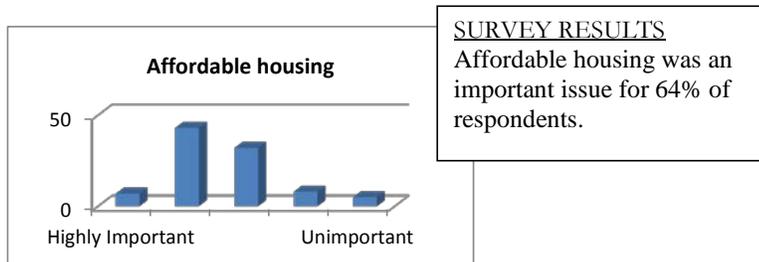
	Middlesex		Washington County	
	Price	# homes sold	Price	# homes sold
2006	\$ 225,000	25	\$ 177,250	696
2007	\$ 260,000	12	\$ 177,500	615
2008	\$ 218,500	7	\$ 180,500	439
2009	\$ 205,000	19	\$ 170,000	436
2010	\$ 187,750	14	\$ 175,000	444
2011	\$ 265,000	21	\$185,500	414

SOURCE: Vermont Department of Taxes

Housing Affordability

**H**ousing affordability is measured by how much of a household’s income is spent on housing costs. If a household spends more than 30% of its income on housing, the home is considered unaffordable for that homeowner or renter. In 2006-2010 American Community Survey, which again is the most recent data we have on housing costs as a percentage of income, 32.8 mortgage ownership households and 43.8% rental households were paying more than 30% of their incomes on housing costs in Middlesex. If about 38% of all households are paying unaffordable housing costs, more affordable types of housing may need to be created in town.

If the demand for housing in Middlesex is not met, prices will continue to rise and the number of homes that become unaffordable will increase. As illustrated below, recent survey results showed that many respondents believe affordable housing is important as well as having residents with a mix of incomes (see Community Profile section for mix of incomes results). If more housing is not created, many homes will be unaffordable and residents with low or moderate incomes, including adult children of current residents, will likely be pushed out of town. Already, 15% of survey respondents said that they would likely have to leave town because it was too expensive.



Middlesex’s re-zoning of March 23, 2010 created a mixed use district that allows multifamily homes and higher density, as well as provisions to manage density, rather than lot size to allow smaller lot sizes, and generous allowances for accessory apartments, are measures that can make development less expensive and provide business for local stores and restaurants in the village center.

**CVRPC's Regional Housing Distribution Plan: Middlesex**

In 2008, the Central Vermont Regional Plan adopted a Housing Distribution Plan as part of its Regional Plan. CVRPC's Housing Committee developed the Plan to encourage the development of more meaningful and practical local housing plans and to promote the sustainable and efficient distribution of housing region-wide. It was formulated with the aim of ensuring that all towns continue to contribute similar percentages of the Region's total housing in the future as they did in the year 2000. By doing so, it is hoped that the burdens and benefits of providing housing can be balanced among Central Vermont communities and sprawling, inefficient patterns of growth can be curtailed.

This document asks municipalities to plan for a future estimated housing need through the year 2020. Specifically, it asks municipalities to provide:

- A detailed map or maps of the town showing the town's preferred locations for future housing units – consistent with current or proposed zoning – for 80 percent of the anticipated 10 to 15 year housing allocation.
- Mapping updates that identify the locations and number of housing units created in the town since the previous town plan adoption.

While municipalities are under no obligation to comply with the guidelines of Distribution Plan, inclusion of the above items will be necessary in order for any plan adopted after January 1, 2009 to receive regional "approval" (per Chapter 117, Section 4350).

Middlesex Housing Distribution (p. 6-17 in CVRPC Regional Plan)

2000-04	2005-09	2010-14	2015-20	Total
76	68	84	151	379

The Distribution Plan allocates 235 new housing units to Middlesex over the next ten years (2010-2020). It is important to emphasize that CVRPC views the Town's response to the Distribution Plan as a planning exercise. According to CVRPC: "The projected housing demand numbers are not quotas or targets and we will not be requiring **implementation**. We are most interested in knowing that municipalities are cognizant of where housing growth is currently occurring, and thinking about where it should occur in the future, in their respective communities." As such, it makes sense for the Town to plan for this growth, as the housing market is subject to change and such growth is likely to come eventually.

Accordingly, a map showing preferred locations for accommodating 80% of allocated future units from 2010 through 2020 and difference from 2000 to 2010 (or **267 units** in Middlesex's case) will be included in the Municipal Plan.

Increase from 2000 to 2010 = 45 units  
(Predicted increase) – (actual increase from 2000-2010) = (144-45) = deficit of 99 units

(2000-2010 deficit) + (2010-2020 predicted increase) = 99+235 = 334 units

"Plan for 80% of units" = .8 \* 334 = 267

The Town recognizes that our growth over the last ten years was only a fraction of that projected and believes that this will be the trend for the next ten years as well. The Town would like to encourage new construction to be built in the zoning districts as follows: 30% Mixed-Use District – 25% Rural Residential District – 15% Medium Density Residential District, 10% Village District and the remaining 20% in the Industrial District and Conservation District. The map identified as Middlesex Zoning, Development Potential and Roads Map, in the appendixes outlines the location and the number of housing units created since 2006.

#### Goals, Objectives, and Implementation Strategies

Middlesex hopes to manage its growth in housing and population as a necessary strategy for achieving the objectives in this plan. Thus, we do not seek to grow to a target size, but rather to keep growth within limits that allow maintaining the rural character of the town. Opportunities for more development in areas closer to the Village District where there are good roads and access should be encouraged while discouraging more development in the more rural areas of

#### **Housing Goals:**

1. To manage the growth of housing in Middlesex in order to protect the town's rural character and quality of life.
2. To meet the needs of residents for affordable housing and special needs housing.
3. Zoning regulations should implement the goals of the Town Plan and support the continuing fit between housing and tax supported systems such as schooling and roads, and between housing and the natural environment.

town.

#### ***Implementation Strategies:***

- A Housing Committee of the Planning Commission should be established and should include at least; one Planning Commission member, one elder resident, and one experienced builder to be accountable for:
  1. identifying special needs of residents for affordable and special housing,
  2. planning for special/affordable housing,
  3. maintain a database on Middlesex housing, and
  4. providing information about energy conservation, sewage systems, road access, and compliance with zoning regulations, and the like, for owners who want to undertake new construction.

#### ***Policies:***

- Most housing should be designed for single and two family use, including extended families, except for housing designed for elders, disabled persons, and families in need of affordable housing. Multi-family housing units should be available to meet the needs of

the elderly, disabled, and those in need of affordable housing. Accessory apartments are another affordable housing option that may be encouraged.

- Cluster housing should be encouraged when equivalent adjacent acreage, or acreage at other sites within the Town, can be protected from development.

## Chapter 6: Natural Resources

This section covers the mountains, waters, forests, fields, plants, and animals that comprise the physical character of Middlesex. The health of the Town's natural resources is important, as is their pivotal role in the land-use occupations they support, the outdoor recreation they provide, and the opportunities for learning about our natural world so close to home. In order to protect and encourage responsible use of natural resources, Middlesex's goals and policies will aim to encourage the manufacturing and marketing of value added agriculture and forest products; the use of locally grown products; the use of best resource management practices; and the planning of public investment to minimize development pressures on agricultural and forest lands.



### Forests and Fields

The combination of forests and fields are a significant element in determining the "rural character" of Middlesex. The views of these open spaces to a large extent define the character of rural living. The forests are used by many residents for logging, as well as hunting, hiking, skiing, and other recreational pursuits. Most of the land is privately owned. The Putnam State Forest runs along the western boundary of the town, part way up the slope of the Worcester Range.

In 2009 the Town acquired a 403 acre parcel at the end of Notch Road that has been designated as the Middlesex Town Forest. There are approximately 86 privately owned parcels in Town currently enrolled in the "Current Use Program", which provides tax relief to landowners who keep their land in forestry or agricultural uses.

Middlesex has significant large forested areas, currently undeveloped, which are interrupted only by the occasional logging road or trail. An attached map of wildlife resources habitat blocks depicts large blocks of contiguous habitat and important road crossing points that provide linkages between these blocks..

**Comment [DS1]:** The current plan does not include this map. Ideally such a map can be added or this reference should be deleted.

### Streams, Rivers, Ponds, Wetlands, and Groundwater

The streams of Middlesex flow either east to the North Branch of the Winooski River and Wrightsville Reservoir, or south to the main branch of the Winooski River. Land along the Winooski River is mostly in industrial, commercial, and agricultural use. The main streams with information about their drainage basin areas are shown on the attached map titled "Watershed Sizes Used as Guidance in Stream Alteration Regulations"

Wetlands protected under the State Wetlands Rules (those on the National Wetland Inventory Maps) are shown on the attached map. It is possible that noteworthy wetlands may exist that are not shown on the NWI Maps.

Little is known about the quality of the groundwater in Middlesex. Some wells in the village on Route 2 were known to be contaminated from a historic petroleum leak.

### Earth Resources – Extractions

The Town supports small scale operations; however, the Town acknowledges that an Act 250 Permit is required for extraction of all natural resources and drilling of oil/gas wells in accordance with the zoning regulations.

Historically, small deposits of sand and gravel have been excavated in the Town. There is one privately-owned active permitted pit in the Town. There remain limited areas of sand and gravel deposits in the Town.

Because sand and gravel are important for the Town for road maintenance and construction projects, the Town anticipates continued extraction of these resources. If sand and gravel are not available locally, they would have to likely be hauled in from distant locations at a greater expense.

Local and State regulations as well as careful site planning, operation and reclamation can address the adverse impacts of earth resources extraction. In order to mitigate or avoid social and environmental impacts on the Town and neighboring properties, the Town should evaluate each proposed operation on a case-by-case basis to determine their compatibility with the Town Plan. The Town acknowledges that an Act 250 Permit is required for extraction of all natural resources and drilling of oil/gas wells, and in accordance with the Zoning Regulations.

### Plants and Animals

A great diversity of wildlife species makes their home in Middlesex or travels through it, providing residents with ample opportunities to view wildlife. The species range from song birds and small mammals such as red squirrels and raccoons to large mammals such as deer, bear and moose. Among the important habitats in town are vernal pools that important breeding sites for amphibians such as wood frogs and spotted salamanders and marshy areas in the northern end of Wrightsville Reservoir that are home to a healthy population of beaver and other animal and bird life. Five main deer wintering areas in Middlesex have been identified by the VT Department of Fish and Wildlife. The relatively intact forests of the Worcester Range in Middlesex provide important habitat connectivity with the rest of the range extending to the north in Worcester and Elmore. The entirety of the Worcester Range is a crucial link to the extensive forest areas found in the Northeast Kingdom.

The Natural Heritage Program of the VT Department of Fish and Wildlife lists three sites in Middlesex that are known locations of rare plants or plant communities. Detailed information about these sites is available from this agency.

### Ridgelines

The Town recognizes the importance of preserving its ridgelines for future generations to enjoy. These high mountain areas play a vital role in the water cycle. There are greater amounts of precipitation that filter through the thin soils, eventually reaching major ground water supplies. Uses which result in the removal of vegetation and soil cover are especially detrimental to the natural drainage of water. These same areas are the natural habitat for a variety of birds and animals, which could be impacted, were development to occur.

### Town Forest

As of January 2009, the Town of Middlesex owns the Middlesex Town Forest property and is responsible for its long-term management. Vermont Land Trust (VLT) and Vermont Housing and Conservation Board (VHCB) hold the Conservation Easement, which permanently protects the natural resources on the property and removes all development rights from the property. The Vermont Land Trust and Vermont Housing and Conservation Board require an approved Management Plan for the property. The Middlesex Town Forest Planning Committee, a subcommittee of the Middlesex Conservation Commission, was created to solicit input from Middlesex residents and draft a Management Plan that was later approved by the Town.

The Plan describes management strategies for natural resource protection, sustainable forestry, community recreation and education. The Plan is intended to increase the continuity of management over time by providing the Town with background information and a consistent policy framework. The Plan is a living document that can be revised periodically as new information is gathered, as forest conditions change, and as management strategies improve. Upon adoption of the Management Plan, all future management issues will be decided or delegated by the Middlesex Select Board. To help the Select Board fulfill their responsibilities, the Select Board and the Conservation Commission created a Town Forest Stewardship Committee (TFSC) that acts as a subcommittee of the Conservation Commission. The TFSC is responsible for the day-to-day management of the Town Forest.

The Management Plan is a guiding document to help Middlesex steward its Town Forest for perpetuity. The Town of Middlesex recognizes that forests are an essential component of Vermont's healthy ecosystems and healthy communities. The Town Forest will be managed in a manner that promotes the health of both, and that encourages all members of our community to learn about, enjoy, and gather in our Town Forest. The plan's primary objective is to balance human uses of the Town Forest with protection of its natural resources, according to the legal requirements of the property's Conservation Easement and the desires of all Town residents.

Goals, Objectives, & Implementation Strategies

**Natural Resource Goals:**

1. To protect important natural resource features and avoid fragmenting habitat.
2. To recognize the carrying capacity of our natural resources and accommodate development that does not jeopardize these resources' carrying capacity.
3. Streams, rivers, and ponds should provide safe, healthful conditions for water-based plants, animals, and humans.

**Objective 1:** To encourage and support farming, forestry and other natural resource based occupations.

***Implementation Strategies:***

- Gather information from available sources on forest and agricultural lands, including their current and potential use, that are important to land-based occupations in Middlesex.
- Evaluate and explore opportunities (tax-breaks, purchase of conservation easements, etc.) to help landowners keep their lands open for forest and agricultural uses in Middlesex. Educate Middlesex residents about the current use program and encourage more eligible landowners to participate.

***Policy:***

- Development should be planned and carried out to ensure the continued use of forests and fields. Development should occur so that the forests of Middlesex, especially in the Town's mountainous regions, do not become fragmented and inaccessible. Owners of fields and other areas in Middlesex containing agricultural soils, especially those suitable for crop production, should be encouraged to keep their land available for that purpose.

**Objective 2:** To protect the natural quality of streams, rivers and wetlands.

***Implementation Strategies:***

- Gather information about possible pollution to streams and stream corridors and forward that information to appropriate officials and boards.
- Continue to address erosion hazards along Great Brook as recommended in the Agency of Natural Resources' Great Brook Study.
- Develop Town road and public property maintenance procedures in such a way as to conserve and protect natural resources
- Encourage the preservation of adequate vegetated buffers along streams and wetlands.

**Objective 3:** To protect and maintain the publicly and privately owned natural resources of Middlesex in order to enhance the visual and recreational opportunities of those living and passing through and avoid fragmentation of habitat.

***Implementation Strategies:***

- Coordinate with natural resource agencies, organizations and outdoor recreation planners to manage conservation plans for publicly-owned lands in Middlesex to meet the goals of this plan.

***Policy:***

- The tradition of accessible land should be encouraged by respecting private property and working with landowners so that members of the community can share the natural resources for hunting, hiking, and other recreation.

**Objective 4:** To amend the current Town Zoning Regulations to ensure that they preserve and protect the Town's ridgelines.

## Chapter 7: Energy



### Overview

**E**nergy is a pervasive influence in our lives. We use energy to heat homes and offices, power industry, and to transport people, goods and services from place to place. Energy costs are a major line item in government, business, and personal budgets.

In Vermont, fossil fuels are the primary source of our energy, accounting for 75 percent of all energy use. Our reliance on fossil fuels contributes to our dependency on foreign countries, the accumulation of "greenhouse gases" in the atmosphere, acid precipitation, and human health hazards resulting from declining air quality. Continued dependency on fossil fuels over the long term will ultimately create severe environmental problems and the potential for economic hardship when supplies dwindle or are cut off.

Common sense dictates that we attempt to decrease our overall energy demands, use our current supplies more efficiently, and begin to shift some of what demand remains to renewable sources such as small scale hydropower, wind, solar, and biomass. While these alternatives are not completely benign in their impacts, they are generally less harmful than fossil fuels and are available in perpetuity at more stable costs.

Land use policies are important in facilitating energy conservation and the development of renewable energy resources. Land use planning can save energy that would otherwise be lost through inefficient site designs and settlement patterns. Standards to consider include encouraging building development on southern slopes, in areas sheltered from the wind, use of vegetation as wind blocks and shade, and flexible lot layouts encouraging planned unit developments with the above considerations according to topography, soils and aesthetic considerations. Directing new growth toward areas with existing infrastructure and services can also reduce energy demands.

Although, the energy picture often appears abstract and beyond the influence of individual communities, local planning can play a positive and effective role in guiding energy decisions. By promoting efficient land use patterns, participating in energy development decisions, facilitating alternative transportation options, and encouraging energy conservation strategies, even small towns can do much to bring about a sustainable energy future.

The three main sources of energy consumption in Middlesex are household heating, private vehicles, and electricity.

Home heating costs and energy use can be dramatically reduced through auxiliary solar systems, passive solar design, and building orientation. In recent years, a growing number of Middlesex households have had solar systems installed. In addition, proper insulation/weatherization of both new and existing structures yields returns far greater than the investment required over the life of most buildings. New construction can and should utilize these appropriate renewable energy techniques.

#### Wind Energy

Given the continued costly reliance on fossil fuels, there is likely to be increased interest in developing renewable projects in Middlesex. While the Town encourages the use of solar and small scale wind, a delicate balance must be sought in deciding the placement of solar and wind energy equipment.

In the 2012 survey, Middlesex residents expressed the most interest in solar power as a renewable energy source and the least support for wind towers on ridge tops.

#### Goals, Objectives, & Implementation Strategies

##### **Energy Goal:**

1. To attempt to decrease our overall energy demands, use our current supplies more efficiently, and begin to shift some of what demand remains to renewable sources such as small scale hydropower, wind, solar, and biomass.
2. Promote sustainable development practices in Middlesex that reinforce smart growth land use patterns to reduce energy consumption in the transportation, energy and land use sectors.
3. To promote the development of renewable energy resources in the Town through small scale, individual and group net-metered and community-based projects, if they comply with all parts of this Town Plan, especially in regard to ridgeline development. All efforts should be made to limit the adverse environmental and social impacts of such development.

**Objective 1:** Encourage energy efficiency and conservation in municipal construction projects, supply purchases, and infrastructure

- Consider removal and/or replacement of conventional street lights with LED fixtures
- Continue to analyze results of past municipal energy audits and perform recommended upgrades to buildings

**Objective 2:** Encourage small scale and appropriately sited renewable energy generation facilities.

***Implementation Strategy***

- Develop municipal standards for scale and siting of renewable generation facilities (wind, hydro, solar, biomass, including our telecommunications facility exclusion area as designed in the Town's Zoning Map).

**Objective 3:** Encourage development within the Route 2 Middlesex Village and/or encourage development outside the Village to be clustered and support pedestrian/bicycle transportation and located near public transportation routes to reduce vehicle emissions and use of fuel.

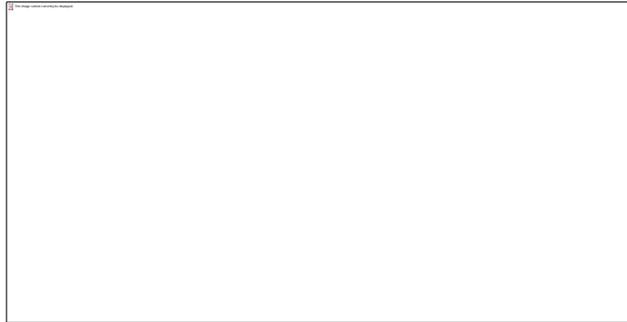
**Objective 4:** The Town recognizes the importance of limiting the impacts of the development of renewable energy resources on public health, safety and welfare, the Town's historic pattern of development, the Town's natural, cultural and scenic resources.

***Policy***

The town should consider energy impacts and expenditures when making municipal decisions. Energy use can be accounted for when considering transportation options, energy used as a result of inefficient land use policies, energy used during the life cycle of new construction, sourcing of materials and supplies, etc.

## Chapter 8: Transportation

Although road maintenance represents the largest portion of the Town budget, and the second largest use of property tax revenues, Middlesex strives for multi modal transportations options for its residents. This includes public transit options and paths for pedestrians and cyclists. By increasing and encouraging alternate modes of transportation, Middlesex can more effectively and efficiently provide safe, convenient, economic and energy efficient transportation for its residents.



### Air and Rail Travel

Although roadways are the main mode of transportation, Middlesex is in close proximity to two airports – Burlington International Airport located in Burlington, VT for main commercial travel; as well as Knapp Airport, located in Berlin, VT for private transportation. The closest rail stations are in Waterbury and Montpelier along Amtrak lines which transports passengers as far north as St. Albans, VT or as far south as Washington, DC. Middlesex acknowledges that these modes of transportation are useful in providing long distance travel alternatives to traditional automobile transportation. The town will look for additional opportunities to increase use of these modes such as encouraging public transit routes through Middlesex that stop at the train stations and airports.

### Road ways

In respect to transportation and land use factors, Middlesex understands the two are very much intertwined. Past development has shown the location and condition of our roads can be an important factor in determining where people build new homes or start a business. The locations of new roads, or conversion of Class IV to Class III roads can also determine which natural resources are conserved or developed by allowing or limiting access to an area.

We can already see the effects of increased traffic. There has been discussion about the possibility of paving more roads. However, there is concern about travel speeds on rural roads, road widening & increased washouts. Middlesex participates in culvert and bridge inventories conducting by CVPRC. These inventories allow Middlesex to better understand culvert and bridge conditions in order to plan for future replacement, upgrade and repair projects.

The I-89 exit in Middlesex is along the most heavily traveled section of highway in the state and the Middlesex exit is one of the least commercially developed exits in central Vermont. **Further** industrial and mixed use development of this area is possible and encouraged by the town given the sites close proximity to existing infrastructure and location on a public transit route.

With the new bridge to Moretown and the widening of Route 100B completed, we can expect an increase in traffic, especially commercial traffic, through the village.

In Middlesex today, cars are the primary means of transportation, and that means that the condition of our roads is important to all of us. Middlesex has no Town owned class one roads. We have 14.2 miles of class two, 33.8 miles of Class 3, an estimated 11.8 miles of Class 4, 3 miles of legal trails, 16.9 miles of State highways, and 19.5 miles of interstate highway. We also have two railroad sidings in the Town. Class II, III and IV roads provide Middlesex residents with the opportunity to recreationally explore Middlesex via bicycle, walking, horseback riding or hiking (in the case of Class IV roads).

#### Alternate Modes of Transportation

The Waterbury Commuter run by GMTA runs through Middlesex with stops along Route 2 between Waterbury and Montpelier. This route serves as an important mode of transportation for workers commuting to Montpelier and Waterbury. Additionally the route connects riders to routes that go to Chittenden County and St. Johnsbury. Although the Waterbury Commuter is the only public transit route that stops in Middlesex at the time, the Town would like to see expanded routes that allow residents to travel to other employment centers such as the Stowe area, the Mad River Valley and Burlington.

Many roads in Middlesex are not paved and do not contain sidewalks; however, some have lower levels of traffic and are ideal for walking, hiking and biking. For commuting purposes, Route 2 has a wide enough shoulder to afford cyclists room to ride. The road was recently repaved and traffic is minimal during off commuting hours.

A park n' ride is available in Middlesex. This park n' ride is located in an interchange area to allow for easy access to I-89 and in Middlesex Village. The lot is well lit, paved, and has handicapped parking for disabled residents. Additionally, if notified in advance, the commuter bus will stop at the lot.

The key to solving our future transportation problems will be to anticipate and plan for the inevitable growth of the Town and to understand that decisions about our roads will be an important factor in determining if this growth will have positive or negative effects. It is important that Middlesex acknowledges the relationships among energy, land use and transportation in order to provide numerous modes of transportation for all residents and have an effective and efficient transportation system.

Goals, Objectives, & Implementation Strategies

**Transportation Goals:**

1. Encourage participation in safe routes to school, transportation enhancement grants, and other state/federally funded grant programs.
2. Maintain the use of class four Town Highways for walking, bicycling, and other recreational uses.
3. The Town should have a long-term capital budget for transportation based on established road conditions and annual maintenance costs which proactively plans for the town's future transportation needs.
4. Encourage all public transportation agencies to expand service and develop additional routes through Middlesex during peak travel times that serve residents in the north.
5. Continue to participate in Central Vermont Regional Planning Commissions sign and culvert inventories and other services.
6. The Select Board will continue to communicate with residents on road schedules.

**Objective 1:** To have detailed information, updated regularly, about the condition of its roads, its rights of way, and the types and volume of traffic using them.

***Implementation Strategies:***

- Continue using the mapping technology available through the Regional Planning Commission, the Select Board and Road Commissioner should continue to gather necessary information to update the GPS Coordinates of town roads. Information should include the location of roads, culverts, private driveways, new housing starts and commercial growth, as well as traffic loads, road conditions, and the annual maintenance schedule. In addition, the areas where access for emergency vehicles and school buses are limited should be identified. An investment of State grant funds or Town funds in this resource will yield cost savings in years ahead.
- Records of public rights of way should be researched and the Town's documentation of all existing ROWs should be updated.

**Objective 2:** To keep select Class 4 roads available for public use and access.

***Implementation Strategy:***

- The Select Board should oversee a survey of all Class 4 town roads and public rights of way and develop a plan to ensure public access for recreation, forestry, and to prevent further deterioration whenever practical.

**Objective 3:** To set road construction and maintenance standards to protect our investment, our environment, and to provide safe roads.

***Implementation Strategies:***

- The Select Board with the recommendations of the Road Commissioner adopted road maintenance and construction standards prescribed by the State for road construction projects. Construction standards should include but are not limited to, road width, visibility, ditching and safety standards. This will provide a basis for estimating the cost of long-term upgrades, protect the Town's investment in its roads, and prevent erosion and damage to streams.
- Scenic vistas, roadsides, and bridges that are publicly owned should be maintained as part of the regular road maintenance program.

***Policy:***

- Every effort should be made to minimize erosion from roads, particularly near streams and wetlands. Chemicals, including salt, should not be used unless authorized by the Select Board after consideration of potential damaging impacts on surface water, ground water, plants and animals. Scenic view sites located along public roads should be preserved.

**Objective 4:** To develop a capital budget to meet the current and future needs of residents.

***Implementation Strategies:***

- The Select Board, through its Road Commissioner may, request traffic data and projections on State roads that are on file at the Agency of Transportation for the Center Road near I-89 and the Shady Rill Route 12 intersection. By requesting the most recent data along with past data the Road Commissioner can get an idea of the increases over that period and estimate the effect on our town roads over the next five years. When combined with the information on road conditions and annual maintenance costs the Town will have the information necessary to produce a five year plan with cost projections.
- The Select Board may work with the Regional Planning Commission on regional transportation planning on identifying programs and funding available for local projects. Existing Agency of Transportation programs include a town bridge program, a culvert replacement program, and a program directed towards non-highway projects including scenic trails, roads, historical sites, and recreation pathways.

***Policies:***

- There should be ample commuter parking provided at the I-89 interchange.
- The Town's industrial and commercial areas should have adequate parking and well planned traffic flow.

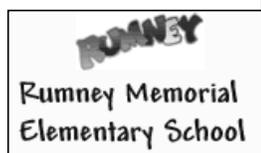
## Chapter 9: Community Facilities & Services

### Education

This section discusses the Town's public schooling, including the quality and cost of educating our students. It also recognizes opportunities for continued learning and community interaction with and for all residents.

#### *Rumney School*

Most kindergarten through sixth grade students attended Rumney School in Shady Rill. Seventh through twelfth graders attend U-32 High School in East Montpelier. Some Middlesex students attend private schools or are home schooled. Total Enrollment at Rumney was 174 in 2012. Total enrollment at U-32 for the five towns it serves was 807 in 2012, 135 of these students from Middlesex.



### Budget

Through a series of public board meetings starting in late November the School Board and the Principal develop a budget for the following school year. The budget is designed to address of the academic, social, and functional needs of Middlesex students in a cost efficient manner. Once approved by the Board, the budget is presented for voter approval by Australian Ballot at Town Meeting Day. For the 2012-2013 school year Rumney's budget was 2,295,522 dollars. The U-32 budget was 8.7 million dollars in 2001 and has increased to approximately \$13,594,212 in 2012.

### Facility & Instructional Staff

Rumney School is a single-story structure with 29,000 square feet. Rumney employs approximately ten classroom teachers, depending upon student enrollment and needs. Other teachers and instructional aides are employed to provide services, the number of which fluctuates depending upon student enrollment and need. Rumney provides special education services through employees and contracted services with Washington Central Supervisory Union. Student assessments are conducted annually.

#### *U-32 High School*

Union High School 32 in East Montpelier is the designated high school of Middlesex, Berlin, Calais, East Montpelier, and Worcester.



### Facility & Instructional Staff

U-32 School is a two-story structure that underwent a significant expansion and renovation which was completed by the 2002-3 school year. In 2005-06, U-32 staff consists of 60 classroom teachers and 28 other teachers and instructional aides. At U-32, student assessment is conducted annually. Aggregate test results generally are reported to school boards and are available to the public. Existing student performance measurements focus mainly on

academic areas. There is relatively little formal assessment of school performance in other life skills areas such as personal, family, and group skills, or in employment and business skills.

The Middlesex School Board is primarily responsible for developing policies and budgets designed to achieve the Town's educational goals of providing a challenging, quality education for each student in a safe, respectful, and caring environment. The School Board's mission is to meet its obligations to Middlesex students and community members through periodic reassessment its goals and policies in light of qualitative and quantifiable results.

### **Continuing Education, Vocation Opportunities, and Nearby Adult Education Opportunities**

Although there are no colleges in Middlesex, there are several public and private traditional and nontraditional higher education institutions located in Montpelier. These institutions include: New England Culinary Institute, Community College of Vermont, Vermont College of Fine Arts, University of Vermont Extension, and Goddard College in Plainfield, VT. There are also numerous higher education intuitions in Burlington, which can be reached via car or the commuter bus routes. Warren, VT in the Mad River Valley also hosts Yestermorrow Environmental Design/Build School. Vocational opportunities for high school students are offered at the Barre Technical School as well.

Adult basic education programs are available at the Central Vermont Basic Education Center in Waterbury. This program provides educational services to adults in their homes or at the Center. Programs aim to improve job related reading, writing and math skills or those who are wishing to take their GED. The Center also provides computer trainings.

## Education Goals, Objectives, and Implementation Strategies

### Education Goals:

Students who graduate from the public schools of Middlesex should have the following six attributes:

1. **Basic Academic Skills** - Students should reach their full potential in reading, writing, and mathematics. Their skills should be comparable to skills of students in other towns, states and countries, and are appropriate for later employment or education.
2. **Citizenship** - Students should be intellectually prepared and motivated to participate actively and intelligently in the democratic process at the local, state and national level. Students should be prepared to participate as community members in energy conservation, preservation of the environment, and the preservation of community history.
3. **Knowledge of the Physical World** - Students should understand and be capable of interacting creatively with their physical surroundings. Suitable to their ability, they have a basic understanding of the natural, physical, and chemical processes that surround them, and of how natural laws limit human activities. Students intending higher education in science should be suitably qualified.
4. **Personal, Family and Group Skills** - Students are prepared to lead safe, healthy and productive lives as individuals, as members of social groups, and as principle partners in new family units.
5. **Creativity** - Students should have knowledge and skills that permit them to express their creative impulses in socially useful and personally rewarding ways.
6. **Transition to Work** - Students are prepared to enter skilled employment with career opportunities, undertake a business occupation, or enter an institution of higher education. Special needs students are prepared to enter an employment, educational, or home setting that allows them to develop to their full potential.

### *Implementation Strategies:*

- The School Board should establish expectations for each goal and reasonable and measurable performance expectations based on student outcomes.
- The School Board should revise student assessment. The superintendent and principal should develop and submit to the School Board methods of measuring attainment of the goals.
- In cooperation with Town committees, the School Board should develop appropriate learning materials that cover energy conservation, fire prevention and response and personal health and safety.

- In cooperation with the Planning Commission, the School Board should develop a plan for the future that will serve as a basis for determination of demand for land for school facilities over the coming two decades.
- The Board should explore means of reducing its budgetary expenditures based on decreasing student enrollment. These means should include reducing the number of instructional staff and consolidation of the school with schools from nearby towns.

***Policy:***

- It is the policy of the Rumney School Board that the Rumney School should be viewed as a community resource. It is a goal of the School Board to maximize the use of the facilities, including the library, the gym, and the grounds by Town residents, consistent with meeting the educational goals identified above.

## Community Services

### Child Care

The Town recognizes that safe and affordable child care is an important resource for working families.

- The Town supports use of federal and state funds to assist with the development of child care facilities, programs and small businesses.
- The Town will strive to maintain an inventory of all child care programs in the Town and their capacity.

The Vermont Department for Children and Families regulate daycare facilities. Vermont law requires any person who cares for children from more than two families, other than their own children, to be registered or licensed by the Department for Children and Families. Day care providers operating out of private homes who care for a maximum of six children under the age of six years old (only two of those six can be under the age of two years old), and four school age children must be licensed with the State of Vermont. As of August 2012 only two home child care operators in Middlesex are registered with the State.

Those day care facilities not operating out of the care provider's home must be licensed by the State. A licensed facility is allowed to provide care to a larger number of children. The State regulates the licensed facilities and does periodic inspections. As of August 2012, the Before School and After School programs located at Rumney Memorial School are the only licensed facility operators in the Town.

Other than allowing for the use of the elementary school, the Town is not involved in providing childcare to local residents. It is not anticipated that the Town's role will change.

## **Citizen Participation**

This section discusses citizen participation in Middlesex’s public decisions, including natural resource planning as well as education and other local issues.

Middlesex places a high value on civic engagement. Citizen participation is likely to produce more well-rounded, sustainable decisions, and it strengthens our sense of community, civic skills and democracy. Middlesex residents have made these values known through the recent survey, (Appendix I) as well as a variety of community efforts.

In recent years, Town leaders have encouraged a well-informed citizenry through the implementation of an official Town website ([www.middlesexvermont.org](http://www.middlesexvermont.org)), the active adoption of the Front Porch Forum online community forum, the publication of the *Middlesex Operator’s Manual*, and other initiatives. Middlesex has worked to increase participation and engagement in our annual Town Meeting by implementing an all-volunteer Remote Town Meeting Participation process so that people with mobility issues or who are abroad for public service reasons can participate by phone and internet; by moving to a larger more accessible meeting space (Rumney School); by creating informational budget pie charts and discretionary funding background materials; by collaborating on child care and a community meal after Town Meeting; and other efforts.

### **Citizen Participation Goals, Objectives and Implementation Strategies**

**Goal:** To continue to improve well informed inclusive, deliberative, empowered participation in Middlesex’s public issues.

#### **Strategies:**

- Middlesex committees (Select Board, Planning Commission, Conservation Commission, School Board, etc.) should use a variety of strategies, from public hearings and written/online surveys to small-group discussions, neighborhood gatherings, Front Porch Forum, and youth involvement, to involve citizens in public decisions.
- Middlesex should encourage informed, civil, face-to-face deliberation in forums such as the annual Town Meeting.
- Wherever possible, Middlesex committees should encourage participation throughout the decision-making process, so that citizens can shape the questions they will vote on.
- To the extent that volunteers are available, and that it does not compromise the experience of those attending Town Meeting in person, Middlesex should make an effort to offer technological methods to participate in Town Meeting. Given

limited resources, priority should be given to people who cannot attend Town Meeting for health-related reasons, and for reasons of public service.

- The Middlesex Town Meeting Solutions Committee and other volunteers should assist in any of the above outreach and public engagement efforts at town committees' request.

### Emergency Services

This section deals with the evolution of our present Fire Department and Fast Squad into a Fire and Emergency Department that will be able to handle the increased demand on its services as Middlesex grows and provide continued protection for all Middlesex residents, businesses, and travelers on our highways.



The Middlesex Volunteer Fire Department (MVFD) is a private, non-profit corporation providing fire and initial emergency medical service to the residents and community of Middlesex with mutual aid to and from the neighboring towns. The MVFD operates from two stations, the three-bay main headquarters located on Welch Park Drive and the two-bay facility located on Shady Rill between the Rumney Elementary School and the Town shed. The stations and vehicles are owned by the Town with minor exceptions.

Equipment includes one engine, one tanker/pumper, one rescue vehicle and a utility vehicle at the main station, one 4x4 engine and a tanker at the Shady Rill station. The MVFD has approximately 30 members, 15 of whom are active firefighters. There are six members of the Fast Squad. There are other active supporting and auxiliary members. The membership is comprised of Middlesex residents and residents of surrounding towns.

The MVFD is a member of the Capital Fire Mutual Aid System serving other towns in Central Vermont. The Mutual Aid System works through a pre-planned arrangement between and among neighboring towns. The active firefighting members of the MVFD have received a basic level of training regarding response to hazardous material incidents. This training prepares the firefighters to keep people away from the scene, to stay away themselves, and to contact the proper state authorities who are trained and equipped to deal directly with such situations.

Police coverage is supplied by the Vermont State Police and ambulance coverage is purchased from the Montpelier Fire Department.

Funding for the Department includes both an annual appropriation and debt service by the Town for its new building, pumper truck and vehicles, private donations, and fund raising activities conducted by the MVFD to supplement the Town appropriated funds.

## Emergency Service Goals, Objectives, and Implementation Strategies

### Emergency Service Goal:

1. We should have adequate fire protection and emergency medical service for our community and its residents.

**Objective 1: Fire Service and prevention:** The MVFD Department should strive to conform to the National Fire Fighting Code and should expand its services if growth in demand dictates. This expansion would include items such as:

- adequate fire station facilities. (A new fire station was built in the village in 2009.)
- adequate mobile equipment and personal gear.
- accessible water sources within one mile of all buildings, if possible, and including dry hydrants.
- on-site water storage for industrial sites not on a public water line.
- adequate staff training in the use of up-to-date equipment.
- up-to-date communications technology.

### *Implementation Strategies:*

- The Fire Department should obtain approval by the Select Board of a 5-year capital budget and coordinated development plan for the Fire Department including: staffing, training, acquisition of equipment and gear, development of fire ponds, dry hydrants, and fire house maintenance and improvement.
- Work with the Select Board and the Planning Commission to develop a procedure for review of industrial processing, building safety relating to fire and other emergencies, and a procedure for approval of planned access to new buildings to assure access by the Fire Department.
- Performance standards should be developed by the Fire Department and data should continue to be collected on all Department activities.

### *Policy:*

- The Department should be primarily publicly financed based on its needs as approved by the voters. The Town should minimize risk by working toward the goal of being able to reach every building in Middlesex within 20 minutes of a call for assistance.

**Objective 2: Medical/Emergency Services (Fast Squad):** The Fast Squad should have facilities and equipment coordinated with the Fire Department, and primarily should receive public financing based on the needs of the Fast Squad as approved by the voters.

### *Implementation Strategies:*

- Performance standards should be developed by the Fast Squad and data should continue to be collected on all services and activities.
- The Fast Squad shall prepare and present to the Select Board a 5-year capital budget and

coordinated development plan for the Medical/ Emergency Services Department including: staffing, training, and acquisition of equipment and gear.

- The Fast Squad should seek other sources of funds and reimbursement for services provided whenever possible.

***Policies:***

- There should be continuous staff training and certification.
- The Select Board and the Fire Department should ensure that the Town is adequately served by a cost effective medical emergency service.

**Objective 3: Regional Emergency Management Agency:** The Middlesex Fire and Emergency Department will cooperate with a Regional Emergency Management Agency. Our staff should be trained with other members of the Agency. Funding will be provided by the state and other sources.

***Implementation Strategies:***

- Middlesex should actively participate in the operation of the Regional Emergency Management Agency.
- Middlesex should develop emergency plans for Middlesex including transportation of toxic wastes and hazardous materials on the interstate.

## Recreation

Outdoor recreation opportunities provide some of the greatest benefits of living in Middlesex. From the spine of Vermont's Green Mountains to the waters of Vermont largest river, Middlesex has something for everyone. The ability to enjoy the natural beauty of Vermont within walking distance of one's home is one of the aspects of a rural life style that Middlesex residents highly value. In the 2012 town wide survey, 87% of Middlesex residents feel that a rural lifestyle is either important or highly important and close proximity to outdoor recreation is a manifestation of this lifestyle.



Top of Hunger Mountain. Photo by Janet McKinstry.

## ***Middlesex Recreation Resources***

### **State Lands**

The Middlesex Grand List shows that there are a total of 2,523 acres of State owned public lands in Town. The Putnam State Forest is made up of several parcels on opposite corners of the town: 127 acres on the I-89 Tract, 329 acres that can be accessed from North Bear Swamp Road and Notch Road and 496 acres in the northwest corner of Middlesex. Refer to the chart below for a complete listing of State owned property.

Comment [DS2]: Is this figure still accurate?

Comment [r3]: MJS

The next largest parcels of land include the Wrightsville Reservoir and surrounding lands. There is conflicting information on the size of the reservoir. The Grand list indicates it at 241 acres of water and 547 acres surrounding. The Water Resources Board states that there are 150 acres of surface water. Regardless, the reservoir is a great outdoor recreational asset to the Town. There are miles of trails surrounding the reservoir, a disc golf course, a picnic area with tables and two shelters, and a public beach. The shelters can be reserved. Wrightsville Beach is managed by the four member municipalities of the Wrightsville Beach Recreation District Board (Middlesex, Montpelier, East Montpelier and Worcester). The Water Resources Board rules allow personal watercraft, motorboats, and airplanes to use the water body. An area north of the narrows is a no wake zone; motor crafts are required to maintain a speed of less than 5 mph. The Shady Rill Picnic Area is also part of this property and is located off Shady Rill Road along Martin's Brook. It has a picnic area and shelter. Use of these facilities is on a first-come, first-served basis.

The Department of Fish and Wildlife owns and manages 600 acres of lands available for hunting, trapping, wildlife watching, fishing and hiking. Motorized vehicles are not allowed. Middlesex owns a total of 506.81 acres. There are two landlocked parcels owned by the Town of 21 and 11 acres located adjacent to the Town Forest that for management purposes are included in the Town Forest.

Comment [r4]: MJS "Where is it"?

Owner	Description	Location	Acres
Department of Fish & Wildlife	Middlesex Notch WMA	TH 33 Notch Road	580.00
Department of Forests, Parks & Rec.	Putnam State Forest	NW Corner Middlesex	76.00
Department of Forests, Parks & Rec.	Putnam State Forest: I-89 Tract	US 2	127.00
Department of Forests, Parks & Rec.	Putnam State Forest: Densmore Mountain Tract	NW Corner Middlesex	125.80
Department of Forests, Parks & Rec.	Putnam State Forest	TH 41	329.00
Department of Forests, Parks & Rec.	Wrightsville Dam: Fee Lands	VT 12	675.90
Department of Forests, Parks & Rec.	Wrightsville Dam: Flowage Rights Only	VT 12	112.30
Department of Forests, Parks & Rec.	Putnam State Forest	NW Corner Middlesex	496.70
Department of Forests, Parks & Rec.	Putnam State Forest: Parking Lot TH #7	TH 41 North Bear Swamp Road	1.00
<b>Total</b>			<b>2523.70</b>

Owner	Description	Description	Location	Acres
Middlesex		.23 Acres	TH 2 Brook Road	0.23
Middlesex	School Use (tennis)	14.75 Acres & Bor & Garage	TH 2 Shady Rill Road	14.75
Middlesex	Landlocked	21 Acres Chandler Lot	TH 33 Notch Road	21.00
Middlesex	Landlocked	11 Acres Vaughn Pitch Lot	TH 33 Notch Road	11.00
Middlesex	Active	30.2 Acres Gravel Pit	TH 33 Notch Road	30.20
Middlesex		0.7 Acres Village Cemetery	TH 34 Gallagher Road	0.70
Middlesex		.6 Acres & Town Hall & "Old" Fire Station	5 Church Street	0.60
Middlesex		3.3 Acres & Fire Station	Welch Park	3.03
Middlesex		.7 Acres Village Cemetery	US 2	0.70
Middlesex		4 Acres North Branch	Portal Road	4.00
Middlesex	Forest	403 Acres Town Forest	TH 33 Notch Road	403
Middlesex School District	School	20.08 Acres & School	TH 2 Shady Rill Road	20.08
Middlesex		1.52 Acres	US 2	1.52
<b>Total</b>				<b>506.81</b>

River enthusiasts can access the Winooski River from the Walter Kelley Memorial Park, next to the Fairpoint garage. Anglers and boaters can launch from here but the area is currently undeveloped. Opportunities exist to improve this parcel.

Each year the Town provides financial support for the Learn to Swim program. Children from ages 4 to 12 have access to lessons.

Opportunities for field and court sports are found at the Rumney Memorial School. The school owns 20 acres and the Town owns 14 acres adjoining it. School recreation facilities include a basketball gymnasium, a playground, an outdoor skating rink (subject to availability of a volunteer to maintain it) and a nature trail. The outdoor basketball court, two outdoor tennis courts, and baseball/soccer field are owned by the Town and maintained by the Middlesex Recreation Committee. Priority is given to school activities but the facilities are available for all town residents. Use of the indoor facilities is based on availability and the Principal's approval. There may be a fee charged if the activity will result in work for the custodial staff. The playground and nature trail can be used by town residents at any time.

#### **Class 4 Roads and Legal Trails**

Middlesex has 9.43 miles of Class 4 roads and approximately 3.32 miles of legal trails. The roads and trails are a valuable resource to the Town. Class 4 roads are legal rights of ways. They are often part of the Town's transportation history, having served as main travel routes prior to the construction of railroads, state highways and federal interstate roads. Over the years they have been downgraded from primary travel routes to Class 4, the lowest tier of road in the Town road classification system. Legal trails are the next and last tier down. Class 4 roads and legal trails are not eligible for state highway funding.

It is rare to see a municipality create a new Class 4 road, although they have the right to do so. New development requiring new roads are created at the Class 3 level or higher, since it is in the Town's best interest due to state highway funding criteria. Class 4 roads and legal trails are therefore rare resources which become more vulnerable as development increases. The Select Board has ultimate authority over the management and classification of Class 3 & 4 roads and legal trails. The Select Board may elect to reclassify a Class 4 road to Class 3 or a legal trail or they may choose to discontinue the road and forfeit all public rights of way.

Vermont statutes state that all highways including Class 4 roads: "... shall be three rods wide (49.5') unless otherwise properly recorded. Any highway which had been designated as a trail prior to July 1, 1967 and later becomes a trail shall retain the same width of right-of-way as a trail as it had as a highway, but not exceeding three rods."

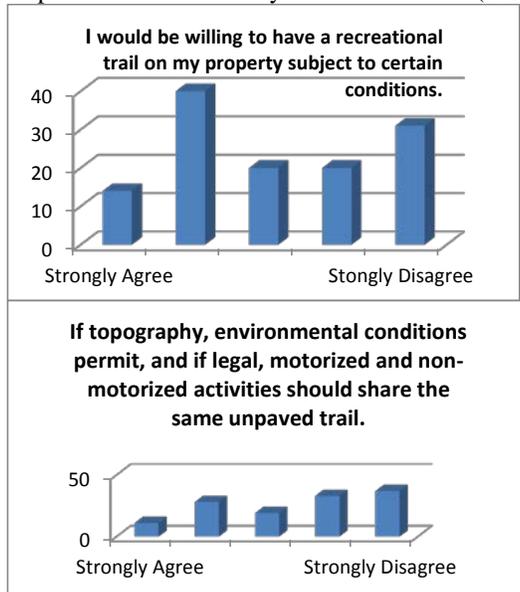
Keeping an accurate inventory of the Town's Class 4 roads and ensuring they are not lost or forgotten over the years is wise public policy. As growth increases and property is subdivided, Class 4 roads and legal trails become a valuable recreation resource. More people on smaller house lots will demand more trail opportunities off of their property. Class 4 roads are currently Town-owned assets that can meet this demand at little or no cost to the Town other than ensuring they are not lost to development or simply forgotten. Class 4 roads are important in providing access to timber for harvesting and to agricultural fields. In that sense they are also important economic development assets.

Every full time resident in Middlesex was sent a survey asking several questions about trail use in town and recreation in general. This section summarizes the survey findings and focus groups.

The survey revealed the survey respondents being divided as to whether there is a need for more trails. Thirty-eight percent thought there was an adequate supply of trails in town while 28% felt there should be more.

The survey asked residents whether motorized and non-motorized activities should share the same unpaved trail. The majority of respondents (55%) felt the uses should be separate while 30% thought they could share the same trail.

When asked if they would allow a trail on their private property for public use, slightly more respondents indicated they would host a trail (43%) than those who would not (41%).



Forty-six percent of those responding stated that they would be willing to have a public trail on their land under certain restrictions.

For many Middlesex residents class 2 or 3 roads are used as trails. Since the most common activity identified in the survey is hiking, it appears that most people are using these roads for strolling, walking, and hiking.

The data indicates many respondents feel the trails in Middlesex should accommodate a variety of pedestrian uses and that hiking and cross-country skiing are the activities most commonly participated in on Middlesex trails. Water based activities were also popular with survey respondents. Trail based activities that were less frequently engaged in included riding ATVs and dirt bikes, mountain biking, rollerblading and snowmobiling.

### **Future Recreation Use**

The survey posed a series of questions regarding residents' future plans. Responses indicate that many residents plan on staying in Middlesex through their retirement years. National health and recreation trends are showing that as people retire from work they are more active and healthier than ever before. For these two reasons, the use of and demand for Middlesex lands for recreation purposes will likely increase. This indicates that recreation planning in Middlesex should plan for the long term.

### **Recreation Goals, Objectives, and Implementation Strategies**

#### **Recreation Goals:**

1. To protect and preserve the town's existing resources of Class 4 roads and legal trails.
2. To work with willing landowners in strategic locations to establish cooperative agreements leading toward sustained long-term use of trails.
3. To discuss the creation of the "Middlesex Loop Trail".

#### ***Implementation Strategies:***

- The Conservation Commission will work on implementing the following actions:
  - Delineate Class 4 roads and legal trails on the ground in Middlesex;
  - Identify potential trails that will connect and form loops with existing Class 4 roads and legal trails;
  - Educate landowners regarding liability issues and the protections afforded them through the State of Vermont when permitting the public to traverse private property;
  - Work with and educate landowners with Class 4 roads and legal trails on their property that these are public resources and rights of way;
  - Explore the potential for creating additional trails on public lands or with willing private landowners;
  - Explore possible connections with trail systems in adjoining towns.

## Water & Sewage

This section discusses plans for adequate supplies of safe drinking water, and for adequate systems for every building that generates waste to treat and dispose of domestic sewage and other wastewaters. We also recognize that water supplies are critical to fire protection services and to business and agriculture.



### **Domestic Water Supplies**

Middlesex groundwater aquifers are being used as drinking water. Individual well systems and springs are being used with no filtration, with mechanical filtration systems, or chemical filtration and disinfection systems. It is not known to what extent these different treatment levels are being used. Little is known about the quality of the groundwater in Middlesex. Some wells in the Village on Route 2 are known to be contaminated from a petroleum leak. A pollution remediation plan has been completed. Middlesex wastes, wastewater, and sewage are treated and disposed of with individual septic systems.

A water and wastewater survey for the village was completed in 2001. That survey indicated that the village did not have a wastewater problem it had a water problem. A preliminary design for a water system was completed. Due to a lack of State or Federal funding it was unfeasible to go forward at that time.

### **Community Water and Sewage Systems**

Middlesex groundwater aquifers that could serve the needs of concentrated residential, commercial, or industrial development, including future Middlesex schools, are most likely located along the Winooski River/Route 2 corridor. The soils, sands, and gravel deposits that, using existing technology, could serve the sewage disposal needs of concentrated residential, commercial, or industrial development and future Middlesex schools are mostly located in the same southern fringes of Town.

Middlesex residents recognize that untreated or poorly treated wastewaters and sewage put at risk their own health, the health of their neighbors, the prosperity of agriculture, and the Town's ability to attract business. For these reasons, individual and community investments should be made to treat wastewater and sewage and properly dispose of these and other wastes to ensure that water supplies are ample and pure and that Middlesex natural resources are protected. These investments will be offset by savings in the costs required to treat polluted groundwater and surface waters at the levels safe for human consumption.

### **Water & Sewage Goals, Objectives, and Implementation Strategies**

**Water & Sewage Goals:**

1. Wastes, wastewater, and sewage should be treated and disposed of in a manner that ensures the integrity of Middlesex natural resources and so that groundwater aquifers are protected for use as drinking water with no more than filtration treatment in accordance with State Regulations.

***Implementation Strategies:***

- Middlesex should inventory potential water supplies for municipal needs including firefighting and the Village center.

***Policies:***

- The Town of Middlesex should have the water supplies needed to ensure the health, safety and welfare of its citizens. The Fire Department should have access to the quantities of water necessary to extinguish fires throughout the town. Other municipal water supply needs, such as for the school should be met.
- Groundwater aquifers, aquifer recharge areas, surface waters, and soils that have the potential to serve the water supply and sewage disposal needs of concentrated residential, commercial, or industrial development should, if needed, be identified, protected, and maintained.

Solid Waste

Solid waste is any material that is discarded after use by residential, commercial, industrial, and agricultural generators. Middlesex currently relies on out-of-town landfills and a regional solid waste district for management of its solid waste. This section covers the cost of solid waste disposal, the environmental effects of its disposal, and the human activities that generate and manage solid waste in Middlesex.

People today are concerned with the cost of solid waste disposal and that solid waste is disposed of with care for the environment.

**Residential** - Many families practice recycling by bringing recyclable materials to drop-off centers in Montpelier, Worcester, or elsewhere. Recycling, in conjunction with trash pickup, is offered by some local haulers. Additional recycling and waste reduction is also accomplished by households that use backyard composting. Trash disposal is handled similarly to recycling: either by drop-off at a landfill, transfer station or other drop-off location.

**Commercial and Industrial** - Commercial and industrial operations generally rely on commercial trash haulers for trash disposal and pick-up of conventional recyclables. Special wastes and recyclable materials require special attention by businesses.

**Agricultural** - Agricultural operations can offer a model for the rest of the Town. Vermont farms can be nearly zero-waste operations: manure is used as fertilizer, paper is used as bedding, cardboard is reused as package for saleable products, and food waste is often fed to livestock,

farm-grown products require minimal or no packaging. The waste that farms do have is generally handled in the manners described for residential generators.

**Rumney Memorial School** – The school food program actively composts.

**Central Vermont Solid Waste Management District** - The CVSWMD was formed in the early 1980's to provide a cooperative negotiating entity with local private landfills serving the Barre-Montpelier area. In 1987, with the passage of a significant solid waste legislation, the district expanded its scope to encompass planning and development of solid waste facilities, and its membership rose to as much as 33 member communities. Since that time the District has successfully developed some small recycling and trash transfer facilities, completed some educational programs, instituted some special waste programs, written and published a regional solid waste plan, and continues to negotiate with private facilities for recycling and disposal services. Middlesex relies on the CVSWMD despite high and increasing costs.

### **Solid Waste Goals, Objectives, and Implementation Strategies**

#### **Solid Waste Goals:**

1. To reduce the total quantity of solid waste generated, encourage the integration of "reusable" into current practices, return material to source or other locations where it may be recycled into new materials or products.
2. Solid waste management in the Town of Middlesex should be accomplished where the benefits of reduced cost, sound environmental practices, and greatest efficiency can be obtained.

#### ***Implementation Strategies:***

- The Select Board should periodically review the solid waste management options of the Town.
- The Town should periodically reevaluate or reaffirm its decision to participate in the Central Vermont Solid Waste Management District (CVSWMD).

## Chapter 10: Land Use



A land use plan for Middlesex is a significant tool for achieving the goals set out in this plan. The major land use tool in Middlesex today is our Zoning Regulations. These regulations have recently been updated and should be periodically reviewed to make sure they achieve our priority goals. This Land Use section of the Town Plan does not specify details of which areas of Town should be used for particular purposes. Instead it identifies the decisions the Town should make about land use and proposes a process for gathering information necessary to help make these decisions.

A land use plan is a key tool for managing the effects of residential and commercial growth so that these effects are positive and do not adversely affect the Town. This land use plan and the actions it anticipates are designed to:

- plan for the possible allocation of lands, if needed, for public facilities and services,
- strike an equitable balance between the interests of property owners and public purposes when there is potential for conflict in the use of land, and
- employ land use tools, as appropriate and approved by the citizens, to achieve the Town's goals.

### Facts About Middlesex:

Total area:	28,173 acres + (44 sq. miles)
Area above 2000 ft.:	1469 acres
Area above 2500 ft.:	501 acres
Area where slope exceeds 15%:	13,470 acres (48% of the Town)

The Town's Zoning Bylaws establish and regulate development according to six land use districts, as follows:

**Village District:** Allows residential, commercial, office, and public uses on 1 acre lots (1/4 with public sewer or water). Includes areas just south and east of Exit 9 and in Putnamville.

**Mixed Use District:** Allows uses complementary to the Village in an area just north and west of Exit 9. There is no minimum lot size but overall density in the zone "must be" equivalent to one building per two acres.

**Industrial District:** Includes a small area south and west of Exit 9 and the area along Route 2 from the Village to the Montpelier line. Industrial uses are encouraged. There are agricultural uses in this zone. The minimum lot size is 1 acre.

**Medium Density Residential District:** A minimum lot size of 2 acres is required in this primarily residential zone. This district occurs in the vicinity of Shady Rill and Rumney School and along Route 2 north and west of the Exit 9 and along Middlesex Center Road.

**Rural Residential District:** Allows similar use on lot sizes of 2 acres provided a 5 acre density is maintained.

**Conservation District:** Allows residential and other low intensity uses on 4 acre lots provided a 10 acre density is maintained.

#### Middlesex Village/Exit 9: Land Use and Development Plan

In October 2001, Middlesex completed the “Middlesex Village/Exit 9 Land Use and Development Plan” to guide actions in those areas. That Plan is specifically incorporated by reference into this Town Plan. A copy is available at the Town offices.

Town-wide Goals, Objectives, & Implementation Strategies:

#### Land Use Goals:

1. The Town’s Zoning Regulations should effectively support and regulate growth management and land use that meets the goals set out in this plan.
2. Lands employed in production will be recognized as potential assets to the community, and zoning will promote land use that benefits owners and the community.

**Objective 1:** To maintain a detailed land use plan and keep zoning regulations up to date and aligned with the goals as outlined in this plan. Priority should be assigned to keeping regulations up to date relating to the following:

- the development of housing subdivisions,
- uses in the Village,
- business parks,
- home-based businesses,
- commercial/retail zones,
- residential zones and cluster housing, and sewage.

**Objective 2:** To identify land to be zoned for production use and recommend zoning regulations, ordinances, and tax policies to support agriculture and forestry in the best interest of land owners, users and the community as a whole.

**Objective 3:** To maintain a long-range plan, schedule, and associated budget for the location, capacity, and installation of public services and facilities that voters will want and need.

**Objective 4:** To maintain a comprehensive Zoning Map that is coordinated with zoning regulations.

***Implementation Strategy:***

- Our current Middlesex Map will be updated as amendments to this Town Plan are approved and as zoning regulations are amended, added, and approved.

**Objective 5:** To preserve and protect the Town's ridgelines, this Plan prohibits construction of any telecommunication facilities or wind generation facilities on the Town's ridgelines. The ridgelines are defined as: (a) those lands above 1,500 feet elevations, including but not limited to: the main range of the Worcester Mountains (west of Center Road and Bear Swamp Road) and (b) all land above an elevation of 1,400 feet on Dumpling Hill.

**Objective 6: The Middlesex Village/Exit 9 Land Use and Development Plan provides an excellent framework for the Town.** Middlesex should continue to pursue the recommendations of the Plan to promote a conscientious revitalization of Middlesex Village and appropriate expansion of its mixed use, densely developed land use pattern. The Town should give strong consideration to the strategies presented in the *Vermont Interstate Interchange Planning and Development Guidelines Manual*. The Town Zoning Regulations require PRD or PUD design in its mixed use district.

## Chapter 11: Regional Coordination

### Adjacent Towns

Development in Middlesex has had little impact on surrounding towns. Although Middlesex has two small industrial parks, most of the development has been in the form of residential construction. Housing growth in Town is strongly influenced by our proximity to Montpelier and our interstate access to Barre, Berlin, and Burlington. In particular, the growth in business activity and state government in Montpelier and Berlin has increased the demand for housing in the region, and we expect this demand to continue.

To the north, Middlesex abuts Worcester, and at present both towns have conservation zoning districts along the North Branch. A change in zoning in this valley by either town would have significant impact on its neighbor.

To the south Middlesex abuts Moretown and Berlin, with a mixture of industrial, village and residential zones. A new bridge over the Winooski River and the widening of Route 100B in Moretown may increase traffic in this area. At present, no major zoning changes are contemplated along this border.

To the west, Middlesex borders the town of Waterbury along the eastern slope of the Worcester Mountain range. This is a rugged area that has not yet come under development pressure. This area is currently used primarily for recreation and the harvesting of timber. Any future use of this portion of Middlesex would have little impact on Waterbury. The Town road that once connected the two communities through the Middlesex Notch is no longer passable by motor vehicles due to erosion and extensive beaver dams.

To the east, the Town borders Montpelier and East Montpelier. Middlesex residents rely on Montpelier for shopping, employment and a wide range of other services. Montpelier's stated economic development plan, if successful, could have a major impact on the demand for housing in Middlesex.

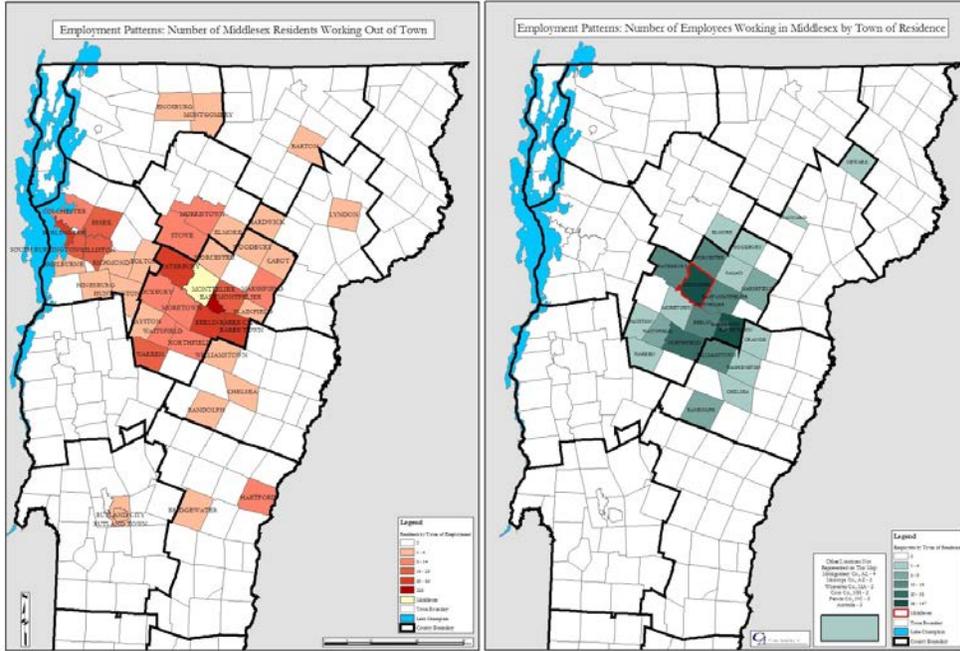
### Regional Cooperation

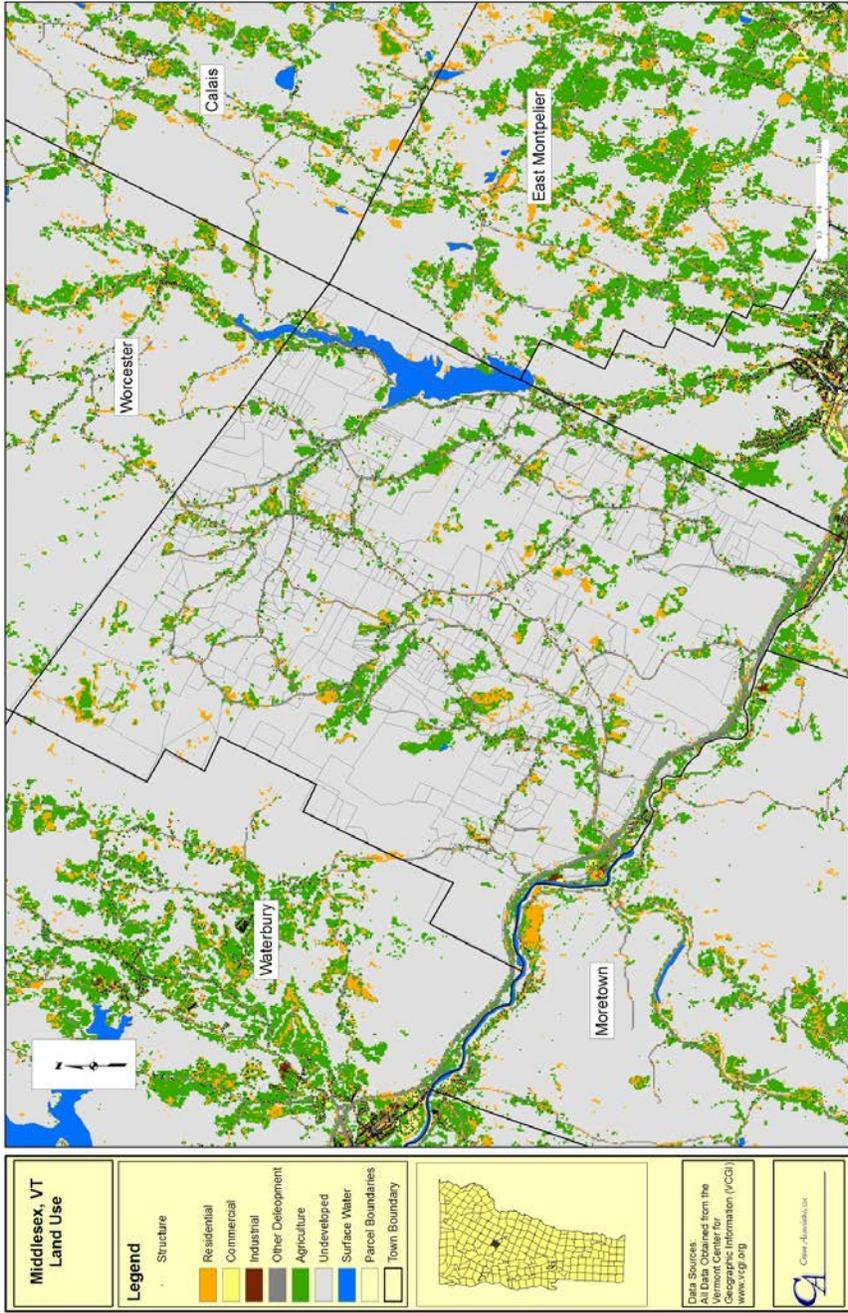
The Town of Middlesex is committed to working cooperatively with neighboring towns to address issues of mutual concern. Middlesex cooperates with other towns in a number of areas, including schools (as part of the Washington Central Supervisory Union), emergency services (as a member of the Capital West Mutual Aid System), and solid waste (as part of the Central Vermont Solid Waste Management District). As a member of the Central Vermont Regional Planning Commission, Middlesex participates along with all Washington County towns and three Orange County towns. The opportunity exists for the towns abutting the Worcester Mountains to develop a long-term plan for the range.

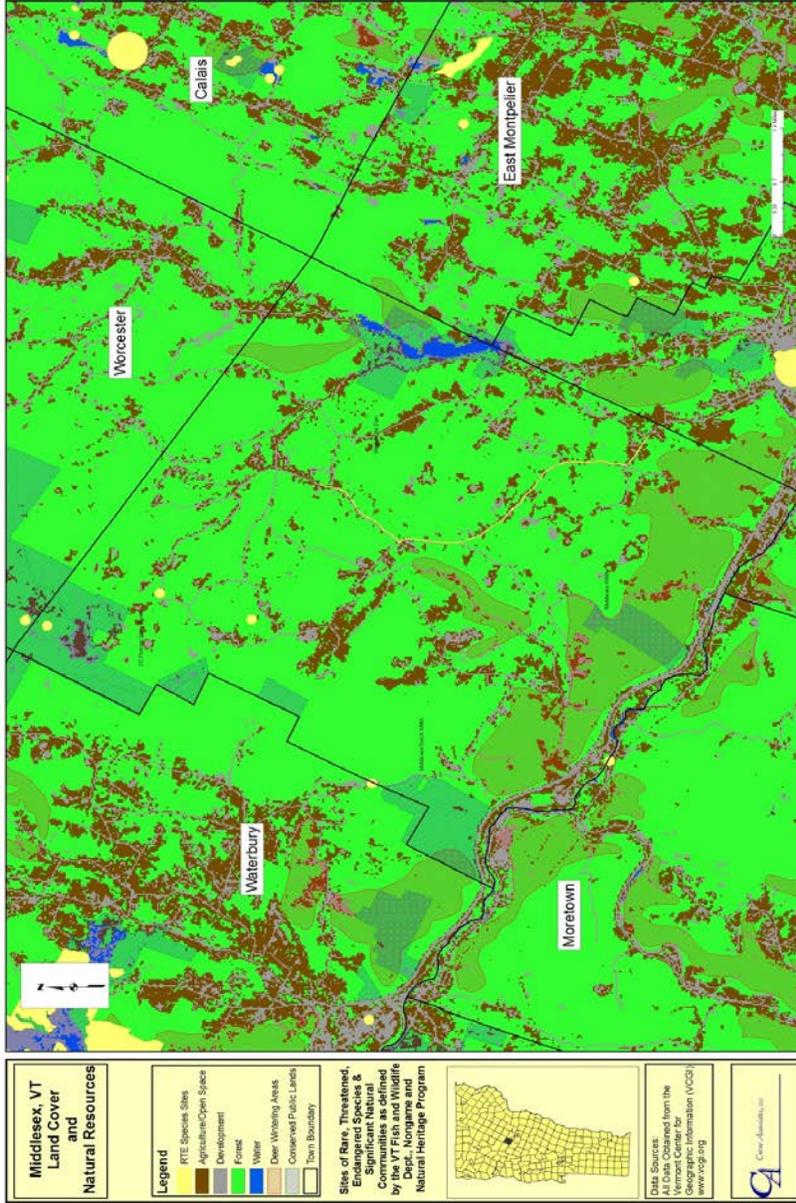
Compatibility Statement

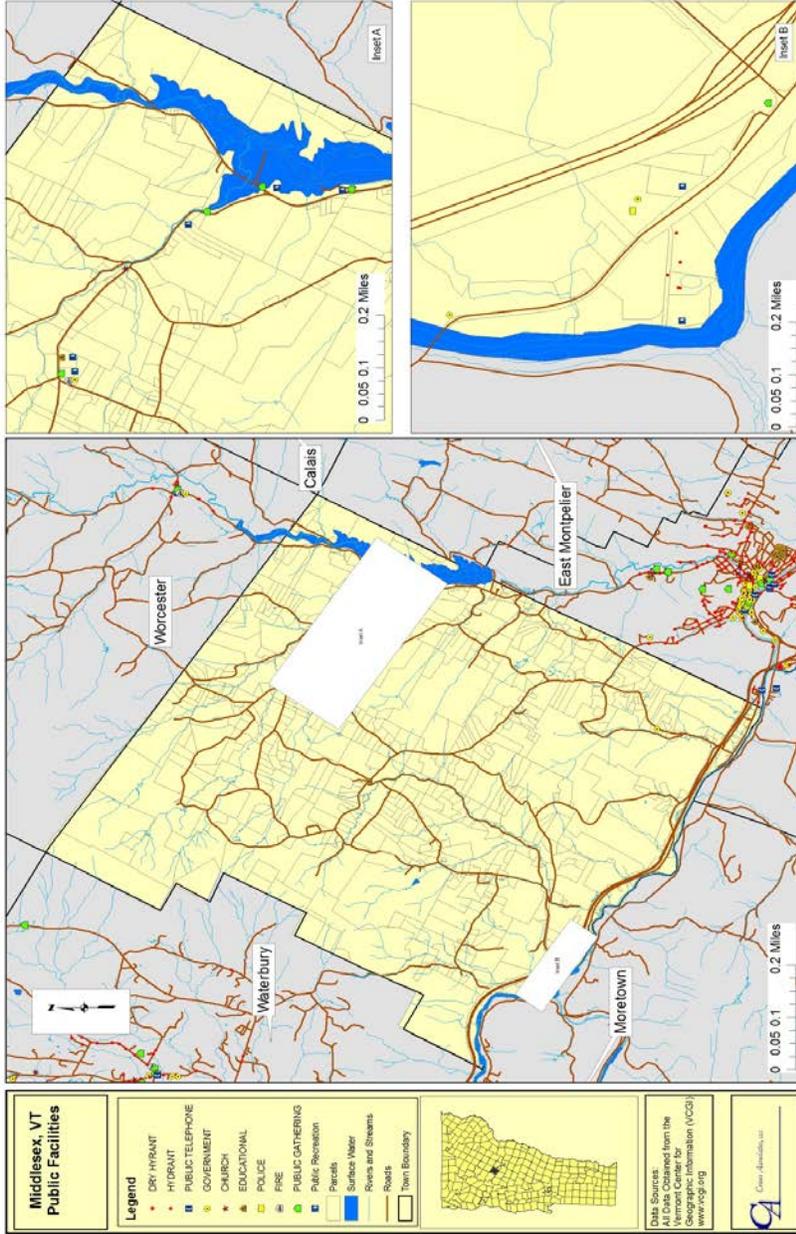
The Middlesex Town Plan as proposed is unlikely to have an adverse impact on the plans of neighboring towns. The Planning Commissions of all neighboring towns have been provided with a copy of this proposed Plan.

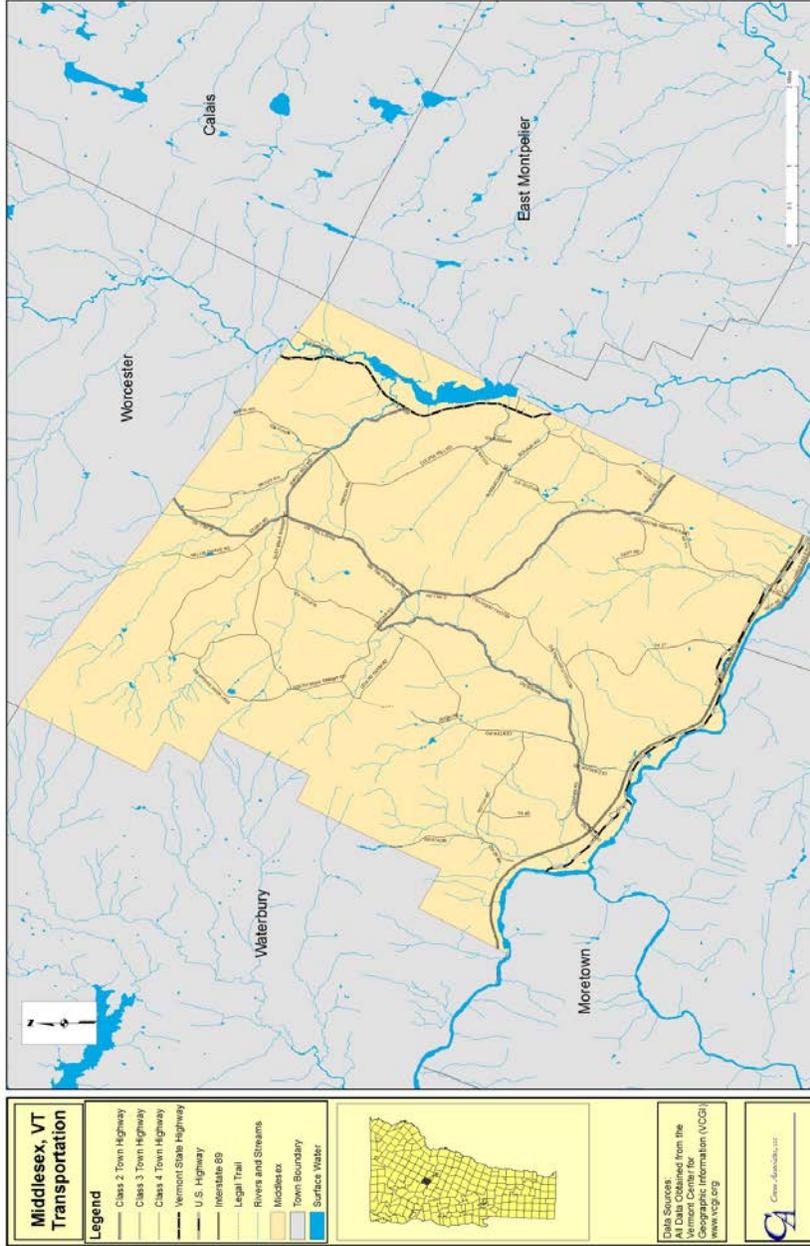
# Maps







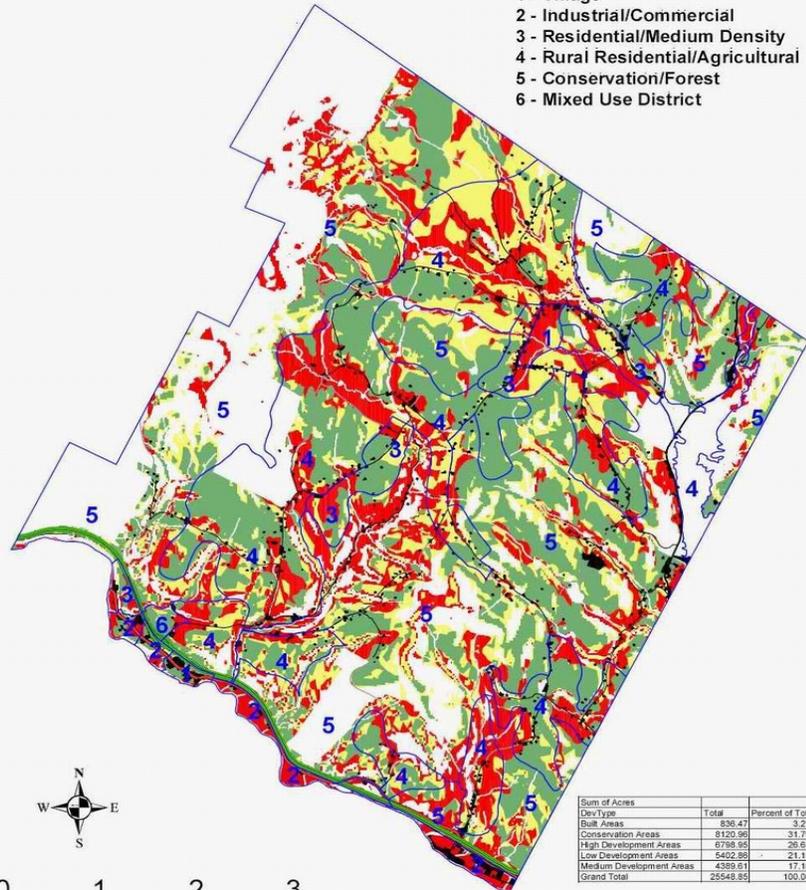




# Middlesex Zoning, Development Potential, and Roads

## Land Use Codes

- 1 - Village
- 2 - Industrial/Commercial
- 3 - Residential/Medium Density
- 4 - Rural Residential/Agricultural
- 5 - Conservation/Forest
- 6 - Mixed Use District



Sum of Acres	Total	Percent of Total
Built Areas	436.47	3.27%
Conservation Areas	8120.96	31.79%
High Development Areas	6798.95	26.61%
Low Development Areas	5402.96	21.15%
Medium Development Areas	4389.81	17.18%
Grand Total	25548.85	100.00%



0 1 2 3 Miles

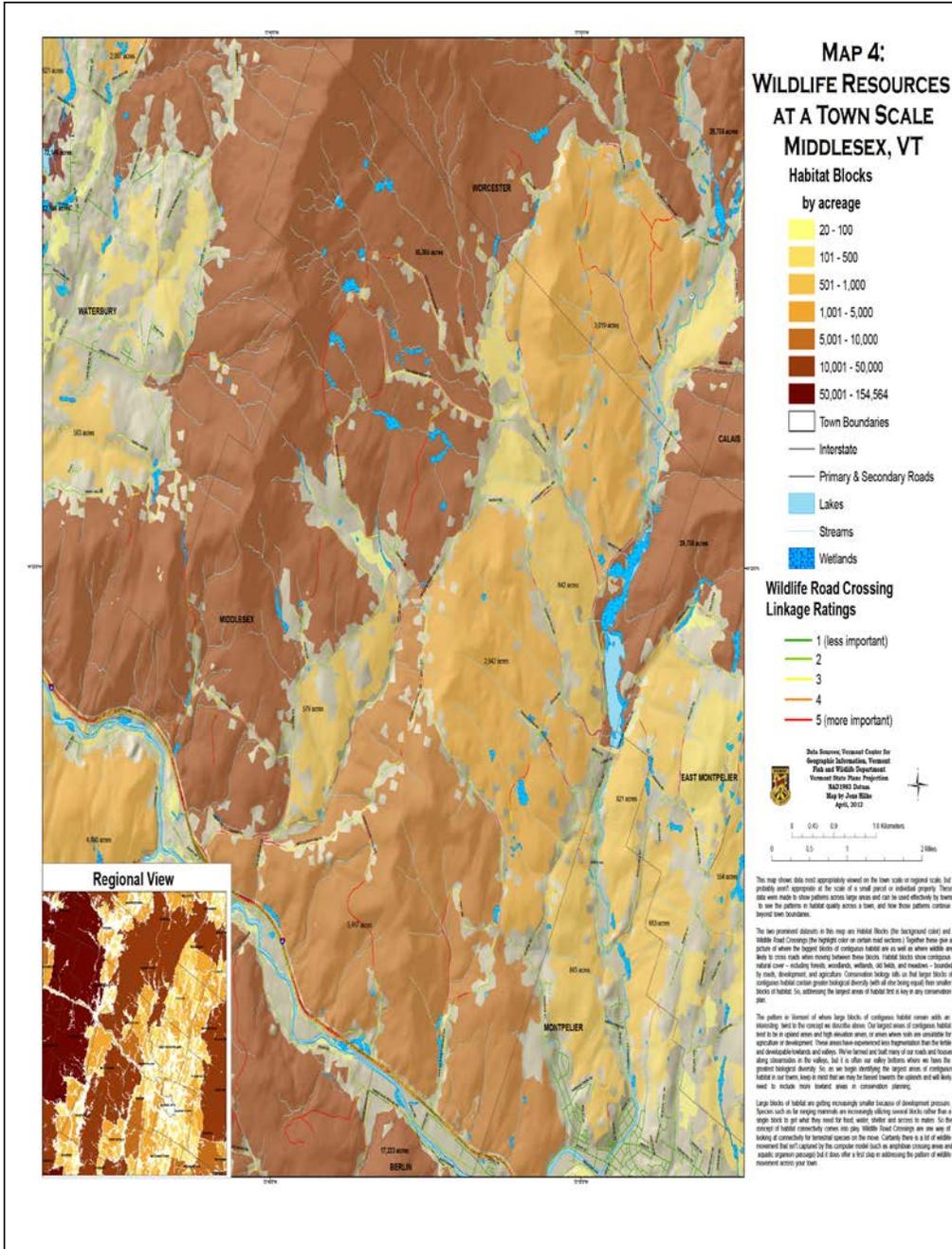
- ### Middlesex Roads Class
- Class 1, 2, and 3
  - Class 4
  - Legal Trail
  - Vermont State Highway
  - US Highway
  - Interstate

- ### Development Potential
- Built Area (-2745 to -2000)
  - Conservation Area (-1999 to -200)
  - Low Development Area (-199 to -75)
  - Medium Development Area (-74 to -26)
  - High Development Area (-25 to 25)

Map Created by CVRPC  
M:\DSS\Middlesex\Maps\Map4.mxd

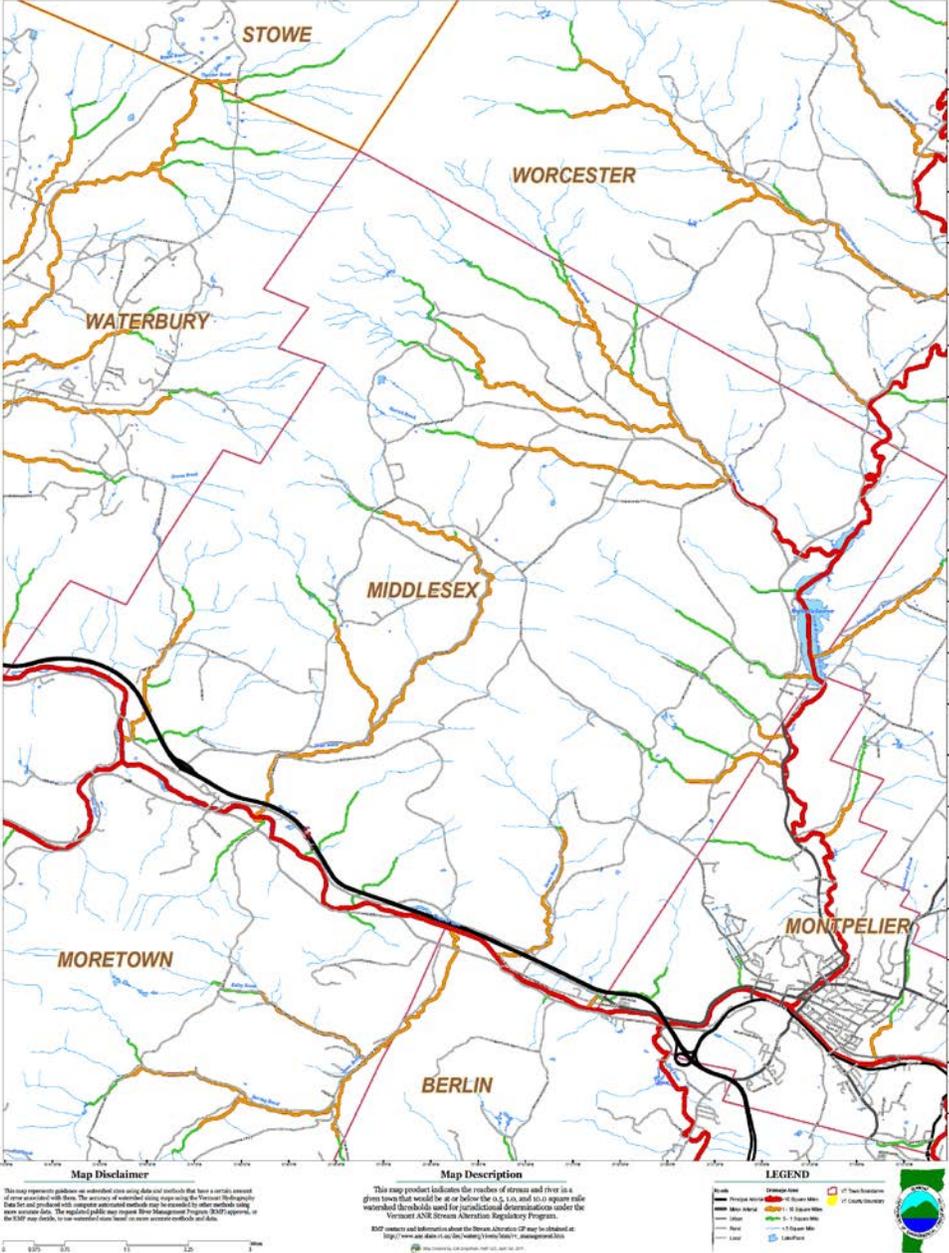


Data is only as accurate as its original source.  
This map is for planning purposes only.  
This map may contain errors and omissions.



### Watershed Sizes Used as Guidance in Stream Alteration Regulations

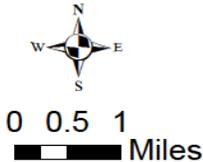
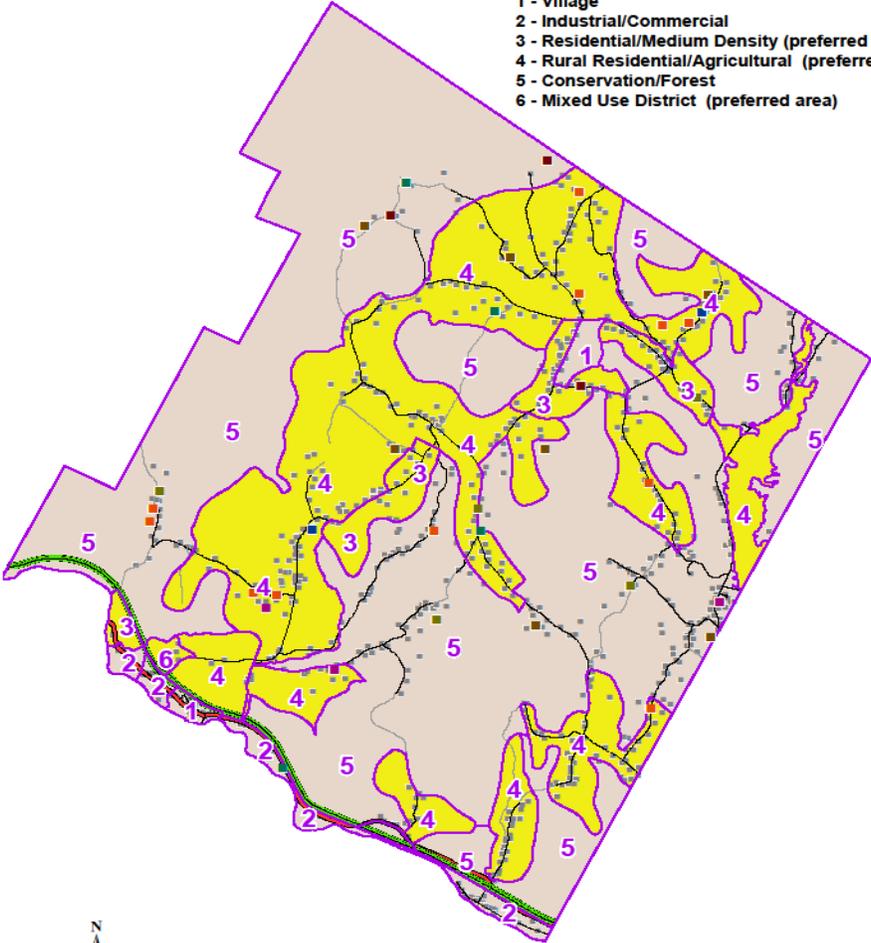
#### MIDDLESEX



# Middlesex Zoning, Roads, and Housing Units

Land Use Codes (preferred housing development area)

- 1 - Village
- 2 - Industrial/Commercial
- 3 - Residential/Medium Density (preferred area)
- 4 - Rural Residential/Agricultural (preferred area)
- 5 - Conservation/Forest
- 6 - Mixed Use District (preferred area)



- Middlesex Roads**
- Class 1, 2, and 3
  - Class 4
  - Legal Trail
  - Vermont State Highway
  - US Highway
  - Interstate

- Housing Unit Construction**
- Year and Number of Units
- 2012 (2 Units)
  - 2011 (4 Units)
  - 2010 (9 Units)
  - 2009 (7 Units)
  - 2008 (3 Units)
  - 2007 (3 Units)
  - 2006 (11 Units)
  - Other Years

- Zoning**
- Preferred Housing Development Areas
  - Other Areas

The Mixed Use, Medium Density Residential and Rural Residential District are the preferred areas for housing development in the town of Middlesex. These areas represent 9129 acres or 38% of the land area in Middlesex.

GIS  
 CVRPC  
 Path: N:\Towns\Middlesex\Projects 2012\Town Plan Maps\Middlesex\_Housing\_Dis\_Map\_2012.mxd

## Appendix I

### Comments from 2012 Survey

We feel it's EXTREMELY important to improve our "downtown", village and/or commercial/industrial area. Middlesex village was once an attractive center. It looks terrible now, except for Red Hen! If any businesses or industrial enterprises come in, oversee attractive and welcoming construction and visible presentation. So many community members and travelers through could benefit from our village.

Thanks for the opportunity to contribute via survey. Our commute/work schedules don't allow us to participate in town affairs currently and for that we are sorry.

Middlesex is ideally located for family oriented outdoor tourist/recreation industry. We could offer a real affordable alternative to big name resorts-while offering similar geographic amenities (proximity to Montpelier, Burlington-ponds, brooks, trails) and benefitting from their national advertising.

I would like to see the town taking care of areas that are at risk for flooding. For example, the field owned by Cadcut has blocked drainage ditches that no one maintains. This contributed to flood damage in 2011. Either the town of Middlesex or the owners of the land should take responsibility to keep the drainage ditches open. If you want to encourage families to stay here or encourage families to move here, it needs to be a safer place. It's more important to protect property from damage than it is to spend money on recreation.

Some people can't make meetings. Stream them online from town website. Current online viewing is outdated. Can be viewed without cost to viewer.

What is improving zoning regulations? Very poor questions. Note: We are just a fancy suburban community. Need more children-community will collapse on itself. Should charge higher fees on second homes and high class residential. Raise children to support elderly parents! Don't constrict our future?

Neighborhood meetings in addition to meetings at town hall. Thanks for gathering this data. It will be fascinating to see the collective results and exciting to imagine Middlesex in 10-20 years.

For the most part, I like the way the town is.

Wind Towers/Hydro/Solar/Biomass should be environmentally regulated so neighbors have a say, Not too much new housing development - costly to tax base supports diversified agriculture, farming, forestry. Supports setting aside more land for light industry as long as it's not retail traffic, property tax to service ration is ok, town pursuing extraction of local natural resources for local use if okayed with neighbors, Thanks for asking.

The Town should not be in the land acquisition business.

(To reduce Property tax rate) poorly worded question. I think the SB & School Board get it about right.

Please stop/enforce the home burning of trash! Almost everyday someone is burning and stinking up the air in our area one of my neighbors has a burn barrel right in his driveway! \*Moved to Middlesex for fresh air and country life, but considering selling and moving\*another "secretly" burns his trash at night in his woodstove.

Difficult to increase jobs/agriculture in town without growth around 89 exit!

Middlesex is now primarily a bedroom and recreational community. Town meeting is, unfortunately, an anachronism which prevents a significant number of people from expressing their true opinions in front of their neighbors or even participating in voting on budgets and other matters. I'm strongly in favor of Australian balloting of most issues, preceded by informational hearings and debate.

I don't think our aim should be to reduce the property tax. Rather, we should identify what's needed to produce the community we want and then find creative ways to fund it.

We are not residents of Middlesex. We own land there and live nearby in Montpelier.

We should have good gravel mined in town to help with the roads!

We enjoy living in Middlesex. It is convenient to Burlington & Barre/Montpelier. However, the taxes are high and the village could really benefit from a gas station/ convenience store. We are seasonal residents.

Middlesex is my family's home for many generations but the cost of owning a vac. or 2nd home in Middlesex is extremely high and makes other states more attractive. Summer residence bring income to the area with very little cost to the town for services. They have no impact on the school system but pay high cost in the tax rates. If the town set a minimum of 2-3 acres it would not over develop the town

I like the manner in which Middlesex governs & attitudes.

Retail is a dying business problematic for all of VT - Reducing property taxes can't really be accomplished. We can't under educate our future citizenry

Motorized and non-motorized activities should share the same unpaved trail but not at the same time.

Middlesex Village should be kept undeveloped

There should be co-housing communities

It's not up to a town to buy land - therefore taking it out taxes to recreate on!

The Town needs to attract and keep more younger people in town and should allow and encourage young people (20s - 30s) to participate in community decision making

The area at the junction of RT 2 & 100B needs improvement. It reflects on Middlesex as many pass through. Cleaning up and then encouraging a business, such as a grocery store, gas station or restaurant would be a great asset to the community. Something like the country store with gas, a place to sit and eat lunch/snacks.

A small gift shop with VT crafts, something to draw people in. Right now it doesn't encourage exploring Middlesex or stopping, other than the Red Hen & the second hand shop. Thank you, a park where the abandoned house not sits would be a plus.

Under what type of community is Middlesex: These categories could overlap I hope not too much money went into this survey, very poorly done. The maximum amount of freedom to landowner should be considered with any "planning". The zoning laws should be as lenient as possible to achieve this.

Local electricity for local use - we need more clustered houses either single family or apartments that are close together and can share resources such as heating, farm fields, recreation driveway. The internet is great. It connects this dispersed community. We would appreciate more opportunities to participate in the actual meetings during the decision making process. Simple votes at town meeting do not provide much opportunity to understand issues being discussed.

Thank you for doing this survey!

Improvements in zoning regs to protect water quality and other environmental benefits. Town should undertake land conservation efforts to discourage subdivision of large pieces of under. Land located interior to roads. I think this is a fairly unique feature of Middlesex that enhances value to wildlife. Encourage town road crews to continue efforts to reduce erosion of roadside ditches!

Middlesex was a wonderful place to raise our children, now grown, and the town is fortunate to have such an excellent elementary school. Now that we are retired, Middlesex continues to be a wonderful place to live, and again, we are fortunate to have the capable and committed fire department, town road crew, and town leaders, who should be commended for their thoughtful use of tax dollars. I am not sure how the town can deal with the problem that has been increasing - there is noise from ATV's on a fairly regular basis during the summer. Residents certainly have a right to use the ATV's but the noise does impact the people in our neighborhood.

Every question of town governance is tainted by the distortion of property taxes. Basing taxation on real property value was functional 150 years ago when most people farmed and income was hard to track. It makes no sense today. As a town we should campaign against it. We need to make Middlesex energy resilient. This means promoting efficiency, renewables, local GA, and local business adapted to this reality. Property tax is appropriate for the 18th century and should be abolished in favor of a local income tax.

Forgot to include a question of finding a place for the town historical society to display its memorabilia - a great way to unite community

We hope to live here a long time in retirement and as we continue to work now. We came to Middlesex in 1976. It is great! Lots of concerns, though, about affordability

in future due to high taxes when we are retired in 5 years and working class Vermonters now. We believe education is very important but Rumney School is adequate space and should not be expanded. Working in our 60s is essential in this economy but Middlesex needs to reduce some expenses to keep taxes reasonable in future.

Try to lower taxes and other things unless for safety reasons.

	Highly Important				Unimportant
<b>Survey Results - PC Survey 2012</b>	<b><u>5</u></b>	<b><u>4</u></b>	<b><u>3</u></b>	<b><u>2</u></b>	<b><u>1</u></b>
Keeping farm and other open land in agriculture/forestry	82	34	6	2	3
Active social life in Middlesex	20	26	51	16	13
Affordable housing	7	43	32	8	5
Promoting the tourist economy in Middlesex	11	19	39	29	23
Increase child care options	8	30	41	21	21
Increase local employment opportunities	36	42	27	11	8
Maintain a rural character	76	34	12	2	2
Develop Senior Housing	15	31	48	19	15
A mix of incomes in Middlesex	42	43	33	5	4
A mix of age groups in Middlesex	48	42	27	7	4
A sociable, cultural economic diverse mix of residents	47	27	29	15	7
Develop renewable energy resources	49	37	24	12	5
What sources of renewable energy are important to you:					
Wind Towers - Private	33	34	22	12	12
Wind Towers – Municipal (ridgetops)	27	29	19	15	23
Hydro	41	33	21	10	8
Solar	63	32	22	2	5
Biomass (fire-wood/wood pellets)	38	30	25	17	6
Maintaining and enforcing Planning and Zoning Regulations	35	42	35	12	5
Revising and improving the Middlesex Zoning Regulations	29	34	37	11	10
Development of village centers:					
Middlesex Village (Route 2)	53	33	22	10	9
Rumney School Area/Town					
Garage/Bandstand	16	29	38	23	21
Putnamville (Route 12)	13	20	36	28	28
Most of the growth in housing has been single family homes. Do you favor more of a trend towards:					
Condominiums/Town Houses	10	10	30	31	39
Retirement home community	12	22	41	25	23
Multi-family apartments	6	14	40	30	34

<b>Community Assets</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neither Agree nor disagree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
The Town Plan should play a primary role in directing growth	39	55	23	8	2
Planning and Zoning regulations should be used to direct growth	35	61	23	5	5
Now that Welch Industrial Park is full, Middlesex should set aside more land for light industry. **see definition below	20	52	32	16	4
Middlesex should encourage businesses with less than 2 employees (home occupation)	38	50	31	10	2
Middlesex should encourage businesses with 3 – 10 full time employees	45	60	21	3	
Middlesex should encourage business with 10 or more full time employees	35	38	35	14	4
Middlesex should charge higher fees on new development to raise revenues for the town.	8	25	48	33	13
The Town needs more indoor recreation facilities	11	29	40	34	12
The Town needs more outdoor recreation facilities	10	39	38	32	7
The Town needs to improve its public safety services (police/fire/rescue)	9	26	48	35	7
The Town needs more day care services	5	26	58	26	9
The Town needs improved elderly care services	6	43	60	13	2
The Town needs more retail businesses that provide for basic household needs including groceries and gas	31	5	26	17	2
To reduce the property tax rate, funding for the following services should be reduced:					
Town highway services (currently 8.20%)	3	8	22	57	37
Other Town services (currently 8.80%)	4	3	33	47	24
Public education (currently 82.41% of tax rate)	23	21	18	31	32
All of the above					
The Town should pursue extraction of local natural resources for local use: sand/gravel	17	54	35	13	11
The Town should pursue extraction of local natural resources for local use:	25	59	39	12	6

timber harvesting					
The Town should use the following sources of funding to pay for any additional land acquisitions or infrastructure improvements for the Town Forest: •timber sales from the town forest•Town's Conservation Fund•fundraising / private donations•grants	26	56	26	5	8
If a parcel of forest land abutting the Town Forest becomes available, the Town should consider acquiring it, using any of the funding sources identified in the above question	37	45	26	14	10

<b>Community Assets</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neither Agree nor disagree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
In addition to signs, trails and bridges where necessary, the Town Forest should include the following infrastructure improvements if paid for with the funding sources identified above:					
•no improvements should be made	9	32	31	6	5
•educational kiosks	9	10	15	15	2
•benches for resting	7	25	16	7	5
•shelters for gathering, teaching, camping	10	29	16	6	4
•improve existing parking	11	23	19	8	4
•add new parking	10	23	20	5	3
	5	17	24	6	7
	Highly Important				Unimportant
Formal public hearings	49	44	28	3	4
Written surveys	48	56	20	5	3
Online surveys	42	43	22	11	9
Small-group discussions including citizens and local leaders	38	51	27	6	7
Participation throughout the decision-making process, so that citizens' can shape the questions they will vote on	50	58	17	2	4
Remote meeting participation for those who cannot attend meetings	46	44	23	9	6

Face-to-face deliberation and voting (e.g. town meetings)	49	45	26	8	4
Voting by Australian ballot	35	30	32	11	13
Involve youth (e.g. civic education)	45	45	25	7	3

	Strongly Agree	Agree	Neither Agree nor disagree	Disagree	Strongly Disagree
There are adequate recreational trails in Middlesex.	10	39	45	28	8
Recreation on Class 4 roads and legal trails are public resources that should be encouraged.	36	56	28	7	3
I would be willing to have a recreational trail on my property subject to certain conditions.	14	40	20	20	31
If a trail project was underway in Middlesex I would be willing to volunteer time or resources to the project.	16	42	42	17	10
If topography, environmental conditions permit, and if legal, motorized and non-motorized activities should share the same unpaved trail.	11	28	19	33	37
<b>Please check the box that most closely indicates how often you engage in the following activities during the appropriate season</b>					
	At least twice per week	About once per week	Once or twice per month	Once or twice per season	Never
ATV/Dirt Biking	7	2	4	5	108
Bicycling on pavement	11	9	23	38	45
Boating (motorized)	2	1	8	13	100
Boating (non-motorized)	3	11	17	42	52
Camping	3	4	14	58	49
Cross Country Skiing	19	16	22	20	51
Hiking/ Walking/Snowshoeing	47	30	25	13	12
Horse back riding	4	2		9	112
Hunting/Fishing	11	6	10	25	76
Mountain Biking	4	9	12	22	58
Picnicking	5	9	32	48	32
Playing at a park or playground with kids	8	6	25	24	60
Playing team sports	3	10	10	9	90

Rock Climbing			1	3	118
Rollerblading	2	1	1	4	113
Swimming/wading/or relaxing by water	23	24	33	19	25
Snowmobile	2	3	2	8	107

Within the next 10 years do you expect to:						
	Almost Certain	Likely	Not Sure	Not Likely	Don't Expect	N/A
Do you plan on selling your home/property	16	16	22	29	46	1
Do you plan on subdividing your property	3	5	14	29	64	16
Retire and live in Middlesex	31	19	23	18	22	13
Relocate for employment reasons		5	12	28	57	26
Relocate for education reasons		1	5	26	63	32
Relocate because it's too expensive to live in Middlesex	5	8	19	30	52	14
Recommend that my family/friends relocate to Middlesex	9	49	25	23	16	6
How many people in your household under 18	60					
How many people in your household between 19 – 29	25					
How many people in your household between 30 – 55	89					
How many people in your household between 55-70	120					
How many people in your household 70 and over	25					

<b>(Indicate your personal opinion of the type of community Middlesex is.)</b>	Average
A community where residents commute out of town for work	63
A community where most people work in town	9
A second home community	6
A tourist community	5
An agricultural and natural resources community	13
A retirement community	7
Other	1
<b>Total</b>	<b>103</b>

<b>I believe Middlesex should move toward these combinations of community types in the future:</b>	
A community where residents commute out of town for work	46
A community where most people work in town	17
A second home community	5
A tourist/visitors community	5
An agricultural and natural resources community	19
A retirement community	8
Other	1
<b>Total</b>	<b>97</b>

\*\* = exactly how completed in survey