Village of Jeffersonville, Vermont Municipal Plan (2014-19)

(cover photo)

Adopted by the Jeffersonville Village Trustees: May 29, 2014

Regionally Approved: XXXX, 2014

Plan Expires: May 29, 2019

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This Plan has been prepared by the Jeffersonville Planning Commission with technical assistance provided by Lamoille County Planning Commission. Development of this plan was funded in part by a Municipal Planning Grant awarded by the Agency of Commerce and Community Development.

HISTORICAL PREFACE

Jeffersonville's History

The first clearing was made here in the 1780's by Jonah Brewster of Bennington, after whom the Brewster River is named. He was one of a large company from that town which settled Cambridge. At an early date this site emerged as the market for scores of farms in South Cambridge, East Cambridge, the upper Pleasant Valley, and parts of North Cambridge and Waterville. The Brewster River afforded numerous mill sites which were steadily developed over the course of the century. After the introduction of railroads to Jeffersonville this activity blossomed into a diverse wood products industry. By the turn of the century, large-scale lumbering operations were cutting and milling high on the neighboring mountainsides. The surrounding hills have long been a magnet for tourists as well. While Jeffersonville had its own ski hill by the 1930s, since the fifties the growth of a major ski development at Smugglers Notch has had a revitalizing effect on the economy.

The core of the Village is based around Main Street, Church Street and Mill Street. Main Street extends to the north, lined by commercial buildings with period storefronts and comfortable Victorian village homes. Church Street is lined with a beautiful church, a sprawling old inn, the Town Hall which houses the Post Office and Cambridge Town Office, and residences mostly dating from the 1870's through the 1930's. Route 108 south (Mill Street) is faced on either side with homes of the same era and the scenic Brewster River. Parallel to Main Street, and running north from Church Street, is Maple Street. This quiet, tree-shaded residential street was mostly built up between 1880 and 1920. It thus represents the growth of the Village during its lumber boom. The Village core is rounded out by the School Street-Carlton Ave. loop, extending off of Main Street. This is dominated by the school and its playgrounds, as well as residences, which represent early 20th century expansion of the Village. Depot and Old Main Streets are also part of the Village Core, the latter including two of the oldest structures in Jeffersonville (circa 1825).

Residential development since 1960 has occurred primarily in four areas of the Village, all outside of the core area: the "Deer Run Development" on a high ridge overlooking the village on the east, "Jeff Heights" on a plateau above the village to the south, a subdivision adjacent to the cemetery, and a senior citizen and low income apartment complex located on Mann's Meadow between Maple Street and Vermont Route 15. In the 1950s a Route 15 bypass was constructed. This diverted most truck and commuter traffic around the Village Core, enhancing the turn-of-the-century character of the Village Core, but it also led to automobile oriented commercial development along Route 15 outside of the Village Core.

The appearance of the Village Core has changed little in the past 75 years. Most of the buildings retain many of their historic features. Jeffersonville's architecture is highly unusual in that the predominant style on Maple and Main Street is a transitional Greek Revival-Queen Anne. Elaborate porches continued to be a standard feature on new houses well into the twentieth century. All but a few structures in the Village Core are sided with clapboards. Slate roofs are common, as are elaborate shingled designs on gable ends. The overall effect of the Village Core's residential sections is of comfortable Victorian homes. The unique character of Jeffersonville's core area was recognized in 1986 when a large portion of it was placed on the National Register of Historic Places. A major objective of this Plan is the preservation of those features and qualities which made the National Register designation possible.

INTRODUCTION

Jeffersonville is a village within the Town of Cambridge, named after President Thomas Jefferson. It was incorporated in 1905 to facilitate development of a community water system. It is located on bottomland of the Lamoille River, at the mouth of the Brewster River, a rushing mountain stream that drains the north side of Smugglers' Notch. Above it, to the south, looms the state's largest mountain, Mount Mansfield. Route 15, the county's major east-west highway, and Route 108, an important seasonal tourist road that passes through Stowe and Smugglers' Notch, intersect here. Jeffersonville is located next to fast-growing Chittenden County, less than 30 miles from Burlington. Chittenden County's growth has already made itself felt in Jeffersonville, and it can be anticipated that development pressures will only intensify in the upcoming years.

This Village Plan is a document by which Jeffersonville takes stock of where it is as a community and sets a course for the future. For Jeffersonville, this is our opportunity to reflect on our present challenges and opportunities and chart our course for the next five, ten, or twenty years. The success or failure of this, or any other planning effort, rests with the community. A bold plan needs inspired people to support it.

This Plan is not intended to be a plan for only some of the community or of a certain special interest, but instead a plan that reflects the aspirations and values of all Jeffersonville residents. The Planning Commission has made every effort during the development of this Plan to reflect the values and ideals of the entire Village. Of course, it would be foolhardy to imply that this Plan is a consensus opinion of the Village's residents - it is impossible to draft a plan of this magnitude without disagreement by some. However, the Jeffersonville Planning Commission has listened to and considered all of the comments and viewpoints posed during the drafting of the plan. What follows is a reflection of our common history, the present status of our Village's facilities and services, an expression of the views of the residents of Jeffersonville, and the direction proposed for the Village of Jeffersonville over the next five years and into the future.

Statement of Objectives

The purpose of this Plan is to evaluate the growth and needs of Jeffersonville and to propose recommendations for guiding future growth. The residents of Jeffersonville must have a voice in how and where future growth takes place so that unwise and unwanted development can be avoided.

Flood Resiliency: Jeffersonville is located at the confluence of the Brewster and Lamoille Rivers. As discussed above, Jeffersonville was founded and developed in part due to the opportunities that these waterways provided. However, the Village is also susceptible to flooding and has experienced significant flooding in the past. A major objective of this Plan is to increase the resiliency of the community in the face of flooding hazards. This will be accomplished by avoiding flooding (through prohibition of new development within the 100-year floodplain, as defined on the most recent FEMA maps), adapting to flood risks (modifying existing structures to reduce flood damages), altering flood hazards (modifying infrastructure that constrict water flow and increase flood risks) and finally, averting flooding through actions such as restoring the natural functions of floodplains.

Flood resiliency extends beyond the immediate floodplain and has the potential to impact all aspects of life within the Village. For this reason, flood resiliency is addressed in every section of this Plan.

Village Revitalization: Maintaining and enhancing the Village of Jeffersonville as a civic and commercial center is an overarching objective of this Plan. Existing and new businesses are encouraged to locate and thrive in appropriate areas. In order to ensure the overall vitality of

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the Village, commercial activity should be concentrated in the "Village Core" area (see Future Land Use Map). It is becoming clear that lack of parking is a critical issue within the Village Core. Rather than locating outside of the Core area, businesses are encouraged to explore creative solutions to parking challenges. For its part, the Village should explore ways to better utilize existing on-street parking, and if necessary, create public parking areas (see Transportation Section).

This Plan proposes a flexible pattern of development which takes into account many factors including location, roads, land and soil characteristics, water and septic availability, historic preservation, and the general character of each area. Every effort shall be made to preserve the existing character of the Village. The form and pattern of development shall reflect the existing fabric of the neighborhood in which it is located. The Village Core should be maintained as a commercial center, with sensitivity to the Core's residential characteristics, and with intensive commercial development discouraged in areas that are primarily residential. This Plan, together with other applicable ordinances should give the Village the ability to review and, if desired, restrict or prohibit the construction of large projects having adverse impacts on the community.

Maintaining the Unique Character of the Village: One of the primary assets of Jeffersonville, which this Plan seeks to protect, is the quality of the environment. Of concern is not only the natural environment but also preservation of the Village's architectural and social environment. Protection of the environment must be an important consideration in planning for growth and evaluating any proposed development. Energy efficiency should be strived for and development requiring significant increases in energy demand shall be avoided.

As noted in the Historic Resources Section, Jeffersonville is home to a unique architectural heritage that defines the character of the Village. It is essential that the historic features and character of the Village Center, in particular the Historic District, be preserved. The integrity of this District is among the most important assets the Village possesses.

In addition to the built environment, the character of the Village is also defined by its natural resources, particularly the scenic and natural qualities of the Brewster River and Lamoille River. This Plan seeks to protect and enhance these important natural assets.

Improving and Maintaining Quality of Life by Providing Essential Services: The Village of Jeffersonville was originally founded to provide residents and businesses with a community water supply. Today, the Village also provides wastewater treatment. Together, these services are essential to the quality of life of residents in a densely developed village such as Jeffersonville. One of the Village's primary responsibilities is to ensure that the water and wastewater systems are adequately maintained. Fire, rescue, police protection, and schools are also essential services. As new development occurs, it is imperative that the rate of growth not exceed the ability of the community to provide these services.

Finally, in recent years, a growing number of Jeffersonville and Cambridge residents have raised concerns about the safety of pedestrians on Village streets. While sidewalks are available on some main streets, they are not present on many side streets. Further, many existing crosswalks are poorly marked or underutilized. Improving pedestrian safety will be a major objective over the next five years.

How is a Village Plan useful to the residents and property owners of Jeffersonville?

There is a range of ways in which a village plan can be used - from simply a source of information to a foundation for regulations. Ultimately, the residents of Jeffersonville will determine the uses of this Village Plan. Among the potential uses of the municipal plan are the following:

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- A source of information: The plan is a valuable source of information for local boards, commissions, citizens, and businesses. The information in a plan could serve to familiarize residents, potential residents, and development interests about Jeffersonville and its resources.
- A basis for community programs and decision-making: The plan is a guide for the recommendations contained in a capital budget and program, for any proposed community development program, and for the direction and content of local initiatives such as economic development, recreation planning, and housing.
- A source for planning studies: Few plans can address every issue in sufficient detail. Village plans not only record and discuss what is known about the resources and residents of the Village but also what is not known. Therefore, many plans will recommend further studies to develop courses of action on specific needs.
- A standard for review at the state and regional levels: Act 250 and other State regulatory processes identify the municipal plan as a standard for review of applications. Municipal plans are important to the development of regional plans and inter-municipal programs. In addition, State proposals must comply with municipal plans, including the purchase of State land for parks and recreation.
- <u>A long-term guide</u>: The plan is a long-term guide by which to measure and evaluate public and private proposals that affect the physical, social, and economic environment of the community.
- To fulfill an eligibility requirement for state and federal grants: In 2000, the State began requiring Towns and Villages to adopt plans in order to be eligible for most grants and low interest loans. Planning grants, water and wastewater grants, community development grants, historic preservation grants, and other key sources of funding all now require the municipality to have an adopted plan. While many private funding sources do not require Village plans in order to be eligible, having a Village plan that documents the need for funding will generally strengthen the application. Having an adopted Plan is also a requirement to maintain "Village Center Designation," which provides tax credits for improvements to structures within the Village.
- A basis for regulatory action: The plan can serve as a foundation and guide for the creation of land use regulations such as zoning regulations, subdivision regulations, official map, shoreland bylaws, and flood hazard bylaws and for the decisions made under these regulations. It can also help guide other ordinances that may be considered by the Village including junk, noise, and other ordinances.

What is required in a Village plan?

Vermont municipalities are authorized to create municipal development plans under 24 V.S.A. §4381. The State Statutes require that certain topics be discussed although it does not mandate any specific goals and policies. All local plans in Vermont, regardless of whether they are for rural or urban municipalities, must include components outlined in Statute:

How the Village Plan was developed

The Jeffersonville Planning Commission, whose members were appointed by the Trustees, developed this Village Plan. In September 2012 the Planning Commission applied for a Municipal Planning Grant from the Department of Housing and Community Development (DHCD) to update and revise the Village Plan. The grant was approved, and the Commission contracted with Lamoille County

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Planning Commission for technical assistance and guidance. Throughout 2013 and into 2014, the Jeffersonville Planning Commission worked to revise the Plan to create the document you have today. This was accomplished through several steps.

Using the *Village Plan Jeffersonville*, *Vermont 2009* as a starting point, the Planning Commission reviewed each chapter of the Plan for areas to improve and amend. Where appropriate, additional research, data collection, and analyses were performed to guide the amendment. The final step involved the review and development of Jeffersonville's goals, policies, and recommendations based on the existing conditions, identified needs, and projected trends.

While it was the responsibility of the Planning Commission to develop the Plan, it was the citizens, committees, and other local groups who played the critical role of gathering information and formulating Plan policies. Local and regional stakeholders and interested parties were invited to participate in discussion of pertinent sections of the Plan. The Planning Commission also reviewed the results of the 2012 Cambridge Jeffersonville Community Infrastructure Survey. Simultaneous to the development of the Plan, the Village of Jeffersonville and the Lamoille County Planning Commission contracted with the engineering firm Milone and MacBroom to develop a model of flood risks in the Village. This model also tested alternatives to reduce flood risks in the Village. Finally, the Planning Commission reviewed and considered the findings of a SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis conducted with Cambridge/Jeffersonville Village business owners in the winter of 2012. Without the participation of residents, the balancing of needs, values, and resources would have been difficult to achieve. After a draft plan was developed, the Planning Commission and Trustees held separate, warned public hearings to provide the public with additional opportunities for comment.

Planning is a continuous process, and Plans must be amended to meet new challenges or situations. Village Plans are valid for only five years and then must be readopted. This provides an opportunity to review policies and goals and, if necessary, to amend the document.

The Structure of the Plan

The Jeffersonville Village Plan is divided into four main sections:

- Section 1 Jeffersonville The People and the Place is where the community profile, historic and scenic resources, and the natural resources of the area are discussed.
- Section 2 Living and Working in Jeffersonville will review housing and economic development plans.
- Section 3 Servicing the Residents, Visitors, and Businesses of Jeffersonville is a broad review of the many public and private services available in the area. This includes such topics as education, transportation, health services, telecommunications, and utilities such as water, sewer, and electric.
- Section 4 Jeffersonville's Plans for Tomorrow is where a new land use plan and strategy for achieving our goals will be laid out.

The chapters that appear in each of the sections will address both the required elements of State Statute and other key areas of concern. Each of the required elements is addressed, including information on past trends, current status, and future needs. Based on the analysis of that information, one or more goals are established for each chapter. Goals can be defined as the "desired future condition" – although some may not be attainable for many years. Policies describe conditions or standards by which anyone can evaluate a project to ensure compliance with a goal. Policies may also be local positions on specific issues.

Finally, each chapter concludes with a discussion of the recommendations for implementation of the goals and/or policies. Some may involve continuing current actions while others suggest new efforts for the future. A good implementation plan will describe what is required, by whom, and in what time frame. By following these guidelines the course of action that the Plan is recommending should be clear.

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How the Plan Relates to the Regional Plan and Adjacent Municipalities

The Jeffersonville Planning Commission and Trustees look forward to cooperating with Cambridge and neighboring Towns to improve services and planning for all residents and visitors. This Village Plan is one step towards achieving this goal. The Planning Commission and Trustees believe this Village Plan complements and enhances the efforts of our surrounding communities.

Town and Village of Cambridge:

Jeffersonville is an incorporated Village within the Town of Cambridge. Jeffersonville is bordered on all sides by the Town of Cambridge. Overall, the Cambridge Town Plan is compatible with the Jeffersonville Village Plan. The Cambridge Town Plan recognizes the importance of Jeffersonville as one of the Town's major centers, but largely defers to the Village Plan in regards to future land uses within the Village.

The Cambridge Town Plan aims to "(focus) new growth, and development should generally be toward five areas in the Town of Cambridge. These areas include the Village of Cambridge, Cambridge Junction, the Ski Area, the Industrial Area, and Jeffersonville." The Cambridge Town Plan further states that "The Village of Jeffersonville is an important commercial, civic, and residential center. Information about future land uses planned for Jeffersonville may be found in the Jeffersonville Village Plan."

One potential area of concern relates to development of the Ski Area. Jeffersonville recognizes the importance of the Smugglers Notch Ski Resort to the local and regional economy. At the same time, development of the Resort has the potential to impact the Village. Given that the Ski Area is located upstream from Jeffersonville, development must not increase flood risks in the Village. It is also in close proximity to the aquifer serving the Village water system and therefore must not unduly impact the groundwater supply.

Upstream Communities:

Flood resiliency is a major theme of this Plan and is discussed in nearly every section. Jeffersonville has taken a proactive approach to addressing flood hazards, including adopting comprehensive regulations to prohibit development within the 100-year floodplain (as defined on the most recent FIRM map), purchasing flood prone properties, and conducting studies of additional measures to reduce flood risks. However, Jeffersonville is part of a larger watershed. Development in upstream communities which places new structures or fill in the floodplain or increases the amount of runoff entering the Brewster or Lamoille Rivers has the potential to negatively impact Jeffersonville.

Lamoille County Regional Plan:

The Lamoille County Regional Plan (2006-14), drafted and adopted by the Lamoille County Planning Commission, is based on the principle of local control. As affirmed throughout this Plan, Jeffersonville is actively engaged in a planning process which ensures that local control is exercised in guiding future land use decisions in the Town and Village. Additionally, both this Plan and the Regional Plan provide a framework of goals and policy statements that are aimed at promoting orderly growth and sustainable development. Future compatibility with regional planning efforts will be assured through the work of the Jeffersonville Planning Commission and the Village's representation on the Lamoille County Planning Commission's Board of Directors.

The Regional Plan is guided by three overall objectives: (1) to guide growth into compact settlements; (2) to encourage compact development and protect the working landscapes; and (3) to protect the region's natural systems and valuable agricultural and silvicultural resources. These

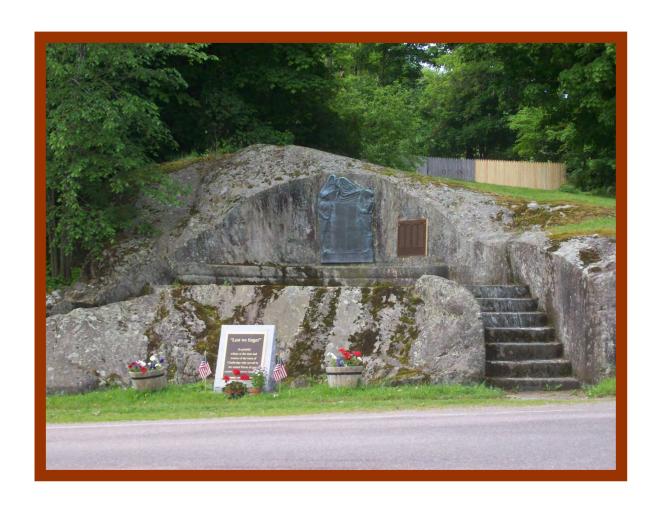
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regional objectives are compatible with the Goals and Objectives of the Jeffersonville Village Plan identified earlier in this Plan.

<u>Chittenden County and Northwest Vermont Regional Plans</u>:

The Town of Cambridge, of which Jeffersonville is a part, borders two other regions - Chittenden County and Franklin County (which, along with Grand Isle County, make up the Northwest Vermont Region). Growth and development in these regions will have an impact on development within the Village of Jeffersonville. As noted elsewhere in this Plan, many Jeffersonville residents commute to other counties for employment. Over the next five years, it will be important to monitor development trends in these neighboring regions, particularly as they relate to economic development and associated workforce housing needs and transportation.

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Section 1 - Jeffersonville - The People and the Place

A. COMMUNITY PROFILE

Population information is some of the most basic and important data needed in order to plan for a community. Historical growth trends, the age structure, and future predictions are just a few pieces of information which can help decision makers in guiding the future of Jeffersonville.

Historical Census Counts

Since 1791 the U.S. Census Bureau has conducted an actual count of persons living in each town in the country every ten years. Jeffersonville came into existence later in 1905. Data is only available from 1910 and on. The historical data in Figure 1 shows population figures from 1920 through 2010. As the figure shows, Jeffersonville's population has doubled since 1960.

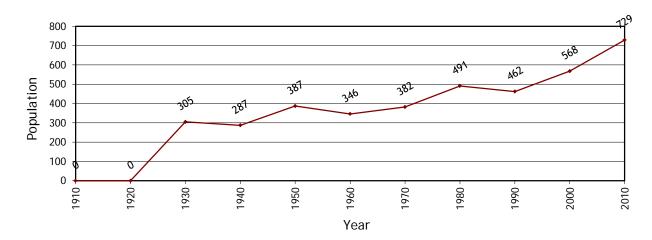


Figure 1. Population of Jeffersonville 1910-2010

Source: US Census (1910-2000)

Population Change

Since the 1970s, Jeffersonville's population has witnessed numerous peaks and valleys. The population change shown in Table 1 is the difference between Census counts. This table shows that population has consistently grown by more than twenty percent in three of the last four decades. Populations change as a result of two factors, natural increase and net migration. Unfortunately, the state only tracks birth and death statistics at the town level so a breakdown of natural increase and net migration are not possible to calculate for Jeffersonville.

Table 1. Changes in population between Census counts from 1970-2010.

rable 1. changes in population between census counts from 1776 2016.							
Period	Change in population	Percent change					
1970-1980	+ 109	+ 28.5 %					
1980-1990	- 29	- 0.06 %					
1990-2000	+ 106	+ 22.9 %					
2000-2010	+ 161	+ 28%					

Source: US Census (1970-2010)

Current Population and Age Distribution

The most recent population count for Jeffersonville is 729 persons (U.S. Census 2010). From 2000 to 2010, Jeffersonville's population increased by 161 persons (28%).

The median age for Jeffersonville is 32 years old, which is 5.9 years younger than the town as a whole and 9.5 years younger than the state average. Age distribution information is important in order to predict future service needs, especially schools. Breakdowns by age categories for 2000 to 2010 are shown in Figure 2 alongside comparable numbers from 1990. There were two distinct peaks on the 2010 chart at the '5 to 9' age group and the '25 to 29' group. This is indicative of a community made up of young families, which are likely to have school children and demand larger homes. Compared to statewide figures, Jeffersonville has proportionally more young children and young families, and proportionately fewer "baby boomers" (ages 45 to 68). However, in the most recent census period the number of baby boomers ages 54 to 60 residing in Jeffersonville has peaked significantly.

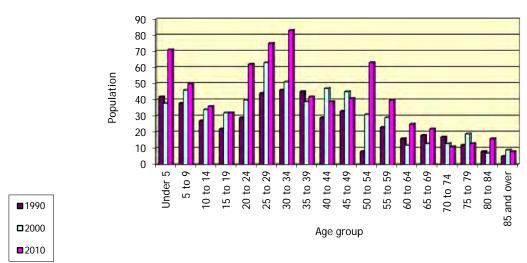


Figure 2. Population by Age Groups in Jeffersonville 1990-2010

Source: U.S. Census 1990, 2000 and 2010.

Diversity

Diverse communities benefit from having a variety of viewpoints, backgrounds, and experiences in which they can take advantage of opportunities or address problems. Communities that celebrate the similarities and differences that exist within their community enjoy a deeper understanding of their neighbors and of the world as a whole.

There are many ways to measure the diversity of a community. Ancestry, ethnic group, age groups, economic classes, place of birth, education, marital/civil union status, disability, and religious affiliation are all ways to look at diversity. Although certainly homogeneous when compared to other parts of the United States, Jeffersonville does have a mix of ethnic groups, age groups, and economic classes.

Some measures of social and demographic diversity include:

• Jeffersonville is 96.7% white which is slightly higher than the state average of 95.3%. The remaining individuals identify themselves as having two or more races. All identify themselves as being at least part white with the largest ethnic group identified as Native American and White (1.2%). (US Census 2010)

- As a result of our history, certain groups were drawn to Jeffersonville. The ancestries most identified by Jeffersonville residents in the 2010 Census was Irish (27.9%), English (23.9%), French (23.9%), and French Canadian (19.4%).
- As discussed above, age groups are an important indicator of diversity. Compared to Vermont as a whole, Jeffersonville has a higher percentage of children under age 10 and individuals 25 to 34, but a lower percentage of boomers.
- Jeffersonville is 71.6% native Vermonter; much higher than the state average of 51.2%. 28.4% of Jeffersonville residents were born in another U.S. state.
- Most residents of Jeffersonville speak only English (97.4%) while the remaining 2.6% of the Village population speak either Spanish (.8%) or another European language (1.8%). In the 2010 Census, 0 residents were identified as speaking English less than "very well".

Some measures of economic diversity include:

- Jeffersonville has a mix of incomes from the lowest (under \$10,000) groups to some of the highest (\$200,000 or more). While every community wants their residents to achieve the middle class, having a Village where low income residents are excluded and forced to live elsewhere is neither fair nor legal. Currently, the median household income for Jeffersonville is \$43,409, approximately \$10,000 lower than the state average.
- According to most recent Census figures, 21.7% of Jeffersonville residents live below the
 poverty level. This is up from 9.6% in 2000 and is greater than county or state levels
 (12.0% and 11.1%, respectively). Note that some of the difference between the 2000 and
 2010 figures may be attributable to different methodologies used to collect data by the
 US Census.

While diversity adds to the character and flavor of a community, it may also add challenges. Some of these may include:

- Language. This is the most apparent and is many times very contentious. The inability to speak English challenges many small communities that host foreign born residents. This makes integration into the community difficult for the new residents and adds friction as bilingual teachers may need to be added to schools, increasing service costs to the host area.
- Cultural and religious differences. New cultures that bring traditions with them sometimes are a challenge to integrate. As communities in Chittenden County are learning, something as basic as cemeteries may not be appropriate for the religious practices of new residents.

Regional and Neighborhood Populations Growth

Table 2. Populations and Percent Change Since 2000 for Jeffersonville and Neighboring Towns.

Villago	2000	2010	% Change in
Village	Population	Population	Population
Cambridge	3,186	3,659	14.8
Town	3,100		14.0
Cambridge	235	236	.4
Village	233		.4
Fairfax	3,527	4,285	21.5
Fletcher	1,179	1,277	8.3
Jeffersonville	568	729	28.3
Johnson	3,274	3,446	5.3
Morristown	5,139	5,227	1.7
Stowe	4,339	4,314	6
Underhill	2,980	3,016	1.2

Waterville	697	673	-3.4
Westford	2,086	2,029	-2.7
Lamoille County	23,233	24,475	5.3
State of	608,827	625,741	2.8
Vermont			

Source: U.S. Census 2000, 2010

Jeffersonville is located at the western edge of Lamoille County, which is experiencing rapid growth rates. While the state grew by 2.8%, Lamoille County grew at a rate of 5.3% over the past ten years. From 2000 to 2010, Jeffersonville grew at a rate of 3 times faster than the County and faster than the Town as a whole (see Table 2 - above). This increase may be attributed to a number of factors, including the rise of young professionals moving into Jeffersonville and an increasing aging population which lives in the Village. Table 2 indicates that many surrounding communities are growing rapidly, especially those to the west.

Goals, Policies, and Recommendations

The community profile is more of a recording of the current demographics of a community today than a set of goals for tomorrow. In general, populations will grow or decline based on many factors outside of a Village's control. The community's responsibility is to monitor the situation and respond as necessary to moderate over-population or the need for an increase in services to meet increasing demands.

GOALS

- For Jeffersonville's population to have a slow to moderate growth rate without placing a burden on the existing facilities and services. Growth shall not exceed the Village's ability to provide services to support the population.
- For Jeffersonville to be a diverse community, welcoming to various ages, ethnic groups, races, religions, family types, and social and economic classes.
- For Jeffersonville to serve as the focal point for economic, housing, and community activity in the Town of Cambridge.

As Jeffersonville has not experienced excessive growth over the past forty years, there hasn't been significant effort to implement growth control measures. If the amount of residential growth or quality of commercial development becomes a concern, Jeffersonville will need to consider additional regulations to ensure growth does not overwhelm existing facilities and services.

POLICIES

- Subdivisions of 10 or more lots shall be phased over a few years so as to not overburden the Village's services and facilities.
- Development of new structures within the 100-year floodplain (as defined on the most recent FIRM map) is prohibited. Redevelopment of existing structures is allowed, provided the footprint of the building is not increased. All development shall comply with Flood Hazard Area regulations adopted in 2011.
- Zoning bylaws and subdivision regulations, if adopted, shall allow the Village to deny applications where the proposal will exceed the Village's ability to provide adequate service to the future residents or where the project will create a burden on existing facilities.

The recommendations are for the Planning Commission to monitor future growth trends and be prepared to draft or amend regulations if needed. The Village also has the right to participate in Act 250 in order to address concerns related to the impact of growth on services.

ACTIONS & RECOMMENDATIONS FOR IMPLEMENTATION

- If the number of persons moving into Jeffersonville becomes a major issue, the Planning Commission should consider growth management tools, such as zoning and subdivision regulations.
- The Planning Commission should consider finding grant funds to develop some 'Future Population Predictions' so the Trustees and Planning Commission will have a better sense for future demand for services.
- The Planning Commission shall review all 'Act 250' applications for its impact on the growth of the Village. Where the application is determined to not conform to this chapter or any goal or policy, the Planning Commission and/or Trustees shall participate in the 'Act 250' process in order to ensure the concerns of the Village are addressed.

B. HISTORIC, SCENIC, AND ARCHEOLOGICAL RESOURCES

Historic Resources

Evidence of Jeffersonville's past is found throughout the Village in the form of its historic buildings and areas. These historic resources not only provide a physical link to the past, but also contribute to the present landscape. While preservation of historic structures recognizes them as an important component of the overall fabric of the community, it should not prevent innovation and the expression of different styles.

Historic record

Jeffersonville's history is intricately intertwined with the history of Cambridge. The Village of Jeffersonville and the Town of Cambridge as a whole have a long and varied past, which is responsible for the values and traditions held by residents today. The community should ensure that the history behind the town is available for residents, new and old, to enjoy. Two books provide an account of the history of Cambridge -- The History of Cambridge, Vermont published in 1976 by the Town of Cambridge under the auspices of the Crescendo Club Library Association, and Cambridge, Special Places, Special People, by Roberta Marsh. The Warner Lodge, the headquarters of the Cambridge Historical Society, is located within Jeffersonville and contains a variety of artifacts related to the history of the community.

Historic Districts

The Jeffersonville Historic District (see Historic Resources Map) is comprised of over 70 structures in Cambridge's largest, picturesque village. The core of the district is the three-way intersection of Main Street, Church Street and Mill Street. Within visual range of this corner are three commercial blocks, an inn, a church, the Town Clerk's Office and a modern bank. Main Street extends about another 500 yards to the north, lined on either side by comfortable Victorian village homes. Parallel to Main Street and running north from Church Street is Maple Street. This quiet, tree shaded residential street was first built in the 1880s and completed to its present appearance by c.1920, and thus it represents the growth of the Village during its lumber boom.

Jeffersonville's architecture is highly unusual in that the predominant style is a transitional Greek Revival/Queen Anne. More than a third of the district's contributing structures fall into this category and were probably the work of a single builder over the years 1875-95. His distinctive technique was to use a traditional, usually gable-fronted, plan with corner pilasters and side hall entrance, all holdovers from the Greek Revival period. All other details, particularly the use of turned porches, were eclectic Queen Anne in style. Elaborate verandas with turned balustrades and spindle screens continued to be a standard feature on new houses well into the twentieth century. The overall effect of the district's residential sections is of comfortable Victorian homes. All but three buildings in the Village are sided with clapboards. (From Jeffersonville Historic District Survey Statement of Significance)

Historic Sites and Structures

The National Register of Historic Places is the nation's official list of historical, architectural, and archeological resources of local, state, and national significance. (To be eligible for the National Register, buildings, districts, or sites must be at least 50 years old and must be distinctive and well preserved examples of their type and period. They should also have strong associations with important historic events or persons or have the potential of yielding significant information on our history or prehistory.)

In the late 1970's and early 1980's The Vermont Division for Historic Preservation conducted a survey of "historic" structures and sites in Cambridge. Within the Village of Jeffersonville Historic District there were over 70 structures listed, and outside of the Historic District there were an additional seven structures. A preliminary review of the inventory indicates some inaccuracies that

need to be corrected if it is to be useful in future planning activities.

Within the Town of Cambridge there are three covered bridges listed on the National Register: Grist Mill Covered Bridge, Poland Covered Bridge, and Gates Farm Covered Bridge (all entered in 1974). The Grist Mill Covered Bridge is the only one within the Village of Jeffersonville. The Grist Mill Covered Bridge was recently restored and placed on new abutments.

National Registry designation does not affect the owner's right to modify or maintain the property. However, projects that involve federal funds or permits must adhere to federal guidelines which do affect structural modifications. There may be tax or grant incentives available to support rehabilitation that preserves existing important historic features.

Cemeteries. Although not always considered historic sites, cemeteries offer a personal link to past residents of Jeffersonville. For some families in the Village, these are the final resting places for parents, grandparents, and great-grandparents. There is perhaps no stronger connection to our common past than in the cemetery within Jeffersonville. There is one cemetery located in Jeffersonville, managed by a private, non-profit organization.

<u>Historic Structures and Flood Mitigation</u>

Like many villages in Vermont, Jeffersonville is located in close proximity to two water courses - the Brewster and Lamoille Rivers. As a result, areas of the Village are vulnerable to flooding. Portions of the Village were inundated in the spring of 2011. While development of new structures is prohibited in the 100-year floodplain (as defined on the most recent FIRM map) and strongly discouraged in other flood-prone areas, FEMA rules and guidelines allow for "wet flood-proofing" of historic homes and businesses. Wet flood proofing refers to measures such as raising electrical utilities and furnaces above flood levels, installing sewage backflow valves, and installing shields or guards to protect walls and floors from flood water. When done properly, wet flood-proofing can reduce some damages caused by flooding. Wet flood-proofing often results in loss of basement space. This loss of space could potentially be offset by construction or expansion of upper story and attic space, provided the foot print of the building is not increased. Wet flood-proofing shall not be used to allow development of new structures in the 100-year floodplain (as defined on the most recent FIRM map).

Village Center Designation

In 2012, at the request of the Village Trustees, the core of Jeffersonville received "Village Center Designation" from the State of Vermont. The Historic Resources Map depicts the designated area. This Designation places no restrictions or obligations on private property. Rather, owners of commercial and multifamily properties within a Designated Village Center are eligible for tax credits to restore or protect historic features of buildings and for code and safety improvements. Property owners who do not have the tax liability to use a tax credit directly may sell the credit to a bank in exchange for cash or for adjustments to a mortgage. In addition to these tax credits, many State funding programs, such as the Transportation Enhancements Program, Municipal Planning Grant Program, and Community Development Block Grant Program, give preference to projects located in Designated Village Centers. Some private entities, such as the Preservation Trust of Vermont, also give preference to projects located in Designated Village Centers.

Scenic Resources

Scenic views and vistas that provide the backdrop for Villages are a part of a community's identity. They offer aesthetic pleasure to residents and visitors and are a valuable resource as they are linked to the economy of a region and personal well-being of the residents. Scenic resources are also somewhat subjective so protecting them can be difficult. Telecommunication towers, junk cars, and poorly planned or located development all could negatively impact scenic resources in a Village. Each of these uses or structures offers unique challenges to their regulation.

While located outside of Jeffersonville's village limits, prominent ridgelines, including Mount Mansfield and the Sterling Ridge, provide a scenic background both within the Village and on major approaches from neighboring communities. In addition to their scenic values, these features offer other natural resource values. Undeveloped ridgelines are parts of important core habitat, provide important corridors for wildlife, and often also contain head waters of local streams, seeps, and ground water recharge areas. Forested hillsides and ridgelines can provide important floodwater attenuation that may reduce flooding hazards in downstream communities such as Jeffersonville. Any development on these ridgelines, including telecommunication towers and renewable energy generation facilities, shall take into account these important attributes. If such development occurs, service and access roads shall utilize existing woods-roads and trails in order to limit the amount of forest fragmentation, and clearing around turbines shall be limited to what is necessary to provide for safe operation of the facility. Any warning lights installed on the facility shall utilize motion sensors so as not to disturb the night sky when aircraft are not present.

Archeological Resources

Archeological sites contain a fragile, complex, and irreplaceable record of past human activities. Archeological sites differ from historic sites in that the information that exists is buried. For 10,000 years Native American persons focused their activities within river valleys and lake basins. Evidence of prehistoric activities and occupations are contained within soil deposits of a cornfield or woodlot, or are buried in a floodplain. Any prehistoric archeological sites constitute an essential link to our past. These sites are often the only source of information for the longest part of human history in Jeffersonville.

A National Park Service study of archaeologically significant riparian areas was done as part of the Vermont Rivers Study in 1986. The Park Service findings concluded that there was an area of "expected moderate-to-high archeological sensitivity" along the entire length of the Lamoille River in Cambridge, including nearly all of Jeffersonville.

This rating does not necessarily indicate that any archaeologically significant resources have been located in the area; it only denotes that the topography, sun exposure, availability of food and other important natural resources exist in the right combination along this river to expect that the area could be archaeologically significant. Unlike the large sites found in Highgate and Swanton, any sites, if they exist, will likely be small.

Goals, Policies, & Recommendations

OVERALL GOAL

To preserve Jeffersonville's heritage and character for current and future generations.

Our overall goal of preserving Jeffersonville's heritage and character can be achieved by accomplishing four other goals - the recording and preservation of the history of Jeffersonville; the preservation of historic structures; the protection of scenic resources; and the preservation of Jeffersonville's archeological record. By achieving these four goals, our heritage will be recorded, protected, and available for residents and visitors to learn and understand what makes Jeffersonville what it is today.

GOALS

Historic resources

- To record and preserve the history of Jeffersonville.
- To encourage preservation and maintenance of individual buildings, structures, and districts of

historical value.

Scenic resources

• To protect the scenic resources in Jeffersonville for the enjoyment of the residents and the attraction of tourism related businesses.

Archeological resources

To preserve Jeffersonville's fragile archeological record.

POLICIES

Historic resources

- Applications for grants to compile a history of Jeffersonville, including oral and written histories, are supported.
- Efforts to protect and preserve items and artifacts of historic significance to Jeffersonville are supported.
- Development within any designated historic districts is strongly encouraged to be in character with the surrounding architecture.
- Jeffersonville encourages the restoration and reuse of historic buildings.
- Jeffersonville's unique architectural heritage should be promoted, both for its intrinsic value, and for its potential to attract visitors and foster economic development.
- Flood-proofing improvements to historic structures are strongly supported. Renovations of upper stories for additional storage, living, or work space are supported in order to offset the potential loss of basement/cellar space, provided renovations are generally in keeping with architectural appearance of the structure.
- Jeffersonville will support buy-outs of frequently flooded properties. If a historic structure is bought out, the Village strongly supports relocating rather than demolishing the structure. The Village further recommends that such structures be relocated in such a way that it continues to contribute to the overall historic fabric of the Village.

Scenic resources

- Telecommunications towers, wind turbines, and other large obvious structures shall be carefully sited to minimize impacts on scenic resources.
- Development around the natural scenic resources identified shall be sited and constructed in such a
 manner as to retain the natural scenic beauty of the areas. Removal of the natural vegetation on
 the site shall be minimized, and structures shall be screened or hidden from view as best as
 possible.
- Storage of abandoned vehicles and junk must comply with local and state limitations on such materials.
- Jeffersonville will participate in Public Service Board proceedings related to projects in other
 jurisdictions, if it is determined that such a project will have an impact on the scenic resources
 identified in this Plan.

Archeological resources

- Projects occurring in the archeologically sensitive area should consider the potential impact of the
 project on archeological sites during the early stages of development. This will offer the best
 opportunity to mitigate potential impact.
- If at any point in the development of a parcel an archeological site is discovered, the state archeologist must be given a reasonable opportunity to investigate and suggest a means to mitigate the impact.

ACTIONS & RECOMMENDATIONS FOR IMPLEMENTAITON

Historic resources

- The Cambridge Historical Society should continue efforts to collect, record, and display historical materials.
- The Historical Society should pursue grant funding to collect oral and written histories of our residents.
- The Historical Society should research avenues for historic preservation projects in the Village and assist residents interested in preservation of historic structures.

- Jeffersonville will support applications made by private citizens for Village Center Designation Tax Credits and Historic Preservation Grants.
- The Village should consider creating "Historic Walking Tours" through Jeffersonville, in collaboration with local businesses or the Historical Society.
- Research and, if feasible, implement streetscape improvements for Church Street and Main Street.
 Streetscape improvements could include additional on-street parking, street trees and other plantings, improved pedestrian infrastructure, and "period" style lighting fixtures.
- Jeffersonville will support Hazard Mitigation Grants and other applications providing funding for property owners to undertake flood-proofing or to buy out flood-prone properties.
- The Trustees and/or Planning Commission should investigate the feasibility of establishing a revolving loan fund to assist owners of historic structures in making flood mitigation improvements.

Scenic resources

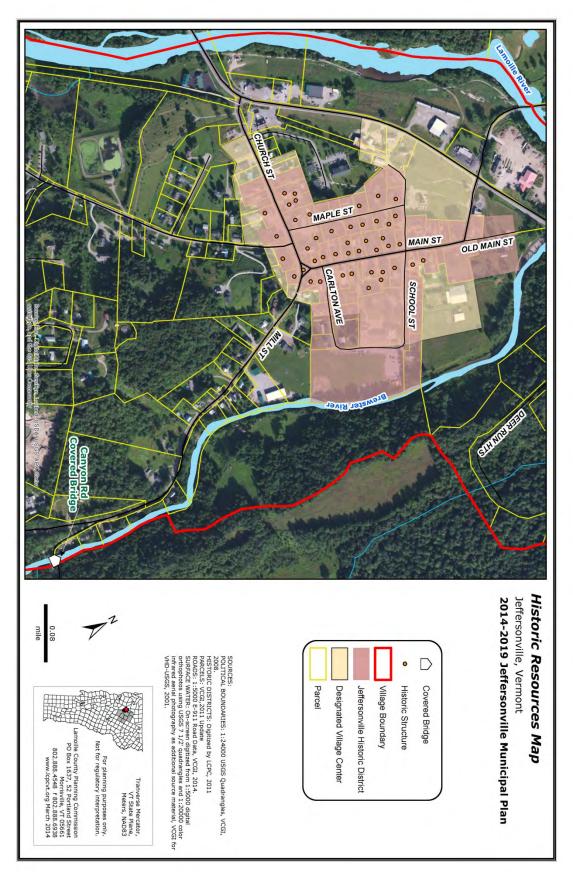
- The Trustees should follow up with violations of the state abandoned vehicles and junk regulations.
- The Planning Commission should pursue funding to conduct a survey of local opinions on protection of scenic resources, including such topics as telecommunications and wind towers.
- The Planning Commission should pursue funding to conduct an inventory of view corridors.
- The Planning Commission should consider establishing some incentives to maintain open land.

Archeological resources

 Where an archeological site is discovered on an undeveloped property or part of a property, the Village supports the purchase of development rights on the effected portion as a means of compensating landowners for the loss of development rights. Purchase of development rights are always on a willing seller basis.

Overall

• The Planning Commission shall review all 'Act 250' applications for impact on the historic resources of Jeffersonville. Where the application is determined to not conform to this chapter or any goal or policy, the Planning Commission and/or Trustees, with input from the Historical Society, shall participate in the 'Act 250' process in order to ensure that the concerns of the Village are addressed.



C. NATURAL RESOURCES

Land Resources

Geography

The Village of Jeffersonville covers an area of approximately 461 acres (0.72 square miles) and lies near the geographic center of Cambridge. Jeffersonville is located at the confluence of the Brewster and Lamoille Rivers. Elevations in Jeffersonville range from about 689 feet along the village line south of Jeff Heights Road to a low of about 452 feet along the Lamoille River near the southwest border (see Contour Map).

Topography

Steep slopes

One factor presenting considerable limitations to development is steep slopes. A "Steep slope" is defined as land having a slope of greater than 30% grade over a distance of 50 feet. Some soil types, particularly clay, are unstable at slopes as shallow as 5%-8%. Based on Jeffersonville's soil types this is not expected to be an issue. The sand, gravel, and bouldery soils found in the Village are generally stable to at least 30% provided they have some vegetation cover (i.e. grass or trees).

Steep slopes present problems when they are cleared for development or timber extraction as soil erosion is increased when vegetation is removed. Jeffersonville has many areas that are considered to have steep slopes (see Soil Limitations Map). These areas have development limitations due to conventional septic rules established by the State of Vermont which prohibit septic systems on slopes above 20%. All new development within the Village is encouraged to preserve vegetation where possible to reduce erosion, reduce flooding impacts, and preserve natural areas and village recreation space.

The eastern bank of the Brewster River is prone to landslides due to layering of sand and clay soils. The most recent major landslide occurred in 1999. Soils from the landslide temporarily blocked the Brewster River, pushing water and soil materials into the Village. New development in the landslide prone area is strongly discouraged.

Soils

The soil structure attributes in Jeffersonville provide both opportunities and limitations to construction and agriculture. Depending on the physical and natural processes that formed the soils, they may have differing depth, composition, texture, and layering. Soils also vary in how easily they absorb water and in their load-bearing capacity. Soils that pose limits to development are often characterized by excessive slope, shallow depth to bedrock, high seasonal water, instability, or high erosion potential (see Soil Limitations Map).

Soils are the primary requirement for conventional septic fields. The soils were mapped in the Village by the Soil Conservation Service in 1981 (now the Natural Resources Conservation Service). Space limitations make it difficult, if not impossible, to locate private septic systems in much of the village. Ledge is also a challenge in some areas, particularly Mill Street. The development of the municipal sewage treatment plant in the late 1980s has solved this problem for areas in the Village Core. All structures within the sewer service area are required to connect to the municipal system.

Outside the service area the constraints still exist. Although most of the village is serviced by the sewage treatment plant, some areas still require on-site septic systems. To confirm soils are suitable for septic systems, all development that is not served by the municipal wastewater treatment system must meet all applicable State regulations for on-site wastewater treatment.

Soils also have qualities that make them productive for timber and agricultural products. Soil provides the medium and nutrients for growth, and crops grow best where these conditions are ideal. Primary agricultural soils have been classified based on these and other criteria. Whether the crop is hay, corn, or trees, the best use for that soil resource is agriculture or forestry. When feasible, prime agricultural soils can be incorporated into the fabric of the Village for small-scale agriculture, such as private and community gardens. The Agricultural Soils Map and Soil Resources Map shows the general location of primary and statewide agricultural soils, as defined by the Vermont Agency of Agriculture.

This Plan recognizes that Jeffersonville is an existing compact settlement. Economic development and revitalization are primary objectives in the Village Core and Village Residential areas. Small lot sizes in these two areas make commercial agriculture unlikely. Mitigation of soil resources in these areas through the Act 250 process should not be required.

Wildlife Resources

Wildlife resources add beauty to the natural landscape and play a vital role in Vermont's local economy. The enjoyment of wildlife and natural habitats for recreational purposes, including activities such as wildlife viewing, fishing, and hunting contribute approximately \$225 million in annual state revenue. Jeffersonville itself does not contain large tracts of wildlife habitat due to the fact that it is primarily a developed Village, and rifle hunting is prohibited within Village limits, due to the close proximity of residential structures. Nonetheless, the Village is situated close to important habitat areas in the Town of Cambridge and other neighboring communities. In addition to the intrinsic value of this habitat, wildlife contributes to the culture of Jeffersonville and represents an opportunity for Village based businesses.

Deer Wintering Areas

Vermont's deer require specific winter habitat to survive the seasonally severe weather and heavy snowfall. Winter deeryards provide two features important to whitetail deer survival -- shelter and food. Statewide, between 6% and 8% of Vermont's forestland is suitable for winter deer range under average winter conditions. Wintering areas do not change significantly between years and can be used by generations of deer over several decades if appropriate habitat conditions remain favorable. The Significant Habitat Map does not show any areas in Jeffersonville identified as deer wintering habitat although they are located just outside the village. Within the Town of Cambridge, around 4,470 acres or 11% of forestland is considered deer wintering habitat. Large tracts of deer wintering land are located west of Route 108, just north of Jeffersonville Village, and between Routes 108 and 109.

Bear Habitat

Bears require large areas of uninterrupted forestland for breeding. They also require travel corridors to move from one part of their habitat to another, especially as forested areas may be subdivided and developed. The Vermont Department of Fish and Wildlife prepared a map of black bear habitat in 1989 to indicate general areas of bear habitat. Critical bear habitat was found primarily along Mount Mansfield and Sterling Range. Other notable habitat areas were also found along the southwest side of Pleasant Valley and along the Fletcher-Waterville-Cambridge border. While many areas exist throughout the town of Cambridge, there is no bear habitat within the Village of Jeffersonville.

Wildlife Corridors

Corridors between blocks of habitat play an important role in maintaining healthy wildlife populations. The vegetated banks of the Brewster River serve as a connector to outlying deer wintering areas and bear habitat and should continue to be protected as valuable habitat corridors.

Rare and Endangered Species Habitat

Rare plants and animals are important for a variety of reasons. Some are indicators of unusual habitats or of colder (or warmer) climates in Vermont's distant past. Others serve as indicators of environmental quality. Still others may provide compounds for medicines and agricultural or industrial products. Many uncommon species and critical habitat areas will disappear if not recognized and given some form of local protection.

Jeffersonville has only one area in the Village Core with rare, threatened, or endangered species. It is located near or in the Lamoille River in the general location of the Route 15 bridge (See Significant Habitat Map). To prevent disturbance or illegal collection of these species, the specific information on the species is withheld.

Fisheries

According to the 1986 Vermont Rivers Study, both the Lamoille and Brewster Rivers in Jeffersonville are recognized as a fishery. The Lamoille River has naturally sustaining populations of brown and rainbow trout while the Brewster River has naturally sustaining populations of rainbow trout, brown trout, and brook trout.

Invasive Species

Non-native invasive species can cause irreversible impacts on ecosystem health and biodiversity. Three non-native insects which currently threaten Vermont are the emerald ash borer, Asian longhorned beetle, and hemlock wooly adelgid. A number of exotic insects and diseases, such as beech bark disease, butternut canker, and gypsy moth, are already established statewide.

Invasive plant growth can lead to loss of native flora and fauna. Japanese knotweed is one particularly aggressive invasive species that is becoming increasingly prevalent in Jeffersonville. Colonies of Japanese knotweed can quickly overtake stream banks, empty lots, construction sites, and back yards. When the plant is disturbed above-ground, a hormone in the root stimulates the growth of new shoots up to 60 feet away from the "mother" plant. A new colony of knotweed can be established by a chunk of root or stem no larger than a human fingernail. Knotweed quickly out competes native vegetation, contributes to soil erosion, especially along stream banks, and has been known to grow through and damage infrastructure such as bridge abutments. The Cambridge Conservation Commission is currently tracking knotweed infestations. Known colonies of knotweed in the Village are being mapped by the Cambridge Conservation Commission.

Conserving genetic diversity within native host species increases potential resiliency in light of invasive pests. Several actions are needed to address non-native invasive species. Among them are preventing new introductions through common pathways. Important actions needed to address non-native species include educating residents about measures they can take to prevent or slow the spread of invasive species; preserving the genetic resources of native species that may be impacted by invasive species; working with partners to develop tools for detecting, identifying, evaluating, and managing invasive pests; and responding rapidly if infestations are detected. Local citizens can play a key role in preventing the spread of invasive species by working with organizations such as the

Cambridge Conservation Commission, Lamoille County Conservation District, and Lamoille County Planning Commission.

Climate and Air Resources

Climate

The Village of Jeffersonville has a climate with a wide temperature range between winter and summer. According to the National Weather Service, temperature extremes recorded for this area range from -30 in January and high 90s in August. In 2013 the mean summer and winter temperature record was 70 in August and 21 degrees in January. Throughout the year alternate flows of air streams of different thermal and moisture content provide a mixture of weather conditions. Air streams are further affected by the topography of the area and the Village being situated within the valley.

Altitude is a major factor in the amount and pattern of rainfall in a given area. Air masses forced up over mountains (such as Mount Mansfield) are cooled and moisture is released. This weather pattern is commonly known as Orographic Precipitation. According to the National Weather Service, Mount Mansfield has an annual average precipitation of 73.9 inches compared to Jeffersonville Village that has approximately 38-42 inches annually. Average annual snowfall in the same areas is over 140 inches and 80 inches, respectively.

Like the rest of Vermont, Jeffersonville experiences a relatively long winter season, which enhances winter sports activities, limits the growing season for agriculture, and shortens the construction season. Careful design and construction of new and modified structures (buildings), utility lines, and roadways are necessary to minimize damage from extreme weather conditions and flooding events. The removal and storage of snow may also require special design considerations.

Air Quality

The National Ambient Air Quality Standards (NAAQS) established by the United States Environmental Protection Agency set criteria for acceptable levels of various types of air pollutants. Areas whose air meets these standards are considered "in attainment," while areas that do not are considered "out-of attainment." Vermont is currently the only state in which no area is currently designated as non-attainment for the NAAQS. However, Vermont is located in the Ozone Transport Region and, as such, must meet additional requirements to reduce levels of ozone and ozone forming pollutants.

Neighboring Chittenden County is very close to being out of attainment for ozone and fine particulate matter. Despite its rural nature, Lamoille County occasionally experiences "bad-air days" due to high levels of fine particulate matter, especially in winter months when "cold-air inversion" traps emissions in low lying valleys. Local sources of ozone and particulate matter come primarily from transportation as well as wood and oil combustion for home heating. However, a notable quantity of these and other pollutants migrate to Vermont from other areas of the country. The exact proportion of air pollution generated locally is difficult to quantify. If the Chittenden County air were designated as "non-attainment," the state would need to develop regulations that will require the area to take additional actions to reduce emissions of target pollutants.

As noted above, three primary sources of local air pollution include woodstoves, oil-burning furnaces, and automobiles. Newer woodstoves are now mandated by the EPA to contain pollution control equipment that significantly reduces particulate emissions. Replacing older woodstoves and oil-burning furnaces will have a positive impact on both indoor and outdoor air quality. When replacing older heating systems due consideration should be given to renewable energy sources to continue to improve overall air quality. While replacing a heating system can be cost prohibitive, there are other measures Jeffersonville residents are encouraged to take to reduce home heating and cooling related pollutants such as weatherizing homes to conserve energy.

Automobiles are a second local source of air pollution. Strategies such as reducing driving

miles, cleaner burning engines, carpooling/ridesharing, use of the CCTA commuter bus, and using alternative-fuel vehicles all would reduce automobile pollution. Increasing local employment opportunities and investing in local infrastructure improvements may also reduce the need to commute.

Goals, Policies, & Recommendations

OVERALL GOAL

• To promote public awareness and appreciation of the Village's natural resources and to balance the conservation and protection of these resources with ecologically sound development practices and economic needs.

GOALS

Land and Soil Resources

• To focus growth in the Village Core and Village Residential Areas (provided these are located outside of the 100-year floodplain - as defined on the most recent FEMA maps) in order to reduce development pressures on important land resources outside of the Village

Natural Areas

To ensure fragile and natural areas are protected and preserved.

Wildlife Resources

- To maintain the native diversity of wildlife throughout Jeffersonville through the protection of critical habitats.
- To raise awareness and prevent further spread of invasive species.

Climate and Air Resources

- All new development in Jeffersonville should be constructed with respect to northern temperature and weather conditions.
- Jeffersonville should maintain a safe and healthy level of air quality to preserve good health among Village residents and the area's treasured scenic vistas.

POLICIES

Land and Soil Resources

- Extraction of gravel or clay for commercial purposes creates environmental, safety, and aesthetic problems and is incompatible with the character of the Village. It shall not be permitted within the Village limits, unless necessary for hazard mitigation and or floodplain restoration.
- In order to focus development in the Village, mitigation of prime agricultural soils should not be required in the Village Core and Village Residential areas as part of the Act 250 Process. If the District Commission determines that mitigation is needed, it shall be at the lowest ratios permitted under statute.
- All development within the Village must be pursued with strict regard to the capability of the soils to support it.
- Development on slopes greater than 30 percent shall be carefully constructed to minimize erosion in accordance with applicable state regulations.

Natural Areas

- Development within or proximate to designated natural areas will take place in such a way as to preserve their value for education, science, research, aesthetics, and recreation.
- Rare, threatened, and endangered plants and animals, along with their habitats will be protected and preserved through appropriate conservation techniques. Where appropriate, a vegetation buffer strip should be designed and maintained to ensure protection.

Climate and Air Resources

- Jeffersonville residents are encouraged to upgrade old heating systems to newer, efficient, and less polluting systems. This action improves both indoor and outdoor air quality.
- Jeffersonville encourages Village residents to explore efficient, renewable energy sources for home heating and cooling.

• The Village of Jeffersonville should explore economic, public transportation, park and rides, and bicycle/pedestrian infrastructure opportunities to reduce dependency on automobiles, especially single occupancy vehicles (SOVs).

ACTIONS & RECOMMENDATIONS FOR IMPLEMENTATION

Land Resources

- Farm and forestland owners are encouraged to participate in the Use Value Appraisal (Current Use) program.
- The Village supports the efforts of organizations in the purchase of development rights and other conservation methods provided the land protected meets the objectives of this Plan. Where possible, the Planning Commission should review proposed purchases and comment based on the goals of this Plan.
- The Jeffersonville Planning Commission should collaborate with the Board of Trustees to develop bylaws that identify procedures for earth extraction (sand and gravel) operations.

Natural Areas

- Jeffersonville supports the acquisition of natural and fragile areas by local or state conservation agencies whose goal is protection of the areas.
- The Planning Commission should work with the Cambridge Conservation Commission to conduct a study to determine how much of the fragile habitats and natural areas are protected and determine what gaps exist in the conservation effort.

Wildlife Resources

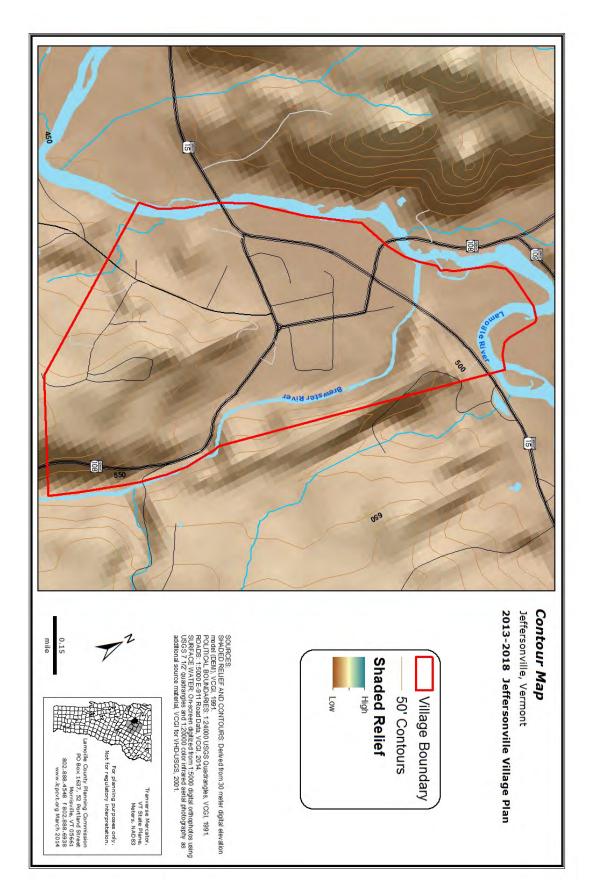
- The Jeffersonville Planning Commission recognizes that more can be accomplished by educating, advising, and assisting landowners with their natural and wildlife resource concerns than could be accomplished through regulations. The Planning Commission should support and provide guidance to any property owner with questions or concerns about their natural resources.
- The Jeffersonville Planning Commission should continue to work with the Cambridge Conservation Commission to educate the general public about how to safely slow the spread of invasive species and to identify existing infestations of invasive species.

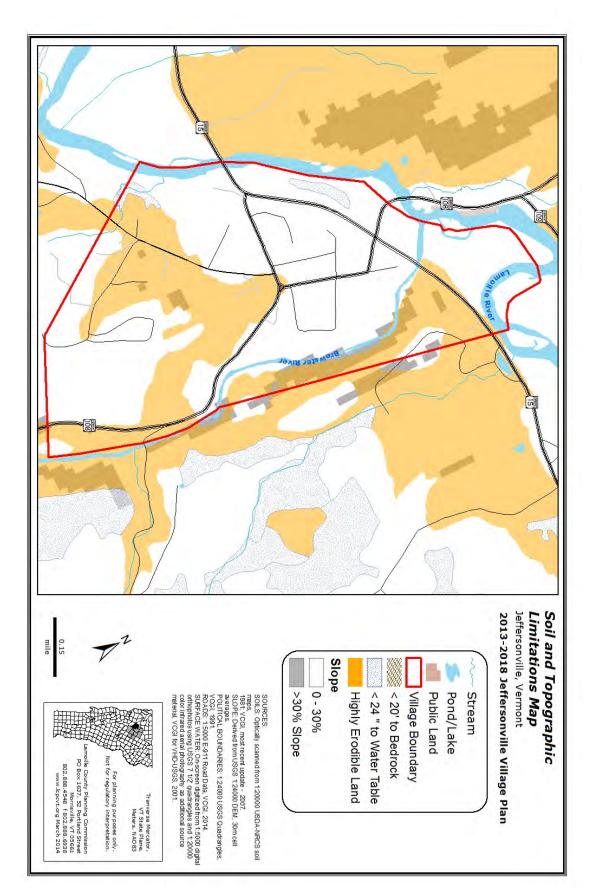
Climate and Air Resources

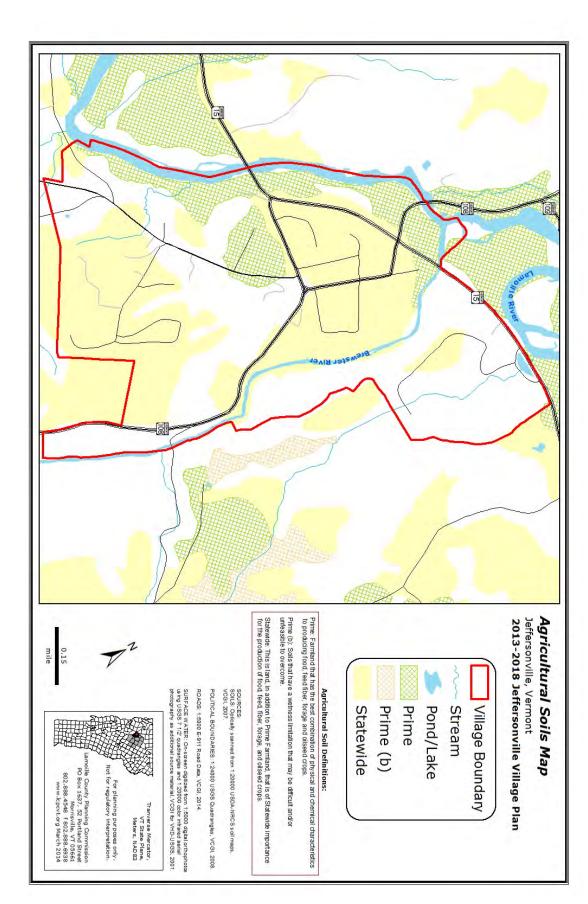
- Support and enforce the Town of Cambridge's ordinance prohibiting the burning of waste products.
- Jeffersonville should promote compact development within the Village Core through infrastructure investments and upgrades.
- Transportation investments should focus on making safe connections within and outside the Village to accommodate all users, motorists and non-motorists.
- Park and ride lots should be clearly identified within the Village and evaluated to ensure sufficient space is provided for commuters.
- The Village of Jeffersonville should continue to support alternatives to the single occupancy automobile, such as the new CCTA bus service extending from Jeffersonville to Burlington.

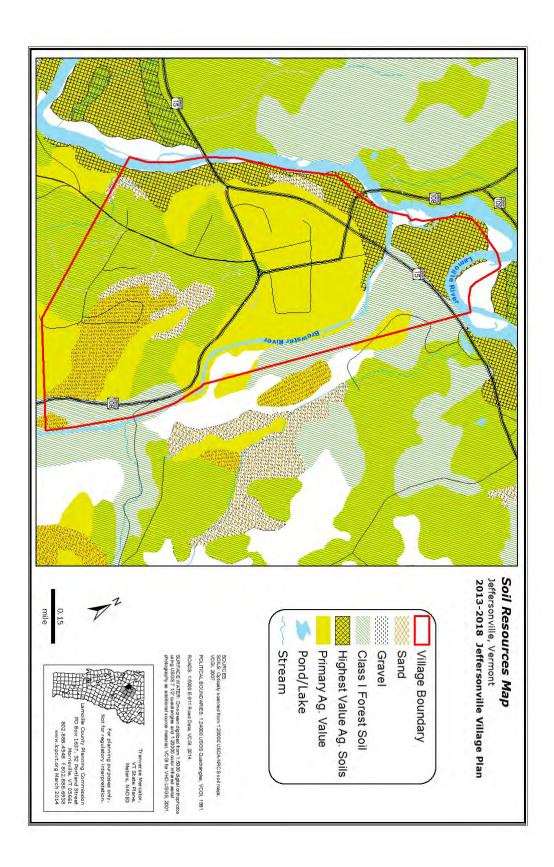
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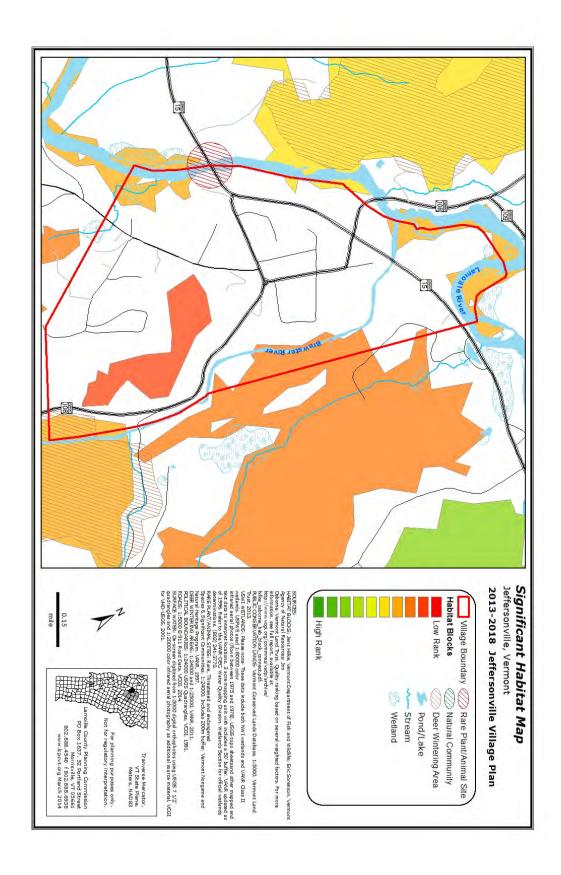
• The Planning Commission shall review all 'Act 250' applications for their impacts on the land and water resources of Jeffersonville. Where an application is determined to not conform to this chapter or any goal or policy, the Planning Commission and/or Trustees shall participate in the 'Act 250' process in order to ensure that the concerns of the Village are addressed.











D. WATER RESOURCES

The Importance of Water Resources

Water resources take on a variety of forms and functions. They provide rivers and lakes upon which to recreate or fish for local food. They provide groundwater to drink and bathe in, as well as host wetlands to store floodwaters and filter natural and man-made contaminants. Water resources provide numerous habitats for a variety of aquatic and riparian plant and animal communities. These resources play a key role in boosting the local economy by providing numerous recreation activities such as fishing, boating, ice skating, and swimming.

Water resources also, unfortunately, end up serving as repositories for pollutants including sediment, nutrient-loading, and chemicals such as herbicides and pesticides. These pollutants stem from a variety of sources including agricultural, residential and commercial runoff, leaking storage tanks (above and underground), landfills, and septic systems. These contaminants are harmful to many aquatic species including fish and hydroponic plants. Additionally, such pollutants, when exposed to groundwater and surface water resources, can destroy existing and potential drinking water supplies and preclude recreational activities. Maintaining the integrity of both local and regional water resources is critical to sustaining Jeffersonville's local economy and quality of life for its residents.

Rivers and Streams

Jeffersonville is fortunate to have abundant riparian resources. Its streams and rivers helped shape the local landscape. All of the rivers and streams in Jeffersonville contribute to the Lamoille Drainage Basin (see Water Resources Map). The two primary river resources located in Jeffersonville are the Lamoille River and the Brewster River. These water bodies provide numerous activities, including boating, swimming, and fishing. They provide residents and visitors an enjoyable, scenic travel connection to various destinations within the Village. These rivers also provide key habitat for local aquatic species including fish, amphibians and wetland plants.

Riparian Habitats

Maintaining riparian habitats is very important to both water quality and wildlife habitat. Plant life such as trees, shrubs, grasses, and herbs along stream banks and river corridors serve to provide both food and shelter for a variety of wildlife species. Several of Vermont's wildlife groups, including deer and moose, are highly dependent on riparian areas for their habitat needs. Stream bank vegetation also helps to regulate water temperatures, which is critical for fish species such as trout. Riparian corridors also play a vital role in reducing stream bank erosion and flooding concerns. Plant life and nutrient rich soils found along river banks assist in filtering and absorbing floodwaters.

Wetlands

The term wetland is used to refer to areas that are inundated with water either seasonally or year-round. They are commonly referred to as swamps, marshes, bogs, fens and vernal pools. Wetlands share three basic characteristics:

- 1. The presence of water at or near the ground surface.
- 2. The presence of water dependent plants occurring on site; and
- 3. Common types of soil (hydric soils) that have formed as a result of the presence of water.

Wetlands serve a number of important functions. In Vermont they are recognized and evaluated for providing ten functions and values which include: water storage for flood water and

storm runoff; surface and groundwater protection; erosion control through binding and stabilizing soil; fish habitat; wildlife habitat; exemplary wetland natural community; rare, threatened, and endangered species habitat; education and research for natural sciences; recreational value and economic benefits; and open space and aesthetics.

The U.S. Fish and Wildlife Service mapped wetlands in Vermont through 1990-1999 and each town has a set of National Wetlands Inventory maps (NWI). The Vermont Significant Wetland Inventory Map (VSWI) was created through 1990-2006 in Vermont. Both maps were made using aerial photos and are useful for assessing the general character of a particular area, but are not accurate enough to determine the nature of a particular property without a site visit from a VT Wetlands District Ecologist or a qualified wetland scientist.

Vermont's wetland regulations were updated in 2010 to include not only mapped wetlands, but those that are connected to mapped wetlands, and those that are over a ½ acre in size and have similar characteristics to mapped wetlands. As a result, regulatory jurisdiction is asserted for wetlands that have significant function and value even if they do not appear on the VSWI map.

All wetlands identified by the inventory maps in Jeffersonville are Class II, and require a 50-foot vegetated buffer between the wetland and any adjacent land development (see Water Resources Map). Any wetland that is found on the ground but is not on the map should be assessed by the VT Wetlands Program. Land owners and developers are encouraged to request a site visit with the VT Wetlands Program to ensure existing wetlands are properly identified and preserved when considering new construction projects, a change in current land use or expansion of current uses such as agricultural fields.

The VT Wetlands Program can be contacted by visiting the VT Wetlands Program website (http://www.watershedmanagement.vt.gov/wetlands.htm) or by calling the Montpelier office at 802-490-6110.

Floodplains and Flood Hazard Areas

Floodplains are land areas adjacent to water bodies that are subject to periodic flooding. Floodplains store runoff during heavy rain storms and spring thaws, thus slowing the velocity of water flowing downstream. The gradual release of floodwaters minimizes erosion, streambank scouring, and downstream flooding. Floodplains also provide important recreational, agricultural, aesthetic, drainage, and wildlife functions. The continuation of each of these functions requires consideration of the water courses and their associated shorelines when designing for construction in their vicinity.

Floodplains can be measured by different intervals (100 year, 500 year, etc.) based on how much rain falls during a given storm event. A "100-year floodplain" is the flooding which results from a storm that has a 1% chance of occurring in any given year. A "500-year floodplain" is the flooding which results from a storm that has a 0.2% chance of occurring in any given year. A 500-year flood is larger than a 100-year flood. The 100-year floodplain is also referred to as the "flood hazard area." Floodplains are identified on maps prepared by the Federal Emergency Management Agency (FEMA). The most recent maps shall be used when determining the location, boundary, and elevation of the floodplain.

Flood Hazard Areas (the 100-year floodplain) are unsuitable for development for several reasons: potential danger to life and property, loss of flood water storage, effects on channel capacity and downstream communities, and improper functioning of subsurface sewage disposal systems when there are high water tables. Under Jeffersonville's 2011 Flood Hazard Bylaws, development of new

structures and use of fill is prohibited in the 100-year flood plain. Owners of existing structures located within the 100-year floodplain are encouraged to flood proof or elevate their structures to at least one foot above the 100-year flood elevation. Under Jeffersonville's Flood Hazard Bylaws, existing structures within the 100-year floodplain must be flood proofed when they are "substantially improved." (A substantial improvement is cumulative renovation greater than or equal to fifty percent of the listed value of the structure).

Pending remapping of the floodplain by FEMA, development within the 500-year flood plain shall only be undertaken with extreme caution. At minimum, new structures shall be elevated to at least one foot above the 100 year flood elevation, or the the 500-year flood elevation (whichever is greater). Use of structural techniques that allow floodwaters to flow beneath a structure is preferred over use of fill, which displaces floodwaters onto other properties.

Jeffersonville's Flood Hazard Regulations also enable property owners in Jeffersonville to purchase flood insurance through the National Flood Insurance Program (NFIP). It is important to note that the NFIP program is structured to minimize risk to life and property but is not necessarily intended to provide water quality benefits. In addition, minimum NFIP standards do not necessarily consider potential adverse impacts of development on downstream properties and communities. Minimum NFIP standards also do not address upstream impacts that may increase a community's vulnerability.

Flood hazard areas in Jeffersonville have been identified along the Lamoille River and the Brewster River. The flood hazard areas are shown on the Water Resources Map and are based on the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps (FIRM) which can be found in the Village Clerk's office. Unfortunately, these maps have not been updated since 1983 and may no longer provide the most accurate information. For example, the floodplain boundaries depicted on the FIRM do not account for flooding caused by ice damming, debris within the waterway, or constrictions caused by structures such as bridge abutments within the floodplain.

In recognition of the inherent limitations of existing flood hazard maps, the Village contracted with the engineering firm Milone and MacBroom to develop an electronic model of flooding hazards within the Village. In addition, the model tested potential "alternatives" to reduce flood levels and flood damages within the Village. The model determined that there are a number of variables exacerbating flooding in the Village, primarily past development and fill within the floodplain (including fill related to the transportation network.) The study recommended several actions to reduce flooding in the Village, including replacing the railroad bridge (now part of the Cambridge Greenway Trail) with a wider, higher bridge, placing several large culverts under Route 15 in the vicinity of the new roundabout, adding "overflow culverts" under the approaches of the Route 108 Bridge, and "reconnecting" the Brewster River to its floodplain downstream of Cambridge Elementary by lowering the ground elevation.

The preceding discussion largely addresses inundation from long, extended periods of rain. However, flash floods, which can occur following short bursts of rainfall, are particularly dangerous. While flash floods are most typically associated with steep slopes and higher elevations, the "flood chute," which is formed as floodwaters from the Brewster River flow through the Village along the Route 15 embankment, has many characteristics of a flash flood. According to the study discussed above, this chute forms during storms as small as the 10-year storm, meaning in any year, there is a 10% chance that the chute will occur.

To prevent flash flood situations, developments shall not increase the volume or velocity of streams. Channelizing and straightening streams increases stream velocity and increases the risk of

flash floods. Many times roads and driveways up steep hills create perfect conditions for flash floods because they are designed to rapidly drain water from the surface and send it downhill in a straight steep ditch. The Vermont Better Backroads Program has developed road standards to avoid erosion and flashfloods resulting from road design and construction. The Town of Cambridge is responsible for maintaining the road network through the Village, excluding State Highways.

River Corridors and Fluvial Erosion Hazards

In Vermont, most flood damage is the result of fluvial erosion rather than inundation. The FEMA maps may not adequately identify areas at risk of erosion. Rivers and streams are not static and meander across the landscape over time. Fluvial erosion occurs as rivers and streams modify their bank locations and can range from gradual bank erosion to catastrophic changes in river channel location and dimensions during a large flood event. As the bank erodes, sediment is transported downstream.

Due to observable erosion along the banks of the Brewster River, the Vermont Department of Environmental Conservation and the Lamoille County Planning Commission completed a "Geomorphic Assessment" of the lower Brewster River in 2013. This assessment identified and prioritized restoration projects aimed at reducing sediment and nutrient loading to downstream waters such as the Lamoille River, reducing the risk of property damage from flooding and erosion, and enhancing the quality of instream habitat. Many of these projects involve conservation and re-vegetation of riparian areas. Since many of these areas are privately owned property, coordination and collaboration with property owners will be especially important to implement these projects.

In the winter of 2013, the Town of Cambridge received approval from the State to remove a downed tree as well as to reduce the size of the gravel bar in the Brewster River and install rip rap along its banks near the Route 15 Bridge. While this temporarily addressed the immediate situation, the underlying problem of upstream erosion remains, as does the likely potential for redeposition of sediment near the Bridge. Reestablishment of vegetative buffers and stream bank stabilization upstream is needed to reduce the amount of sediment entering the Brewster River. In addition, the floodplain reconnection identified in the modeling project discussed above would allow the Brewster to deposit much of the sediment it is carrying before reaching the Route 15/Brewster River Bridge.

Groundwater Resources

Groundwater is the source for over 90% of the drinking water for rural communities in Vermont. It is replenished through rain and surface waters which percolate through the soil. Any activity which introduces contaminants directly into the ground (such as underground storage tanks, septic disposal fields, and agricultural activities) can affect groundwater quality. Since surface waters may also travel underground, surface water quality may affect groundwater quality as well.

Although most residents receive their water through the Village water system, some residents outside of the service area still have private wells and springs. It is important to protect the quality of well water through appropriate separation between wellheads and septic disposal fields. This is addressed at the state level through the issuance of water and wastewater disposal permits. Private septic owners within the Village are encouraged to have their septic systems serviced regularly to avoid leakage into nearby surface or groundwater sources.

Public groundwater sources in Vermont are assigned Public Water Source Protection Areas (SPA). An SPA is defined as an area around a ground or surface water supply in which contaminants are reasonably likely to move. The State Agency of Natural Resources (ANR) is responsible for the Vermont

Source Protection Program which is in effect to protect Vermont's public water sources. A public water supply is defined as any water supply system with fifteen or more connections or that serves at least 25 individuals daily at least 60 days per year. While there are no SPAs in Jeffersonville, the SPA for the Village water system is located off Edwards Road and 101 Road in the Town of Cambridge.

Water Quality

Two issues have been in the press over the past few years with regards to water quality - agricultural runoff and stormwater runoff from impervious surfaces such as roads, parking lots, and roofs. Both of these sources of pollution impact our streams and rivers, although stormwater runoff is a bigger factor in Jeffersonville.

The Department of Agriculture has produced 'Accepted Agricultural Practices' (AAPs) and 'Best Management Practices' (BMPs) for farms and similar standards for silvicultural operations (AAPs and BMPs are also discussed in the Land Resources Chapter). Where farms are believed to be having an impact on water quality, BMPs and other measures can be used to help prevent the runoff from entering the streams. Farmers shall meet minimum standards required by state and/or federal law and are strongly encouraged to work with organizations such as the NRCS to implement Best Management Practices.

Stormwater has the potential to carry pollutants from impervious surfaces into rivers and streams. New changes in state regulation aimed at improving water quality in Lake Champlain may require tighter regulation of stormwater. Taking some precautions now may prevent problems in the future. For instance, parking areas can be set back from streams and wetlands; runoff from rooftops can be directed to rain gardens and other vegetated areas rather than parking areas; landscaping can be designed to retain stormwater as opposed to channeling it into streams; and storage and fuel tanks shall be anchored to prevent leaks. These steps will help prevent the waterways in Jeffersonville from being contaminated. Addressing the stormwater issue now is far easier than trying to go back and retrofit old developments, as is being proposed in other communities.

Goals, Policies, & Recommendations

GOALS

Rivers and Streams

• To ensure Jeffersonville's rivers and streams contain clean water, a healthy riparian habitat, and stable stream banks.

Wetlands

To preserve and protect wetlands from pollution, filling, and any other uses or activities that will
result in their degradation or a reduction in their capacity to provide wildlife habitat, flood
control, and water storage.

Flood Hazard Areas

To protect the health, safety, and welfare of the residents of Jeffersonville by restricting use in flood hazard areas to agriculture, recreation, and open space.

Groundwater

• To maintain the quality and quantity of local groundwater supplies, especially the wells serving the Village water supply.

Water Quality

To maintain and, where degraded, improve the water quality across the Village.

POLICIES

Rivers and Streams

- Development within or proximate to designated rivers and streams shall take place in such a way as to avoid crossing the stream and to protect and maintain a natural vegetative buffer.
- Provide sufficient setbacks and vegetative buffers to prevent erosion along streambanks and to retain visual and physical access to water bodies.

Wetlands

All Class II wetlands are required to have a 50-foot buffer. Any work in a designated Class III
wetland should be validated by the Army Corps of Engineers. No filling, dredging, draining, clearing
of vegetation, or grading of wetlands is allowed without a permit.

Flood Hazard Areas

- Development is prohibited within the 100-year floodplain, as defined on the most recent FEMA maps. Existing structures should be flood proofed to at least one foot above the 100-year flood elevation, and shall be flood proofed whenever they are "substantially improved."
- Agriculture, recreation fields, parks, and open space are all appropriate uses of flood hazard areas, provided no new structures are constructed and no fill is introduced.

Groundwater

- Withdrawal of groundwater shall not exceed the recharge rate over a reasonable period of time.
- No form of land waste disposal or storage of possible contaminants shall be permitted in high water table and ground water recharge areas.

Water Quality

- All construction where soil is to be disturbed shall provide adequate erosion control so that no soil
 moves off site or into surface waters or wetlands.
- Agriculture and forestry must abide by AAPs and AMPs. Where an activity may have a negative impact on water quality, BMPs are recommended.
- The total impervious surface of any watershed shall not exceed 10%. While higher percentages of impervious surface may occur within the Village Core and Village Residential areas, this should be offset elsewhere. Where appropriate, stormwater technologies or techniques shall be used to prevent runoff from directly entering any surface water.

ACTIONS & RECOMMENDATIONS FOR IMPLEMENTATION

Wetlands

 The Planning Commission should consider acquiring funds to have a wetland inventory of the Village conducted.

Flood Hazard Areas

- The Village should consider enrollment in the "Community Rating System" as a tool to reduce flood insurance premiums. The Village should also consider adopting the measures required for more favorable reimbursement under the Vermont Emergency Relief and Assistance Fund (ERAF).
- The Village should consider purchasing properties or development rights of properties within the floodplain to permanently prevent development in those areas.
- The Planning Commission should consider creating a plan for the flood hazard area to address recreational opportunities, flood hazard protection, and the potential for implementation of water quality measures.
- Work with willing property owners to "reconnect" the Brewster River floodplain between Cambridge Elementary School and the Route 15 Bridge.
- Develop and utilize Fluvial Erosion Hazard Maps to minimize losses from flooding and erosion.

Groundwater

- The Planning Commission should identify potential threats to the source protection area for the Village water supply.
- The Village should work with the Town of Cambridge to ensure protection of the source protection area for the Village water supply.

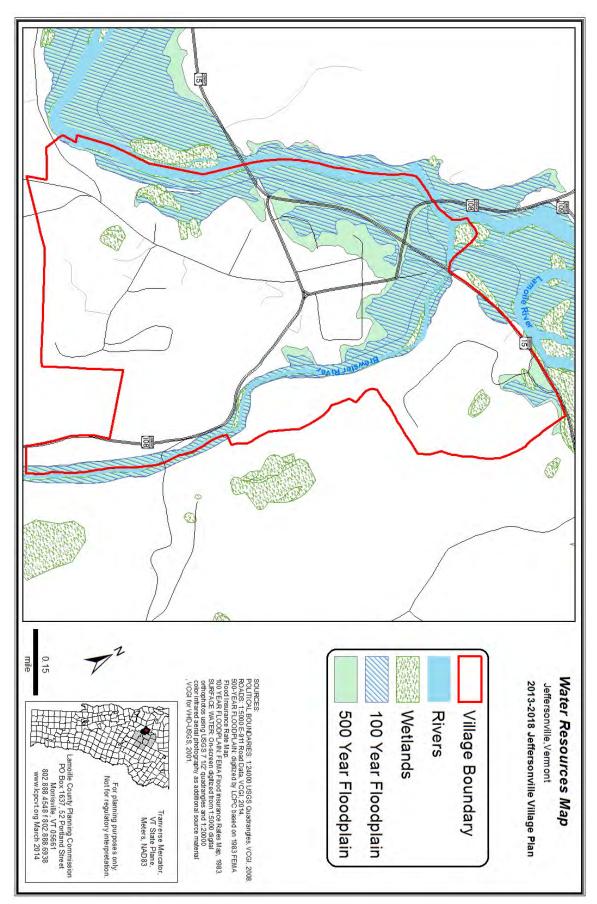
Water Quality

- The Village should ensure that all homeowners understand the importance of the proper disposal of household hazardous waste. The pickup of such materials should be inexpensive and easy in order to encourage compliance.
- Require sufficient setbacks to prevent erosion along streambanks.

- Encourage use of permeable pavements, rain gardens, and other "low impact development" technologies to manage stormwater.
- Explore potential land use regulations and other tools to protect water quality.

<u>Overall</u>

• The Planning Commission shall review all 'Act 250' applications for their impacts on the land and water resources of Jeffersonville. Where an application is determined to not conform to this chapter or any goal or policy, the Planning Commission and/or Trustees shall participate in the 'Act 250' process in order to ensure that the concerns of the Village are addressed.





Section 2 - Living and Working in Jeffersonville

A. Housing

Safe Housing

A basic responsibility of any local government is to ensure the safety of its residents. This generally translates into ensuring that vital services, such as police, fire, and rescue, are provided, but it also explains why many communities adopt regulations such as building codes, septic regulations, health codes, and zoning bylaws. Each community decides how much oversight they will provide and how much is left to the property owners to determine for themselves.

In Jeffersonville, the State health codes are enforced by the Town of Cambridge through the appointment of a Health Officer. The health codes apply to commercial and rental properties. In July 2007, the State of Vermont began having complete authority over all septic permits. Other basic standards that the Village can adopt include flood hazard regulations (to require housing in the flood hazard area to be safe for occupants), subdivision regulations, zoning regulations, and fire codes (to enforce additional fire code requirements on rental units). In 2011, Jeffersonville adopted a Flood Hazard Bylaw that prohibits future development from being constructed in the 100-year floodplain, as defined on the most recent FEMA maps (Special Flood Hazard Area). The purpose of the bylaw is to reduce repetitive loss of property and public expenditures during flooding events.

Housing Demographics

The Village of Jeffersonville should have a variety of housing types available. This is important because housing needs change over time. Younger individuals and families rent. As households gain financial resources they move into home ownership, and as individuals and families move into retirement they typically downsize. Having a variety of housing options in Jeffersonville means residents can remain in the Village as their housing needs change.

Of the 266 total housing units located in Jeffersonville reported in the 2010 U.S. Census, 41% were single-family detached houses. The remaining 58.9% were multi-unit housing hosting anywhere from 2 to 19 units. Of the 232 units that were occupied, 72 housing units were owner-occupied and 160 were renter-occupied.

While the population over the past 10 years increased at a brisk 28% (see Community Profile chapter), the number of housing units increased at a lower rate of 5%. A majority of the difference is the result of a slight increase in average household size, now averaging 2.76 persons per owner occupied unit and 2.66 per renter occupied unit, and an increase in multi-housing units available (10%).

Affordable Housing

Affordable housing is generally examined at two levels, regionally and personally. Regional affordability compares the median cost of housing locally with the median income regionally. In this way the Village can see how affordable the housing is to the average person in the region. Even where housing is found to be regionally affordable, many individuals and families may have housing that personally is not affordable. This second measure examines each individual's income with their respective housing costs. Unaffordable housing is generally tied to low incomes, but this is not always the case. A family with a \$100,000 a year income who spends more than \$2,500 per month on mortgage and taxes would not have affordable housing. This will be discussed further below.

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Regional Affordability

The Department of Housing and Community Development housing policy states that housing is regionally affordable when the costs required for housing (mortgage plus taxes) are no more than 30% of the income for a household earning 80% of the median county income. The affordability threshold for Lamoille County is \$868.18 per month. Lamoille County's affordability threshold is calculated as follows: \$43,409 is the regional median income; \$34,727.2 is the 80% figure; \$10,418.16 is 30% of the 80% figure; \$868.18 is arrived at by dividing the \$10,418.16 by 12 months.

During the 2010 Census, monthly costs for homeowners in Jeffersonville were calculated, and the median costs were \$1,399 for those with a mortgage and \$525 for those without a mortgage. The median housing cost for those with a mortgage was \$530.82 above the regional affordability threshold which means that a household earning \$34,727.20 could not afford the median mortgage expenses in the Village of Jeffersonville. In comparison to the rest of Lamoille County, Jeffersonville is the fifth most affordable place to live in the County. The towns of Hyde Park, Johnson, Waterville, and Wolcott have lower median monthly costs when it comes to owning a home. It is worth noting that according to data in the prior (2000) census, a decade ago, Jeffersonville was the least affordable place to own a home in Lamoille County other than Stowe.

Unlike mortgages, rent in Jeffersonville is considered affordable. (Note that rental costs may have slightly increased since the most recent data became available in 2011). As of 2011, the median gross rent (rent plus utilities) for all units in Jeffersonville was \$867 per month. This is less than the median gross rent for the County, which is \$930 per month.

Regionally, housing affordability has become an increasing problem for homeowners and renters in Lamoille County. Since 2000 (median household income increased by 36% between the two Census counts (2000-2010) and housing values rose by 87%, while rent rose 71%. Similarly, Jeffersonville's housing values increased dramatically by 74%; however, median household income increased by only 13%. This indicates that housing has become more unaffordable over the past decade. From 2000 to 2010, homeownership costs in Jeffersonville increased 27% with a mortgage and 25% without. Meanwhile, rent increased by 73% but is still considered affordable based on regional standards.

Personal Affordability

When residents were asked about affordability during the 2010 Census, 38% of Village households had homeownership costs that were not affordable (spending more than 30% of their income). Countywide, 41% of respondents in the Census reported figures that were unaffordable. When examining rent figures for 2010, the data revealed that 36% of Jeffersonville households had housing costs that were unaffordable, compared to 53% countywide.

Specialized Housing Options

Within every community there are individuals or families with special housing needs. The elderly and families with children in poverty are examples of groups with special needs that are found in most communities. The disabled or infirm may also require special arrangements. A final category of special needs housing is group quarters or institutional care. Living arrangements such as college dormitories, nursing homes, group homes, and homeless shelters fall into this category.

The amount of special care required may be more or less depending on the situation. Some individuals need only special construction (such as handicapped accessibility), while others need assisted living arrangements (visiting nurses) or full institutional care.

Listed below are groups with special needs which are found in Jeffersonville and an evaluation

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of how well their needs are being met. Generalizations are made throughout this section based on age. They are not intended to be derogatory in any manner. With each generation, individuals are staying healthier longer and can live independently much later in life. But, in general, taking care of oneself and one's home gets significantly more difficult as one gets older, especially if someone loses a spouse. If diverse housing options are not available, some residents may be forced to relocate outside of Jeffersonville as they age and need additional levels of care.

- <u>Seniors living alone</u>: According to the 2010 Census there were 28 seniors living alone in
 Jeffersonville. This group is important for social reasons as being retired and living alone in
 northern Vermont can be hard. In many cases, opportunities to rent apartments in senior
 housing are desired. Jeffersonville currently has no Level IV (housing with no living assistance)
 senior housing. While there are no Level IV facilities, there are private senior housing options
 including Brewster River Housing (7 units) and Jeffersonville Bond Senior Apartments (22 units).
- <u>Seniors 70-84</u>: Most seniors between 70 and 84 continue to live independently, but many require some assistance especially as they get older. These may be situations where seniors have difficulty driving or require a visiting nurse periodically. Residents are typically still active and take care of themselves and their apartments. In 2010, in Jeffersonville there were 40 seniors in this age group, and there are no Level III living arrangements available (Level III housing has 24 hour assisted living). However, there is a Level III facility located in Cambridge up Route 108 (Riverview Life Skills Center).
- Seniors 85 and over: Beyond age 85, many seniors increasingly need more intensive care. In the most serious cases, full institutional care is required. The 2010 Census recorded 8 seniors living in Jeffersonville over age 85. Jeffersonville has no Level II or Level I housing. These types of living arrangements are also known as nursing homes or convalescent homes. Residents generally are unable to live on their own due to physical or mental difficulties. It is unlikely that a Level I nursing home will be constructed in Jeffersonville as they are generally located near hospitals where emergency services can be available.
- <u>65 and over with a disability</u>. As a result of privacy concerns, the 2010 census did not release data regarding individuals having a self-care or mobility limitation in small communities such as Jeffersonville. However, local knowledge suggests that there are individuals over 65 with a disability living in Jeffersonville. In addition to social services to address some of these needs, there are wheelchair accessible units in the Brewster River Housing (4 units), and Jeffersonville Bond Senior Apartments has two accessible units
- 16 -- 64 with a disability. Depending on the severity of the limitation, human services, transportation services, or special construction (handicapped accessibility) may be required. Some social services are available in Jeffersonville although special living situations for those in serious conditions do not exist. Wheelchair accessibility is available to residents at the Jeffersonville Allocated Family Building (2 accessible units).
- Families in poverty. In 2010, 31.5% of families and 25.2% total individuals were living in poverty in Jeffersonville. Out of those families living in poverty, 37% of them had related children under the age of 18. These are groups with housing needs that are difficult to meet. Three housing developments in Jeffersonville received special financing through a combination of grants, loans, and tax credits from Vermont Housing and Conservation Board and Vermont Housing Finance Agency to provide affordable rental units. These housing developments include Brewster River Housing on Main Street (7 units) and Brewster River Apartments and Senior Housing on Mann's Meadow (10 and 22 units respectively). There are income limits to be eligible to rent these apartments as well as a cap for how much rent can be charged. Federal programs provide housing assistance under the Section-8 Housing Choice Voucher. A family or individual can apply to the Vermont State Housing Authority for rental assistance (called a "voucher") that would enable them to afford a privately-owned apartment of their choice within the Housing Authority's jurisdiction. Affordable housing developments such as Brewster River Housing and Section 8 Housing Vouchers are, in many cases, the housing of last resort for some families before becoming homeless. These housing and support programs are necessary to help families keep a roof over their heads until a more permanent arrangement can be made.

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Options to increase housing variety and affordability

Jeffersonville has not adopted zoning or subdivision regulations. If such regulations are adopted in the future, impacts on housing affordability should be considered. Regulations should allow for a variety of housing types, especially in the Village Core and Village Residential areas, while providing standards to maintain the character of the area and ensure adequacy of services. Traditional zoning relies primarily on minimum lot size and setbacks to control density, which are often not the most effective tools within a village setting. This traditional approach often limits the diversity of housing types in a community and results in new development that is more "suburban" in nature. If Jeffersonville elects to adopt zoning or subdivision regulations, alternative approaches for managing density, such as lot coverage or floor-to-area ratio requirements and tools such as "form based" standards, should be considered.

Jeffersonville can also impact housing affordability as the operator of the municipal sewer and water utility. For example, allowing use of common meters for multifamily dwellings can reduce construction and maintenance costs. Further, through wise planning and operation of the water and sewer systems, the Village can maintain affordable rates for users.

Jeffersonville can also promote housing variety and affordability by promoting programs such as HomeShare. HomeShare Vermont assists elders and persons with disabilities to live independently in their own home by bringing them together with persons who are seeking affordable housing and/or care giving opportunities. HomeShare conducts background checks and monitors matches to ensure the safety of those involved. HomeShare represents an opportunity to expand housing opportunities while maintaining open space and other critical environmental areas such as floodplains.

Fair Housing

Federal and State fair housing laws are intended to prevent discrimination in how housing is sold, rented, appraised, financed, and advertised. These laws protect people of all races, religions, sexual orientation, people with disabilities, the elderly, families with children, and persons receiving public assistance. These laws also protect all homeowners and residents from being victimized by destructive practices such as steering potential residents to only certain communities, neighborhoods, or developments.

Fair housing laws mainly regulate the actions of property owners, landlords, lenders, realtors, and appraisers. Municipalities, however, also must comply. Municipal responsibilities are derived from four general areas: regulatory activities, provision of services, provision of subsidies, and proprietary activities.

In this regard, Jeffersonville has few areas of concern at this time. The Village does not have zoning and subdivision regulations. If such bylaws are adopted, they should be written to allow for multi-family housing, mobile homes, and other housing options to ensure affordable housing options are available to residents. The zoning district lines and regulations should not isolate or single out any group, and the bylaws must be administered and enforced without bias.

Other than emergency services, education, and highways, Jeffersonville does not provide subsidies or special services to residents. Jeffersonville also does not get involved in the buying and selling of real estate as a few large communities do. Jeffersonville primarily needs to be vigilant with the provision of those few services to ensure they are fairly administered (e.g. not plowing roads with minorities as frequently as other roads in Village could violate fair housing laws, among others).

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A municipality has fair housing responsibilities regardless of whether or not the federal or state government has funded the activity that is a basis for a complaint. A fair housing violation does not require intent -- a violation can be found even if only a discriminatory impact or burden results. For this reason, Jeffersonville must take care in establishing processes and procedures, provide education and training to employees, and reviewing any regulations that are developed in the future to ensure protected groups are not directly or indirectly discriminated against.

Goals, Policies, & Recommendations

OVERALL GOAL

• For Jeffersonville to have safe and affordable housing available in a variety of types for all incomes and ages and for those with special needs.

GOALS

Safe housing

• All housing should be safe for the occupants and shall not present a hazard for the public at large. Variety of types

• Jeffersonville should have a variety of housing to meet the various needs of the residents of the Village including vacation homes, multifamily housing, single family, two family, mobile homes, and accessory apartments.

Affordable housing

• For residents of Jeffersonville to have the opportunity to find housing, for purchase or rent, which is affordable.

Specialized housing

• To ensure that households and individuals with special housing needs, including the elderly, handicapped, and low-income households are able to attain suitable and affordable housing.

Fair housing

• That housing in Jeffersonville is available to all individuals and families regardless of race, gender, sexual orientation, age, marital status, religion, color, national origin, disability, having children, or receiving public assistance.

POLICIES

Safe housing

- New residential development shall follow rules and guidelines in the Jeffersonville Flood Hazard bylaws.
- Existing housing in the floodplain should be flood-proofed for the safety of the residents and the Village as a whole.
- Additions to existing dwellings in the floodplain are permitted, provided the addition does not
 increase the footprint of building. (Adding living space to an attic by installing dormers is an
 example of a permitted addition.) If the addition results in a "substantial improvement," the
 structure shall be flood proofed in accordance with the Jeffersonville Flood Hazard Regulations and
 pertinent FEMA guidance.
- All rental housing must meet state fire codes as appropriate.

Variety of types

- Vacation homes are encouraged.
- Accessory apartments are encouraged, as they provide needed income for the homeowner and needed small apartments for residents living alone.
- Multifamily housing is allowed in locations similar to those generally used for single-family conventional dwellings.
- Maintenance of structures as single-family homes contributes greatly to the social fabric of the community and is also encouraged, including in areas such as the Village Core.

• Given the high percentage of rental housing located within Jeffersonville, efforts to create additional affordable and market rate entry-level owner-occupied housing are encouraged.

Affordable housing

- Sites for manufactured homes are allowed in locations similar to those generally used for single-family conventional dwellings.
- Affordable housing should minimize long-term living costs through high quality design, efficient construction, energy efficiency, and proximity to employment.
- Jeffersonville encourages land use patterns which are inherently more affordable by nature of cost of efficiencies associated with construction (e.g. shorter access roads, smaller lots, proximity to utilities).

Specialized housing

• Jeffersonville supports efforts to assist elderly and disabled residents who wish to remain in their homes, and to community based health care systems that enable elderly and disabled people to remain in the community.

ACTIONS & RECOMMENDATIONS FOR IMPLEMENTATION

Safe housing

- Jeffersonville will support Hazard Mitigation Grants and other applications providing funding for property owners to undertake flood-proofing, or to buyout flood-prone properties.
- Jeffersonville will support efforts to educate homeowners and renters about flood mitigation and flood safety.

Variety of Housing Types

- The Village should support efforts by the Lamoille Housing Partnership, other housing agencies, and private developers to create additional affordable and market rate owner-occupied entry-level housing.
- If housing units are lost as a result of flood hazard mitigation buyouts, Jeffersonville should work
 with the Lamoille Housing Partnership, other housing agencies, and private developers, to develop
 replacement units at other locations within or in proximity to the Village but outside of the 100year and 500-year floodplains, as defined on the most recent FEMA maps.

Affordable housing

• The Planning Commission should work with regional agencies to find ways to ensure working residents have housing they can afford.

Specialized housing

- The Village should work with Lamoille Housing Partnership and others to investigate the development of senior housing near the village center. Both Level III and Level IV facilities are needed and would be appropriate for Jeffersonville.
- The proportion of affordable housing in Jeffersonville currently exceeds county and statewide averages, thus, the Village should work with Lamoille Housing Partnership to maintain but not necessarily increase current levels of low-income family housing near the village center.

<u>Overall</u>

• The Planning Commission shall review all 'Act 250' applications for its impact on housing in the Village. Where the application is determined to not conform to this chapter or any goal or policy, the Planning Commission and/or Trustees shall participate in the 'Act 250' process in order to ensure the concerns of the Village are addressed.

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B. ECONOMIC DEVELOPMENT

Economic development is vital to the future stability and growth of Jeffersonville's local economy and employment base. Residents must have opportunities to earn a livable wage and learn the skills necessary to achieve gainful employment. Village policies should encourage and support business ventures that benefit the local economy and community at large, while preserving historic character, public safety, and valuable natural and recreational resources

Overview of Jeffersonville's Economy

Resident labor force

According to the 2010 Census there are approximately 307 residents in the labor force. In 2010, 2.4% of Jeffersonville's labor force was unemployed. From 2000 to 2010 the Village's unemployment rate dropped by 3.4%. Meanwhile, the Town of Cambridge as a whole witnessed a similar drop in the unemployment rate from 5 to 2.9%. Most residents of Jeffersonville are employed in private wage or salary positions (88.9%) while the remaining residents are employed by the government (6.7%) or self-employed (4.4%).

Tables 3 and 4 below show the occupation and industry of residents in Jeffersonville during the 2010 Census. As demonstrated below, the most popular means of employment were in sales (100 people), management, professional, business and related occupations (93). In 2010, these professions accounted for 65% of Jeffersonville's workforce. Additionally, a sizeable number of residents held service (60) and construction (39) jobs. The most popular service-based occupations were in the arts, entertainment, recreation, accommodation, and food services industries. The remaining labor force held occupations in production, transportation, and material moving services (1.7%).

Tables 3 and 4. Occupations and Industries of Residents in Jeffersonville.

Occupation	Number	Percent
Management, professional, business, science, and arts	93	31.3%
Service occupations	60	20.2%
Sales and office occupations	100	33.7%
Natural resources, construction, and maintenance	39	13.1%
Production, transportation, and material moving	5	1.7%

Industry	Number	Percent
Agriculture, forestry, fisheries, hunting, mining	0	0
Construction	37	12.5%
Manufacturing	32	10.8%
Wholesale trade	3	1%
Retail trade	31	10.4%
Transportation, warehousing, utilities	12	4%
Information	0	0
Finance, insurance, and real estate	12	4%
Professional, scientific, management, waste management	45	15.2%
and administrative services		
Education, health care, and social services	44	14.8%
Arts, entertainment, recreation, accommodation and	56	18.9%
food services		
Other services (except public administration)	14	4.7%

Public administration	11	3.7%
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Source: 2010 Census

SWOT Analysis

In the winter of 2012/2013 the Cambridge Artists and Entrepreneurs (CAE) and the Lamoille Economic Development Corporation (LEDC) conducted a "SWOT" analysis with Jeffersonville/Cambridge business owners. The focus of the meeting was to give input identifying the Strengths, Weaknesses/Limitations, Opportunities, and Threats impacting the Cambridge business community. A full house of business representatives from the Town of Cambridge and Village of Jeffersonville attended the meeting to voice their concerns and ideas regarding the current state of the area's local economy. Representatives from both the LEDC and the Lamoille County Planning Commission were present.

Strengths:

In the case of economic strengths, the majority of assets discussed were centered on the Town of Cambridge and Village of Jeffersonville serving as a unique tourist destination within a close-knit community. Situated in the heart of the Green Mountains, Jeffersonville offers a variety of recreational opportunities including skiing at Smugglers Notch Resort, hiking in the Notch, and biking or walking along local trailways such as the Lamoille Valley Rail Trail. The area is well known for its scenic beauty and diversity of small-scale farms, promoting a strong "buy local" movement. Additionally, Jeffersonville is a well-established historic village and home to active community groups and local businesses. The Village's surrounding scenic beauty, quality services, and existing infrastructure such as roads, municipal water and sewer, and WiFi access, make Jeffersonville a local hot spot for a thriving artist community and diverse local commercial businesses.

Weaknesses/Limitations:

While the Village of Jeffersonville serves as a thriving community for selective residents and local businesses, there are still certain barriers discouraging businesses from locating in the area. Such weaknesses and local barriers can impact the staying power of younger generations. When it comes to public infrastructure and services, Jeffersonville has limited access to services including public transportation, broadband internet, and parking facilities. The limitation of these services and the distance to major interstates such as I-89 present challenges for businesses that rely on these services to operate and generate a local market-base. In addition to infrastructure and service needs, one of the most concerning economic development challenges for the community is creating a local economy that appeals to young professionals. Currently, Jeffersonville lacks high-tech and industrial development opportunities. Higher paying jobs, increased internship/ higher educational opportunities, and affordable housing are essential to sustaining younger generations and future local economic markets.

Opportunities:

Within the past decade economic development in the Village and the Town of Cambridge has been increasingly challenged by the presence of re-occurring flooding events. SWOT analysis meeting attendees identified the need for increased planning efforts focusing on local businesses development. Existing economic development barriers present an opportunity and pressing need for local governments, including the Village of Jeffersonville and Town of Cambridge, to collaborate in an effort to stimulate the area's local economy while addressing concerns for natural disasters. Additional economic development opportunities discussed at the SWOT analysis meeting included harnessing the localvore, sustainable agriculture movement, collaborating with Smugglers' Notch Resort in marketing and business development efforts, and exploring additional internet marketing strategies to market Village specific events and businesses.

Key Assets

At first glance, Jeffersonville appears to be simply a quiet residential community with a few

stores. A closer look reveals that it is indeed a small-scale commercial development center. Currently, commercial development is concentrated in the Village Core Area (See Land Use and Development Section) and along Route 15. Within the Village Core, new development and redevelopment of existing structures is encouraged, provided it is in keeping with the character of the Village, no new structures or fill placed within the 100-year floodplain, and is designed to mitigate flooding hazards. Appropriate businesses in the Village Core Area include uses such as professional offices, basic services, lodging, restaurants, and retail. Within the Village Core residential uses will continue to be mixed with commercial uses, both as standalone structures and as upper story apartments and living space.

The Village Residential area consists of quiet residential areas. Only small scale, light impact commercial uses are permitted in these areas. Examples include small workshops or professional offices, small galleries, childcare homes, and bed and breakfasts. Any commercial use in this area shall have the general appearance of a village home and shall not produce noise, traffic, or parking hazards beyond what would typically be expected from residential uses within the Village.

Infrastructure

Jeffersonville currently has much of the infrastructure in place to support economic development. Jeffersonville is served by municipal water, sewer, roads and 3-phase power. Both the sewage treatment plant and municipal water system have additional capacity to handle new growth (see Public and Private Facilities and Services section). Additionally, to support local businesses, the Village areas have broadband internet access from multiple venues (see Information Technology and Telecommunications chapter).

Jeffersonville's location at the intersection of major east-west and north-south State highways (Routes 15 and 108) serves as an economic hub for the Town of Cambridge as well as some neighboring communities. The Village provides goods and services to many people beyond the borders of Jeffersonville. One piece of infrastructure lacking in Jeffersonville is parking. Many village lots are not large enough to provide on-site parking lots, and most businesses are currently served by on-street parking on Church Street and Main Street. It is possible that the supply of parking could be increased by better defining parking stalls. Provided safe and inviting sidewalks are available, on-street parking can be beneficial to economic development in the Village, as pedestrians may notice other village businesses as they walk to their primary destination.

Jeffersonville's location at the intersection of two State highways makes it an excellent hub for regional markets. However, many other communities in Vermont and neighboring States are marketing their recreational resources. In order to remain competitive, Jeffersonville will need to work hard to market the Village. The Smuggler's Notch Area Chamber of Commerce is currently working on marketing Jeffersonville and the surrounding area. The distance of the Village from an interstate exit presents a challenge for manufacturing, due to the cost of transporting raw products into the community and finished products outside of the community. Jeffersonville may be able to overcome this challenge to a degree by focusing on value-added manufacturing of locally produced raw materials (such as local food and wood products) and marketing these products directly to residents, visitors already in the community, and commuters passing through it. Avenues for selling local products include local merchants, farmers markets, and on-site direct-to-consumer sales.

High Speed Internet Access

As a result of a Backroads Broadband Grant, Jeffersonville and the rest of the 644 exchange is now served by high-speed internet access. Carrier Based Ethernet is available to businesses located within the Village. As a result, Cambridge and Jeffersonville can offer businesses internet speeds that are noticeably higher than those available in some other parts of Vermont. The availability of Carrier Ethernet in Jeffersonville represents a major opportunity to expand and diversify the local economy. Hi-speed internet access is increasingly essential not only for high tech industries, but for all businesses operating in the 21st century. Hi-speed Internet is a vital tool for growing the local economic base and would make Jeffersonville more attractive to home-based businesses, telecommuters, the cottage software and web development industry, the creative economy, and even manufacturers who

increasingly rely on broadband for product specifications and advertising.

Wireless telecommunications (WiFi) is fast becoming "the next frontier" of technology. Professionals increasingly rely on wireless devices to access information when away from the office. Some communities, such as Morrisville and Johnson, have created public WiFi districts in their downtowns. Several locations in the Village offer patrons free WiFi. Extending a public WiFi district throughout the Village Core may help to attract visitors to the Village and support the growth of local businesses.

Recreation and Tourism

One of Jeffersonville's strengths is its proximity to numerous recreational resources. These include the Lamoille Valley Rail Trail, Brewster River Uplands Trail, the Cambridge Greenway Trail, Smuggler's Notch Ski Resort, the Long Trail, canoeing and kayaking on the Lamoille River, bike tours, cross country ski trails, VAST trails, riding stables, hunting camps, and swimming and fishing holes. These resources and activities are part of the recreation and tourism economy. These types of economies thrive when customers receive the types of experiences they expect. Visiting Vermont means experiencing vibrant villages, open working landscapes, and areas of solitude and wilderness. If areas begin to lose this character they become less appealing to visitors. Jeffersonville still retains its historic feel and character. Both the village character and recreational resources need to be protected and enhanced to ensure the vibrancy of this economic sector. As noted in the Historic, Scenic, and Archeological Resources Section of this Plan, Jeffersonville contains a unique architectural style that, if marketed and maintained, could be used to attract "heritage" tourists to the Village

The Lamoille River flows through the Village of Jeffersonville. Boaters, kayakers, canoers, swimmers, and anglers all use portions of the River. Two commercial businesses operate boat launch points on the Lamoille River within Jeffersonville. The Cambridge Greenway Trail also follows the banks of the Lamoille River. In time, the Greenway Trail's pending connection with the Lamoille Valley Rail Trail, a planned four-season, multi-use recreation path running from Sheldon Junction to St. Johnsbury, and possibly with other trail networks as well, could be promoted, creating new customer bases for both new and existing businesses. Further, the Rail Trail may make Jeffersonville and the surrounding area more attractive to home businesses and telecommuters, who are not tied to a particular place and may consider their locations based on "quality of life" decisions. Both the river launch points and Greenway Trail are separated from the Village Core by Route 15, which creates a barrier to people enjoying the River and trail from easily accessing Village based businesses.

Arts and the Creative Economy

Several galleries and studios are located in Jeffersonville, and numerous artists and artisans call Jeffersonville home. Jeffersonville is also a premier destination for non-resident artists visiting Vermont. Not only do the arts help define Jeffersonville's character, they also provide local employment and bring visitors to the Village who may frequent other local businesses. As the number of studios and galleries grows, so will the demand for local sources of supplies. Again, this creates an opportunity for other local businesses.

In addition to the arts, the "Creative Economy" includes film and news media, software and game development, publishing, advertising and marketing, and high-tech manufacturing arts. The creative economy provides clean, well-paying, skilled jobs. Provided high-speed internet is available, many Creative Economy firms can "locate anywhere." In a 2013 survey conducted by the Vermont Office of the Creative Economy, sixty-five percent (65%) of businesses in the sector stated that Vermont's "clean, natural environment and working landscape" was a key factor in determining where to locate. Other important factors included Vermont being an "environmentally conscious state," a past history and residence in Vermont, and proximity to family and friends. A third of businesses also indicated a desire to locate in a compact, walkable, "authentic" community or downtown. Jeffersonville's natural beauty, authentic historic character, wealth of recreational assets, growing art community, and proximity to the Burlington area place the Village in an attractive location for businesses operating in the Creative Economy.

Creative economy firms in Jeffersonville range in size from one person advertising studios, to a publishing company with several dozen employees. Locating additional firms in Jeffersonville, particularly in the Village Core, represents an opportunity to create an "economic anchor" for other businesses that rely on a local customer base (such as local retailers and restaurants). Larger creative economy firms (and other professional offices) may be able to locate in larger Victorian homes located in the Village, providing property-owners with an alternative to conversion of these properties to multi-unit rental housing.

Economic Development and Flood Mitigation

Much of Jeffersonville lies within the 100-year flood zones. This poses a constraint/challenge on potential economic development in the Village. The Village has experienced flooding over the years that has flooded homes and businesses and resulted in noticeable economic impacts. According to FEMA, nearly 60% of businesses close within a year of experiencing a significant flood. New commercial and residential structures shall not be built within the 100-year floodplain, as defined on the most recent FEMA maps. Development of new structures introduces impervious surfaces and displaces floodwaters, increasing potential flood damage to existing structures and infrastructure. However, renovations and additions to existing structures that do not increase the ground level footprint of the building, such as creation or expansion of upper stories, are permitted.

Conversion of some existing residential structures to commercial uses also offers the opportunity to enhance economic development within the Village, provided appropriate flood mitigation measures are employed. FEMA rules and guidelines allow for "wet flood-proofing" of commercial structures but does not allow these measures to be employed in residential structures (unless the home is considered historic). Wet flood-proofing refers to measures such as raising electrical utilities and furnaces above flood levels, installing sewage backflow valves, and installing shields or guards to protect walls and floors from flood water. When done properly, wet flood-proofing can reduce some damage caused by flooding. Wet flood-proofing is preferred to "dry flood-proofing" and use of fill to raise structures above flood levels, since these techniques may displace floodwaters and damage neighboring properties. Wet flood-proofing shall not be used to allow development of new structures in the 100-year floodplain, as defined on the most recent FEMA maps.

The preservation of open spaces along river banks is an important component of flood mitigation. Both within and outside the Village, such undeveloped open spaces not only draw visitors to stimulate Jeffersonville's local economy, but also help to prevent downstream flooding by allowing floodwaters to dissipate in the floodplain. As of the drafting of this Plan, the Village is in the process of purchasing a portion of the former Bell-Gates property. In addition to mitigating against future flooding, this property will create a new green space located at the gateway to the Village, similar to "village greens" in other Vermont villages. Village greens often become important community gathering places. As a result, properties located along greens are often prime locations for local businesses. Although the loss of the lumber industry was a blow to the local economy, the Bell-Gates property now provides a unique opportunity for Jeffersonville to increase the overall resiliency as well as the vibrancy of the community.

Goals, Policies, and Recommendations

Economic development is vital to the future of Jeffersonville. We have, so far, avoided the fate of some villages which have lost their historic feel and character. This will help the Village take advantage of its opportunities in the tourism sector of the economy. Jeffersonville also needs to work

to improve the diversity of businesses and employment to ensure residents have good jobs close to home. Increasing local employment opportunities will create an environment where residents can work, play, and shop locally, further supporting Jeffersonville's local economy.

GOALS

- For Jeffersonville to have a diverse and resilient economy based on small businesses that are compatible with Jeffersonville's historic center and that will raise income levels and provide employment for Jeffersonville residents.
- For Jeffersonville to be a small regional center for commercial activity and employment.

The Village has developed the following policies in order to encourage and support local economic development.

POLICIES

- The Village encourages the development of recreationally based businesses to bring visitors to Jeffersonville. The Village also supports development of infrastructure and amenities.
- The Village shall seek to take full advantage of its existing assets (open areas of Special Flood Hazard Area, Village Center Designation, Historic District, trail system etc.) to optimize its ability to serve as a "hub" for nearby cultural and recreational amenities.
- Jeffersonville supports the efforts of the Smuggler's Notch Area Chamber of Commerce, Cambridge Artists and Entrepreneurs, and other organizations to market and promote area businesses.
- The development of appropriate industries and businesses which utilize the skills of the local labor force are encouraged.
- The Village supports efforts to grow the area's creative and arts-based economy.
- The Village supports proposals which will provide workforce training to improve opportunities for residents in new and existing businesses.
- Economic development at the expense of the environment is not encouraged. Businesses and industries shall not degrade or endanger air and water resources or public safety.
- Jeffersonville should work to accommodate parking needs of businesses located in the Village Core in a way that is compatible with the character of the Village.
- Additions to existing businesses in the floodplains are permitted, provided the addition does not
 increase the footprint of building. (Adding space to an attic by installing dormers is an example of
 a permitted addition.) If the addition results in a "substantial improvement," the structure shall
 be flood proofed in accordance with the Jeffersonville Flood Hazard Regulations and pertinent
 FEMA guidelines.
- The Village should work to preserve existing green space in the 100-year floodplain, such as the Bell Gates property, and investigate ways to utilize such green space to provide additional flood protection for developed properties. The Village should also investigate low impact uses of preserved green spaces that draw people into the Village.

The following actions and recommendations are intended to provide opportunities for economic development.

ACTIONS & RECOMMENDATIONS FOR IMPLEMENTATION

• The Planning Commission should pursue funding, perhaps through the municipal planning grant program, to conduct an economic assessment of Jeffersonville and to develop a strategy for moving forward to enhance the local tourism, recreation, service-based, and creative economy. This economic assessment should identify strategies for increasing the flow of recreation users to local businesses and services within the Village Core.

- The Village should work with the Town of Cambridge and Cambridge Greenway Council to connect the Cambridge Greenway to the Lamoille Valley Rail Trail and to create public trailhead parking and boat-launches in proximity to the Village.
- As needed, the Village of Jeffersonville should consider implementing infrastructure upgrades as recommended in the 2012 Jeffersonville Infrastructure Assessment conducted by the Lamoille County Planning Commission.
- The Village should work with businesses and civic and non-profit organizations located within the Village Core to determine if a public "WiFi" district would support economic development and the other goals of this Plan.
- The Village should work with these and other groups to encourage connections with other trail networks to enhance Recreation & Wellness, Transportation (i.e. a Jeffersonville Village to Cambridge Village Trail) as well as Economic Development.
- The Planning Commission and Village Trustees should work with other village and town officials, business owners, and private property owners to ensure existing town-wide scenic and recreational resources are preserved.
- The Trustees and Planning Commission should investigate ways to encourage better utilization of existing on-street parking located within the Village Core. This could involve better definition of parking stalls and improvements to pedestrian infrastructure and streetscapes so that customers are more likely to walk from parking to their primary destination. If such measures are insufficient to meet the needs of current and new businesses, the Village may need to investigate creation of a public lot serving the Village Core.
- The Village should study where new development or redevelopment can occur in light of flooding hazards and other environmental constraints. Such areas with appropriate infrastructure should be identified.
- The Village should work with Lamoille Economic Development Corporation (LEDC) to host small business development workshops in the Village.
- The Planning Commission shall review all 'Act 250' applications for their impact on the economic development of the Village. Where the application is determined to not conform to this chapter or any goal or policy, the Planning Commission and/or Trustees shall participate in the 'Act 250' process in order to ensure the concerns of the Village are addressed. Where an application conforms to this chapter, the Planning Commission and/or Trustees shall participate in the 'Act 250' process to attempt to ensure the process is as smooth as possible for the applicant.

C. RECREATION, HEALTH, AND WELLNESS

Health and Wellness Issues

Health and wellness is defined as the state of well-being. Health and wellness is not simply the absence of illness, but rather improved quality of life resulting from enhanced physical, mental, and spiritual health. The purpose of this section is to lay out a vision for the health and wellness of the residents of Jeffersonville. It incorporates objectives and targets while outlining strategies to achieve a healthy community. It also identifies potential partners who will be key to achieving our vision and goals.

As previously discussed in this Plan, Jeffersonville's population continues to grow. As the Village grows, it is important for its residents to be able to access recreational resources, livable wage jobs, healthy local food products, and quality educational and health care services.

Measuring Health and Wellness - Local Indicators

Identifying current information on the health and wellness at the local level is difficult, as much of the pertinent data is collected on a county level. However, general indicators can be used to assess the current health and wellness of Village residents. Local health indicators may include access to secure shelter, safe nutritious food, adequate education, recreational/exercise facilities, financial security, and proper care and supervision of vulnerable populations such as children, the elderly, and people with disabilities.

Poverty data is one of the few pieces of information related to measuring health and wellness that can be found at a local scale. As noted in the Community Profile, the percentage of Jeffersonville residents living in poverty has increased dramatically over the last decade. Poverty is a significant indirect challenge to health and wellness. Individuals and families without financial security tend to be increasingly subject to stress that diverts their attention away from their well-being. When struggling financially there is also the concern of not being able to afford healthy food products.

Other local health and wellness indicators include roads with adequate shoulder widths for biking/walking, alternative commute patterns (number that walk/bike to work), number of access points to existing and developing recreation trails, use of recreational facilities, and types of food served at local schools. More information on these indicators is contained below or within the Transportation Section of this Plan.

One tool to assist communities in assessing wellness is the Healthy Vermonters 2020 Report, published by the Vermont Health Department. The report measures several health indicators and tracks the health status of Vermonters and includes a "real-time" performance measurement tool that tracks progress for improving the population's health. The report can be accessed online at http://www.healthvermont.gov/research/index.aspx

Additionally, regional health and wellness organizations (Office of Local Health, Lamoille Valley Fit and Healthy Council) are available in Lamoille County and can be utilized as a resource for healthy community planning and conducting studies such as walkability/bikeability studies, food audits, and recreational improvement surveys to measure community wellness.

Health and Wellness Infrastructure and Services

Recreation

Jeffersonville residents have access to a growing number of recreational opportunities. These facilities help to promote an "active lifestyle" that is integral to health and wellness. Regular exercise can assist in preventing chronic diseases such as heart disease and diabetes. Some studies have suggested that children who receive even small amounts of exercise, such as walking to school, are better able to concentrate and have fewer disciplinary issues. At the other end of the age spectrum, exercise can help to delay the onset or severity of dementia and Alzheimer's disease. The wealth of both outdoor and indoor recreational facilities within the vicinity of Jeffersonville also serves as an integral piece of the Village's local economy. The increasing number of recreational users assists in stimulating local business sales and provides local employment opportunities.

Recreational facilities within the Village of Jeffersonville and Town of Cambridge include both public and private facilities and formal and informal activities. Examples of public facilities are the Cambridge Recreation Fields and Lamoille Valley Rail Trail. Private facilities include the Smugglers' Notch Ski Resort and boat rental companies. Informal recreation activities such as hiking, boating, snowshoeing, and bicycling are available on public and State owned (Smugglers' Notch State Park) land. The following section highlights recreational facilities accessible within the Village of Jeffersonville.

The Cambridge Recreation Fields, owned by the Town of Cambridge, are located between the Brewster River and Cambridge Elementary School. The fields are managed and maintained by the Cambridge Recreation Board. The fields include:

- The Williamson Field which was purchased from the Williamson Family and is located next to the Town Garage. The field is primarily used for soccer and lacrosse.
- A baseball field with two dugouts. This field is also used for soccer.
- The "lower fields" which are also predominately used for baseball in the spring and soccer in the fall. During the winter, an ice rink is installed on the lower fields by the Cambridge Rotary.

The Cambridge Greenway is a 1.3 mile long packed gravel surface recreation path located in Jeffersonville. The path, which was built in 1996, begins at the western edge of Jeffersonville, runs adjacent to the Lamoille River passing underneath the Route 15 and Route 108 bridges, and ends at the historic Poland Covered Bridge in Cambridge Junction. Half of the path is located on a former spur of the Lamoille Valley Railroad. This unpaved four-season recreation path is used in the warmer months by walkers, runners, cyclists, equestrians and people walking their pets (leashes are required). There are also multiple fishing access points to the Brewster and Lamoille Rivers. In winter, the path is also used for cross country skiing, snowshoeing, horseback riding, and snowmobiles as part of the Vermont Association of Snow Travelers (VAST) trail network. Other than snowmobiles in the winter, no other motorized vehicles are allowed on the path with the exception of motorized wheelchairs and emergency and maintenance vehicles. Parking is available in the Village of Jeffersonville, a commuter parking lot off Route 15 at the mid-point of the path, and near the Poland Covered Bridge at the end of the path.

The Cambridge Greenway connects to the planned *Lamoille Valley Rail Trail*. The Lamoille Valley Rail Trail (LVRT) will be a four-season, multi-use recreation path running from Sheldon Junction to St. Johnsbury. The trail will be built on the corridor of the former Lamoille Valley Railroad and will pass through Cambridge. The Town of Cambridge is currently working with Cambridge Greenway Trails and the Lamoille County Planning Commission to develop a trailhead parking area for the LVRT in Cambridge Junction.

The Alden Bryan Brewster River Trail (ABBRT) runs along the Brewster River

The *Brewster Upland Conservation Trust Trail System* (also called the Windridge Trails) connects conserved land located between Junction Hill Road and Canyon Road with the Brewster River Park.

The *Lamoille and Brewster Rivers* are important recreational resources. Many residents use both rivers for fishing, swimming, and boating. A local swimming hole is located north of Jeffersonville at the Brewster River Park. Two commercial businesses operate boat launch points on the Lamoille River within Jeffersonville.

The *Brewster River Park* is owned and operated by the Village of Jeffersonville. The Park is open to the public free of charge, and includes a swimming hole, picnic area, trails and gazebo. Visitation to the Park has doubled in the last year.

The Cambridge Elementary School Gymnasium is the primary indoor recreation facility located within Jeffersonville. However, multiple events/activities frequently compete for use of the Gymnasium. Village residents would benefit greatly from additional venues, either publicly or privately owned/operated, for indoor recreation.

Public and private efforts are under way to identify and develop additional community recreation and enrichment space and facilities. Long term plans include linking existing trail systems to create a community wide trail network.

Food Access

Food Security

The ability for people to access affordable food is referred to as "food access." Food access is influenced by travel time to shopping, availability of healthy foods, product prices, and the relationship between food shopping, spending patterns, diet, and health. "Food security" is often tied to access. A community is food insecure when its residents do not have access to enough nutritious, quality, affordable food to lead an active and healthy life. It is important to consider food security and food access in order to increase the self-reliance of communities. According to the 2010 Census, in Jeffersonville 24% of households use the Supplemental Nutrition Assistance Program (SNAP, also known as "food stamps"), and 25% of people in the Village live under the poverty threshold. At the Cambridge Elementary School, 40% of the students were enrolled in the free and reduced lunch program in 2012-2013. (By comparison, this is the lowest enrollment rate in the Lamoille North Supervisory Union.) Given those statistics, there is a demonstrated need for a coordinated effort to increase food security in Jeffersonville.

There is a range of policies and programs dedicated to addressing food security, which includes:

Food availability and affordability

- Direct food marketing
- Diet-related health problems
- Participation in and access to Federal nutrition assistance programs
- Ecologically sustainable agricultural production
- Economic viability of rural communities
- Economic opportunity and job security
- Community development

The closest major supermarkets are in Essex and Morrisville, both about 20-30 minutes away. Small local markets and grocery stores supply much of the food stock for Village residents. While Jeffersonville residents support and value existing local markets, there may be a need and demand within the community for a larger selection of food products.

On the other hand, Jeffersonville is fortunate to be surrounded by a number of working farms. Many of these farms benefit from open fields within the floodplain which contain some of the best and most fertile agricultural lands. Some farms now have a retail store or farmstand on-site. A dedicated group of volunteers has been instrumental in building and maintaining the Jeffersonville Farmers' and Artisans' Market. Held weekly throughout the summer and fall, the Farmers' Market brings together local food producers in a central location in Jeffersonville. The market features a diversity of food products, including organic, conventional, and chemical-free produce, bread, meat, eggs, and cheese. Some farmers' markets accept SNAP benefits through the Electronic Benefits Transfer (EBT) program. While this can be a major investment for a small farmers' market, it is worthwhile to increase access to the market's offering, especially given the high percentage of Jeffersonville residents receiving SNAP benefits. The Jeffersonville Farmers' Market group will also have an EBT/Debit machine in the future. The value of a farmers' market cannot be understated. Markets provide access to fresh food, provide a source of income for farmers and producers, and bring the community together. All of this contributes to the health and well-being of the Village.

Food Affordability

Integral to food security is food affordability. While there is no measure for how much a household should be spending on food like there is for housing, food affordability calculations are often based on how far a person has to go for food, size of the nearest grocery store(s), and household income. The USDA offers guides for spending plans based on family size. The range for a family of four is \$127 a week up to \$289 a week.

The Jeffersonville Farmers' and Artisans' Market and local retailers offer a selection of food, but some items are not necessarily affordable for all income types. There are a number of public and private programs for those who cannot afford food. The Cambridge Community Food Shelf is one of those programs and is located in Jeffersonville. The Food Shelf offers limited hours weekly for eligible individuals to pick up food. In recent years the hours of operation have expanded, but there is still a need to evaluate hours and staffing of the Food Shelf. In addition to food, the Food Shelf also has clothing available for residents in need. The Food Shelf is located in donated space from the Second Congregational Church. The Food Shelf may consider adding pet food to its shelves in the future.

The Meyer Meal Maker program sponsored by Meyer Hatchery gives away a free chick with every order with one stipulation -- raise the chick to laying/butchering age and donate the meat and/or eggs to a local family or charity.

Additionally, the Eagles Club offers free lunches to residents. At present, they offer lunches twice a month. Not only do the lunches provide an option for residents in need, they also provide a social gathering space for the community and are open to all. There are no eligibility requirements to enjoy an Eagles Club lunch. The Eagles Club and the Cambridge Community Food Shelf both sponsor Thanksgiving meal baskets.

The Vermont food stamps program is called 3SquaresVT. This program, for those who are eligible, works with participants to increase their food budgets and ensure "three square meals" are available for every household participating. The Commodity Supplemental Food Program provides staple items and nutrition assistance to qualifying individuals and households.

The Vermont Foodbank also sponsors four fresh food initiatives. The "gleaning program" harvests excess or unmarketable produce from farms and redistributes it throughout the state. "Pick for your Neighbor" is a partnership with tree fruit growers that allows citizens and companies to visit participating orchards to pick and purchase extra apples for donation to the Foodbank. The Foodbank also operates its own farm in Warren to grow produce for local food shelves. Jeffersonville should continue to support these organizations and encourage retailers to participate in the Healthy Retailers Initiative and to connect with local food producers. Lastly, the Foodbank organizes the BackPack Program for school-aged youth. During the school year, bags of kid-friendly nonperishable vitamin fortified food from all five food groups are packed and distributed to participating schools. The food is then put into children's backpacks.

The Vermont Agency of Education administers two meal programs for school children during the summer. The Seamless Summer Option has a free meal service for participating school food providers. The Summer Food Service Program sponsors serve public or private non-profit schools, local, municipal, county, tribal or state government, private non-profits, public or private non-profit camps, and private or non-profit universities or colleges. Sponsors must be able to provide a capable staff, managerial skills, and food service capabilities. A sponsor may provide its own meals, purchase meals through an agreement with an area school, or contract for meals with a food vendor. The Agency of Education offers more information about eligibility and operation of these programs.

Healthy Retailers Initiative

Ensuring farmers and local food and beverage producers are able to remain viable is a critical piece of food access. Financial, promotional, and distributional support are necessary for producers and institutions such as markets and stores. Having locally produced agricultural products available at local stores and grocers helps ensure local dollars stay in Jeffersonville. The Vermont Department of Health's Healthy Retailers Initiative is one example of a resource to encourage access to local healthy food products.

The voluntary and free Healthy Retailers Initiative focuses on three key areas: tobacco, alcohol, and healthy foods. By enrolling in the program, retailers gain access to resources and tools in order to reduce tobacco advertising and promote healthier food options, such as colorful posters using Vermont role models, signs to hang in aisles, door clings, and table tents. The Initiative also works with retailers to promote the EBT program for qualifying products. The goal of the program is to remind shoppers that healthy changes can be easy to make while allowing retailers to highlight healthy items they may already have in their store. At the time of this Plan, there is one Jeffersonville store participating in the Healthy Retailers program.

Marketing Local Products

Direct marketing of locally produced food provides another option for increasing food access and security. Direct marketing occurs when local producers sell directly to the customer rather than going through a distributor or wholesaler. A farmers' market is an example of direct marketing. A Community Supported Agriculture model (CSA) is also a direct marketing tool. Under the CSA model, a customer purchases a "share" up front from a farm, and the farm then distributes a weekly box of produce to the customer. This model gives the farmer an assurance of income and ensures the customer receives a share of food throughout the growing season. CSAs have expanded to include winter shares, meat shares, egg shares, and shares of other food products. Many farms offer a reduced rate for households under a certain income level.

Direct marketing is also found in the Farm to School and Farm to Institution model. These programs encourage farmers to sell products directly to schools or institutions, such as hospitals. Increasing the amount of locally grown produce available for sale at local retailers is also important. Efforts can be enhanced to achieve this by such organizations as the Healthy Retailers Initiative or the Lamoille Fit and Healthy Council.

Community and Backyard Gardening

While communities are limited in what they can do to influence dietary decisions by individual households, they can be instrumental in providing resources and opportunities to increase access to healthy, affordable food. One way is by encouraging the use of gardening, such as community gardening or "backyard" gardening. A community garden is simply a garden where two or more individuals grow plants. Community gardens can be located on private or public property and are often tied into existing organizations, such as schools, senior housing complexes, apartment or multi-family buildings, and religious organizations. Mann's Meadow housing complex has a small garden for residents. Organizations such as food pantries and food shelves may use community gardening as both a learning tool and a food source. Farmers in some communities make space available for gardeners, for free or for a fee. Some barriers to community gardening include conflict with road crews, costs, and water access. Resources are available to communities through the Vermont Community Garden Network or American Community Gardening Association.

In rural farm communities, it is more common for households to each have their own garden or wild berry patch. Barriers to having a backyard garden include lack of space, lack of tools, and lack of knowledge about how to grow your own food. In Jeffersonville, residential neighborhoods are generally densely compact, limiting yard space available for backyard gardens. Additionally, Jeffersonville has an increasing young, rental population who are often times limited in terms of how they can use rental property. While some lots in Jeffersonville provide reasonable space for backyard gardens, other residents, especially those residing in the Village Core along Main and Church Streets, may benefit from a local community garden plot. Currently, Jeffersonville does not have a community garden. As the Village continues to explore green space opportunities, potential community garden space should be given consideration during the design and planning process of new residential developments and recreational facilities.

Organizations throughout the state, such as 4-H and the UVM Master Gardeners Program, provide training in growing and preserving food at home, which is one way to improve food security and self-sufficiency. Similarly, a community tool set is an option for households, especially smaller households such as renters in the village, to share implements such as shovels, hoes, and rakes without a major investment. Jeffersonville strongly encourages gardening as a way to increase access to affordable, healthy foods.

Health Care Providers

The Community Paramedic Program (CPP) emerged out of discussions by the Community Healthcare and Emergency Cooperative to develop a standardized training curriculum that can be modified for rural communities by expanding the role of Emergency Medical Services professionals (EMS). CPP connects underutilized resources to underserved populations by allowing EMS workers to provide health services where access to physicians, clinics, and/or hospitals is difficult or may not exist. CPP partners with primary care physicians to oversee the program. CPP is a voluntary program. Community Paramedics can help willing people manage chronic diseases such as diabetes and high blood pressure and can help prevent disease and illness through immunizations and screenings. They can also provide information and counseling about ways individuals care for themselves and their families. In addition, Community Paramedics can be eyes, ears, and voices of residents. For older residents who may be living alone or have a medical issue that limits their mobility, the CPP offers an alternative source of care. The program is still evolving but could be considered an option for residents and for Cambridge Rescue to explore.

Community Partners

Health and Wellness services, information, and assistance in Jeffersonville are provided by a number of different agencies. Some are private commercial enterprises, a few are private not-forprofit organizations, and others are governmental agencies. Likely partners for health and wellness initiatives accessible from Jeffersonville include:

- 4-H Program
- **Building Bright Futures**
- Cambridge 360
- Cambridge Elementary School Parent Teacher Association
- Cambridge Fire Department
- AAAAAAAA Cambridge Rescue
- Cambridge Rotary
- Copley Hospital
- **Eagles Club**
- Fit and Healthy Council of Lamoille Valley
- Cambridge Food Shelf
- Johnson State College
- Þ Lamoille Area Cancer Network
- Þ Lamoille Home Health and Hospices
- A A A Lamoille Valley Prevention Campaign
- Lamoille Valley Tobacco Taskforce
- **RSVP Bone Builders**
- Salvation Farms
- Vermont Department of Health Morrisville District Office

School Activities

Much is being done to maintain and enhance the educational and nutritional programs at Cambridge Elementary School to encourage health and wellness among children including:

- Providing ample recreation and physical activity opportunities,
- Educating students on healthy eating habits, and
- Increasing access to healthy locally produced food.

The school currently has a garden for pre-school to sixth grade students. The garden harvest is used in the school lunch program. Additionally, the school is making use of ample opportunities to work with local producers to access fresh produce from area farmers. The Cambridge Elementary School (CES) is already implementing some of the tenets of the farm-to-school movement. In northern Vermont, the Green Mountain Farm-to-School Network, to which CES belongs, provides resources, education, and assistance to schools for fresh food in cafeterias, to support local farms, and to provide education programs, events, and activities for students and the community. CES works with local producers to incorporate healthy, local food into the school's lunch program. Encouraged by students, the CES now buys and uses locally sourced maple syrup in the cafeteria and through a national grant is able to provide free fresh fruits and vegetables for snack times. The Abbey Group operates CES's lunch program. Based out of Enosburg Falls, The Abbey Group sources much of their food from Vermont producers, including Boyden Farm and Valley Dream Farm in Cambridge. Food is also supplied from Foote Brook Farm (Johnson) and through Upper Valley Produce (Stowe). Through a Lamoille Fit and Healthy Council grant, CES purchased industrial blenders for smoothies.

CES has an ongoing relationship with the Cambridge Food Shelf. The school sponsors food drives throughout the school year. The food shelf supplies free lunches to students who attend the federally funded 21st-Century Community Learning Program and after school snacks for all of the students who participate in the 21st-Century Community Learning After School program. The Cambridge Food Shelf and CES partner to provide lunch during summer vacation for the families who need this service, and the Food Shelf provides additional school snacks to students who need them.

Additional resources are available through the Vermont Food Education Every Day (VT FEED) Collaborative project. VT FEED is organized at three levels: the classroom, with a standard food, farm, and nutrition-based curriculum; the cafeteria, by integrating local food and nutrition education through food service institutes; and through the community by connecting students to their food sources.

The Cambridge Elementary School recognizes the importance of incorporating into its curriculum routine physical activities and educational outreach regarding healthy eating habits. In an effort to incorporate these important roles into the school's curriculum, in 2006 the CES adopted a wellness policy and has continued to utilize new resource tools such as the "Food Pyramid Game" to promote wellness among children. This resource tool, demonstrated in math and science classes, allows students to identify an appropriate intake of daily calories and to identify food products which are considered healthy. The after school program offers classes that promote fitness and wellness. Wellness Days provide opportunities for the older grades to participate in a variety of winter sports at Smugglers' Notch Resort. By partnering with the Cambridge Rotary and local businesses, the three Wellness Days continue to strengthen the relationships between health, wellness, education, and community partnership. Further, the CES strives to teach sustainable food systems by partnering with local businesses to operate a food scrap composting system at Sanctuary Farms in Morrisville. (More information can be found in the Utilities and Facilities chapter.) Ensuring that the CES stays current with changes in dietary needs, food system advancements, and educational tools is a collaborative effort for school officials, the Parent Teacher Association, the Lamoille North Supervisory Union, farmers, and other local partners.

The Role of Businesses

Businesses can promote healthy lifestyles which can improve employee morale and productivity and potentially lower health insurance costs. Actions a business can take include drafting a wellness plan for the business and its employees, providing health and wellness informational resources, holding health workshops and screenings, providing healthy snacks, and rewarding walking or biking to work. The Vermont Worksite Wellness Resource is a tool kit developed by the Vermont Department of Health. The Worksite Wellness Resource provides employers with the steps and supporting information to aid in planning, developing, implementing, and evaluating a worksite wellness program. The Resource focuses on the major risk factors related to chronic disease -- poor nutrition, physical inactivity, and substance abuse. The Resource Kit includes healthy eating guidelines for work sites and the Vermont Worksite Healthy Pledge. Ιt is available online Eating at http://healthvermont.go/family/fit/documents/WorksiteWellness Resource.pdf.

Land Use Decisions

There is much potential for land use planning to increase opportunities for health and wellness in Jeffersonville. Some opportunities include:

- The protection of natural scenic and recreational areas so that they may be maintained as destinations for hiking, biking, and other physical activities;
- Encouraging mixed-use development (for example ground floor retail with apartments and offices above) and siting new development near existing stores, restaurants, and workplaces, (excluding new structures in the 100-year floodplain as defined on the most recent FEMA maps), to increase availability of walking and biking;
- Providing public access to hunting and fishing and other outdoor recreation activities;
- Ensuring that roads have adequate shoulders for recreational biking and walking;
- Encouraging sidewalks and other pedestrian amenities in new developments and existing streets; and
- Encouraging community garden space.

These points are more fully developed in the Natural and Scenic Resources, Transportation, and Economic Development sections of this Village Plan.

Wellness and Flood Resiliency

Maintaining existing green space is an integral part of promoting both wellness and flood resiliency in the Village. Many recreational resources situated in the heart of the Village not only provide physical activity opportunities, but also mitigate flooding impacts throughout the area. Outdoor recreation fields, trailways, agricultural fields, and community gardens can provide flood storage during major flood events, reducing both the volume and velocity of floodwaters up and downstream. The Village of Jeffersonville should continue to explore ways to utilize existing green space located within the flood prone areas that do not introduce new structures and to minimize new impervious surfaces, (such as parking lots). Utilization of these areas for passive recreation, trails, and community garden space will allow these areas to remain undeveloped, while still contributing to the well-being and local economy of Jeffersonville.

Goals, Policies and Recommendations

GOALS

Wellness

- To provide ample opportunities for the health and wellness of Jeffersonville residents.
- To have the local data necessary to provide a baseline for measuring health and wellness in Jeffersonville.

Recreation facilities

To maintain, develop, expand, and enhance recreational facilities and opportunities.

Food Access and Security

• To provide access to healthy, affordable locally grown food.

Health facilities

 For Jeffersonville to expand quality affordable healthcare options available to the local community.

Land Use

- To encourage more physical activity through land use plans and policies.
- For suitable amounts and types of land to be set aside in Jeffersonville for public use and enjoyment.

POLICIES

Recreation Facilities

- Jeffersonville recognizes the value of the planned Lamoille Valley Rail Trail, Cambridge Greenway, and other trail networks. Jeffersonville supports infrastructure investments that will allow businesses and community members to take full advantage of this opportunity.
- Jeffersonville supports responsible development of additional indoor and outdoor recreational
 facilities within the Village. Passive recreation such as trails is an acceptable use of areas within
 the 100-year floodplain (as defined on the most recent FEMA maps), provided no new structures are
 created.

Food Access and Security

- The availability and affordability of locally grown foods to residents of all income levels should be increased
- Gardening, including private and community gardens, is strongly encouraged and supported.
- Jeffersonville should plan for the development of future community gardens.

Health facilities

- Jeffersonville supports any reasonable proposal to locate a community health, dental, assisted living, or skilled nursing facility in the Village.
- New health facilities are encouraged in the Village Core, provided no new structures are created within the 100-year floodplain (as defined on the most recent FEMA maps). If such facilities are located within existing structures located within the floodplain, the structure shall be flood proofed in accordance with most recent FEMA guidelines. Given the vulnerable populations served by such facilities, measures should be taken to protect them during larger flood-events, including, but not limited to, elevating utilities to at least the 500-year flood elevation.

Land Use

- Natural, scenic, and recreational areas should be protected so that they may be maintained as destinations for hiking, biking, and other physical activities.
- Public access to a wide variety of outdoor recreation activities should be preserved.

Transportation

• All public roads in Jeffersonville should provide for safe walking and biking.

Education

• Jeffersonville's youth should be provided with opportunities to walk or bike to school, sound nutrition, and information pertinent to healthy living.

ACTIONS & RECOMMENDATIONS FOR IMPLEMENTATION

Overall

• Jeffersonville should work in partnership with other local, regional, and state agencies to begin measuring more local health and wellness indicators.

Recreation Facilities

- Jeffersonville should identify and fill gaps in the existing recreation trail network and establish itself as a "hub" for local and regional recreation amenities.
- Jeffersonville, in partnership with other organizations and the Town of Cambridge, should develop
 a comprehensive plan for amenities, facilities, and aesthetics for the Lamoille Valley Rail Trail and
 other trail systems
- The Village should work with other groups in the community to address various recreation issues, assist the development of recreational facilities, and support and coordinate the efforts of local recreation, trail, and conservation groups.
- Jeffersonville should continue to explore development of additional indoor and outdoor recreation and enrichment facilities.

Food Access and Security

- The Jeffersonville Farmers' and Artisans' Market should continue to participate in the EBT/Debit program.
- The Jeffersonville Board of Trustees and Planning Commission should work with other local groups to identify potential space for community gardens within the Village.

Health Facilities

- Jeffersonville should pursue partnerships with other organizations to ensure the provision of affordable housing that shelters and supports all residents, especially children, the elderly, and those possessing disabilities.
- Jeffersonville supports the development of elderly housing, assisted living, and skilled nursing facilities that are compatible with the physical and cultural characteristics of the community and are properly protected against flooding, and are not located within the 100-year floodplain (as defined on the most recent FEMA maps).
- Jeffersonville supports investigating additional community wellness initiatives, such as a community paramedic program.

Education

- Cambridge Elementary School should continue to promote and implement the district wide school wellness policy for students and teachers developed by the Lamoille North Supervisory Union.
- The Cambridge Elementary School should continue to work with local farmers/producers to increase local food products provided as part of the school's lunch program.



Section 3 - Servicing the Residents, Visitors, and Businesses of Jeffersonville

A. COMMUNITY FACILITIES & SERVICES

This chapter discusses a wide variety of public, governmental, and private services available to residents and businesses residing in the Village of Jeffersonville.

Jeffersonville's Government

Jeffersonville is an incorporated village within the Town of Cambridge. All residents of Jeffersonville are also, therefore, residents of Cambridge. The Village can regulate and affect only those aspects authorized in the Village Charter or where specifically granted under State law. The Village, for example, does not maintain streets, provide police protection, or address education as a separate municipality. The Board of Trustees is made up of five elected citizens serving rotating three year terms. Additionally, there is a Village Clerk who is elected annually.

Village Wastewater Treatment Plant

Jeffersonville was incorporated in 1905 for the purpose of developing community water and sewer systems. A water system was completed in 1914, but no sewage system was considered due to lack of funds. This forced homeowners to install individual on-site subsurface systems. These typically included only a cesspool with a timber cover. The failure of numerous on-site systems in the Village caused concern for many years. As a result, a municipal wastewater treatment plant was constructed in the summer of 1989.

The wastewater treatment facility serves most, but not all of the Village. The Jeffersonville Sewer System has a total capacity of 77,000 gallons per day (gpd). On an average day, the system currently treats between 30,000 and 40,000 gallons of water per day. About 50%-60% of the system's capacity is currently unused. In other words, the plant's current wastewater treatment system could process an estimated additional 35,000 gallons per day. It may be easier to understand this unused capacity by visualizing it in terms of how it could be used for future development. A three bedroom single-family home uses approximately 420 gpd. Therefore, the system has enough unused capacity to serve approximately 83 new three bedroom homes. Of course, Jeffersonville contains many uses other than single family homes. When measured in terms of employment potential, there is enough unused capacity to serve approximately 2,328 new employees in retail or office type businesses.

The wastewater treatment facility is now over twenty years old. Components of the facility will need to be replaced in the near future. Most notably the aeration system will need to be replaced in the next two to three years. Operation of the wastewater treatment facility is energy intensive. The Village Trustees have been investigating ways to make the plant more energy efficient and have considered renewable energy installations to offset some of the electricity costs. The Trustees have adopted Wastewater Rules and Regulations governing use of the wastewater and water systems. Impact fees help offset additional capital costs. For more information on energy efficiency upgrade opportunities for the treatment plant please refer to the Energy chapter of this Plan.

Private Septic Systems

As of July 2007, all on-site septic systems are regulated and permitted by the Vermont Department of Environmental Conservation.

Water Systems

The Village water supply consists of approximately eight (8) miles of water line fed by two (2) springs and buffered by two (2) reservoirs. The two wells yield between 60,000 and 140,000 gallons per day (GPD). The two reservoirs have maximum storage capacities of 250,000 and 500,000 gallons.

The watershed, wellhead protection areas, and location of the springs are not in public ownership; however, there are right-of-way agreements providing the Village with access to the springs. Even so, lack of ownership of the land surrounding the springs creates the potential for development that could potentially undermine the quality of the springs and local water supply.

Both springs are located at about 1,180 feet in elevation, allowing the entire distribution system to be gravity fed. No connections to the system are permitted above the elevation of the reservoirs. Although the distribution system went through major upgrading in 1984, some of the original transmission lines are still in use, which makes annual maintenance expensive. The distribution system consists of a variety of pipe types and sizes, ranging from 4 to 12 inches in diameter. The older system primarily consists of 8, 6, and 4 inch mains. Newer portions of the system installed in 1984 or later consist of 12, 8, 6, and 4 inch mains. The State of Vermont now mandates use of 8 inch mains when serving fire hydrants. The highest concentration of older, smaller diameter mains is found in the Village Core and Jeffersonville Heights. As a result, to date, the Village's priority has been to upgrade the existing distribution system prior to expanding lines.

Exact spring yields are difficult to assess under the current system design. Upgrades to the old lines and the addition of a pump station would improve the system and enable the calculation of accurate spring yields. Spring yield information is necessary to assess reserve capacity for future growth.

In addition, the Village of Cambridge own rights to two springs located on private property in South Cambridge. These springs once supplied water for Cambridge Village. Legal deed restrictions regarding use of these springs remain. However, the surrounding land remains in private ownership. In the future, these springs could be used to increase the supply of water available in Jeffersonville, provided permission is granted by the Cambridge Village Trustees. The Jeffersonville Trustees should also investigate other options for increasing the public water supply as they become available.

Water quality is considered to be very good, but the Village voluntarily treats with caustic and chlorine.

Storm Drainage and Stormwater Management

Portions of Jeffersonville are serviced by storm drains. Most appear to be functioning adequately. However, the capacity of the existing storm drains has not been evaluated. While maintenance of the storm drainage system is largely the responsibility of the Town of Cambridge, as operator of a wastewater treatment system, Jeffersonville is responsible for ensuring that "cross connections" of storm drainage into the wastewater system do not occur. A cross connection refers to an illicit connection of storm drainage, such as from a curtain drain or rooftop gutter, into the wastewater system. Recent inspections of the system have found no cross connections.

Sound stormwater management involves more than moving runoff off of a site. It involves ensuring that the volume/velocity of runoff does not damage neighboring properties and infrastructure. It also involves removing sediment and other contaminants that could damage water quality. Traditional approaches to stormwater management often involve creating large treatment facilities such as storage ponds which can be difficult to accomplish on small sites found in the Village. "Green Infrastructure" or "Low Impact Development" are alternative approaches to storm water treatment which address storm water as close to the source as possible by linking together small-scale practices to maintain or replicate natural water flows. Reducing impervious areas, use of pervious pavers, rain gardens, and use of rain barrels are all examples of Green Infrastructure and Low Impact Development. While these measures may not reduce flooding in major storm events, such as a 100-year storm, they may help to reduce sediment loading and runoff into the Brewster and Lamoille Rivers during smaller, more regular storm events.

Village Owned Buildings and Properties

According to the Grand List for the Town of Cambridge, Jeffersonville owns 5 properties totaling 25.72 acres. These properties include 10.32 acres where the Sewage Treatment Plant and operator office are located, a 0.05 acre lot where the water system is located, a 0.40 acre lot where a reservoir is located, a 1.05 acre lot on Junction Hill where the second reservoir is located, and a 13.90 acre lot containing the Brewster River Park.

The Wastewater Treatment Facility also houses the office of the system operator. Due to this office space being for other Village business, it was necessary to relocate the Village Clerk's office and Trustee meeting space to a new, safer and larger space. This new space is also used by other Village boards, including the Planning Commission and Board of Adjustment.

Additional Services

Numerous services are located within the Village of Jeffersonville but are the responsibility of other entities, such as the Town of Cambridge. Such services include Solid Waste, Law Enforcement, Fire Protection, Rescue, Library facilities, highway maintenance, and cemeteries. A more thorough discussion of many of these facilities is found in the Cambridge Town and Village Plan. Facilities located in the Village appear on the Utilities and Facilities Map.

Solid Waste Management

Cambridge is a member of the Lamoille Regional Solid Waste Management District which is responsible for waste management policies within the District. A transfer station is located on the site of the former Cambridge Landfill for the collection of solid waste and recyclables. Recycling is mandatory for all residents and businesses within the District. In 2012 the Vermont State Legislature mandated recycling and composting of food waste. This law may create the need for additional municipal composting facilities.

Law Enforcement

Law enforcement is provided through a contract between the Town of Cambridge and the Vermont State Police. The Town also has the option of contracting with the Lamoille County Sheriff. Barracks for the State Police and County Sheriff are located in other communities (Williston and Hyde Park, respectively), which may reduce response times. Given the relatively high density of the Village Core and surrounding residential neighborhoods, a formal or informal "neighborhood watch" could provide additional security if this should become an issue in the future.

Fire and Rescue

Fire and rescue service is provided by the Cambridge Fire Company and Cambridge Rescue, respectively. The headquarters of both organizations are located in Jeffersonville.

Cambridge Rescue operates out of a converted residence built in the 1960s. Cambridge Rescue has occupied this building since 1996. The building contains approximately 1,000 square feet of office space split between the main floor and the basement. The Cambridge Emergency Operations Center (EOC) operates out of the basement of the building. The EOC is one of the best equipped in the state and contains laptops, weather monitors, and other digital equipment needed to coordinate emergency response during a disaster. The Rescue Building also includes an attached two-bay garage housing rescue vehicles.

The Cambridge Fire Company, Inc., is a volunteer department organized in 1952 as a private, nonprofit corporation to serve Cambridge. The Town of Cambridge owns the equipment and facilities. In addition to Town appropriations from Cambridge and Fletcher, the Department conducts its own fund raising activities. The Cambridge Fire Company primarily provides fire protection, heavy rescue,

and hazmat response. It also provides valuable assistance during flooding, search and rescue, and when there is extensive storm damage. A new state-of-the-art facility was built in Jeffersonville in 2012. This facility should fill the Department's needs for many years.

Library

The Varnum Memorial Library was initially established in 1898 and is administered by the private, non-profit organization, the Crescendo Club Library Association. The Library is funded through fund raising activities, some endowments, and Town of Cambridge support. The Library is located within an one-story structure constructed in 1938 on Main Street in Jeffersonville. An addition was added to the rear of the building in 2006. The Library's collection includes about 5,500 items, including books, audio books, DVDs, etc. In addition to holding and distributing books, the Library hosts community events such as authors' visits and workshops. About 7,500 patrons visit the Library each year. In addition to serving Jeffersonville and Cambridge, the Library also has patrons from surrounding communities such as Waterville, Belvidere, and Fletcher. The Library is equipped with several public computers and is a WiFi "hotspot" that provides free internet access to the public.

Cambridge Highway Garage

The Cambridge Town Garage is located at 173 Mill Street. The Garage houses all vehicles used by the Cambridge Highway Department. The main garage building is a 7,280 square foot (52'x140') structure with a six bay garage. The building also contains a small office and kitchen/break room. There are two other buildings on site -- a 1,200 square foot salt shed and a 1,840 square foot storage shed. The garage facilities were substantially upgraded in 2009. No major repairs are anticipated in the next 5 to 10 years. However, barriers or an enclosed structure may be needed to prevent sand from running onto neighbors' property or into the Brewster River which is located behind the highway garage.

Cambridge Town Office and Jeffersonville Post Office

The Cambridge Town Office and Jeffersonville Post Office are located in a renovated mid-19th century building at 85 Church Street in Jeffersonville. The building underwent a series of renovations. The Post Office is located on the first floor, and the Cambridge Town Office is located on the second floor. Both floors are fully accessible with a 1,000 pound, two person elevator in the front of the building. The building contains 6,684 square feet of floor area, divided between two stories. The Cambridge Town Office on the second floor contains three large rooms and one small room. A vault containing the Town Land Records and other vital documents is also located on the second floor of the building. The Clerk has indicated the vault is currently sufficient for the communities' needs. The Post Office on the first floor is divided into two large rooms -- a lobby and a mail sorting area. A bank of mail boxes also serves as a partition between the lobby area and counter area.

Community Services/Facilities and Flood Resiliency

During a disaster public services and facilities become even more critical. While some services, such as fire and rescue, have obvious roles, many other services also become important. Town officials such as Clerks, Emergency Management Directors, and Trustee/Selectboard members would play a critical role in organizing the relief effort and gathering/distributing information. Public buildings often serve an important role following a disaster. Many communities set up emergency shelters and relief centers in schools, town offices, and libraries. Cambridge Elementary School is currently designated as an Emergency Shelter.

Given the important role that community facilities may play in a natural disaster, public infrastructure and buildings housing public services should be protected against flooding to a greater degree than private structures. To this end, at minimum, utilities and HVAC systems serving these buildings should be elevated above the 500-year flood elevation. Additions to public buildings should be elevated to at least one foot above the 100-year flood-elevation and, where feasible, above the 500-year flood elevation. Efforts should also be made to ensure that servers and other telecommunications infrastructure are located above the base-flood-elevation to ensure that electronic

information is not lost in the event of a major flood event.

Continuity of public services is important following a disaster. Portions of the Jeffersonville sewer and water distribution system, including three pump stations, are located in areas vulnerable to flooding and erosion. In order to ensure that the system remains operational during a major flood event, either relocation or flood proofing of these structures may be necessary.

Given Jeffersonville's location at the intersection of several regionally important State routes, the area has been identified as a potential location for a Commodity Point of Distribution (C-POD). A C-POD is a location where life-sustaining commodities (such as food) are distributed to members of the public following a natural disaster. C-POD's are generally established immediately following a disaster and serve multiple communities. A C-POD must be reasonably safe from flooding (i.e. not located within the 100-year floodplain) and accessible during a flood emergency. A suitable site for a C-POD service in the Jeffersonville/Cambridge area has yet to be identified.

Goals, Policies, & Recommendations

OVERALL GOALS

- To efficiently provide high quality, environmentally sound and affordable public services and facilities.
- To plan local investments in infrastructure at the appropriate location and pace to support the local economy while mitigating physical and social impacts.

The overall goal of any community facility or service is to protect public health and safety and to enhance the quality of life of the community.

GOALS

Sewer and Water

- All wastewater in Jeffersonville shall be appropriately treated so as to protect public health.
- All household water supplies shall be clean and be of an adequate supply.

Public safety

• To provide a safe environment in which to work, live, and play.

Stormwater management

• To provide storm drainage facilities as needed for the proper treatment of storm runoff.

POLICIES

Sewer and Water

- Treatment systems must be compliant with State wastewater and water supply rules.
- Development shall not place an undue burden upon the Village wastewater treatment plant or water system.
- New sewer allocations and water system hookups, as well as those associated with changes or expansions of use, must be approved by the Village Trustees.
- New water system hookups above the elevation of the reservoir shall be prohibited.
- In general, priority should be given to upgrading the existing sewer and water distribution system over service area expansions.

Public safety

- All residential development shall be accessible to emergency vehicles.
- Jeffersonville residents should be secure in their homes and businesses from crime and natural disasters

Storm Water Management

• Stormwater runoff should be managed to maintain water quality in Jeffersonville's rivers and streams. Use of Green Infrastructure and Low Impact Development techniques to manage storm water is encouraged.

ACTIONS AND RECOMMENDATIONS FOR IMPLEMENTATION

Sewer and Water

- Any regulations developed by the Planning Commission should require the applicant to demonstrate compliance with State wastewater and water supply regulations.
- The Trustees should investigate options to reduce the risk of flooding damage to the sewer/water distribution network.
- The Village should continue to upgrade all existing undersized water mains. Priority should be given to undersized mains serving fire hydrants with the highest existing population density.
- The Village should consider public purchase or easement over land in the wellhead protection area of the two wells providing water for the Village System.
- In cooperation with the Cambridge Village Trustees, the Village should investigate whether the two springs owned by Cambridge Village in South Cambridge could be leased to provide additional water in the future. The Village should also investigate any options to increase system capacity that become available.

Public Safety

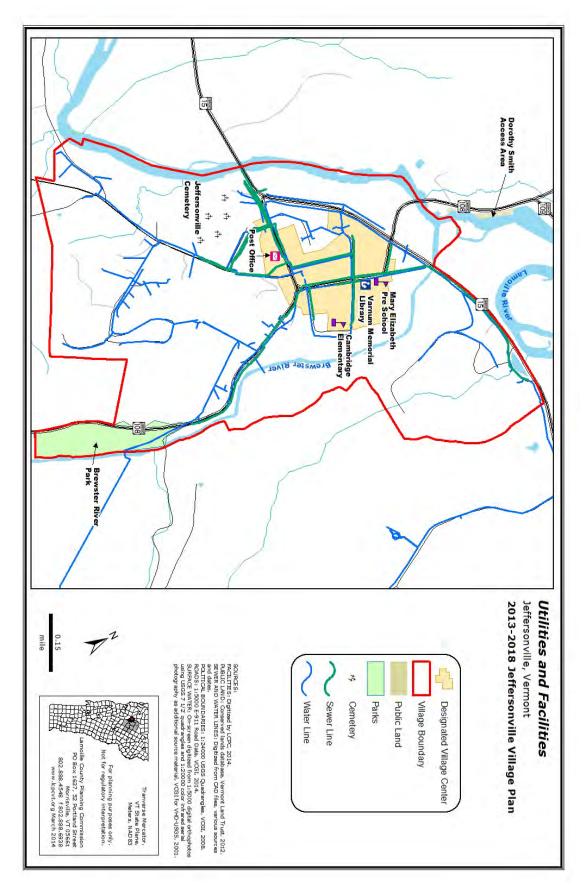
- The Village should consider working with law enforcement agencies to distribute informational resources to residents interested in forming a neighborhood watch.
- The Village should work with owners of existing buildings housing community services to elevate important utilities, HVAC systems, telecommunications systems, and computer servers above the 500-year flood elevation. When new community facilities are constructed, they should be elevated above the 500-year flood elevation.
- Work with State and regional emergency management organizations to identify a Commodity Point
 of Distribution in or near Jeffersonville.

Storm Water Management

- The Planning Commission should consider requiring developers to demonstrate compliance with State stormwater rules as well as general storm drainage standards.
- Identify potential sites on public land, or land belonging to willing property owners, to increase flood storage capacity and reduce potential flood risks in the Village.

Overall

• The Planning Commission and Trustees shall review all 'Act 250' applications for their impact on community facilities and services in the Village. Where the application is determined to not conform to this chapter or any goal or policy, the Planning Commission and/or Trustees shall participate in the 'Act 250' process in order to ensure the concerns of the Village are addressed.



B. Information Technology and Telecommunications

Up until mid-twentieth century, municipal planning for telecommunication hasn't been a major concern for most communities. Early to mid-twentieth century phone lines were first introduced into Towns and Villages. Once phone coverage became common, the topic wasn't often addressed. Later television broadcasts were available and became more common with limited planning and municipal involvement. In the last fifteen years of the twentieth century, we saw an explosion of technology and innovation. Cell phones first became available for cars and soon after as handheld cellular devices. Broadcast television has been replaced with cable and satellite service. Computers and the internet evolved from a system used by academics at universities to a point where computers are present in most homes and businesses. Websites and email became a vital component of businesses across the country. Today the above telecommunication services are an integral part everyday lives serving a range of residents, visitors, and businesses.

Currently, Jeffersonville has basic information technology and telecommunications infrastructure although there is much room for improvement. While the Village area has cable television and DSL phone coverage, other broadband internet service like WiFi could be made more available for visitors, local businesses, and Village residents. Cellular phone coverage has improved in Jeffersonville; however, cellular coverage is still limited in certain locations throughout the Village due to surrounding terrain limitations and changes in service provider coverage areas. Improvements in these areas could help put Jeffersonville in a better competitive position in attracting visitors and businesses to the area.

This Plan recognizes that technology is evolving at a rapid pace. Therefore, some of the specific recommendations presented here may be rendered obsolete before this plan expires. The Jeffersonville Planning Commission and Trustees will plan for these broadband infrastructure components based on advice from experts familiar with the latest in information technology.

Definitions

An understanding of the below definitions IS important for common discussion regarding information technology.

- Broadband: a network speed of 200Kbps (FCC definition). This figure will likely increase over time as technology advances.
- ISP: Internet Service Provider
- WISP: Wireless Internet Service Provider
- DSL: "Digital Subscriber Line" is a family of technologies that extends the ability of copper telephone lines to carry high-speed data telecommunications over short and medium distances.
- WiFi: Short for "Wireless Fidelity," is a brand name for an industry standard used for providing Local Area Networks (LANs) over license free wireless spectrum.

Point Telecommunication Facilities

Point telecommunication facilities (or point to point networks) are those that are designed to provide telecommunication services to a fixed point (your home or business). Currently most Vermonters could potentially have up to three point facilities in their home -- cable/satellite (for television), telephone lines, and wireless internet connection (if separate from telephone and television on a WISP network for instance). As mentioned above, these point systems are consolidating such that it is now possible to have a single point telecommunication facility handling multiple roles -- a cable line, internet, and phone (voice over internet protocol) simultaneously.

Phone lines

Fairpoint is the incumbent telephone company for the Jeffersonville central office code (the "644" local phone numbers) which includes Jeffersonville, Cambridge, Belvidere, Waterville, and a

portion of Fletcher. Fairpoint is regulated by the Public Service Board through an Alternative Regulation Plan which runs for five year increments before being renewed. Phone lines can also provide internet service over "dial up" or broadband speeds via DSL. DSL is limited to locations with certain types of phone lines and having distances within 3 miles from an office or, with newer technology, 5 miles. DSL is available in all of Jeffersonville.

Cable lines

Cable companies are franchised by municipalities. Towns and villages can request changes to the franchise agreement when they expire. Changes could include adding public access channels or expanding service to new areas. Currently, Jeffersonville has cable service in the Village through the Jeffersonville Cable TV Corporation. Over a decade ago, the company's cable lines were extended to service Cambridge Village and more recently portions of Route 108 South.

Wireless ISP

In rural locations Wireless ISP broadband (WISP) is being marketed to homes and businesses because it is cheaper than the cost of running cable or other high speed lines. In these situations each subscriber to the system would have a static antenna that would link to other antennas to provide the wireless network. The fixed antenna makes the system a point-system. This type of system is currently available in many places throughout Lamoille County but not in Jeffersonville.

Broadband coverage

Jeffersonville is a broadband rich area with respect to point communications. In the Village, residents and businesses may have multiple options to receive broadband internet service. Both Jeffersonville Cable and Fairpoint DSL have service in this area. Recently in 2012, Fairpoint Communications completed installation of Carrier Ethernet Service equipment at their Jeffersonville Central Office. The installation allows data communications to be delivered across the internet to local businesses at speeds of 1 Mbps to 1 Gbps with products such as E-LAN (Ethernet Local Area Network), E-Line (Ethernet Point-to-Point) and E-DIA (Ethernet Dedicated Internet Access). The availability of Carrier Ethernet in Jeffersonville represents an opportunity to increase local business communication avenues and diversify the local employment base.

Mobile Telecommunication Facilities

As of the drafting of this Plan, mobile communications are still divided into two categories-cellular and PCS. A new emerging semi-mobile facility is that of Local Area Networks (more commonly known as "WiFi" hotspots) but has limited application in terms of the distance range of wireless users.

Cellular phone service

Cellular service is defined as a subset of personal wireless service (PWS) employing modulation in the 800 MHz spectrum. Cellular's advantage is the greater range for communication, but it uses a narrower bandwidth (carries less data). Cell phone service of varying quality is available in the Village. Currently, in Jeffersonville cellular coverage is provided by two main service providers; Verizon and AT&T.

Personal Communications Service

Personal Communications Service (PCS) are a subset of Personal Wireless Services generally employing digital modulation at higher (up to 2GHz) frequencies. PCS uses a wider bandwidth so it can carry a greater amount of information but at the expense of coverage.

WiFi Hotspots

Providing Internet (or "WiFi") hotspots is a primary goal of the 2004 Vermont Telecommunications Plan. "WiFi" hotspots are places where a computer user can access the internet wirelessly (sometimes for a fee and sometimes free). "WiFi" technology operates at 2.4GHz frequency. In the same way that PCS carries more information at the expense of coverage compared to cellular, WiFi carries more information than PCS but with a significant loss of coverage. While WiFi can carry

voice (in the form of voice over internet protocol) it is generally used to send information. The State Telecommunications Plan set an ambitious goal of having 100% "WiFi" coverage in downtowns and resorts by 2010 so that residents and visitors can access the internet and email while on vacation or on the road. Limited WiFi service is offered by several Village based businesses and the Varnum Memorial Library.

The development of a public access WIFI district in Jeffersonville holds great potential for attracting new residents and businesses to the area. A public WiFi district could also help to attract visitors and tourists to the Village, as they would be able to access the internet while on the road. A WiFi district could be established to serve the Village Core area.

Radio and Emergency Service Communications

Emergency service communications operate in the UHF bandwidth (460MHz) and VHF bandwidths (150 MHz) depending on the system. Other wireless communications may exist in these bandwidths including pager services (VHF) and other businesses with dispatch systems like buses and delivery companies. HAM radio operates with repeaters in these ranges as well as at High-Frequency (HF) bands.

One important consideration to any discussion of mobile telecommunication facilities is that of towers. In the past, towers for radio and television were hundreds of feet tall (thousands of feet tall in the west and mid-west of the United States). Today towers rarely exceed 120 feet except for radio towers. Cellular companies have resorted to placing antennas on farm silos, barns, church steeples, flag poles, or anything sufficiently off the ground. The cost of taller structures does not generally provide a large improvement in coverage. Most communities regulate towers for scenic and aesthetic reasons. In planning for telecommunications, Jeffersonville should consider the impacts of towers on these resources.

Newspapers

Jeffersonville residents have access to four bi-weekly newspapers; the News & Citizen, the Transcript, The Mountain Gazette, and the Stowe Reporter. The News & Citizen and Transcript are published in Morrisville and issued to Lamoille County towns and villages every Tuesday and Thursday. The Village of Jeffersonville utilizse these papers to warn the public regarding official notices and public hearings. The Stowe Reporter reports on happenings in the region although it highlights primarily events and news within the Town of Stowe. The Mountain Gazette reports primarily on the Towns of Cambridge, Westford, Underhill, and Jericho. The closest paper with a daily circulation, upon request, is the Burlington Free Press. The Free Press provides limited coverage of events in Lamoille County. Jeffersonville residents also have access to several other news publications, including Seven Days and the Mountain Ear.

Communications and Flood Resiliency

Maintaining effective communications is essential during all phases of a disaster. In the height of a disaster, be it a major flood, fire, or medical emergency, response personnel require access to communications technology to coordinate the response. It is important to ensure that radio and telecommunications equipment used by emergency personnel is not located in an area where it is vulnerable to flooding. For this reason, telecommunications equipment serving public buildings and/or emergency response facilities should be elevated to at least the 500-year flood elevation.

Flooding can also threaten telecommunications infrastructure itself. Utility poles located in hazard areas may be susceptible to both erosion and inundation hazards. For example, several utility phone poles located near the Brewster River could be in jeopardy due to erosion. Loss of this infrastructure could compound the effects of a flooding disaster.

Telecommunications infrastructure can also assist a community in preparing for a flood. For example, river gauges provide advanced warning allowing responders to mobilize and residents to secure themselves or evacuate. Cambridge Rescue has worked to develop a simple advanced warning system to notify residents of impending flooding via email or text message. Due to this system and other efforts, the Town of Cambridge has been designated as a "Storm Ready Community" - the only such community in the State of Vermont. Given the Village's susceptibility to flooding, this system could be upgraded to provide advanced alert to critical facilities such as the Cambridge Elementary School of potential flooding.

Goals, Policies, & Recommendations

GOALS

- To ensure electricity and telecommunication infrastructure and facilities are adequate to support residential and business activities.
- For residents and visitors of Jeffersonville to have access to a range of broadband opportunities.
- For mobile telecommunication services to be available at a variety of frequencies, including cellular, PCS, and "WiFi", to meet a variety of information and communication needs.
- For Jeffersonville to maintain 100% coverage for DSL, cable, and cellular phones in the Village.

POLICIES

- Jeffersonville supports investment in telecommunication infrastructure within the Village.
- The enhancement and expansion of high speed internet and cellular communication services is encouraged within the Village to provide adequate service to local businesses and residents
- The Village of Jeffersonville supports the use of social media and online networking tools to increase community connections among residents, visitors, and local businesses.
- Where possible, telecommunication towers shall co-locate antennas to avoid tower proliferation. Alternatively, towers can be located at least a mile apart and on a different hill or ridgeline to increase coverage in the Village.
- All wireless telecommunication towers shall be designed to meet additional safety and aesthetic standards as identified in the Town of Cambridge's Communications Facilities Ordinance.
- In planning for telecommunication towers, consideration shall be given to the environmental limitations of any given site. Potential impacts on wildlife habitat, soil erosion, forestry, agricultural lands, and similar resources shall be carefully addressed during the siting of towers. Projects that materially impact these resources shall be discouraged.
- Towers and related fixtures that fall into disuse or are discontinued shall be removed by the facility owner to retain the values set forth above. Owners may be required to post bond for removal.
- Telecommunications systems serving public buildings and emergency response facilities should be elevated to at least the 500 year flood elevation.

ACTIONS & RECOMMENDATIONS FOR IMPLEMENTATION

- Jeffersonville should create a committee to investigate options and work with private businesses to encourage the adoption of telecommunication infrastructure.
- Jeffersonville should continue to explore new avenues to encourage social networking among residents, visitors, and local businesses.
- The Planning Commission, Trustees, and any local committees should work together to plan for the enhancement and expansion of telecommunication infrastructure in the Village. As technology advances, the Village will need to adjust plans for telecommunication improvements accordingly.
- While planning for the improvement of telecommunication services, Jeffersonville should consider collaborating with regional resources such as the Lamoille County Broadband Committee and the Lamoille County Planning Commission.
- The Planning Commission should review the existing and proposed siting of telecommunication

- towers in the Village to ensure the policies described above are addressed.
- The Jeffersonville Planning Commission and Board of Trustees should participate in the review of the Cambridge Communication Facilities Ordinance to ensure both town and village telecommunications needs and aesthetic concerns are addressed.
- In consultation with Village based businesses, explore the feasibility of implementing a village WiFi system in the Village Core, consult neighboring towns, such as Morristown and Johnson that have installed downtown WiFi, consider locating a "public use computer" that would provide computer and broadband access to the general public, in the Jeffersonville Village Office.
- Continue to develop and expand the advanced warning system tied to river gauges that notifies residents of potential flood risks.
- Address telecommunications infrastructure that is currently threatened by flooding and erosion.

C. ENERGY

Energy plans are generally grouped into three main sections: electricity, heating, and transportation. Jeffersonville's Energy Plan examines these areas in association with energy sources, production, and consumption. Additionally, this chapter highlights the importance of energy conservation, potential financing strategies for efficiency projects, and incorporating flood resiliency into Jeffersonville's future energy plans.

Energy sources

Electricity

Electricity can be generated from a variety of sources including hydro, nuclear, and fossil fuels (coal, oil, and natural gas). Other potential sources of electricity include solar, wind, biomass (wood burning), and methane recovery (from landfills and farms).

Presently, there are no commercial electricity generating facilities in the Village. All electricity is purchased from other places. Green Mountain Power (GMP), formerly Central Vermont Public Service, will be discussed further below in *Energy Providers*. The power they purchase comes from a variety of sources including nuclear (46.2%), hydro (42.7%), wood (3.5%), Oil (.7%), "Cow Power" (0.7%), solar (.1%), wind (.2%), and other sources (6.1%). Much of GMP's power comes from non-fossil fuel based sources.

New hydro-generating facilities are not expected in the region, and none are anticipated for Jeffersonville. If new hydro-electric sites come on line they will likely be micro-hydro projects which capture power from small locations like old mill dams. These small-scale facilities capture power from smaller streams so they have less of an environmental impact on aquatic life and natural habitats compared to large dams.

According to wind charts produced by the Vermont Department of Public Service, Jeffersonville does not have wind resources suitable for commercial wind farms. Additionally, the potential for wind towers in the Village is limited for a variety of reasons, including the proximity to people, the dense nature of the Village, the potential to adversely impact neighbors, and topography and elevation limitations. Suitable commercial wind areas are generally found at higher elevations and along north to south ridgelines. However, outside the Village of Jeffersonville, within the Town of Cambridge, there are sites that produce enough wind along the spine of the Green Mountains. These ridgelines, including Mount Mansfield and Sterling Ridge, are unlikely to be developed due to aesthetic concerns. Sterling Ridge and Mount Mansfield are not only admired for their scenic beauty, but are strongly connected to the Village of Jeffersonville's cultural and historic identity. For more information on scenic and historic ridgelines please refer to the Historic, Scenic, and Archeological Resources Chapter of this Plan. While commercial scale wind projects are discouraged along scenic ridgelines and sensitive habitat areas including Smugglers' Notch, small scale (rooftop, stand-alone tower in fields) private wind towers are permitted. For more information on the distribution of wind resources within the Village of Jeffersonville, visit the Vermont Renewable Energy Atlas online www.vtenergyatlas.com.

Due to the compact nature of development in the Village of Jeffersonville, rooftop residential solar power systems hold the greatest potential for capitalizing on solar resources within the community. According to the Vermont Renewable Energy Atlas, currently there is only one rooftop PV (photo voltaic) system along Route 108 South within the Village of Jeffersonville. Future potential solar sites include several residential units within the Village of Jeffersonville that are south facing structures. The Village of Jeffersonville supports residential (rooftop) solar and encourages Village residents to explore solar opportunities. While opportunities within the Village for commercial solar are limited due to space requirements, large scale solar projects proposed within the Village should be

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designed in a manner that considers their impact on natural resources, existing recreation areas, and valuable agriculture soils. For more information on solar resources within the Village of Jeffersonville visit www.vtenergyatlas.com.

Villages cannot directly regulate most energy production. Any project that will provide energy to the overall power grid is exempt from local zoning. These energy project applications are reviewed by the Public Service Board in what is known as a "Section 248 review" (V.S.A. Title 30; Sec. 248). Village residents and local officials can participate at public hearings under Section 248 as registered formal parties and may submit written comments and testimony to the Public Service Board prior to hearings. Conformance and review of both Village and Town Plans is a key requirement of the Section 248 review process. The policies found in this Plan are, therefore, one of the few ways to influence the location of private wind tower and other power generation systems such as photo-voltaic (solar) power. For more information on the Section 248 review process visit the Public Service Board's webpage at www.state.vt.us/psb/index.stm.

Heating

The heating of homes and businesses is an important sector in energy plans especially in northern Vermont. One locally renewable source for heat in Jeffersonville is wood. Solar power has also been used efficiently to heat water which is another component of home heating. Other more commonly used sources of home heating fuel include oil, liquid propane gas (LPG), kerosene, and electricity.

According to the 2010 Census, Jeffersonville residents relied on only three primary sources of home heating fuel; petroleum-based fuels, wood, and electricity. In 2010, 47.4% of residents reported heating their home by fuel oil (oil, kerosene), 27.6% used liquid propane gas (LPG), 15.9% utilized electric heat, and 8.2% heated their home by burning wood. Many homes have multiple sources of heating so even if a home is primarily heated with oil, it may also have a wood stove for backup or secondary heat. While the range of primary heating fuel sources has expanded since 2000 to include wood and electricity, fuel oil still remains the most commonly used heating source in the Village of Jeffersonville.

Transportation

Other than walking or biking, all transportation modes available to Village residents and visitors rely on fossil fuels (gas, diesel fuel). Nearly 90% of residents in Jeffersonville rely on private vehicles for their commuting needs. In the fall of 2013 CCTA (Chittenden County Transit Agency) expanded bus service to Jeffersonville. This new service allows Jeffersonville residents to commute via bus to the Burlington area. To reduce the community's dependence on oil and transportation related emissions, Jeffersonville residents are encouraged to utilize existing Park and Ride lots (Jeffersonville and Cambridge lots), future public transit, and non-motorized transportation modes when possible.

Energy Providers

Electricity

There is only one utility which provides electrical utility services in the Village of Jeffersonville. Green Mountain Power (GMP), formerly the Central Vermont Public Service Corporation, provides electric utility service to all of Jeffersonville as well as parts of western and northern Cambridge.

Heating

Heating fuel is provided entirely through private individuals and companies. Local fuel oil, kerosene and LPG providers located within the Jeffersonville include Jack F. Corse Inc. Additionally, the Energy Co-op of Vermont delivers heating oil, kerosene, and wood pellets to co-op members residing in Jeffersonville.

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Transportation.

Fuel for transportation is provided locally by privately owned and operated service stations.

Energy Consumers

Municipal Facilities and Services.

Jeffersonville has few Village owned facilities except for the waste water treatment plant. Village services include sewer and water and street lights. Jeffersonville should continue its effort to purchase efficient equipment and improve the efficiency of the treatment plant building and community services to save tax dollars long-term. The Jeffersonville Village Trustees and Planning Commission are exploring opportunities to install a new efficient solar-powered aerator in the treatment plant. Other opportunities for the Village of Jeffersonville to save on long-term electricity costs include upgrading street lights to LED lighting. In 2012-2013 the Village of Jeffersonville spent \$33,591.75 in electric costs for Village owned facilities and services. During that same time frame the Village spent over \$2,000 on heating Village facilities. There are a variety of energy efficiency measures the Village may explore to cut heating costs for the treatment plant building including reinsulation of walls, installing double-paned windows, and replacing indoor and outdoor lighting with efficient bulbs or fixtures.

Financing Methods for Municipal Efficiency Improvements

There are a variety of financing methods to fund efficiency improvements for municipal facilities and services including grants, efficiency incentives, budgets/capital reserves, loans, performance contracts, and a tax-exempt lease purchase. One potential grant funding source for municipal building energy efficiency improvements is the Clean Energy Development Fund (CEDF). The Clean Energy Development Fund offers a grant program that finances cost effective, environmentally sustainable electric and thermal (geo thermal) energy technologies. CEDF grants are available to both individuals and organizations. For more information regarding CEDF grants please visit: www.publicservice.vermont.gov/energy/ee_files/cedf/CEDF% 20Strategic%20Plan.pdf. Additionally, Efficiency Vermont offers financial incentives for municipalities improving the efficiency of town facilities and services (street lights). For more information visit www.efficiencyvermont.com.

Residential, Commercial, and Industrial.

Residential heat and electricity account for 34.6% of all energy used statewide (not including the energy used by residents for transportation). Commercial and industrial land uses consume a much lower percentage of the total energy use at 13% and 12% respectively. Considerable savings in energy can, therefore, be made by making modest improvements to the efficiency of homes. Residential buildings can save energy by installing more efficient heating, improving insulation, replacing inefficient windows and appliances with newer efficient models, and being sited to take advantage of passive solar heating.

As mentioned above, Jeffersonville is dependent on outside electric power providers as a source for power production. In a market where there are a limited number of electricity producers, Jeffersonville is potentially vulnerable to increases in the costs of electricity. Public education of energy conservation methods would also be useful in saving customers money and reducing our dependence on outside sources.

Financing Opportunities for Residential, Commercial and Industrial Efficiency Projects

Jeffersonville residents and local business owners are encouraged to invest in efficiency upgrades to conserve energy and lower long-term heating and electric costs. To make renewable

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energy and efficiency projects a more feasible investment for local residential property owners, several towns, including neighboring Hyde Park, have implemented PACE (Property Assessed Clean Energy) Financing Districts. PACE financing effectively allows property owners to borrow money to pay for energy improvements on a property, including energy efficiency/conservation retrofits as well as on-site renewable energy generation. The amount borrowed is typically repaid by a special assessment on the property owner's tax bill over a period of up to 20 years. As a result, the loan runs with the property, rather than the individual. Due to the fact that PACE financing is administered through the local property tax system, municipal approval is needed to create a PACE District.

Commercial, industrial and residential property owners may also apply for financial incentives through Efficiency Vermont's Energy Star Home Performance and Building Performance programs. Through the Home Performance Program residents can receive up to \$2,000 per household to assist in financing energy efficiency projects. Commercial building owners may receive up to \$5,000 per building for efficiency upgrades. For more information on Efficiency Vermont incentives visit www.efficiency vermont.com.

Transportation and Energy

According to the 2011 Vermont Comprehensive Energy Plan, transportation currently accounts for 34% of the total energy demand in Vermont. In Lamoille County transportation accounts for 31% of the region's total energy consumption. Energy demand for transportation can be influenced by the location and type of roads provided, convenience of services and facilities, structuring of routes for school buses, and the siting of new residential development. According to the 2010 Census, the average commuter from Jeffersonville spends 27.8 minutes driving to work each day (approximately one hour every day round trip). Currently, 89.6% of Jeffersonville commuters drive alone. Carpooling and other efforts can save money, time, and energy for residents of Jeffersonville. There is an informal park and ride lot on Route 15 just east of Route 108N, which makes carpooling convenient. This park-and-ride should at least be maintained for use as an informal park-and-ride lot. To continue to encourage carpooling among both Jeffersonville residents and visitors, in the future the Village may want to pursue formal designation of a park-and-ride lot at that location. While carpooling and ride sharing can reduce fuel consumption for Jeffersonville commuters traveling long distances, situating residential and commercial developments in the Village where existing infrastructure and services can be utilized has a notable impact on reducing automobile transport needs for local trips. In keeping with the Vermont Health Department's 2011 "Complete Streets" legislation, all new road projects on paved streets should be designed in a manner that accommodates motorists and alternative modes of transportation such as walking and biking. Improving existing bike and pedestrian facilities and their connectivity to community services (extending sidewalks to the edge of the village, widening road shoulders along village periphery) not only reduces fuel costs, but also provides a safe environment for non-motorist travelers. For more information on integrating non-motorist modes of transportation in future road projects please refer to the Transportation chapter of this Plan.

Energy and Flood Resiliency

While the above energy consumption trends and conservation strategies identify areas for efficiency improvements and long-term cost savings, often times local energy plans fail to address concerns related to the impact of local flooding events. Over the past decade, Jeffersonville has witnessed an increasing amount of re-occurring flood events, causing repetitive property and utility damage within the Village. With the majority of Village structures situated within the 100 and 500-year floodplain plains, it is important for Jeffersonville property owners and utility providers to consider strategies to prevent future damage to utility lines, private heating and cooling systems, and pollution

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caused by leaking fuel tanks. Strategies to prevent such future damage and property loss may include raising circuit breakers, furnaces, and other HVAC system components above the local base flood elevation, anchoring down fuel tanks, and considering the switch to non-renewable energy sources that are less likely to contaminate floodwaters (wood pellets, solar, etc...). Additionally, the Village of Jeffersonville encourages residents to contain wood piles to reduce downstream blockage and road hazards in the event of a major flood.

Goals, Policies, & Recommendations

Energy is a critical component of economic development and global environmental concerns. The State of Vermont has had varying success in achieving the goals of clean, reliable, and renewable energy. Energy for electricity used in Jeffersonville is generated primarily from renewable sources while energy for transportation is almost exclusively non-renewable. Residents and businesses do not have the option to change some of these sources of energy. However, everyone can save money and energy by using efficient appliances and vehicles, by conserving power by turning off unused equipment, and by making efficiency upgrades to buildings in all economic sectors (commercial, industrial and residential).

GOALS

- For citizens to generate energy locally from renewable sources, whether for heating, electricity, or transportation.
- Energy should be provided in a safe, reliable, and efficient manner.
- To promote energy efficiency and conservation in the design, construction, and use of municipal, commercial, industrial, and residential structures.

POLICIES

- Jeffersonville supports its residents in using wind and solar to generate electricity locally, provided scenic and aesthetic concerns are met.
- Within subdivisions, planning for transmission lines should be strongly weighed in favor of underground placement to achieve the scenic objectives of this Plan.
- Energy efficiency will be included as a factor in municipal construction, purchase, and use.
- Outdoor lighting, especially parking areas, shall use cutoff fixtures to reduce the amount of light pollution and to allow lower wattage bulbs including LEDs.

ACTIONS & RECOMMENDATIONS FOR IMPLEMENTATION

- The Planning Commission should exempt or provide accommodations for minor alternative energy facilities (e.g. solar collectors).
- The Trustees should conduct energy audits of all municipal facilities to identify opportunities for savings.
- The Planning Commission and Trustees should encourage builders and homeowners to check with Efficiency Vermont for energy standards and conservation opportunities.
- Jeffersonville and Cambridge should collaborate to explore the prospect of implementing a PACE financing district.
- The Trustees should participate in all Section 248 hearings to ensure local concerns are met.
- The Village Trustees and Planning Commission should coordinate with CCTA to locate future transit stops both within the village and at the existing park and ride lot along Route 15.

D. EDUCATION

Current facilities

Jeffersonville is served by the Cambridge Elementary School and the Lamoille Union Middle and High School. The Village government, therefore, has no direct say in the operation or location of school facilities.

The Cambridge Elementary School building is located in Jeffersonville on a 6.15 acre parcel. Recreational facilities, including school ball fields, are located on an adjacent 3.0 acre parcel. The Cambridge Elementary School is made up of three connected buildings, ranging in age from 6 to 100 years old. The combined square footage of the buildings is about 51,600 square feet. Between 2000 and 2002, the Town conducted a series of assessments to examine the need for expanding the elementary school. The building was renovated in 2005. A new roof may be needed for the Gymnasium and "old building" in the near future. The Gymnasium floor will also need to be replaced in the next five to ten years.

Projections from the Supervisory Union suggest that enrollment at Cambridge Elementary school will surpass 400 students in 2014. Classroom space will need to be reorganized in order to accommodate this growing population. For example, one of the Special Education resource rooms has been relocated, and the computer lab has become mobile. If enrollment continues to grow at similar rates, additional changes may be needed.

Efficiency Vermont conducted an energy audit of the building in 2010. This audit found that Cambridge Elementary School is one of the most efficiently built and operated schools that Efficiency Vermont has visited. The building uses about 19,000 gallons of fuel oil for heat and hot water each year. This represents about 0.3 gallons per square foot, about 30% less than the statewide average of 0.44 gallons per square foot. The School's electric use is also 24% less than the statewide average.

Cambridge Elementary School is located in the Village of Jeffersonville and is within walking distance for many residents of the Village and nearby areas of the Town. In addition to the health benefits of walking to school, mild exercise such as walking can improve a student's concentration and educational performance. Unfortunately, despite the school's location, students face several barriers to walking to school. There are no sidewalks along School Street or Carlton Avenue, nor are there any marked or controlled crossings on Route 15. As a result, it is unsafe for students living north of Jeffersonville or outside the Village to walk to school. While there are existing crosswalks on Church Street and Main Street, the markings of these crossings could be enhanced. VTrans approval must be granted before new crosswalks are created on State Highways. This approval is granted only if "warranted" by substantial number of existing pedestrian crossings, or if the crossing has been identified as an important walking route to school by the local School Board.

Jeffersonville middle and high school students attend Lamoille Union High School located on a 56.2 acre parcel in Hyde Park. A new middle school was added in 2002 to accommodate the growing student population. High school juniors and seniors, as well as a limited number of adult learners, also have access to career training and educational opportunities at Green Mountain Technology and Career Center (GMTCC) which is located on the same campus as Lamoille Union Middle and High School in Hyde Park. GTMCC offers technical programs in thirteen areas of study and is accredited through the Association of New England Schools and Colleges.

School governance

The Cambridge School Board is responsible for developing the budget and overseeing the administration of the Cambridge Elementary School. The Board of Directors has five seats, with seats

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having staggered terms of up to three years.

Similarly, the Lamoille Union Board of Directors is responsible for overseeing the budgets and administration of the Lamoille Union School District. There are twelve seats on the Board. Cambridge has three, three-year term seats which are filled by election at Town Meeting.

Lamoille North Supervisory Union consists of six towns from Lamoille County: Belvidere, Cambridge, Eden, Hyde Park, Johnson, and Waterville. LNSU has the administrative responsibilities for the Town school districts. General oversight of the Supervisory Union falls to the Superintendent who is appointed by the local school boards.

Post-Secondary, Adult, and Vocational Education

In addition to GMTCC, which offers multiple courses eligible for college credit, there are two other local institutions offering college-level instruction. Johnson State College, located 10 miles from Jeffersonville in neighboring Johnson, offers a variety of graduate and undergraduate degree programs, along with other continuing education services. The Community College of Vermont (CCV) also operates campuses in Morrisville, Saint Albans, and Burlington. CCV offers Associate Degrees, certificate programs, and online instruction in various pre-professional concentrations. Finally, additional adult educational opportunities are available to students who are not enrolled in public schools through Central Vermont Adult Basic Education (CVBAE) in Morrisville.

Vocational training is also available in nearby Fairfax at the Vermont Woodworking School (VWS). VWS is located in a historic, renovated barn and offers a variety of learning opportunities. VWS partners with Burlington College to provide an Associate's Degree, a Bachelor of Fine Arts, and a Certificate Degree. It also provides its own immersion program. Semesters run for 12weeks. VWS leases a house in Jeffersonville that provides dormitory housing and also offers some student housing at its campus in Fairfax.

Programs at VWS are not limited to enrolled students. Workshops designed for varying levels of expertise are open to the public. Due to its commitment to the art and tradition of wooden crafts, VWS was designated a State Craft Center in 2012, one of only four such centers in Vermont. In 2013, the VWS received a grant from the Working Lands Enterprise Fund to start an incubator space for emerging woodworking businesses. The space will be available for both students and non-students.

Child Care and Early Education

Early education has been shown to be critical to the future success of children in school. There are a variety of early care and educational opportunities available to residents of Jeffersonville. As of the drafting of this plan, several private, Pre-Kindergarten educational programs are located within Jeffersonville. The Lamoille Family Center (LFC) offers a range of early education services through a coordinated service network known as Children's Integrated Services (CIS). Programs offered through this network include Maternal Child Health, Early Childhood and Family Mental Health, and the Early Intervention Program for children with developmental delays.

LFC also offers a variety of child care programs and services including the Birth to Three Project, resource development, care referral, financial assistance, the LFC Child Care Center, playgroups, and the Child and Adult Food Care Program. The Birth to Three Project employs a Child Care Mentor to communicate with registered family and neighbor care providers to address how the quality of care may be improved. In the case of the Child Care Resource Development program, a specialist seeks to improve the quality of care by offering professional development opportunities to child care providers. These opportunities include literacy and child care visits as well as trainings on childhood development, positive learning environments, active listening, nutrition, and Vermont Early

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Learning Standards. To receive statewide recognition, childcare programs are eligible to apply for Vermont's STARS rating system. For information on STARS visit: http://dcf.vermont.gov/cdd/stars/.

The availability of childcare is a critical concern for parents in the workforce. Building Bright Futures, a program of the Vermont Department of Children and Families, operates an online childcare directory (see www.brightfutures.dcf.state.vt.us). As of the drafting of this Plan, there were four center based childcare programs (including the Cambridge After School Program, Cambridge Elementary Early Childhood Program, Smugglers Notch Discovery Day Camp, and Smugglers Notch Resort DBA treasures) and six home based child care providers located in Cambridge. Together, these providers had 20 total vacancies. Given that many residents commute outside of Cambridge for employment, residents may utilize childcare resources in neighboring communities. There are seven center based childcare programs and eleven home based child care providers in communities neighboring Cambridge (Fletcher, Jericho, Underhill, and Johnson) many of these providers are located within Johnson, while the majority of Cambridge/Jeffersonville residents commute in the opposite direction. As Jeffersonville and the surrounding area continues to grow, additional home and center based childcare facilities may be needed.

Educational Facilities and Flood Resiliency

Planning for the flood resiliency of educational facilities, especially Cambridge Elementary School, is important for a variety of reasons. First and foremost, Cambridge Elementary School often houses young children who may require a high level of supervision during a major flood event or other natural disaster (such as a landslide). In addition, CES is the Emergency Shelter for Jeffersonville and Cambridge Town. While not located in the FEMA mapped 100-year floodplain, Cambridge Elementary School was impacted by the Spring 2011 flooding, and would be vulnerable during a 500-year flood event. In addition, the School grounds are located across the river from the site of an active landslide. In the 1999 a landslide from this area temporarily diverted the Brewster River into the Village, flooding the recreation fields and nearly flooding the School.

As renovations and additions to the school are planned, efforts to make the building less vulnerable to flooding should be considered. Efforts might include raising utilities, fuel tanks and furnaces, other HVAC systems, and back-up generators above the base-flood elevation. Given the sensitive populations served at the school and the building's dual role as the community's emergency shelter, consideration should be given to raising electrical utilities and HVAC systems above the 500-year elevation. Efforts should also be made to ensure that servers and other telecommunications infrastructure are located above the base-flood elevation to ensure that electronic information is not lost in the event of a major flood event.

Education also plays an important role in long term planning and preparation for flood resiliency. While Jeffersonville has prohibited construction of new structures within the 100-year floodplain, the Village contains many existing structures located within the 100-year floodplain. Numerous other structures in the Village are located in close proximity to the 100-year floodplain and could be vulnerable to flooding during a larger storm event (such as a 500-year flood). Adequately protecting these structures against future flood damage requires a pool of contractors and design professionals with specialized skills in flood mitigation. Vocational and post-secondary education that includes these skill sets is critical to meeting the community's flood resiliency goals.

Goals, Policies, & Recommendations

GOALS

 To plan for growth and development in a way that allows Jeffersonville to provide quality education services and adequate facilities for all residents without placing an undue burden on taxpayers.

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• Provide a wide variety of educational services and facilities to meet the needs of Jeffersonville residents of all ages.

POLICIES

- Future development in the Village shall not exceed the capacity of the school district to provide educational services.
- Jeffersonville supports efforts to broaden educational and vocational opportunities.
- Jeffersonville recognizes the importance to our community of high quality early education and child care. Jeffersonville supports organizations that provide these services.
- Jeffersonville supports the GMTCC and other institutions that broaden access to education for adult learners and provide vocational opportunities for students.
- Jeffersonville supports efforts to improve the safety of children walking to school.
- Jeffersonville supports efforts to improve the flood resiliency of Cambridge Elementary School

ACTIONS & RECOMMENDATIONS FOR IMPLEMENTATION

- Continue to monitor growth in student populations and capacity at Cambridge Elementary School. Work with Town and School officials, as well as the Act250 District Commission, to ensure that new growth does not outpace school capacity, and/or that expansions of the School are planned to accommodate increases in student population.
- The Village Trustees should work with the School Board to define highest priority road crossings for students on Route 108, Route 15, and other State highways.
- The Village Trustees should work with the Cambridge Selectboard and Vermont Agency of Transportation to plan and implement appropriate upgrades to pedestrian infrastructure that supports children walking to school.
- As renovations or additions to Cambridge Elementary School are made, consideration should be given to locating utilities and HVAC systems above the 500-year flood elevation.
- Work with organizations providing adult and vocational education to increase the pool of contractors and design professionals with skills in hazard mitigation.

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E. Transportation

Highways

Local roads in Jeffersonville are maintained by the Town of Cambridge Highway Department. See the *Town and Village of Cambridge Municipal Development Plan* for a full description. Numbered state roads are maintained by the Vermont Agency of Transportation (VTrans).

Classification and Function

Vermont's local roads are classified according to their importance and general use. This classification system applies to all town highways and is used to determine the amount of State highway assistance provided to each community. Class 1 roads are those highways that, while the responsibility of the town or village to maintain, are extensions of the State highway system and carry a State highway route number. Jeffersonville currently does not have any Class 1 roads. Class 2 roads are the most important highways serving as corridors between Villages and, consequently, carry a large volume of local and regional traffic. Upper Pleasant Valley Road is a Class 2 road (see Table 5). Class 3 roads - such as School Street and Jeff Heights - are comprised of secondary town highways that are passable year round by standard vehicles. Class 4 roads are dirt roads typically functional for only part of the year for normal traffic. Jeffersonville does not have any class 4 roads. The following table illustrates highway mileages in Jeffersonville.

Table 5. Village highway mileage by classification

	Class 1	Class 2	Class 3	Total Local	Total State
Jeffersonville	0	0.440	1.730	2.170	2.339

Source: VT AOT 2001

Parking

Parking is an important component of the highway network. Parking allows motorists to transition from traveling on the transportation network to becoming pedestrians utilizing Village services and frequenting Village businesses. Many village lots are not large enough to provide for onsite parking lots, and most businesses are currently served by on-street parking on Church Street and Main Street. By allowing flexible parking arrangements, such as encouraging offsite, shared, and onstreet parking, new parking can be incorporated into the existing fabric of the Village

Rail

AMTRAK

The closest passenger rail service for Jeffersonville residents is Amtrak, located in St. Albans, Waterbury, and Essex Junction. These depots serve Amtrak's "Vermonter" line with a daily run between St. Albans and Washington, D.C.

Air

Jeffersonville residents are provided air transportation service through the Morrisville-Stowe State Airport on Route 100 in Morristown and through the Burlington International Airport in South Burlington. These two airports are critical to the development of tourism and industry in Jeffersonville and the surrounding region.

Burlington International Airport has seen an increase in activity over the past few years and

now offers a wide array of passenger service, including commercial services connecting to various international airport hubs around the country. Charter airline services are also available as are charter helicopter services.

The Morristown-Stowe State Airport is owned by the State of Vermont and is under the management of the Vermont Agency of Transportation. It is located on Route 100, two miles south of Morrisville, in Morristown. In the early 1980s, the runway was paved and lengthened to its present size of 75 feet wide and 3,700 feet long. The airport is classified as a "general aviation" facility and provides service to small private users including some charter activity. During the summer months, Stowe Soaring operates a very active tourist based business providing glider rides over the Mansfield Range and adjacent valley. The airport also plays an important role in providing emergency services. These include facilitating wilderness rescues, organ transplants, and patient transfer operations through the generosity of local pilots. The State Police use the facility for drug enforcement operations, and the National Guard uses the airport to practice helicopter operations. The airport is also used annually by the United States and Canadian governments as part of rabies bait-drops to prevent the spread of rabies.

Multi-Modal Transportation

Bicyclists

Most of Jeffersonville's local roads were designed with only the auto traveler in mind. As cyclists and pedestrians use these roads, conflicts can arise from lack of space and poor shoulders. Future road projects should be designed to give greater consideration to non-motorized users and follow Complete Streets principles. When planning new projects or making improvements to existing infrastructure, Complete Streets consider and incorporate all users and modes of transportation regardless of age, ability, or modal preference. In order to maintain safe roadways, bicyclists and pedestrians cycling or walking within the Village are encouraged to obey all applicable traffic laws. If interest exists in a study of bicycle and pedestrian needs, the Village should contact Lamoille County Planning Commission for guidance.

Sidewalks

Safe pedestrian access and mobility is a critical component of a successful Village. Many businesses rely on foot traffic. Continuous and accessible sidewalks improve mobility and provide many benefits including safety, accessibility, and healthier communities. In October 2011, the Lamoille County Planning Commission inventoried and evaluated all of the sidewalks within the Village of Jeffersonville. The focus of the inventory was to identify existing sidewalks and to evaluate and understand the pedestrian infrastructure needs within the Village. A total of approximately 4,300 linear feet of sidewalk was inventoried. The inventory determined that the majority of the sidewalks within Jeffersonville are located within the Village Core and most are in either good or fair condition. Several short segments were rated poor due to obstruction caused by parked vehicles. Any measures to address these obstructions should ensure that adequate on-street parking remains within the Village. On-going evaluation and maintenance should be performed to ensure that the sidewalks in Jeffersonville are safe and meet the needs of all users.

Currently, most sidewalks are located in the Village Core, though there are few connections to surrounding Village neighborhoods. The lack of sidewalks between Main Street and Cambridge Elementary represent a major gap in the sidewalk network. This issue is explored in greater detail in the Education Section of this Plan. In addition, the existing pedestrian crossings of Main Street and School Street are poorly marked, and there is no formal pedestrian crossing of Route 15. Prior to the installation of the roundabout at the intersection of Route 15 and 108, some residents walked along the

wide shoulder of Route 15. However, the shoulder was narrowed as part of the construction of the roundabout. This has exacerbated safety concerns in the area, particularly during the winter months.

Lamoille Valley Corridor

The St. Johnsbury and Lamoille County Railroad, a 96-mile line between Swanton and St. Johnsbury, passes through Lamoille County along the banks of the Lamoille River. The railway served as a vital east-west transportation corridor from 1877 until its closing in 1994. The State currently owns the line and leases use of the railroad to the Vermont Association of Snow Travelers (VAST). Although none of the rail line passes through Jeffersonville, the Cambridge Greenway Path provides access to and from the Village.

With oversight from the Vermont Agency of Transportation, VAST is charged with developing the railway into a four season multi-use recreational trail and transportation corridor, known as the Lamoille Valley Rail Trail. The VAST Board of Directors has established the Lamoille Valley Rail Trail Committee (LVRTC) that will oversee the planning and funding for the conversion and maintenance of the trail. Once completed, the Lamoille Valley Rail Trail will connect 18 communities along the corridor and will be the longest rail trail in New England. Construction in Lamoille County is set to begin in 2013 or 2014. The Town of Cambridge is currently working with the Lamoille County Planning Commission to create a public trailhead for the Lamoille Valley Rail Trail in Cambridge Junction. The LVRT is connected to Jeffersonville via the Cambridge Greenway Trail.

Cambridge Greenway Trail

The Cambridge Greenway is a 1.3 mile long packed gravel surface recreation path located in Jeffersonville. The path, which was built in 1996, begins west of Jeffersonville, runs adjacent to the Lamoille River passing underneath the Route 15 and Route 108 bridges, and ends at the historic Poland Covered Bridge in Cambridge Junction. Half of the path is located on a former spur of the Lamoille Valley Railroad. More information on the Cambridge Greenway Trail can be found in the Recreation, Health and Wellness Section of this Plan.

Snowmobile Trails

The Vermont Association of Snow Travelers (VAST) maintains a network of snowmobile trails on private and public lands across the state [see Transportation Map]. VAST trails through private and public lands connect Jeffersonville to all of the surrounding towns. VAST trails are maintained and groomed by volunteers and provide an important link in a statewide recreation network.

Transit Services

Buses

Starting in October 2013, the Chittenden County Transportation Authority (CCTA) began offering a new Jeffersonville-to-Burlington commuter bus service along Route 15, which connects Cambridge/Jeffersonville, Underhill, and Jericho to Chittenden County. This is the first and currently is the only regular public transportation service available in Jeffersonville. Route 15 is a major commuting corridor without transit service. CCTA has located bus stops in Jeffersonville Village and Cambridge Village and a new park-and-ride along Route 15 in Jeffersonville.

Taxi

Local taxi service is provided by a few taxi services that operate out of Hyde Park, Morrisville, and Stowe. A taxi service in Cambridge also recently opened which will provide transportation services to Jeffersonville residents.

Carpools/Vanpools

Carpools/vanpools have proven economic and environmental benefits, including reduced fuel consumption and reduced auto emissions. Commuters who wish not to drive alone every day have the option of carpooling or vanpooling. A carpool usually involves two or three participants sharing driving

responsibilities. Vanpools can take up to 15 people. Go Vermont, a program of VTrans, offers a vanpool program. Private employers may also offer pre-tax carpool deductions for a percentage of the carpool/vanpool cost. Vanpools require a set fee each month, and the driver can explain the fees and requirements for their individual route. Go Vermont works with employees and businesses to start vanpools and offers parking passes to carpools/vanpools in dense areas where parking may be difficult to find.

Social Service Transportation

Rural Community Transport (RCT) provides demand response service to Lamoille, Caledonia, and Orleans County. They essentially co-mingle riders of various funding sources to bring them to their destinations. There are also a variety of human service agencies providing transportation services in Lamoille County which are available to Jeffersonville residents. These include Central Vermont Council on the Aging, Lamoille County Mental Health, Lamoille County Vocational Rehabilitation, Out and About Adult Day Care, and Central Vermont Community Action Council. Each of these provides transportation services specific to their particular mission and are very important to the quality of life of those who depend on them. Many of these programs serve a large elderly population. The demand for these services is likely to increase over time as the population ages and residents desire to remain in their own homes while still interacting with the community.

Regional Transportation Planning

The Lamoille County Regional Plan contains transportation goals and policies that will provide the basis for planning for future transportation needs in Lamoille County. The Plan was recently updated in 2011.

The Lamoille County Planning Commission Regional Transportation Planning Program is currently coordinating transportation-planning issues for the county. In July 1992, a Lamoille County Transportation Advisory Committee (LCTAC) was formed. The LCTAC is comprised of appointed representatives from each town in the county and a member of the Lamoille County Planning Commission (LCPC) Board of Directors. The purpose of the LCTAC is to provide recommendations regarding regional transportation needs and concerns to the LCPC Board of Directors and the Vermont Agency of Transportation. The LCTAC serves as the eyes, ears, and voice of local communities in the regional transportation planning effort.

Benefits to Jeffersonville of this regional effort include:

- 1) More local control of regional Transportation Planning and Funding
- 2) Greater eligibility for Federal funds
- 3) Eligibility to attach additional local elements in the region's annual work plan, and
- 4) Local technical assistance on transportation issues.

Transportation Infrastructure and Flood Resiliency

In 2013, the Village of Jeffersonville and the Lamoille County Planning Commission hired the engineering firm Milone and MacBroom to develop a model of flooding in the Village. The model found that changes to the existing transportation infrastructure, such as replacing the existing railroad bridge with a new bridge on wider abutments, and installing a large culvert, or series of smaller culverts, under Route 15 in the vicinity of the new roundabout, would reduce flood levels in the Village by transferring floodwaters from the Brewster River out of the Village more quickly.

These measures would also have the potential benefit of decreasing the likelihood that floodwaters would close Routes 15 and 108. A Route 15 closure represents a major hazard during a disaster, as it could prevent Jeffersonville residents from leaving the Village in the case of an evacuation or medical

personnel from reaching Village residents. In addition, since both Cambridge Rescue and the Fire Department are located within the Village, a Route 15 closure could prevent them from protecting much of Cambridge Town.

Goals, Policies, & Recommendations

GOALS

Highways

• The Village highway system should be safe and efficient for vehicular and non-vehicular use, as appropriate, and should be maintained in a cost-effective manner.

Multi-Modal Transportation

• Pedestrian and non-vehicular transportation networks should be safe and conveniently located to encourage their use.

Transportation services

• Jeffersonville supports efforts to provide regional public transportation services for the general public and special transportation services for those who require assistance.

POLICIES

Highways

- Major roadways, especially Route 15, should have limited road accesses (curb cuts) to allow for smooth travel into and out of the Village.
- New road and driveway accesses shall have a suitable site distance so as to not create blind or hidden driveways.
- Any new or upgraded roads shall be constructed to town road standards.
- Land use and development activity must not adversely impact traffic safety and the condition of Village roads and rights-of-way.

Multi-Modal Transportation

- Measures to provide safe pedestrian and bicycle travel within the Village is encouraged. Expansion of the existing network of sidewalks, particularly to Cambridge Elementary School, is supported.
- When new development occurs in the Village, reserving adequate right-of-way space for future sidewalks or other means of providing pedestrian connectivity shall be required as a condition of approval.
- The Village should continue to work with organizations such as the Cambridge Trail Coalition to promote physical activity and an active lifestyle.

Transportation services

- Jeffersonville supports efforts to provide social transportation services to assist elderly and disabled residents who wish to remain in their homes.
- Carpooling and vanpooling by local commuters to reduce transportation costs and impacts is encouraged.
- Jeffersonville supports efforts to expand the availability of transit service in the Village. If ridership levels are sufficient, Jeffersonville supports expanding the Route 15 Commuter bus to include mid-day and/or weekend runs.

ACTIONS & RECOMMENDATIONS FOR IMPLEMENTATION

Highways

- The Planning Commission should research traffic calming options for consideration within the Village.
- The Trustees and Planning Commission should investigate ways to encourage better utilization of existing on-street parking located within the Village Core. This could involve better definition of parking stalls and improvements to pedestrian infrastructure and streetscapes so that visitors and residents are more likely to walk to their primary destination. If such measures are insufficient to meet the needs of the Village, the Village may need to investigate creation of a public lot serving

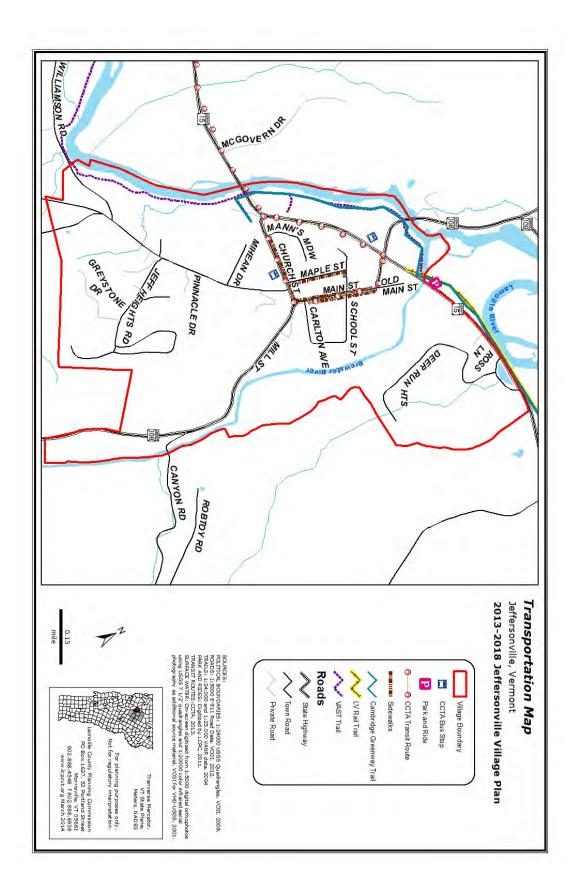
- the Village Core.
- Work with the Vermont Agency of Transportation and the Town Of Cambridge to plan modifications
 to the transportation network that reduce flooding in the Village and/or reduce the likelihood of a
 Route 15 closure during major flood events.
- The Village should work with the Vermont Agency of Transportation to investigate safety improvements at the intersection of Rt. 108, Main Street, and Church Street.

<u>Multi-Modal Transportation</u>

- Identify, design, and construct highest priority new sidewalks, particularly those serving Cambridge Elementary School.
- Work with Vermont Agency of Transportation to define highest priority road crossings of Route 108 and Route 15.
- Consider upgrading school related crosswalks and signs to improve safety and enhance visibility to motorists.
- Reduce obstruction of sidewalks caused by parked cars while maintaining sufficient on-street parking for Village businesses by better defining the edge of sidewalks through use of curbing and/or striping.
- Install ADA compliant ramps and detectable warnings at all existing and new crosswalks.

Transportation services

- Jeffersonville should continue to work with the CCTA to identify long-term commuter parking locations that do not compete with the parking needs of Village based businesses.
- Jeffersonville should continue to support the non-profit services provided at the regional level which provides public transit and other services.





Section 4 - Jeffersonville's Plan for Tomorrow

A. LAND USE AND DEVELOPMENT

Assessment of Existing Land Use

Residential areas

Residential uses can be found throughout the Village. Along Main and Church Streets the residential uses are mixed among commercial uses in historic buildings. Mill Street (Route 108 South), Old Main Street, Depot Street, and Maple Street consist of older residences. As was typical during the era, residences in these areas are laid out to make maximum use of yard space. Structures are generally located in a front corner of the lot to maintain a large, rear yard, and oriented perpendicular, rather than parallel to the street. Many historic homes are graced by deep front porches which contribute to the historic streetscape and create a transition between the public space of the street and the private space of the home.

Areas such as the Upper Valley Road, Jeff Heights, and Mehean Drive have more modern single and two family structures. Similarly, development along Deer Run is generally more recent single family dwellings.

Higher density senior housing and low income housing exists on Mann's Meadow, between Maple Street and the old Burlington and Lamoille Railroad right-of-way. While this development provides needed housing, its form is not consistent with established development patterns found in the Village and shall not be emulated by future development or expansions.

Commercial and industrial areas

Jeffersonville embodies many of the traditional village characteristics seen throughout Vermont, with a vibrant small-scale economy. A majority of the businesses are small family owned operations blended into the existing streetscape. Most side streets in the Village are quiet residential streets and generally do not have anything larger than a small home business.

Industrial uses are classified as any activity that adds value to a commodity or product. These may typically be defined as those involved in the manufacture, processing, fabrication, packaging, or assembly of goods. Presently, industrial uses within the Village are generally limited to lower intensity, light industrial uses. Higher intensity, heavy industrial uses are not currently found in the Village and shall be discouraged. This includes industrial processing that uses flammable or explosive materials and/or potentially hazardous conditions, those that emit noxious fumes or obnoxious noise and lighting, or those with heavy truck traffic.

Extraction of gravel or clay for commercial purposes creates environmental, safety, and aesthetic problems and is incompatible with the character of the Village. It shall not be permitted within the Village limits, unless necessary for hazard mitigation and/or floodplain restoration.

Forest and open spaces

Small forests and open spaces located throughout the Village do much to reinforce the feeling of Jeffersonville being a small rural village. Many of these open space areas are associated with public lands or are areas that have severe limitations to development due to steep slopes, erosion hazards, or flood hazards. The swimming hole above the covered bridge on the Brewster River is another unique resource which shall be protected.

Agricultural

There are no working farms remaining in Jeffersonville. Various meadows, primarily in the Lamoille and Brewster River floodplains, continue to be in agricultural use though.

Recreational uses

Jeffersonville is fortunate to have the school recreational facilities in its midst. This provides a gym, playground, and ball fields. In addition, there are numerous recreational assets located within the Village or in close proximity to it. These include several canoe access points, local trails, and the Lamoille Valley Rail Trail. The Town has developed the Cambridge Greenway Path that runs along the Lamoille River and eventually joins the Lamoille Valley Rail Trail. Horseback riders can enjoy parts of this path. In winter, snowmobilers and cross-country skiers enjoy its quiet beauty. There are privately maintained snowmobile trails which some use for cross country skiing as well.

Public and semi-public uses

In addition to the school with its recreation fields and gym, there are numerous other public and semi-public areas. The library is located on Main Street; the Veteran's Memorial, a church, the Post Office and Town Clerk's Office (both located in the former town hall), and fire station are all located on Church Street. The Town Highway Garage is on Mill Street. The Village Office is located off Church Street on Lamoille View Drive.

Future Land Use

In order to achieve the goals of this Village Plan, the Village of Jeffersonville is divided into four land use areas (see Future Land Use Map) with two overlay land use areas (see Overlay Map). These land use areas include the Village Core, the Village Residential Area, the Route 15 Corridor Area, the Conservation/Open Space Area, the Historic Village Overlay, and the Flood Hazard Area Overlay. The delineation of these land use areas is based on current land uses, characteristics identified in earlier chapters, conversations with neighbors and residents, and, in some cases, by using common sense.

These designations are non-regulatory and will not affect the ability of a property owner to use his or her land. Only zoning or subdivision regulation could have that effect. This section also provides guidance to the District Commission relative to agricultural soils mitigation. In accordance with 10 VSA § 6093, the District Commission is instructed to reference local and regional plans when determining whether to require on-site or off-site mitigation of impacts to agricultural soils.

Village Core

- Description. The Village Core consists of properties fronting on Main Street, Church Street, Old Main Street, School Street, and Depot Street, and it includes municipal facilities such as the elementary school and town garage.
- *Purpose*. The Village Core includes a mix of commercial and residential development and is the heart of civic life in the Village.
- Present Land Uses. This area is currently used for residential, commercial, and public uses. Most of these buildings continue to have significant historic value.
- Future Land Uses. Commercial development is encouraged in the Village Core and shall be in keeping with the traditional Village character, particularly in the Historic District. Anticipated uses include basic services, retail, office space, art galleries, etc. These should be located along the primary thoroughfares, and shall be at a scale and appearance consistent with its surroundings. Parking and traffic flow are very serious concerns in the Village Core. In order to address these concerns, commercial uses are encouraged to utilize creative parking solutions (such as providing employee parking off site or sharing parking with adjoining businesses). Further, business owners are encouraged to utilize site design which encourages access by pedestrians and cyclists (ensuring access to the sidewalk is not blocked by parked cars, providing bike racks, etc.)
- Agricultural Soils Mitigation: In recognition of the fact that this area serves as the mixed use core of the Village of Jeffersonville, as well as the Town of Cambridge, agricultural soil

mitigation shall not be required in this area. If the District Commission determines that mitigation is required, off-site mitigation shall be allowed, and shall not exceed a ratio of 1:1.

Village Residential Area

- Description. The Village Residential Area is found in a few areas including interior streets such as Maple Street, Carlton Ave, and Mann's Meadow and areas such as the Valley Road, Jeff Heights, and Deer Run.
- *Purpose*. The Village Residential Area is established to allow for medium to high density residential development adjacent to existing Village Core areas.
- Present Land Uses. These areas are currently developed in single, two-family, and multifamily housing units. Some home businesses and industries can be found as well.
- Future Land Uses. The goal for this area is to allow the current mix of housing types to continue. Especially within the Historic District, development shall match the form and pattern of development outlined in this Plan.
- Agricultural Soils Mitigation: In recognition of the need for housing located in existing settlements and served by existing infrastructure, agricultural soil mitigation shall not be required in this area. If the District Commission determines that mitigation is required, off-site mitigation shall be allowed, and shall not exceed a ratio of 1:1.

Route 15 Corridor Area

- Description. The Route 15 Corridor Area includes the land on the northwest side of Route 15 from the Lamoille River Bridge to Tatro's and the land on the other side of Route 15 from the Mobile Station to the old Granary Site.
- *Purpose*. The Route 15 Corridor Area is a special area in town. It has historically been developed at a moderate density with commercial and industrial uses, but it is largely within the floodplain. The intent of this land use area is to acknowledge existing uses and to prohibit further development in the floodplain.
- Present Land Uses. This area is currently used for commercial, light industrial and some residential uses. There are also many undeveloped areas.
- Future Land Uses. The Route 15 Corridor Area contains Route 15, a major arterial that permits unrestricted flow of traffic around the Village Core. Many of the existing businesses in this area are located within the 100-year floodplain. These businesses may continue to operate. Changes of use may be permitted, provided they occur within the footprint of an existing structure. Structures may be expanded upward in order to create upper story space. Any time a structure is "substantially improved" it shall be floodproofed to at least one foot above the 100-year base flood elevation. No new structures or fill shall be permitted within the 100-year floodplain, as defined on the most recent FEMA maps.
- Agricultural Soils Mitigation: No new development shall be permitted within the 100-year floodplain. If, for some reason, agricultural soils mitigation is required, it shall generally be on-site, unless a compelling case for off-site mitigation can be made. The ratio of mitigation shall be between 2:1 and 3:1.

Conservation/Open Space

- Description. Undeveloped and fragile parcels of land bordering the Lamoille and Brewster Rivers, which have hazards and limitations to development.
- Purpose. Jeffersonville's beauty is in large measure a reflection of its historic character and its natural resources. The Lamoille and Brewster Rivers and their floodplains are central to the character of the Village, and protection of these areas serves scenic and environmental benefits.
- Present Land Uses. Fragile lands along the Lamoille and Brewster Rivers are largely undeveloped; however, recreation, agriculture, and some limited residential uses exist.

- Future Land Uses. As a general rule, the fragile lands identified in the Conservation/Open Space land use area include steep slopes along river corridors and floodplains. These areas shall not be developed.
- Agricultural Soils Mitigation: This area should be targeted for protection associated with offsite mitigation from other sites within the Village of Jeffersonville or Town of Cambridge. No new development shall be permitted in this area. If, for some reason, agricultural soils mitigation is required, it shall generally be on-site, unless a compelling case for off-site mitigation can be made. The ratio of mitigation shall be between 2:1 and 3:1.

Historic Overlay

- Description. The Historic Overlay area is one of the Village's most important physical assets. It encompasses over 70 residential and commercial structures, most of which predate 1915. There are few villages the size of Jeffersonville left in the State, and probably the country, that have entered the twenty-first century looking virtually unchanged since entering the twentieth century.
- *Purpose*. The Historic Overlay has been proposed to protect and preserve the character and characteristics that make the Village of Jeffersonville special and unique. This area shall develop in a manner that supports and enhances these features.
- Present Land Uses. Most of the residential structures in the Historic Overlay District follow a development pattern typical of the era. Residences are laid out to make maximum use of yard space. Structures are generally located in a front corner of the lot to maintain a large rear yard, and oriented perpendicular, rather than parallel to the street. Most historic homes are graced by deep front porches, which contribute to the historic streetscape and create a transition between the public space of the street and the private space of the home. All but a few structures in the Village Core are sided with clapboards. Slate roofs are common, as are elaborate shingled designs on gable ends. The commercial center at the south end of Main Street is equally historic in appearance. This commercial area was developed prior to the predominance of the automobile, and is thus built at a more human scale. Buildings are built close to the sidewalk, and most have wide storefronts, overhangs, and/or stoops. Buildings are generally two to three stories tall, with retail or customer space on the ground floor and offices or apartments above. This virtually unbroken string of lovely historic structures is, visually at least, the essence of the historic district.
- Future Land Uses. What makes the future of the historic district so tenuous is that its unique appearances can be so easily altered. There is almost no way to keep incompatible, new development from sticking out like the proverbial sore thumb. Historic structures in the district should not be torn down, but should be maintained and rehabilitated to retain their historic integrity. New development shall model traditional building forms and architectural details to blend in with existing structures and the traditional pattern of development as described above and throughout this Plan.

Flood Hazard Overlay

- Description. The Flood Hazard Overlay area includes those lands identified as within the "100-year flood plain" by the National Flood Insurance Program maps, as most recently updated or amended.
- *Purpose*. This area is designed to minimize and prevent the loss of life and property, the disruption of commerce, the impairment of the tax base, and the extraordinary public expenditure and demands on public service that result from flooding.
- Present Land Uses. While much of the mapped floodplain is undeveloped, there is a startling number of structures located within the hazard area.
- Future Land Uses. Development within this district must comply with the Jeffersonville Flood Hazard Regulations, as administered by the Board of Adjustment. Existing structures are encouraged to be flood proofed to at least one foot above the 100-year base flood elevation. Any structure that is "substantially improved" shall be elevated to at least one foot above the

- base flood elevation. Flood hazard areas offer excellent opportunities to locate recreational, open space, and other uses which do not require the placement of structures or fill. This area is not suited for other uses due to the risks of frequent flooding.
- Agricultural Soils Mitigation: This area should be targeted for protection associated with offsite mitigation from other sites within the Village of Jeffersonville or Town of Cambridge. No new development shall be permitted in this area. If, for some reason, agricultural soils mitigation is required, it shall generally be on-site, unless a compelling case for off-site mitigation can be made. The ratio of mitigation shall be between 2:1 and 3:1.

Timing and Intensity of Growth

Virtually all development makes some demand on public services and facilities, be it schools, fire, water, sewage disposal, or roads. Demand on services and facilities shall be evaluated when considering development proposals. Development that would overtax services or facilities shall not be allowed, or shall be phased as additional services and facilities are made available.

Goals, Policies, and Recommendations

The land use plan is perhaps the most basic, crucial, and often the most controversial topic faced by local planners. The primary goals of this Village Plan address future growth and development, preservation of the historic district, public services, facilities and roads, and protection of the environment. This has required the Planning Commission to carefully consider the recommendations in this land use plan.

GOAL

• For development and growth in Jeffersonville to occur in a reasonable and sustainable manner so as to protect the environment, use services efficiently, and to preserve Jeffersonville's historic character and settlement pattern.

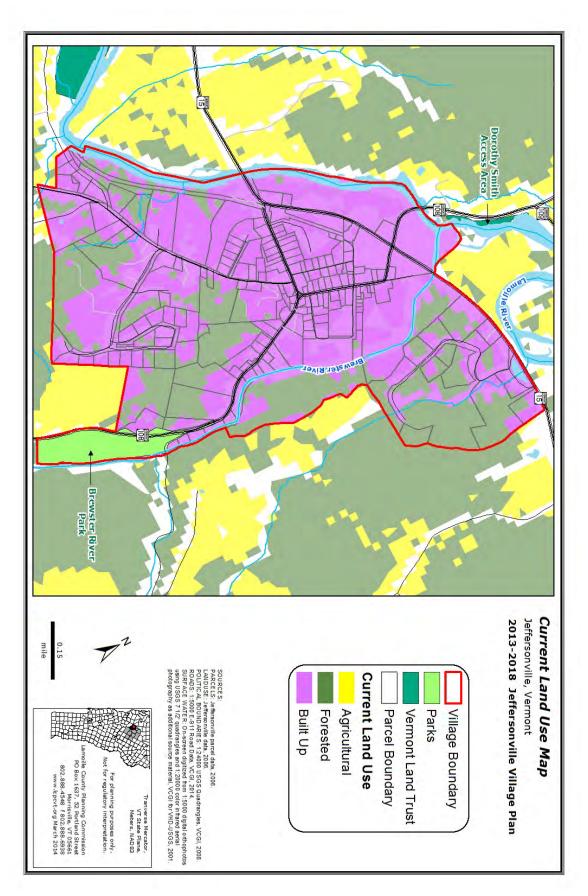
The Village has developed the following policies in order to guide development in a manner consistent with the overall goals and objectives of this plan.

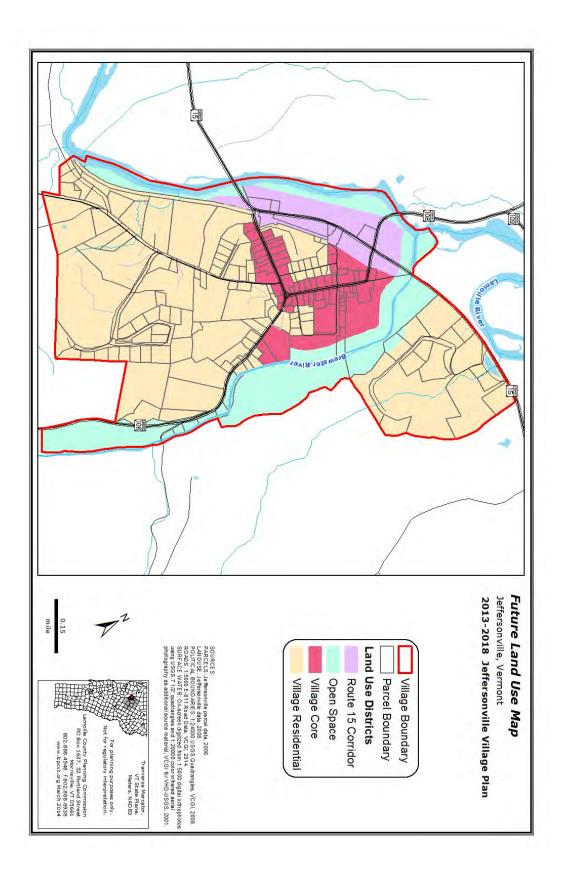
POLICIES

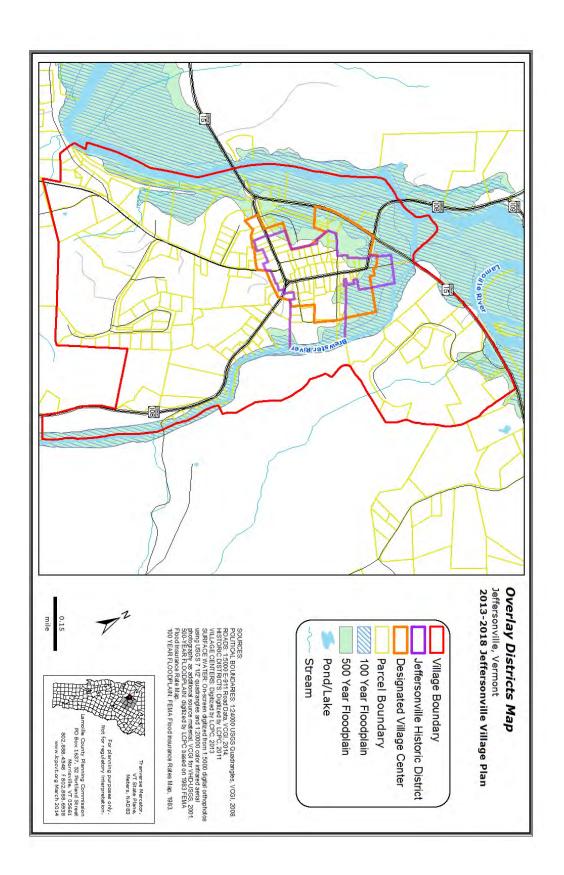
- The clustering and/or siting of development is encouraged in order to replicate traditional patterns of development, to protect historic and scenic character, and to maintain open space for recreation and the environment.
- The Flood Hazard Overlay is intended to protect life and property within federally designated flood hazard areas. Development within this district must comply with the Jeffersonville Flood Hazard Regulations, as administered by the Board of Adjustment. Existing buildings should be flood proofed to at least one-foot above the base flood elevation. Flood proofing shall be required whenever a structure is "substantially improved."
- In the Village Core, mixed-use developments are encouraged to allow commercial, business, and residential uses to be located near each other.

ACTIONS AND RECOMMENDATIONS FOR IMPLEMENTATION

- The Planning Commission should explore options for managing growth and maintaining the character of the Village, including non-regulatory tools, zoning, subdivision, and "form based" standards. The Planning Commission should educate residents on the various options available, and pursue options that appear to be acceptable.
- Jeffersonville should maintain Village Center Designation as a non-regulatory tool to preserve the historic integrity of the Village.
- The Planning Commission shall review all 'Act 250' applications for its compliance with the land use plan. Where the application is determined to not conform to this chapter or any goal or policy, the Planning Commission and/or Trustees shall participate in the 'Act 250' process in order to ensure the concerns of the Village are addressed.







B. IMPLEMENTATION

Each of the chapters in this Village Plan establishes a set of recommendations to accomplish the goals and objectives. With more than 50 recommendations throughout this Plan, there is no way each and every task can be completed. Over any time period, money or resources may become available to tackle an issue, and the policies and recommendations will be in place to take advantage of them.

Implementation can take place in big and small steps. Having the Planning Commission investigate zoning would require a great deal of effort from Commission members and Village residents. Other steps, such as conducting energy audits of municipal facilities, are smaller and can be achieved quickly.

Non-regulatory tools to implement this Plan include purchase of development rights and purchases of property. This is useful in areas where severe restrictions would need to be placed on a property in order to implement the plan, such as flood hazard and erosion hazard areas. Infrastructure investments are also important non-regulatory tools. For example, investing in upgrading existing water and sewer mains rather than extending lines to outlying areas helps to focus growth toward existing centers. Investing in pedestrian infrastructure and public parking will address traffic concerns as well as make the Village a more attractive place to live or do business. Finally, participating in programs such as Village Center Designation provides incentives for people to invest in Jeffersonville. Other non-regulatory options include developing capital budgets and developing capital improvement plans. These achieve goals through the development of projects such as improving pedestrian traffic through the construction of more sidewalks. Most goals can be achieved in many different ways.

With that in mind, the Planning Commission would like to recommend a few projects for the Trustees and Planning Commission to accomplish in the next five years. In this way, this Plan will hopefully lead to some direct actions and, in this way, take the Village a step closer to its goals for the future.

Recommended Actions for Implementation of the Village Plan

Over the next five years the Village Trustees and Planning Commission should take action to implement parts of this Plan.

Trustees

It is recommended that within the next five years:

- > The Trustees should maintain Village Center Designation for Jeffersonville and encourage property owners to utilize the associated tax credits.
- ➤ Jeffersonville should create a committee to investigate options and work with private businesses to encourage the adoption of telecommunication infrastructure, such as establishing a public WiFI district in the Village Core.
- > The Trustees should work with the Town of Cambridge and the Vermont Agency of Transportation to improve pedestrian safety on Village streets.
- > The Trustees should pursue funding opportunities to implement flood resiliency measures outlined in the Jeffersonville Hazard Mitigation Plan.
- The Trustees should continue to invest in upgrades to the sewer and water systems within the existing area of service. Upgrades to existing infrastructure shall be given priority over line and service area expansions.
- ➤ The Trustees should conduct energy audits of all municipal facilities to identify opportunities for savings.

Planning Commission

- In addition to working with other groups and boards in the Village, it is recommended that over the next five years:
- > The Planning Commission should explore options to protect the historic character of the Historic District, including traditional zoning and "form based code."
- The Planning Commission should consider creating a plan for the flood hazard area to address recreational opportunities, flood hazard protection, and the potential for implementing water quality measures. This may include developing and utilizing Fluvial Erosion Hazard Maps to minimize losses from flooding and erosion.
- ➤ The Planning Commission should pursue funding, perhaps through a municipal planning grant program, to conduct an economic assessment of Jeffersonville and to develop a strategy for maintaining the vitality of the Village in light of restrictions imposed by flood hazard areas .
- > The Planning Commission should work with local and regional partners to enhance the Village as a hub for regional recreation.
- ➤ If the number of persons moving into Jeffersonville becomes a major issue, the Planning Commission should consider growth management tools, such as subdivision and zoning regulations.

Other groups or individuals

Obviously the Jeffersonville Trustees and Planning Commission are critical to achieving objectives in the Village of Jeffersonville. Other groups were mentioned from time to time throughout this Plan as well. Each of these groups can do its part to accomplish its piece of the overall plan. The Planning Commission is available for guidance and assistance. These other groups include:

- Cambridge Historical Society
- Lamoille Housing Partnership
- Telecommunications Committee (if formed)
- Energy Committee (if formed)
- School Boards
- Cambridge Conservation Commission
- Trails Coalition
- Lamoille Fit and Healthy Council