# Town and Village of Cambridge, Vermont Municipal Development Plan (2013-18)



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# Prepared by Cambridge Planning Commission

With technical assistance from the Lamoille County Planning Commission

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#### INTRODUCTION

The Town of Cambridge recognizes that growth and development are inevitable and that with careful planning they can be in harmony with present land uses. It is the basic goal of this Plan to maintain the blend of residential, rural, business, and recreational elements that have led to the character of our present community.

Growth and development must be planned and managed so they do not put an undue burden on the ability of the Town to provide municipal services. The community recognizes its responsibility to respect the property rights of individual landowners. At the same time, the Town is obligated to protect public health and safety, be fiscally responsible, and safeguard the long-term interests of the community as a whole.

Our agricultural and resource-based economy must be maintained while allowing our tourist, recreational, and business economy to expand, as needed, to broaden the tax base, and to provide jobs for our citizens. Growth and development that provide employment within the Town should be encouraged as a way to reduce traffic, conserve energy, and preserve a sense of community--a sense which can be difficult to maintain in a bedroom/resort community. The Town must be sensitive to the need for affordable housing for current residents as well as for businesses seeking to locate here.

Future growth and development must take into account the inherent limitations of the land itself and should take place where they are compatible with current land use patterns. Open space and scenic preservation are important to the residents of the community as well as to the tourist economy and will be encouraged.

All of these objectives are important to maintain the present character of the Town and provide for orderly growth and development. They will be discussed in greater detail under the appropriate sections of the Plan, which follows.

## How this Plan was developed.

Much of the 2013 Plan was derived from the prior 2008 Plan. The 2008 Plan was reviewed and updated based on current trends and issues within the community. In revising the Plan, the Planning Commission sought substantial input from the Cambridge community. 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. 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.

## History of Cambridge's planning efforts.

Formal planning in Cambridge dates back to 1963 Cambridge, when the Town appointed a "zoning commission." The Planning Commission was established in 1968 through a vote at Town Meeting. The first Plan for the Town of Cambridge, the Village of Cambridge, and the Village of Jeffersonville was likely adopted by the Selectboard on December 18, 1972 (although it could not be confirmed in town records). Development in Cambridge Town and Village is currently governed by Flood Hazard Area Bylaws (adopted in 1995) and Subdivision Regulations (adopted in 2006). Several attempts to adopt Zoning Regulations have been defeated through town wide votes.

## Uses of a Municipal Plan.

Towns are not required to adopt municipal plans so the question is sometimes asked – why spend the time and effort to write a town plan? There is a range of ways in which a town plan can be used - from simply a source of information to a foundation for regulations. Ultimately, the residents of Cambridge determine how the Cambridge Municipal Plan will be used and whether or not it will be effective. Among the potential uses of the Municipal Plan are the following:

- 1. A source of information: The Plan is a valuable source of information for local boards, commissions, citizens, and businesses. The information in the Plan could serve to familiarize residents, potential residents, and development interests about Cambridge and its resources.
- 2. A basis for community programs and decision-making: The Plan serves as a common vision for the community. The planning process provides an opportunity for Cambridge residents to discuss their future hopes for the community. The Objectives and Policies found within the Plan can be used to guide community decisions. For example, 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 farmland protection, recreation planning, and housing.
- 3. A source for planning studies: Few Plans can address every issue in sufficient detail. Town Plans not only record and discuss what is known about the resources and residents of the town but also what is not known. Therefore, many Plans will recommend further studies to develop courses of action on specific needs.
- 4. A standard for review at the State and regional levels: The Municipal Plan provides an opportunity for local concerns to be addressed in State-level decision making. Act 250, the Section 248 Public Service Board process, 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 regional and inter-municipal programs. In addition, State

proposals must comply with Town Plans. This includes the purchase and management of State land for parks and recreation. While the Town, Village, and local residents may have the opportunity to provide comments in these decision making processes, under State law, these comments are given greater weight when backed up by clearly stated policies found in the Local Plan.

- 5. A long-term guide: 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.
- 6. To fulfill an eligibility requirement for State and Federal grants: In 2000, the State began requiring towns to adopt Plans in order for communities to be eligible for most grants and low interest loans. Planning grants, water and wastewater grants, community development grants, historic preservation grants, Village Center tax credits, and other key sources of funding all now require the municipality to have an adopted Plan. While many private funding sources do not require Town Plans in order to be eligible, having a Town Plan that documents the need for funding will generally strengthen the application.
- 7. A basis for regulatory action: The Plan can serve as a foundation and guide for the creation of zoning regulations, subdivision regulations, official maps, shore land bylaws, and flood hazard bylaws and for the decisions made under these regulations.

## Fundamental Themes and Objectives.

This Plan has been developed with the following principles in mind.

- ➤ Development and change in Cambridge is inevitable and is likely to continue as a consequence of trends in Vermont, the United States, and the rest of the world.
- ➤ This Plan recognizes that diverse housing, employment, civic, and recreational opportunities are essential for the future health of the community. The Plan seeks to manage and direct growth in ways that preserve Cambridge's rural, agricultural character and quality of life while preserving the property rights of the town's landowners.
- ➤ Greater collaboration between the various municipal boards serving Cambridge residents, as well as other public and private organizations active within the community, is essential to ensure that adequate public services and infrastructure are available to serve the needs of Cambridge's growing population.
- ➤ Retaining/increasing the amount of land utilized for agricultural purposes by removing or minimizing financial obstacles to agricultural land uses. This goal should be accompanied by all practicable methods including, without limitation:
  - o Allowing for the diversification and development of new agricultural enterprises.

- o Encouraging the purchase of development rights.
- o Ensuring that no town regulatory hurdles are erected to agricultural land uses.
- o Clearly and emphatically stating the town's preference for agricultural uses.
- Maintaining the rural character of Cambridge to the greatest extent possible consistent with private property rights. Mechanisms for attaining this goal should include, without limitation:
  - o Encouraging development to be directed towards the Villages and Growth Areas defined in the Land Use Section of this Plan.
  - o Discouraging scattered development patterns on open land by encouraging clustering in development projects.
- Encouraging the preservation of scenic areas for economic (tourism) as well as local (aesthetic) reasons.
- ➤ Both regulatory and non-regulatory tools can be used to meet the objectives of this Plan. When possible, preference will be given to non-regulatory tools. If regulatory tools, such as bylaws, are adopted, the permitting process must be predictable and efficient and must contain clear, unambiguous standards to ensure that all residents receive fair and equal treatment.

## How this Plan is Organized.

The first chapter of this Plan outlines the Objectives, Policies, and Recommendations that will form the basis for decisions over the next five years. Each of the subsequent chapters contains a more detailed inventory and analysis of specific issues or topics. By providing all Objectives, Policies, and Recommendations in the first section of the Plan, a reader can gain an understanding of Cambridge and the vision outlined in the Plan for the future without wading through a multitude of data and statistics. Readers wanting more information on a specific topic can then reference an individual chapter. For readers using electronic software to review the Plan, hyperlinks connecting each Objective, Policy, or Recommendation to the pertinent section of the Plan have been added.

## **OBJECTIVES, POLICIES, AND RECOMMENDATIONS**

## Economic Development

- o Objective:
  - Cambridge should have a balanced and diverse local economy that provides rewarding local employment opportunities, at livable wages.
  - To provide the necessary infrastructure, including public sewer and water, business-class broadband, transportation, parking, and workforce development, to support growth of small businesses in Cambridge.

#### o Policies:

- Cambridge recognizes that small businesses are critical to future economic development in town as they employ a majority of workers. Cambridge, therefore, seeks to promote small business growth in town.
- Home occupations are encouraged and supported provided they do not conflict with existing uses in the neighborhood.
- Cambridge supports economic activity that strengthens the viability of farm/forestry and related activities, including value added manufacturing.
- Cambridge encourages diversification of the economy, provided the activity is in keeping with the scale and character of the community.
- Cambridge supports protection of its scenic resources as an important component to the tourism sector of the economy.
- Cambridge supports regional and local workforce training initiatives to improve economic opportunities for residents.
- Economic development at the expense of the environment is strongly discouraged. Businesses and industries shall not have an undue adverse impact on air and water resources.
- Planning for future transportation improvements should take the needs of local business and industry into account.
- Cambridge recognizes the value of converting the Lamoille Valley Railroad to a recreation trail. Cambridge supports infrastructure investments that will allow businesses and community members to take full advantage of this opportunity.

#### o Recommendations:

- The Cambridge Planning Commission should explore ways to protect the scenic resources, which are important to the recreation economy.
- The Cambridge Planning Commission should examine what barriers may exist to industrial development in town, such as a lack of developable lots in the Cambridge Enterprise Park, and develop a plan to address them.

- The Planning Commission and Conservation Commission should develop a plan for the agricultural future of Cambridge. This plan should address opportunities for diversification, infrastructure gaps and needs, and the working landscape and open space.
- The Planning Commission should continue to monitor labor statistics in town, including wage and unemployment information.
- The Selectboard and Trustees should develop capital budgets for major infrastructure maintenance and improvements in order to align and minimize fluctuations in property taxes and annual municipal expenses.
- Cambridge should work with Lamoille Economic Development Corporation (LEDC), the Lamoille County Planning Commission, Smugglers' Notch Chamber of Commerce, Lamoille Region Chamber of Commerce, Cambridge Artists and Entrepreneurs, and local businesses to provide local input to regional economic concerns.
- Cambridge should investigate potential financial incentives, such as a local revolving loan fund or tax abatement program, to support growth and expansion of local businesses.
- Cambridge should work with local and regional economic development organizations and internet service providers to better promote the availability of carrier-based Ethernet in Cambridge and the opportunities for businesses that it provides.
- The Town of Cambridge should advocate for changes in State and Federal laws that prevent businesses along Route 15 from accessing business-class broadband due to improperly defined service areas.
- The Cambridge Planning Commission supports development of adequate trailhead facilities for the Lamoille Valley Rail Trail. The Planning Commission should work with the Conservation Commission to develop a recreation plan to tie the Lamoille Valley Rail Trail to other trails, Villages, services, parking, and attractions in Cambridge.
- The town should consider creating a joint Development Review Board with the Village of Jeffersonville.
- Cambridge should initiate quarterly meetings between governing boards of the Town and Villages in order to improve collaboration on economic development, planning, and other community issues.

#### Natural Resources

• Climate and Air Resources:

#### o Objectives:

- Development in Cambridge is to be constructed with respect to the northern temperate conditions in town.
- Cambridge should maintain a level of air quality that supports a healthy and safe environment and maintains a clear view of our many scenic vistas.

#### Policies:

- New or replaced woodstoves should be cleaner burning, modern woodstoves.
- Cambridge should explore options to reduce automobile dependency, including increasing the availability of local employment, promoting alternatives such as walking, biking and carpooling, and supporting expansion of public transportation/bus service.

#### o Recommendations:

- Carpool and ride share lots should be identified and evaluated to ensure sufficient space is available for commuters.
- Continue to enforce a burning and disposal of solid waste ordinance, which prohibits the burning of trash.
- Periodically review available date and information to identify specific issues and opportunities related to air quality in Cambridge.
- Through infrastructure investments, subdivision regulations, and other planning tools, Cambridge should encourage compact developments in or near Village and Growth Areas, in order to reduce unnecessary travel, thus reducing air pollution.

#### Land Resources

#### o Objectives:

- Use Cambridge's land resources conservatively for the benefit of existing and future generations.
- Conserve and enhance the soils in Cambridge, especially prime and statewide significant agricultural soils, for present and future generations.

#### o Policies:

- Sand and gravel resources should be identified and conserved until needed and reasonably developed in the public interest.
- Development that is proposed near or over important sand and gravel resources should account for the potential loss of that resource.
- Sand and gravel extraction and related processing operations will be permitted only when it has been demonstrated that there will be no undue adverse impacts on the town or its

residents. Potential conflicts between current land use and proposed extraction operations will be minimized. Strict standards for the operation, maintenance, and restoration of extraction sites may be established as appropriate based on the unique conditions of the area affected.

- All development in town must be pursued with strict regard to the capacity of the soils to support it.
- Development on slopes greater than 30% is prohibited.
- Development on lands over 2,500 feet in elevation is prohibited.
- Development should be located so as to minimize impacts on prime and statewide agricultural soils.

#### o Recommendations:

- Cambridge should plan for the eventual exhaustion of gravel at the town gravel pit. The Town should explore options for restoration/reuse of the pit and investigate potential sites for a new municipal pit.
- The Planning Commission should consider drafting bylaws that include provisions for the regulation of earth extraction operations. The bylaws should achieve the goals of this section and provide the owner of the site with a clear set of guidelines to follow.
- Any bylaws related to earth extraction operations should require the submission and local approval of site restoration plans and the provision of adequate surety to guarantee the completion of the restoration plan at the operator's expense.
- The Planning Commission should periodically review the effectiveness of existing subdivision standards related to prime agricultural soils.

## Water Resources

#### o Objectives:

- Cambridge's water resources, including its lakes, ponds, streams, rivers, wetlands, groundwater, and associated habitats, are to be preserved and, where degraded, improved in order to ensure water quality for drinking, recreation, and the environment.
- Cambridge must maintain the quality and quantity of local ground water supplies.
- Ensure that Cambridge's rivers and streams contain clean water, a healthy riparian habitat, and stable stream banks.
- Preserve and protect wetlands from pollution, filling, dredging, and any other use or activities that will result in their degradation or a reduction in their capacity to provide wildlife habitat, flood control, and water storage.

Protect the health, safety, and welfare of the residents of Cambridge by limiting development in the flood hazard areas to agriculture, recreation, and open space.

#### o Policies:

- No form of land waste disposal or storage of possible contaminants should be permitted in high water tables and ground water recharge areas.
- Development within or proximate to a river or perennial stream shall not have an undue adverse impact on water quality, and should take place in such a way as to avoid crossing the stream and to protect and maintain at least a 50-foot vegetative buffer. 100-foot buffers are preferred where conditions allow.
- All bridges and culverts should be built to standards recommended by the Better Back Roads Program to ensure minimal impact on rivers and streams.
- Development near the Brewster River Gorge must not have a negative impact on the quality of this significant stream feature.
- A naturally vegetated buffer around lake and river shores is required in order to protect the water quality from contaminants as well as protecting the scenic values of the areas.
- Access to and appropriate, traditional uses, such as fishing and swimming, of the public waters of the community should be maintained.
- All development shall conform to the Vermont State Wetland Rules.
- No development should occur within a flood hazard area except in conformance with the flood hazard bylaws. Any new or substantially improved structure should be elevated at least one foot above the 100-year flood elevation or should be flood proofed in accordance with most recent FEMA guidelines. Use of structural piers and other techniques that allow floodwaters to flow beneath a structure is preferred over use of fill, which displaces floodwaters onto other properties.
- Agriculture, recreation fields, parks, and open space are all appropriate uses of flood hazard areas.
- Cambridge will support Hazard Mitigation Grants and other applications that provide funding for property owners to undertake flood-proofing or to buy out flood-prone properties, provided the property owner or an entity other than the Town provides the required match.
- All construction where soil is to be disturbed is required to provide adequate erosion control so that no soil moves off

- site or into surface waters or wetlands. Erosion control practices shall be in accordance with the most recent standards established by the State of Vermont.
- Agriculture and forestry must abide by Vermont State Accepted Agricultural Practices and Acceptable Management Practices. Where an activity may have a negative impact on water quality, Best Management Practices are recommended.
- As a general rule, total impervious surfaces should account for less than 10% of the area of any watershed. Compact development areas should be offset by undeveloped areas in other areas of the watershed. Where appropriate, stormwater technologies or techniques should be used to prevent runoff from directly entering any surface water.
- Stormwater runoff from any new development should be treated and appropriate technologies used to maintain predevelopment runoff volumes, velocity, and turbidity in any nearby waterway.

## o Recommendations:

- The Planning Commission should identify potential threats to groundwater supplies.
- The Town should adopt, within or separate from zoning bylaws, Wellhead Protection Area regulations to restrict land uses that present a risk of contamination to the groundwater.
- Cambridge Conservation Commission should continue working with Lamoille Watershed Council and other agencies whose goals are the protection of the rivers and streams in the area.
- The Town should consider acquiring funds to have a wetland inventory of the Town conducted.
- The Town should consider acquiring funds to purchase properties or development rights of properties within the flood hazard areas.
- The Planning Commission should review the flood hazard zoning regulations to ensure they are adequate to meet the goals and objectives of this Plan.

# • Wildlife Resources

#### o Objectives:

• Ensure wildlife resources are protected and preserved in order to maintain the native diversity of wildlife throughout Cambridge through protection of critical habitats.

#### o Policies:

 Development within or proximate to fragile and natural areas will take place in such a manner as to preserve their value for education, science, research, aesthetics, and recreation.

- Deer wintering areas and bear habitat should be protected from development and other uses that threaten the ability of the habitat to support the species. Development shall not have an undue adverse impact on these areas. Development should only be permitted adjacent to deer wintering areas if it is demonstrated that, in consultation with the Department of Fish and Wildlife, the integrity of the area for deer habitat will be preserved.
- Subdivisions and other development should avoid fragmenting habitat. Core habitat areas and interconnecting links (e.g. wetlands areas, riparian zones, travel corridors) shall be preserved.
- Rare, threatened, and endangered plants and animals and their habitats shall be protected and preserved through appropriate conservation techniques, such as limiting of clearing or disturbance where such species are present. Where appropriate, a buffer strip should be designed and maintained to ensure protection.

#### o Recommendations:

- The Town supports efforts by the Cambridge Conservation Commission to facilitate conservation of natural and fragile areas in town.
- The Conservation Commission should 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.
- The Conservation Commission should work with landowners and other conservation organizations to implement recommendations related to improvement of the critical wildlife corridor located at "Willow Crossings" between Hubbard Drive and the Cambridge/Johnson Town line.
- The Planning Commission should consider incorporating standards related to the protection of core forest habitat, deer wintering areas, and bear habitat into the Cambridge Subdivision Regulations.
- The Planning Commission should support and provide guidance to any property owner with questions or concerns about natural resources.

## Agricultural and Forest Resources

- Agricultural Resources:
  - Objective: Promote the retention of working farms and agricultural products as viable parts of Cambridge's economy, landscape, and culture.

#### o Policies:

- Further fragmentation of productive agricultural land is to be discouraged; continued access to productive farmland should be ensured.
- Development within agricultural areas will be sited to avoid taking viable agricultural areas permanently out of production. Non-agricultural structures should not be placed in open fields and meadows; such structures and related infrastructure will be set back from field edges and follow tree lines where feasible to minimize disturbance and visual impacts and to maximize open productive space.
- Agricultural operations should follow "Accepted Agricultural Practices" (AAPs) defined by the Vermont Commissioner of Agriculture. Cambridge encourages the use of Best Management Practices (BMPs) where feasible.
- Cambridge supports community members pursuing sale of development rights and other conservation methods, provided the land protected meets the objectives of this Plan.
- Cambridge encourages farm owners to participate in Vermont's Current Use Program.
- Cambridge supports the development and expansion of value added agricultural products and businesses.
- Cambridge supports efforts to provide local residents and businesses with locally grown foods, such as farmers markets and other local agricultural marketing tools.

#### o Recommendations:

- The Planning Commission should assist landowners interested in adopting Best Management Practices.
- If zoning regulations are considered for adoption in the future, the Planning Commission should establish standards and allow the use of Planned Unit Developments (PUDs).
- The Planning Commission should establish areas in town where agriculture is the primary land use. In this way, conflicting land uses, such as residential properties, will be identified and minimized. The Planning Commission should consider requiring subdivisions in these areas to include "right-to-farm" language in deeds protecting neighboring agricultural operations against nuisance lawsuits.
- The Planning Commission should identify significant agricultural lands through the development and use of planning tools such as Land Evaluation and Site Assessment (LESA).
- The Planning Commission should monitor and evaluate the local impact of changes to the Current Use Program and examine local property tax alternatives that are sensitive to maintaining productive resource lands.

#### • Forest Resources

- o Objective: Retain working forestland as a viable part of Cambridge's economy, landscape, and culture.
- o Policies:
  - Further fragmentation of productive forestland is to be avoided; continued access to productive forestland should be ensured.
  - Cambridge encourages the use of Best Management Practices where feasible.
  - Given the large amount of State-owned land within Cambridge, public use of this land for recreation, wildlife management (including hunting), timber management, and maple sugar production should be allowed and encouraged.
  - Cambridge supports the efforts of the Cambridge Conservation Commission in facilitating the purchase of development rights and other conservation methods to protect land in a way that meets the objectives of this Plan.
  - Cambridge strongly discourages ridgeline development regardless of elevation.

#### Recommendations:

- The Planning Commission should identify significant forestlands through the development and use of planning tools such as Forest Land Evaluation and Site Assessment (FLESA).
- The Planning Commission should establish areas in town where forestry is the primary land use. In this way, issues such as fragmentation of the resource can be minimized.
- Cambridge should work with the Vermont Department of Forests, Parks, and Recreation to determine if areas of the Mount Mansfield State Forest should be open to maple sugar production. Only areas that would not degrade recreational use of the forest should be considered. If so, the Town and Department should consider piloting a test program allowing maple sugar production on State Forest land.
- Cambridge supports efforts to promote active land management through use and growth of e-commerce and telecommunications tools such as the Vermont Fish and Wildlife Landowner/Hunter Access Registry:

http://www.vtfishandwildlife.com/wildlife\_hunteraccess.cfm

## Community Facilities and Services

- Water Supply
  - o Objective: To provide safe, clear, and abundant water from both public and private sources to Cambridge residents.
  - o Policies:

- Any development within the Village of Cambridge should not place an undue burden on the water system.
- All private wells must be drilled in accordance with State water supply regulations.
- Development within the wellhead protection areas of the public water supplies for Jeffersonville, Cambridge, or Smugglers' Notch Resort or within the isolation distances of a private well must not present a risk of contamination (or loss) of these resources. At minimum, development within these areas shall comply with minimum State wellhead protection guidelines.
- New development or changes of use that will be served by either the Jeffersonville Water System or the Village of Cambridge Water System shall file an application with the appropriate Village Trustees.

#### o Recommendations:

- The Cambridge Village Trustees shall continue to oversee the Village of Cambridge Village Water System.
- The Town of Cambridge should work in collaboration with the Village of Jeffersonville Trustees to protect the wellhead protection area of the two springs providing water for the Village system.
- The Town should adopt, within or separate from zoning bylaws, Well Head Protection Area regulations to restrict land uses that present a risk of contamination/loss of public water supplies.
- Any zoning regulations, if drafted, should require identification of water supplies and provide proof of State compliance.
- In order to encourage development to locate in close proximity to municipal services and facilities, Cambridge should encourage the access, use, and expansion of existing community water systems within their physical limitations and financial constraints of the rate payers.
- In order to encourage responsible development in close proximity to municipal services and facilities, The Village of Cambridge should maintain the legal rights to the two springs on private land in South Cambridge. The Village of Cambridge should investigate the potential for these springs to be used to increase water supply for Jeffersonville or Cambridge Village.

#### • Sewage and Septic

o Objectives: Cambridge must ensure that all wastewater is properly treated so as to protect public health and the environment.

#### o Policies:

 All wastewater treatment systems must obtain a State Wastewater and Water Supply permit.

#### o Recommendations

 Consider conducting a feasibility study for a community leach field or decentralized wastewater treatment systems for Cambridge Village.

## Solid Waste Handling and Disposal

o Objectives: Cambridge's businesses and residents should responsibly dispose of solid waste, including efforts to reduce the amount of waste generated, reuse materials when possible, and increase recycling.

#### o Policies

- All projects must provide for adequate removal of solid waste.
- Backyard burning of trash is prohibited.
- The Town will support waste reduction and recycling efforts that reduce the volume of material entering the waste stream.

#### Recommendations

- Cambridge should continue to work with the Lamoille Regional Solid Waste Management District to provide solid waste management services to residents.
- The Town of Cambridge should study alternative waste disposal options given that only one facility remains for this purpose in Vermont.
- Implement recycling, composting, and other solid waste reducing measures in all municipal and school buildings.
- Study the feasibility of locating a recycling or composting facility in Cambridge. Such a facility could be operated by the Town or an independent entity.

## • Electric Utilities and Communications

o Objectives: Electricity, telecommunication facilities, and other utility services should be adequate to support Cambridge businesses and residents.

#### o Policies:

- Cambridge supports the expansion and enhancement of communication services in Town, including improvements to high speed internet and cellular phone coverage.
- Wireless telecommunication towers must meet aesthetics standards and other safety requirements as provided in the Town of Cambridge Communications Facilities Ordinance.
- Support use of online communications and social networking tools to improve communications with Cambridge residents.

#### o Recommendations

- The Planning Commission should review the Communications Facilities Ordinance to ensure the Town's goals are met with respect to telecommunications.
- The Town of Cambridge should work with the Lamoille County Broadband Committee and Lamoille County Planning Commission to develop and implement plans related to information technology and telecommunications.
- The Town of Cambridge should continue to maintain the municipal website and investigate other methods of utilizing expanded broadband access to improve communications with Cambridge residents.

#### Public Safety

- o Objectives: For Cambridge to have well-trained and adequately funded fire, police, and rescue services in order to provide a safe environment in which to work, live, and play.
- o Policies:
  - Driveways and private roads shall not exceed eight percent slope so as to accommodate fire and rescue vehicles.
  - Height limitations of 40 feet shall be maintained in all residential construction to accommodate fire and rescue efforts.
  - The Town should enforce the Town of Cambridge Road Standards Ordinance. These Standards should be updated as needed.

#### Recommendations

- Cambridge should continue to support the fire, rescue, and police services at Town Meeting Day. These services have been provided efficiently and effectively in the past and are expected to continue in that manner in the future.
- Cambridge supports regional efforts to provide improved emergency services, communications, and collaboration.
- The Town of Cambridge and members of the emergency services community should identify and plan to address future facility needs.
- In consultation with public safety providers, Cambridge should support public safety improvements and improve development regulations as they relate to identified safety concerns.
- The Planning Commission should consider revising the Subdivision Regulations to require fire ponds and/or dry hydrants for larger subdivisions and subdivisions that are located a substantial distance from existing water supplies.

#### Health Care

- o Objectives: For Cambridge to have a variety of quality local health care facility and service options.
- o Policies:
  - Cambridge supports the expansion of health care services to meet current and future needs.
  - In order to allow Cambridge residents to remain in town, Cambridge supports the development of elderly housing, assisted living, and nursing home facilities that are compatible with the physical and cultural characteristics of the community.

## o Recommendations

- The Town will continue to support organizations that provide needed health services to all members of the community.
- The Town should undertake a study to determine the feasibility and potential appropriate locations for elderly housing, assisted living, and/or nursing home facilities to locate in Cambridge. This study could be overseen by the Planning Commission or a special committee appointed by the Selectboard.
- Flooding has made the Cambridge Regional Health Center inaccessible or forced it to evacuate in the recent past. The Town might consider incorporating this knowledge into its strategic disaster management planning and planning accordingly.

#### Cemeteries

- Objectives: Cambridge's cemeteries should be maintained with respect and dignity and have sufficient capacity to support future need.
- o Policies:
  - Any new development adjacent to cemeteries should be sited and, if necessary, screened so not to have a negative aesthetic impact on these public spaces.
  - The Town supports creation of new public or private cemetery space in Cambridge.
- o Recommendations:
  - For the Planning Commission to meet with the Cemetery Commission and four Cemetery Associations to determine future needs and future burial locations as needed.

#### Libraries

- o Objectives: To provide high quality library facilities and programs for Cambridge residents and residents of neighboring communities.
- o Policies
  - Efforts to improve the Varnum Memorial Library facility are supported.
- Recommendations

• The Planning Commission should work with the Crescendo Club Library Association to address space and energy efficiency needs at the Varnum Memorial Library.

#### Recreation

 Objectives: To provide access to recreational facilities and to develop needed facilities in Cambridge for all of Cambridge's residents.

#### o Policies:

- Support the provision of recreational facilities which meet identified community needs.
- Encourage growth of recreational activities for all ages of people, through both public and privately owned activities
- The Cambridge Recreation Board is encouraged to continue to support youth programs and also to expand its programs to include working adults and elderly.
- Encourage the Cambridge Recreation Board to take a more active role in identifying needs, infrastructure development and maintenance, programming, etc.

#### Recommendations

- Improve recreational infrastructure, facilities, and programming.
- Review the various roles of various organizations and groups working on recreational issues in Cambridge and examine opportunities for greater collaboration among organizations.
- Work with the Cambridge Recreation Board and other interested groups in planning for recreational facilities as they relate to land use and development.
- The Town of Cambridge should work with the Cambridge Recreation Board to improve field maintenance and coordination.
- Complete planned equipment storage facility.
- Work to extend Cambridge Greenway Trail to Williamson Road and eventually to Cambridge if possible.
- The Planning Commission and Recreation Board should develop a Comprehensive Recreation Plan.
- Improve publicity for recreation facilities and programs.

#### • Arts

- o Objectives: For the arts to be supported and play an active role in community life.
- o Policies:
  - Cambridge supports the location and expansion of art related facilities and activities.
- Recommendations

• The Planning Commission should work with Cambridge Arts Council and other interested groups in planning for facilities as they relate to the arts.

# Educational Facilities and Services

 Objective: Provide for a comprehensive educational experience for all students in a stimulating and supportive environment in a fiscally responsible manner.

#### o Policies:

- Maintain and enhance facilities for a variety of academic, athletic, social, cultural, and community activities.
- Manage residential growth in a planned, graduated, and predictable pattern and at a level consistent with the Town's fiscal capacity to accommodate its impact on the education system. Maintain a matrix of estimated students based upon current rate of housing growth to plan for corresponding costs of education.
- Future design of educational facilities should consider community needs and multiple uses subject to Act 68 restrictions on education spending.
- Cambridge encourages efforts to improve the safety of children walking to school.

#### o Recommendations:

- Representatives and Senators representing Cambridge should work to ensure Act 68 funding is equitable towards Cambridge residents and businesses. In turn, Representatives should assist to educate the community on the underlying basis of Act68.
- The Finance Committee should work with the Selectboard, Village Trustees, School Boards, and District Superintendent to develop a capital budget and program for the community as a whole. The Planning Commission may make recommendations for projects to include in the capital budget based on the goals and policies of this plan.
- For safety and to assist in cost containment for busing, Cambridge should enact an ordinance ensuring that all road signs, including those on private roads, meet Federal MUTCD standards.
- The Planning Commission and Selectboard should solicit input from the School Board on all Act 250 development projects that may have an impact on education.
- The Planning Commission should work with School Boards to share information to better understand how to address impacts created by increased residential growth.
- Work with the School District to define highest priority road crossings for students on Route 108, Route 15, and other State Highways.

- Consider upgrading school related crosswalks and signs to improve safety and enhance visibility to motorists.
- Consider upgrades to the pedestrian infrastructure in Jeffersonville to support children walking to school.

## Transportation Facilities and Services

- Highways and Roads
  - o Objective: The Town highway system should be safe and efficient for vehicular and bicycle/pedestrian use, as appropriate, and be maintained in a cost efficient manner.
  - o Policies:
    - Maintain existing Class 2 and 3 roads in a manner that provides safe and reliable year round access.
    - Maintain the scenic quality of roads where practicable, as described in the Historic, Scenic, and Archeological Resources Section of this Plan.
    - The Town of Cambridge should only accept new public roads if they are (a) built to current Town road specifications and (b) serve at least five residences.
    - Outside of Village and Growth Areas, major roadways, especially Routes 15, 104, 108, and 109, should have limited curb cuts and shared/consolidated access points to allow for smooth travel in to and out of town.
    - New road and driveway accesses must have sight distances suitable for the road's use and speed, so as not to create blind and hidden driveways.
    - All new or upgraded roads, both public and private, must be constructed to Town standards.
    - Land use and development activities must not have a negative impact on traffic safety or degrade the condition of roads and rights of way.
    - Route 108 through Smugglers' Notch should be safe and accessible for all users, including commuters, bikers, and hikers. The Notch should not be open to heavy truck traffic, nor should winter through traffic be permitted.
    - Roads should be designed to encourage safe use by multiple transportation modes, especially in Village areas.

#### o Recommendations:

The road foreman and Selectboard should work to maintain and update a Road Surface Management System (RSMS) and Culvert Inventory. These tools are useful for planning and for scheduling and budgeting needed road repairs and major improvements to be included in the Town's capital budget and program.

- The Selectboard should plan for major repairs by developing a reserve fund for bridges and road maintenance.
- The Selectboard should consider revising the road ordinance and/subdivision regulations to define appropriate sight and access standards for future development.
- Any zoning or subdivision regulations adopted should address the type and amount of development along Routes 15, 104, 108, and 109 to ensure smooth and safe traffic flow outside of the villages.
- Where dangerous intersections or other highway safety hazards are identified, Cambridge should work with State and regional transportation officials to mitigate the risks. High crash location intersections should be a priority.
- Monitor the take rate of the Town gravel pit and identify long term solutions for the Town's gravel needs before the supply of the current pit is exhausted
- Continue discussions with Vtrans regarding State compensation for damages caused to local roads (particularly Upper and Lower Pleasant Valley Roads) when those roads are used as emergency detours.
- Cambridge should work with various agencies and partners to improve the transportation network through Smugglers' Notch, to develop innovative tools to educate visitors about the area's unique natural features, and to announce annual winter closure of the Notch.

## Railroads and Airports

- Objective: Cambridge businesses and residents have access to high quality regional airport and rail facilities.
- o Policies:
  - Unless the rail line is thrown up by the State, all development adjacent to the rail bed should consider the possibility of future rail use.
  - Cambridge supports the railbanking and conversion of the rail line into the Lamoille Valley Rail Trail, a four season recreational right-of-way.
  - Cambridge supports continued State ownership and operation of the Morrisville-Stowe Airport, recognizing that this facility is vital to the growth of tourism and industry in the region and the many useful services it provides the region and its municipalities.
  - Cambridge supports expansion of the runway at the Morrisville-Stowe Airport.

#### o Recommendations:

 The Selectboard, Trustees, and Planning Commission should continue to support implementing the Lamoille Valley Rail Trail, including the construction of trailheads and parking areas.

When private airstrips/helipads are developed, the Town should work with the property owner to provide for use of these facilities during emergency situations.

## • Bicycles and Pedestrians

o Objective: Bicycle and non-vehicular transportation networks should be safe and conveniently located near residential and commercial areas to encourage their use.

#### o Policies:

- Measures to provide safe pedestrian travel are encouraged in village areas. Appropriate measures may vary based on the location and may include sidewalks or expanded shoulders, depending on traffic volumes and neighboring uses.
- When new development occurs in proximity to Village and Growth Areas, sidewalks or other means of providing pedestrian connectivity should be required as a condition of approval.
- Cambridge encourages and is supportive of grassroots efforts to improve the Town pathway network.
- Wide shoulders, dedicated bike lanes, or shared travel lanes should be developed when new roads are constructed or existing roads are resurfaced. The appropriate lane type and width should be determined based on traffic volumes and speed.
- Cambridge encourages installation of bike racks in Village areas to encourage bicycling within the community.
- The Planning Commission should work with the various groups and organizations involved in trail construction to coordinate development of the Town-wide trail network.

#### o Recommendations:

- Cambridge should pursue funding for improvements to pedestrian and non-vehicular infrastructure.
- Develop and upgrade trailhead and parking facilities for the Lamoille Valley Rail Trail and Cambridge Greenway.
- Conduct an alternatives analysis on various potential pedestrian/bike connections between Cambridge Village and Jeffersonville.

## • Public Transportation Service

- o Objectives: Cambridge supports efforts to provide regional public transportation services for the general public and special transportation services for those who require assistance.
- o Policies:

- Cambridge supports efforts to provide transportation services to assist elderly and disabled residents who wish to remain in their homes.
- Cambridge supports carpooling and vanpooling by local commuters to reduce transportation costs and impacts.
- Cambridge supports development of additional park and ride locations.

#### Recommendations:

- Cambridge should continue to support the non-profit services provided at the regional level, which provide public transit and other services.
- Cambridge should continue discussions to bring the Chittenden County Transportation Authority (CCTA) service to the Town and to provide adequate locations for parking and bus stops.
- Cambridge should continue to appoint a municipal representative to the Lamoille County Transportation Advisory Committee (LCTAC) to coordinate transportation planning, road maintenance, and improvements with adjoining town and to ensure that the interests of the Town are adequately addressed by the region and State.

## Housing

- Variety of Housing
  - o Objective: Cambridge seeks to have a variety of housing available to meet the needs of all community members, visitors, and seasonal workers.
  - o Policies:
    - Cambridge supports a mix of housing types so that people of all ages, income levels, and household types have the opportunity live in town.
    - Accessory apartments are encouraged as they can provide needed income for homeowners and add to a mix of diverse housing options.
    - Multifamily housing is allowed in locations similar to those generally used for single-family conventional dwellings.
    - Vacation homes are encouraged.

## o Recommendations:

- Higher density housing should be located near Villages and Growth Areas to enable ease of access to services and reduce the expense of municipal services.
- The Town should investigate ways to monitor conversion of single family dwellings to apartments and to ensure safe conditions of rental properties.

The Planning Commission should continue to monitor changes in population demographics to determine if adequate housing exists for all segments of the population.

## Housing Affordability

 Objective: The Town of Cambridge seeks to promote housing for purchase or rent that is affordable to households of all income ranges.

## o Policies

- Manufactured homes will be treated in the same manner as site built homes.
- Affordable housing should be encouraged in areas with access to services (for example, in proximity to Village and Growth Areas and along major roadways).
- Affordable and low-income housing should minimize long term living costs through high quality design, efficient construction, energy efficiency, and proximity to employment and/or service centers
- Cambridge encourages land use patterns that are inherently more affordable by nature of cost efficiencies associated with construction (e.g. shorter access roads, common walls, proximity to public utilities, smaller lot sizes).
- Efforts by private developers and non-profit organizations to provide increased opportunities for affordable home ownership will be supported, provided the efforts are consistent with other elements of the Cambridge Town Plan.

## o Recommendations:

- The Planning Commission should work with the Lamoille Housing Partnership and other public/private entities to encourage development of an adequate supply of affordable housing in Cambridge. The Town should support efforts to create additional affordable and market rate owner-occupied, entry-level housing
- Cambridge should work to promote HomeSharing as a tool to create new housing options for residents.

#### Specialized Housing:

Objectives: The Town seeks to ensure households and individuals with special needs, including the elderly, handicapped, and lowincome households, are able are able to attain appropriate affordable housing.

#### o Policies:

The Town will support efforts that assist elderly and disabled residents who want to remain in their homes and will support community based health care systems that enable elderly and disabled people to remain in the community. • In order to allow Cambridge residents to remain in Town, Cambridge supports the development of elderly housing, assisted living, and nursing home facilities that are compatible with the physical and cultural characteristics of the community.

#### Recommendations:

- The Planning Commission should work with special needs service providers to encourage the availability of housing for those individuals with special needs.
- The Town should undertake a study to determine the feasibility and potential appropriate locations for elderly housing, assisted living, and/or nursing home facilities to locate in Cambridge. This study could be overseen by the Planning Commission or a special committee appointed by the Selectboard.

# Seasonal Worker Housing:

- o Objectives: Safe and affordable housing meeting the needs of short term visitors and seasonal workers is available within Cambridge.
- o Policies:
  - Cambridge supports efforts to provide housing for low income and seasonal employees.
- o Recommendations:
  - The Town should work with Smugglers Notch Resort and other recreational employers to identify quality, long-term solutions for seasonal employee housing.

## Energy

- Energy Sources:
  - Objective: For Cambridge to reduce dependence on outside sources of energy through energy efficiency and the use of locally available renewable sources.
  - o Policies:
    - Cambridge encourages the development and use of renewable energy sources.
    - All energy production projects situated within the Town of Cambridge should consider their impact on natural resources, wildlife, and working lands including farm and forestland.

#### o Recommendations:

- Cambridge should conduct an inventory of all renewable energy opportunities in town including wind, wood, hydroelectric and solar. Special attention should be given to opportunities that may exist on municipally owned properties.
- Energy Providers:

- o Objective: Residents and businesses in Cambridge should have reliable power types suitable to meet their needs.
- o Policies:
  - Cambridge supports efforts to upgrade energy transmission and distribution systems in order to increase efficiency, providing upgrades are consistent with the goals of the Natural Resources chapter of this plan.

#### o Recommendations:

- Zoning bylaws, if adopted, must address the needs of fuel providers. The bylaws should include areas in town for bulk storage of heating fuels including renewable energy fuel sources (biofuel) and specify locations for gasoline service stations and electric car charging stations.
- The Planning Commission should work with utility representatives to determine what role the Commission has in promoting increased efficiency of electrical energy usage and existing local utility lines.

## • Energy Consumers:

o Objective: Promote energy efficiency and conservation in the design, construction, and use of municipal structures and all new construction.

#### o Policies:

- Energy conservation and the use of renewable energy resources will be considered in town buildings and operations as appropriate.
- Energy efficiency will be included as a factor in municipal construction, purchases and uses. A Life cycle cost analysis method will be used by the town in evaluating capital expenditures as appropriate.
- Cambridge supports demand side management programs as appropriate to increase energy efficiency and reduce costs.
- The energy efficient clustering of development and site design which uses siting and landscaping techniques to reduce building requirements for power, lighting, heating, and cooling are encouraged.
- Ridesharing, and/or development of bike and pedestrian paths and park and ride lots, and increased public transportation opportunities to reduce transportation costs are encouraged.
- Home occupations and home based businesses that reduce transportation energy consumption and fuel expenses are encouraged.
- o Recommendations:

- Develop a local Energy Committee to conduct regular energy audits of municipal buildings and provide educational outreach on weatherization practices and incentives.
- Study the feasibility of developing another commuter park and ride lot in town.
- Coordinate the sitting of future Park and Ride lots with CCTA's new Jeffersonville to Burlington public transit line.
- Explore the idea of implementing a PACE (Property Assessed Clean Energy) Financing District in Cambridge. For more information on PACE visit:

  <a href="http://pacevermont.wikispaces.com/Welcome+to+PACE+Vermont">http://pacevermont.wikispaces.com/Welcome+to+PACE+Vermont</a>

## Historic, Scenic, and Archaeological Resources

- Historic Resources
  - o Objective:
    - Record and preserve the history of Cambridge.
    - Protect, maintain, and encourage the functional use of Cambridge's historic structures, sites, and areas.

#### o Policies:

- Efforts to compile a history of Cambridge are supported.
- Efforts to protect and preserve items and artifacts of historic significance to Cambridge are supported.
- Development within any designated historic district should be in character with the surrounding architecture.
- Cambridge encourages the restoration and reuse of historic buildings.
- Cambridge encourages the maintenance and continued functional use of historic structures, sites, and areas.
- Cambridge supports the efforts of the Cambridge Historical Society in order to implement the goals and policies of this chapter.
- Plans for transportation and other infrastructure improvements should consider impacts to historic resources.

#### o Recommendations:

- The Cambridge Historical Society should work with individual property owners to develop a historic resources inventory for the community and to review and verify existing inventories for completeness and accuracy.
- A historic district should be considered if zoning bylaws are proposed.
- The Town, Historical Society, or related entity should provide informational resources to owners of historic buildings on voluntary resources to maintain these structures
- The Planning Commission should coordinate with the

- Historical Society in order to implement the goals and policies of this Plan.
- Research and, if feasible, implement tree planting and other landscaping within the Old Cambridge Village Green to enhance the physical appearance of the Village and provide a buffer between North and South Main Street and commuter traffic on Route 15.
- Cambridge supports applications made by private citizens for Village Center Designation tax credits and Historic Preservation grants.
- Any upgrades to Route 15 through Cambridge Village should be mindful of the historic character of the area.
- Where feasible, upgrades to historic bridges should attempt to retain the structure's historic character.

#### Scenic Resources

- o Objective: Maintain the scenic character of Cambridge's landscape.
- o Policies:
  - Cambridge supports activities that help to maintain and enhance the working landscape and natural beauty of the Town.
  - The Town recognizes the importance of the Lamoille River and the Brewster River and their enduring scenic and recreational values.
  - Telecommunications towers, wind turbines, and other large obvious structures shall be designed and carefully sited to minimize impacts on scenic resources. Community input shall be sought and considered through all phases of the permitting and development process for such structures.
  - Development of high elevation ridgelines is strongly discouraged. Where ridgeline development does occur, it shall be designed and sited so as to maintain the natural scenic character of Cambridge.
  - Development in the Conservation District, which is not for forestry purposes, is strongly discouraged unless designed and sited not to have a negative impact on the District.
  - Development in the Sterling and Madonna Ridge viewshed shall be designed and sited so as not to negatively impact the scenic quality of the area.
  - Development and subdivision along State highways should be designed and sited to maintain the scenic qualities of the area. Options for accomplishing this include use of PUDs, clustering of building lots, and locating of buildings to frame scenic views.

#### o Recommendations:

The Development Review Board should consult regularly

- with the Planning Commission to determine if updates to the subdivision are needed in order to provide clarity to applicants and achieve the goals and objectives identified in this Plan.
- The Planning Commission should review the Cambridge tower ordinance to ensure the provisions are adequate to achieve the scenic goals of this Plan.
- The Planning Commission should incorporate ridgeline standards in any zoning or subdivision bylaws. Alternatively, the Planning Commission could consider developing a ridgeline ordinance to regulate development in certain scenic areas of town.
- The Planning Commission should develop clear community standards regarding use of scenic resources, including, but not limited to, ridgelines, scenic vistas, and the traditional landscape, which are admissible before the Public Service Board when reviewing energy generation/transmission or telecommunication projects. These standards should be developed based on extensive input from the community. Once developed these standards should be incorporated into this Plan.

## Archaeological Resources

- Objective: Identify and preserve Cambridge's fragile archaeological record.
- o Policies:
  - Projects occurring in the archaeologically sensitive areas in Town should consider the potential of their project to impact an archaeological site during the early planning stages. This will offer the best opportunity to minimize potential impacts.
  - If during the development of a project, an archaeological site is discovered, the Town must be given a reasonable opportunity to investigate and suggest a means to minimize the impact.
- o Recommendations:
  - Where an archaeological site is discovered on an undeveloped property or part of a property, the Town supports the purchase of the property or development rights on the affected portion as a means of compensating landowners for the loss of development potential. Purchase of development rights are always on a willing seller basis.
  - The Planning Commission should develop a comprehensive set of provisions within the zoning bylaws to achieve the policies of preservation of archaeological resources.

# Land Use and Development

o Objective:

For development and growth in Cambridge to occur in a reasonable and sustainable manner so as to protect the natural resource base, to use services efficiently, and to preserve Cambridge's rural character and historic settlement To this end, development should be organized based on type and density, so that higher densities are directed toward Villages and Growth areas. of infrastructure consideration and natural resource constraints.

#### Policies:

- Cambridge supports development that is sensitive to the inherent limitation of the land and its impact on the environment, community services, and the visual landscape.
- Cambridge encourages diversity within its economic base by supporting commercial and industrial development that is in keeping with the scale and character of the community.
- Higher density residential developments should be located closer to major roadways and Village and Growth Areas to improve emergency service response.
- Mixed-use developments are encouraged in Village and Growth Areas to allow commercial, business, low-intensity industrial, and residential uses to be located near each other.
- Growth and development in the Route 108 South Area should be designed and located so as to minimize disruption of scenic views along the corridor and to ensure smooth traffic control and organized access management.
- Especially in the Rural Residential and Conservation/Forest areas, the clustering and/or siting of development is encouraged in order to protect rural and scenic character and to maintain contiguous tracts of resources and open space.
- The Flood Hazard area is intended to protect life and property within Federally designated flood hazard areas. Development in this area shall not exacerbate flooding or fluvial erosion upstream or downstream. Any new or substantially improved structure should be elevated or flood proofed at least one foot above the 100-year flood elevation. Use of structural piers and other techniques that allow floodwaters to flow beneath a structure is preferred over use of fill, which displaces floodwaters onto other properties.
- Land within the Conservation/Forest Area and Flood Hazard Area should receive high priority for conservation funding.
- Infrastructure investments made by the Town, Villages, and State should reinforce the development patterns outlined in this Plan.

#### o Recommendations:

- The Planning Commission should work closely with local developers, landowners, and businesses in defining innovative ways of encouraging development activity that will serve to enhance the rural character of the community.
- The Planning Commission should ensure that existing Cambridge Subdivision Regulations are effective in implementing the goals and objectives of this Plan. If the Subdivision Regulations are found not to be effective, the Planning Commission should initiate a public process to discuss potential amendments to address any deficiencies.
- The Planning Commission should facilitate regular communication with the Development Review Board regarding current development trends.
- Cambridge should investigate the need and support for local development controls that will implement the goals and objectives of this Plan while encouraging flexibility and creativity as part of the development process.
- The Planning Commission should engage in a community discussion and review of appropriate use and development of flood hazard areas.
- Infrastructure upgrades that enable or enhance opportunities for mixed use development in Village and Growth Areas are supported.
- Cambridge should encourage low-intensity industrial uses in the Village and Growth Areas that are compatible with existing uses.
- The Planning Commission should review all 'Act 250' applications for its compliance with the land use plan. Where the application is determined to not conform to this Plan or any goal or policy, the Planning Commission should participate in the 'Act 250' process in order to ensure the concerns of the Town are addressed.

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## **COMMUNITY PROFILE (2013)**

This report is drafted based primarily upon the US Census and from an amended version of the Town and Village of Cambridge Municipal Development Plan 1995 and amended in 2003 and 2008. Other sources have been referenced as appropriate.

When reviewing Census information, references to "town" figures also include both villages. References to the villages apply only to the village population. In general the discussions in this report will center on the town with limited discussions of the villages' sub-populations.

This report is primarily descriptive therefore there are no policies or goals associated with this chapter. The facts and figures in this report may be referred to and discussed in more detail in later reports.

## A. Geography

The Town of Cambridge covers an area of approximately 40,637 acres (63.5 square miles) on the western side of Lamoille County. The northern edge of Mount Mansfield, Vermont's highest peak, lies to the south, and the Lamoille River, Vermont's third longest waterway, traverses the northern third of the Town from east to west. Cambridge is notable for having the greatest change in elevation of any town in Vermont, due to the fact that the Town includes both Mount Mansfield and the Lamoille River Valley. A variety of physical environments exist throughout the community. There are villages, farms, and forestland from the agriculturally rich bottomland along the Lamoille River to the thin, stony soil in the high elevations on the northern slope of Mount Mansfield.

## B. History and Development

Cambridge was chartered in August 1781 and organized in March 1785. Within the Town lie two incorporated villages-- Jeffersonville and Cambridge Village. These villages function as the commercial centers of the community and serve as locations for community services and higher density residential development.

From the establishment of the Town in the late 18th century until after World War II, the economic base of the community was primarily agriculture, forestry, and related industries. In 1960 social and economic forces outside the community led to rapid growth and development and changed the economic focus of the Town.

The development of the ski industry in the Town led to the establishment in 1973 of a village and year-round resort community, Smuggler's Notch

Resort, adjacent to the Mount Mansfield State Forest.

## C. Municipal Government Structure

The governing of the Town of Cambridge is conducted by three elected members of the Selectboard (the Town's legislative body). Located within the Town of Cambridge there are two chartered Villages, the Village of Cambridge and the Village of Jeffersonville. Each of the Villages has its own elected boards, the "Board of Trustees." The Cambridge Village Trustees are primarily responsible for management of the Cambridge Village Water System and other public infrastructure in Cambridge Village (excluding roads). Cambridge Town and Village share a Municipal Plan and Planning Commission. The Jeffersonville Village Trustees are responsible for management of most of the public infrastructure in Jeffersonville Village (excluding roads). In addition, Jeffersonville maintains an independent Planning Commission and Municipal Plan. As a result, Jeffersonville may adopt land use regulations independently from the Town of Cambridge and is not subject to land use regulations adopted by Cambridge.

For matters concerning the School Districts (Lamoille Union School District and Cambridge Elementary School District), there are two elected boards; the Board of Grade School Directors and the Board of Union School Directors (see the Education Section for further information on these Boards).

There are a number of other elected and appointed positions important to the running of the Town, such as the Town Clerk, Auditors, Listers, and the Planning Commission. See the most recent Town Report for a complete listing of the currently elected and appointed members of the Town's Boards, Trustees, and Commissions.

## D. Demographic Profile

In 2010, the US Census revised the data collected for the Census, eliminating many categories. Eliminated categories can now be found in the American Community Survey, an ongoing survey that provides data for a number of social and economic categories. Notations have been made where the data is different between the 2008 and 2013 plans. Additional information, including quick tables and detailed data tables, can be found at <a href="http://census.gov">http://census.gov</a>

## Resident Population

Population Growth

According to the 2010 Census, Cambridge has a population of 3,659. This represents a 15% increase from 2000--one of the fastest growth rates of the ten Lamoille County towns and well above the county rate of 5.3%. Since

1990, Cambridge's population has increased 37%.

Since 1791, Cambridge has experienced three distinct periods of population change--rapid population growth between 1791 and 1850; slow population decline between 1850 and 1960; and since 1960 rapid population growth at an even faster rate than during the initial period (see Figure 1).

In 1960 the population of Cambridge was 1,295, and about 43% lived in the villages. The Town's population increased to 1,528 in 1970, 2,019 in 1980, and 2,667 in 1990 before reaching 3,186 in 2000. At the time of the latest Census, the villages only constituted 26% of the overall population (see Figure 1).

In comparison with the Town population, the Village of Cambridge population has remained static for the last 40 years. The total population of Cambridge Village in 1960 was 217, and by 2010 it had increased to 236. In between, the population rose as high as 292 in 1990 and was as low as 211 in 1980. During 1970 the population was the same as it was in 2000; 235 persons (see Figure 1).

The Village of Jeffersonville has seen modest population growth within its boundaries. In 1960 the population was 346; increased to 382 in 1970 and to 491 in 1980 before declining to 462 in the 1990 census. By the 2010 count, the population had grown to 729 (see Figure 1). Jeffersonville's population growth has climbed exponentially, 28% from 2000 (568) to 2010 (729).

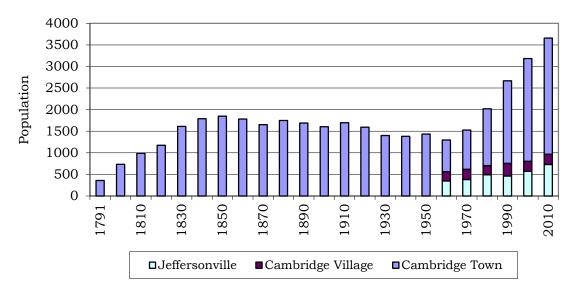


Figure 1. Population of Cambridge 1791-2010

Source: US Census

<sup>\*</sup> Village population figures prior to 1960 were not found.

# Factors affecting population growth

Population change is the result of two sets of factors – natural increase and net migration. The population change shown on Table 1 is the difference between Census counts. Population dropped between 1950 and 1960 but increased during each of the past four decades. The population had its greatest increase during the 1980s when the population grew by 648 persons.

Table 1. Changes in population between Census counts from 1950-2010.

Period	Change in population	Percent change
1950-1960	- 140	- 9.8 %
1960-1970	+ 233	+ 18.0 %
1970-1980	+ 491	+ 32.1 %
1980-1990	+ 648	+ 32.1 %
1990-2000	+ 519	+ 19.5 %
2000-2010	+ 473	+ 14.8%

Source: US Census (1950-2010)

Table 1b compares population growth in Cambridge over the last decade with population growth in surrounding Towns, Lamoille County, and the State of Vermont. As this table demonstrates, Cambridge has grown at a faster rate than most of its neighbors (with the exception of Fairfax, as well as Lamoille County and the State of Vermont).

Table 1b. Population Change Since 2000 for Cambridge and Neighboring Towns.

Town	2000	2010	% Change in
Τοωπ	Population	Population	Population
Cambridge	3,186	3,659	14.8
Fairfax	3,527	4,285	21.5
Fletcher	1,179	1,277	8.3
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 Vermont	608,827	625,741	2.8

Source: U.S. Census 2000, 2010

Populations increase 'naturally' when more people are born over a certain time period than die. The Vermont Department of Health has kept birth and death statistics for each town since 1857. Table 2 shows the number of

recorded births and deaths in the Town of Cambridge in each of the past five decades. One observation of this table is that the growth due to natural causes has been fairly steady with growth around 10% per decade. If this trend were to continue, it would result in moderate population growth in the future.

Table 2. Population change due to natural increase

Period	Births	Deaths	Increase	% population change
				due to natural increase
1950-1960	*	*	142	+ 9.9 %
1960-1970	*	*	123	+ 9.5 %
1970-1980	300	170	130	+ 8.5 %
1980-1990	424	153	271	+ 13.4 %
1990-2000	472	162	310	+ 11.6 %
2000-2010	566	201	365	+ 9.9%

Source: Vermont Department of Health Vital Statistics (1950-2010)

Net migration is the second factor affecting population change. This information is determined by subtracting the natural increase from the total change in population. For example, it is known from Census data that there was an increase of 473 persons in Cambridge between 2000 and 2010 (see Table 1). It was determined that, of the 473 persons, 365 were the result of natural increase (see Table 2) therefore the other 108 were the result of migration (see Table 3).

Table 3. Net migration

Period	Net migration	% population change due
		to net migration
1950 – 1960	- 282	- 19.7 %
1960 – 1970	+ 110	+ 8.5 %
1970 – 1980	+ 361	+ 23.6 %
1980 – 1990	+ 377	+ 18.7 %
1990 – 2000	+ 209	+ 7.8 %
2000 - 2010	+ 108	+4.9 %

Unlike natural increase, net migration has varied greatly. During the 1950s, 282 more people moved out of town than moved in resulting in a population drop of close to 20%. By comparison, 377 more people moved into town in the 1980s. The 1970s experienced the highest percentage gain in population from migration. The trend has been slowing over the past two decades although still making a significant contribution to the population growth in town. If the current migration rates continue to slow, the population will grow at a moderate rate. There are many social and economic factors that could affect migration rates over the next decade, including how well

<sup>\*</sup> Individual birth and death figures for the 1950s and 60s not found.

Chittenden County addresses their housing problems. If the County fails to address the issues, this will place additional pressures on towns like Cambridge that are within a commutable distance from Essex, Milton, and Burlington.

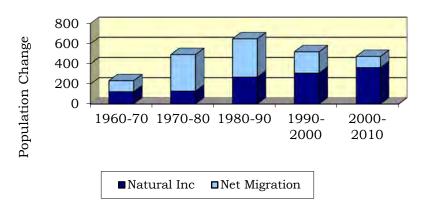


Figure 2. Components of Population Change

Over the past twenty years, the increase in population has been split evenly between natural increase and migration. Since 1980, the population has increased by 1167 persons, of which there was a natural increase of 581 persons and a net migration of 586 persons. The difference between the factors is that the natural increase has been steady while the net migration is slowing (see figure 2).

# Age Distribution

From 2000 to 2010, the proportion of the population in the 50-55 year old age groups increased more than any other age group (see Figure 3). This trend continued in retired age groups as well but not to the degree found in the 'baby boomer' age groups. As the population has been increasing, the number of young people from age 9 to 24 has remained about the same. The number of young children under 5 has increased quite a bit from 2000. With the aging of the Cambridge population, the Town may need to review services to ensure that the needs of an ever increasingly older population are met.

As expected from Figure 3, the median age in Cambridge increased considerably. In 1970 the median age was 28.2. This has increased with each census (1980- 29.3; 1990- 31.7) until 2010 when the median age reached 37.9.

Another figure typically examined with age groups is the <u>percentage</u> of individuals under 18 and over 65. These age groups, especially under 18 years of age, require more services than individuals in their working years. The lower the percentage of youths and seniors, the easier it is to afford to provide services. Examining figures, again back to 1970, Cambridge is in a much better position to provide for our youths and seniors than at any other time. In 1970,

over half of the population was either under 18 or over the age of 65 (36.9% and 13.4% respectively). At the time of the 1980 and 1990 census the percentage of youths decreased and then remained steady at 29.9% and 29.4% while the over 65 group decreased to 10.4% in 1980 and to 7.9% of the population in 1990. By 2000, the overall percent of the population in these two categories decreased to less than one third. In 2010, the under 18 age group fell to 25.9 percent although the over 65 has begun to increase again and is now 9.4% of the population.

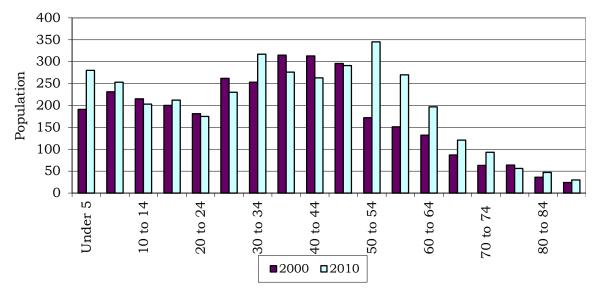


Figure 3. Population by age groups in Cambridge 2000-2010

Population Predictions

Various agencies in State government periodically make future population predictions using complex models that rely on some of the information discussed above (age distribution, migration rates, birth and death rates). It should be noted that population projections are expectations of what might occur. As with any prediction, the accuracy depends on the validity of its underlying assumptions. While imprecise, they can give an idea of where the overall population may be heading.

Since 1970 there have been four official population forecasts. An early prediction from 1979 was for Cambridge to grow at a moderately rapid rate and have 3,108 residents by the year 2000 (see Figure 4). This 1979 prediction, incidentally, turned out to be the most accurate as the actual 2000 figure was 3,186. In 1983 the predicted growth rate was adjusted down and expected 2,908 persons by 2000. Just before the 1990 Census the State released another prediction and again adjusted the predicted growth rate down. This prediction expected 2,801 persons in 2000.

The next population projections were from the Vermont Health Care

Authority (1993) and predicted a growth rate of 24.4% between 1990 and 2000 (Figure 4). This prediction turned out to be too high with the predicted population by year 2000 to be 3,318 (132 persons too high). This same prediction projected populations out to 2015 as well. The final set of predictions from the State was released in 2003 and forecasts Cambridge's population out to 2020. These estimate a 16% growth rate for the first ten years and a 13% growth rate for the second ten years. This prediction expects Cambridge to have 4,000 residents by the year 2016 and 4,175 by 2020. This would represent a 31% increase in population from 2000.

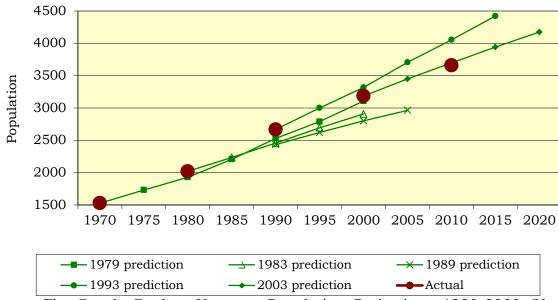


Figure 4. Population Predictions for the Town of Cambridge

Sources: The People Book – Vermont Population Projections 1980-2000 (Vermont State Planning Office 1979); Vermont Population Projections 1985-2000 (Vermont Department of Health 1983); Vermont Population Projections 1990-2005 (Office of Policy Research and Coordination 1989); Vermont Population Projections 1990-2015 (Vermont Health Care Authority 1993); MISER Population Predictions for Vermont, 2000-2020 (Stefan Rayer 2003).

Comparing the actual 2000 Census figures to the earlier predictions it can be concluded that the State has generally been in the range for population growth in Cambridge. The next set of predictions from the State, developed in in 2003, forecast Cambridge's population out to 2020. The lesson to be learned here is that, when viewing the new population forecasts, it should be kept in mind that the State predictions have only been close over the past 20 years with regards to Cambridge.

#### Education

Comparing the 2000 Census and 2010 American Community Survey (ACS), Cambridge continues to increase the level of educational attainment. Already above the County averages in 1990, Cambridge increased the

percentage of residents with a high school diploma or higher from 87.4% to 91.2% of all residents over the age of 25. This percentage again increased in 2010 to 97.1%. The percentage of residents with at least a bachelor's degree also increased to 39.6% (see Table 4).

Compared to the County and the State, Cambridge had a larger proportion of its population reporting completion of high school. The percentage of residents with a bachelor's degree was above the State average of 33.3% and above the County average of 34.6%.

Table 4. Educational attainment (percent of population over age 25)

	1990	2000	2010	Lamoille	Vermont
				County	
Less than 9th	5.3	3.5	1.6%	2.5%	3.3%
grade					
9 <sup>th</sup> to 12 <sup>th</sup> grade,	7.3	5.3	1.3%	5.4%	6.2%
no diploma					
High school	37.1	32.1	34.8%	31.1%	32.0%
graduate					
Some college, no	14.6	19.2	11.8%	17.5%	16.8%
degree					
Associate degree	9.4	9.1	10.9%	9.0%	8.4%
Bachelor's degree	18.6	21.9	28.1%	22.8%	20.2%
Graduate or	7.8	8.8	11.5%	11.8%	13.1%
Professional					
degree					
% High school	87.4	91.2	97.1%	92.2%	90.6%
grad or higher					
% Bachelor's	26.3	30.7	39.6%	34.6%	33.3%
degree or higher					

Source: US Census 2010 and ACS 2011

Management, business, science, art

Production, maintenance

Production, materials moving

Figure 5. Occupations of Cambridge Residents

#### *Industries*

While "occupation" discusses the profession of the employee, "industry" discusses the type of field the individual works in. For instance, in Figure 5 above, a manager at a manufacturing plant would be classified under "management" as an occupation <u>and</u> as "manufacturing" as the industry in Figure 6 below. Because many people do not work in Cambridge, some of these industries are in other areas of the state. The Economic Development section will discuss further the industries located within and outside the Town of Cambridge (see Figure 6 on the next page).

The four industries that employ the greatest number of Cambridge residents are "education, health care, and social services," "manufacturing," "arts, entertainment, recreation, accommodation, and food services," and "professional, scientific, management."

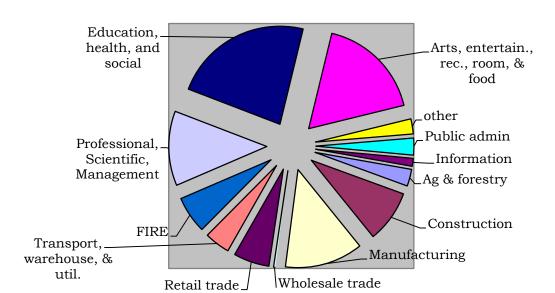


Figure 6. Industries Employing Cambridge Residents

### *Income and Poverty*

The median household income in 2010 for Cambridge was \$61,741- 19% higher than the State average (see Table 5). The Town of Cambridge, Lamoille County, and the State all increased median incomes a similar amount between 1990 and 2000. Residents of the Villages did not fair as well as the Town as a whole. Both of the Villages had median incomes greater than the State and County averages in 1990, but by 2000, and again by 2010, incomes had grown minimally resulting in incomes well below the County and State medians.

The Town of Cambridge has a poverty rate lower than the State and County average-- 8.8% of all residents. Although this is low, the needs of these individuals must be addressed in discussions of housing and employment. One third of those individuals with earnings below the poverty level live in the Villages. According to other figures, a majority of those in poverty (83%) are between 18 and 65 with few seniors or children. Related children make up 17% of those in poverty while another 2.3% are seniors. Of those in poverty, County and State figures both put children at 14%-15% and seniors at 8%. While only speculation, the ski resort may be a contributing factor to the higher than expected 18 to 65 year old poverty rate. Employees of recreational areas, such as ski resorts, tend to be lower salary wage earners or are part time or seasonal workers.

Table 5. Median household income and percent below poverty level.

	1990	2000	2010	%	%	% below
				change	below	poverty,
				(1999-	poverty	2010
				2010)	1999	
Town of	\$33,413	\$44,950	\$61,741	37.4	5.2	8.8
Cambridge						
Vil. of	\$31,125	\$31,250	\$38,750	0.24	9.0	12.6
Cambridge						
Vil. of	\$33,011	\$38,333	\$42,917	12.0	6.6	21.7
Jeffersonville						
Lamoille	\$27,315	\$39,356	\$52,232	32.7	9.6	12.0
County						
State of	\$29,792	\$40,856	\$51,841	26.9	9.4	11.1
Vermont						

Source: U.S. Census 2010

### Non-Resident Population

Non-resident, or seasonal population, has an important effect on Cambridge. It increases the demand for community facilities and services and at the same time, contributes to the local economy. Reliable non-resident population data is not available; however, 4.5% of housing units in Cambridge are considered "seasonal." In the future, the assessment of non-resident population data will be important in developing a better understanding of the additional demand for municipal facilities and services.

# E. Type of Community

### Job center or bedroom community?

One common way of classifying a community is to determine if it is a "bedroom community," an "average community," or a "job center'." **Job centers** have more jobs than resident workers or more than two-thirds of the resident workforce is working within their community. **Bedroom communities** have more than two-thirds of the resident work force leaving town for employment. An **average community** has is one that qualifies as neither a job center nor a bedroom community. Residents generally discourage becoming a bedroom community as it hampers the development of strong communities. While there are always residents who need to commute to jobs in other towns, when it becomes too prevalent, people become disconnected from their towns and problems can result. For example, finding volunteers for the fire or rescue squads is difficult because most residents are too far away to respond to calls during work.

Based on 1980 and 1990 census information, Cambridge was classified as an average community (see Table 6). Slightly more than 39 % of residents in the workforce were employed in town but above the 33.3% needed for classification as a bedroom community.

By 2000, Cambridge had become classified as a bedroom community. 69.3% of residents in the workforce now leave town for employment in other places. Unfortunately, the data used to develop this table was not collected for the 2010 Census. Data provided by "On-the-Map" (an online mapping service which links Census and employment data) indicates that, as of 2010, only 20% of Cambridge residents were employed in Cambridge. The same data source shows that 24% were employed in Cambridge as of 2002. Since these data sources differ, direct comparisons cannot be made. However, both sources show a trend toward Cambridge residents leaving town for employment. If Cambridge wants to change this trend, there must be an investment in local jobs to give workers the opportunity to stay in the community. This will be explored further in other reports associated with this Town Plan.

Table 6- Factors determining Cambridge's community rating (1980-2010)

Year	# of local jobs	Resident workforce (RW)	RW employed locally	# of local jobs > RW?	% RW employed locally	Community rating
1980	579	843	331	No	39.2	Average
1990	647	1342	529	No	39.4	Average
2000	1,226	1803	553	No	30.7	Bedroom
2010						

Source: U.S. Census 1980-2010

### **ECONOMIC DEVELOPMENT REPORT (2013)**

This report is drafted from an amended version of the Town and Village of Cambridge Municipal Development Plan 1995 and amended in 2003.

The foundation of Cambridge's economy has historically been its resource base. Initially agriculture and forestry have dominated the community's economy and over the past 200 years have helped shape the landscape. This working landscape and the natural beauty of the area have contributed to the recent growth of the Town as a residential "bedroom" community and to the expansion of the recreation/tourism industry over the last fifty years.

## A. Components and Characteristics

The local Cambridge economy is based upon a mix of one very large company (Smugglers' Notch Resort), a few medium size companies (G.W. Tatro Construction and Jack F. Corse Inc.), and many small businesses. Businesses that rely on recreation and tourism are becoming more prevalent. While this creates new opportunities, it may leave the Town at risk of becoming dependent on the boom-bust cycle of tourism. At the same time, Cambridge residents are more likely to be leaving town for work elsewhere (see Section I-Community Profile) With this change, Cambridge has evolved into a "bedroom" community. New residents create a local customer base for Cambridge businesses. However, as more residents work outside of Town, Cambridge becomes more dependent on other communities for its economic future. In order for Cambridge to remain economically strong, the community will need to have a balanced and diverse local economy that provides rewarding job opportunities at a livable wage.

Major sectors of the economy in Cambridge include construction, manufacturing, service and professional businesses, recreation and tourism, agriculture and forestry, and municipal employment.

#### Construction

As noted elsewhere in this chapter, many Cambridge residents are employed in the construction industry. The largest local construction company is G. W. Tatro Construction, with about 45 employees. Construction at Smugglers Notch, Stowe Mountain Resort, Jay Peak, and other resorts, renovation and expansion of camps and second homes, and new housing development all represent opportunities for residents employed in the construction industry.

The construction industry was particularly hard hit by the decline of the housing market at the onset of the "Great Recession." Identifying

new opportunities that utilize the skills of residents in the construction industry, such as energy retrofitting and specialized construction, should be a priority for regional and state workforce development organizations.

# Manufacturing

Manufacturing is a critical piece of the local economy. Cambridge Enterprise Park houses several manufacturing industries, although many small, light manufacturing uses operated out of homes or other locations can also be found in Cambridge. manufacturing offers higher wages and more stable employment than other sectors of the economy. In 2010, the average annual wage in the manufacturing sector in Lamoille County was \$38,144, while the average annual wage in the retail trade and accommodations and food services sectors were \$24,682 and \$22,017 respectively. The average annual wage figures may actually inflate earnings in the retail trade and food services sector because many of these jobs are seasonal in nature. This is particularly true in the accommodations and food services sector where quarterly turnover is 24.1%. In addition to lower wages and less predictable employment cycles, service jobs rarely include the same benefits as manufacturing jobs, such as health insurance or retirement plans.

Several manufacturers in Cambridge are "value added" industries meaning they take natural resources and add value to it. For example, milk, grapes, and timber all have some value. When those raw products are processed into something else (cheese, wine, or lumber) more value is added. In some cases, those products can be further processed. (For example, cheese and wine can be paired into a meal at a local restaurant, and lumber may turn into a hardwood table.) This is often referred to as the "economic multiplier." If Cambridge is exporting value added products rather than shipping raw materials to be processed elsewhere, the amount of money generated by those sales are greater. More jobs may also be created locally.

The transportation sector plays a critical role in supporting manufacturing. Currently, almost all finished products produced in Cambridge are transported to market via trucking companies. There are several locally owned and operated trucking companies located in Cambridge.

#### Service and Professional Businesses.

These businesses support residents and visitors with a variety of services from haircuts to car repair. Most of these are small independently owned operations. This is an important sector of the economy due to the overall number of persons it employs. Some

businesses, especially ones such as computers and childcare, provide support for other businesses in Cambridge.

This sector also includes the growing "creative economy." Several galleries and studios are located in Cambridge and Jeffersonville, and numerous artists and artisans call Cambridge home. Not only do the arts help define a community's character, they also provide local employment and bring visitors who may frequent other local businesses.

In addition to the arts, the "Creative Economy" includes film and new media, software and game development, publishing, advertising and marketing, and high-tech manufacturing arts. Creative economy firms in Cambridge range in size from one person advertising studios to a publishing company with several dozen employees.

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, 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. Cambridge's natural beauty, authentic historic character, wealth of recreational assets, growing art community, and proximity to the Burlington area place it as an attractive location for businesses operating in the Creative Economy.

### Recreation/Tourism

Recreation and tourism is a major, and growing, segment of the local, regional, and State Economy. Cambridge's topography and geography make it a hub for recreation and tourism. Part of Mount Mansfield State Forest, the State's largest and one of the most heavily visited, is located in Cambridge. The forest contains the State's highest peak as well as a segment of the Long Trail and the Smuggler's Notch Natural Area.

Since mid-1950, with the development of Smugglers Notch Resort on Sterling Mountain, recreation and tourism activities have expanded during the winter months. Once primarily a winter destination, like many other Vermont resorts, Smugglers Notch is expanding to create more "four season" activities. The creation of a self-contained village, the expansion of summer activities, and focus as a family resort has led to national recognition for the resort.

In addition to the Smugglers' Notch Resort, several shops, restaurants, lodges, and bed and breakfast businesses serve visitors throughout the year. Recreation and tourism have become a dominant force in the economy. Scenic and natural beauty remains an important element in tourism. Protection of these resources will be important to maintaining the recreation and tourism sector in the future.

Wildlife-based activities, including hunting, fishing, viewing, and photography, are estimated to have brought more than \$383 million to the State's economy (Vermont Forest Resources Plan, 2010). Hunters alone spend more than \$189 million in Vermont annually, according to a new survey conducted by the U.S. Fish and Wildlife Service and the U.S. Census Bureau. Wildlife-based recreation represents a potential economic driver for the Cambridge.

The Lamoille River flows through Cambridge. 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. Over time, the Greenway Trail could be connected to the Lamoille Valley Rail Trail, a planned four-season multiuse recreation path running from Sheldon Junction to St. Johnsbury. This connection could create a new customer base for both new and existing businesses. Further, the Rail Trail may make Cambridge 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.

#### Agriculture/Forestry.

The agricultural and forestry industry is an important component of the economy and is discussed in greater detail in the *Agricultural and Forest Resources* Section of this Plan. This sector is a valuable source of primary and secondary employment and is critical to the wise use of natural resources and the intrinsic character of the Town. Along with the few dairy farms left in Cambridge, the emergence of new diversified agricultural products has led some to say that Northeastern Vermont is experiencing an "Agricultural Renaissance." In addition to farm enterprises themselves, a vibrant agricultural economy relies on the availability of appropriate infrastructure, including roads, utilities, processing, and storage capacity.

# School and <u>Municipal Employment</u>.

There were 81 school and municipal positions in Town in 2010. There were 77 school and municipal positions in Town in 2006. These positions include school teachers, administrators, the Town Clerk, and the Highway Department.

### **B.** Labor Market

Economic data is difficult to obtain for small communities like Cambridge due to State and Federal rules governing confidentiality. Caution should be taken when interpreting information presented in this section.

### Employment.

According to the 2010 Census, 2,108 residents of Cambridge were in the labor force with 2,022 of them employed. The greatest percentage of workers head to Chittenden County for work (45%) while the second largest group stay in Cambridge for work (30%). The remaining 25% is split between other Lamoille County towns (15%), Franklin County (5%), and other destinations in and outside of the state. 101 residents (5% of the work force) work out of their home; 240 were self-employed workers in their own not-incorporated company; and the mean travel time to work is 32.9 minutes.

Smuggler's Notch Resort is the community's largest employer with over 200 full-time employees and 600-800 part-time/seasonal employees drawn from communities both within and outside of Lamoille County.

The U.S. Bureau of Labor Statistics provides a Quarterly Census of Employment and Wages (QCEW) and makes information available to the Vermont Department of Labor (formerly the Vermont Department of Employment and Training). The QCEW reports annually on "covered employment" (i.e. those jobs which are covered by unemployment insurance - UI) by town. The reports include number of jobs and average wages for each sector (see Table 7). Cambridge residents who are self-employed might not be included in these figures; these figures may include non-residents who are employed in town; they may include part time employees.

Table 7. Covered employment and wages- Cambridge 2006, 2011

NAICS	Industry	Avg. units (2006)	Avg. Units (2011)	Total empl (2006).	Total empl. (2011)	Total wages (thousands, 2006)	Total wages (thousands, 2011)	Avg. Wage (2006)	Avg. Wage (2011)
	Total covered	124	121	1,258	1,187	\$32,099	\$32,274	\$25,509	\$27,192
	Private ownership	115	116	1,166	1,092	\$29,187	\$29,060	\$25,032	\$26,604
	Goods producing	33	28	143	145	\$5,695	\$5,724	\$39,897	\$39,479
11, 21	Nat. resources & mines	3	7	15	*	\$ 250	*	\$16,356	*
23	Construction	27	19	117	101	\$5,063	\$4,478	\$43,428	\$44,306
31-33	Manufacturing	3	2	11	*	\$ 381	*	\$35,215	*
	Services providing	82	88	982	947	\$18,771	\$23,335	\$19,123	\$24,633
42-49, 22	Trade, trans- port & utils	24	24	142	141	\$	\$3,403	\$19,178	\$24,140
51	Information	3	1	*	*	*	*	*	*
52-53	Financial	4	6	*	*	*	*	*	*
54-56	Professional & business serv	14	17	25	48	\$ 675	\$2092	\$26,817	\$43,227
61-62	Education & health serv.	11	10	69	64	\$2,013	\$2,397	\$29,171	\$37,269
71-72	Leisure & hospitality	16	17	738	639	\$16,457	\$13,558	\$22,285	\$21,235
81	Other services	11	14	22	27	\$ 703	\$855	\$31,469	\$31,492
	Government totals	9	6	92	95	\$2,912	\$3,214	\$31,533	\$33,989
	Federal government	5	2	10	7	\$ 383	\$361	\$37,677	\$49,236
	Service providing	5	2	10	7	\$ 383	\$361	\$37,677	\$49,236
42- 49,22	Trade, trans- port, & utils	4	2	10	7	\$ 380	\$361	\$38,979	\$49,236
92	Public admin	1	3	0	9	\$ 269	\$322	\$ 7,005	\$36,880
	State government	1	0	5	0	\$ 222	0	\$44,440	0
	Goods producing	1	0	5	0	\$ 222	0	\$44,440	0
23	Construction	1	0	5	0	\$ 222	0	\$44,440	0
	Local government	3	4	77	87	\$2,306	\$2,853	\$29,889	\$32,707

	Service providing	3	4	77	87	\$2,306	\$2,853	\$29,889	\$32,707
61-62	Education &	1	1	67	79	\$2,038	\$2,530	\$30,224	\$32,242
	health serv.								
92	Public admin	2	3	10	9	\$ 269	\$322	\$27,573	\$36,880

Source: Vermont Department of Labor Economic and Labor Market Information, 2011, data from the U.S. Bureau of Labor Statistics

<sup>\*</sup>Information not publishable but included in subtotals.

Table 7 shows the NAICS code, industry, annual average reporting units (number of businesses), annual average employment (number of employees covered by UI), annual total wages, and annual average wage. Examining the table, private companies make up the majority of businesses and employees in Cambridge. Private businesses pay 18% less than the total town average of \$32,707. Of the 116 private businesses, 88 are "service providing" while the remaining 28 are "goods producing." Goods producing employers paid on average \$15,116 more per year than the average service job in Cambridge and \$12,287 less than the average covered job in Cambridge. Service positions averaged \$2,559 less than the town average.

Government positions contributed only 95 of the 1,187 employees in Cambridge but earned \$7,000 more a year, on average, than private employees. Of all sectors, Federal employees in service providing and transportation jobs earned the highest wages (\$49,236), and private "leisure and hospitality" employees earned the least (\$21,235). This latter sector is composed overwhelmingly of retail sales positions.

Employment and income data for Cambridge residents are reported in the Community Profile Section of this report. A comparison of those figures with employment and wage data presented in this section indicates a wide discrepancy between median incomes and average wages paid by businesses in the Town.

In 2010, Cambridge had the second highest median earnings for workers in Lamoille County at \$32,279. This is an increase from the 2000 Census when Cambridge had the fourth highest median earnings for year round workers at \$30,265. Vermont Department of Employment and Training figures in 2000 show that the average annual wage paid by businesses in town was \$20,938, which was below average for the region (\$23,542). Vermont Department of Labor figures from 2010 again show that Cambridge was below average for the region and in the bottom three, with the average annual wage being \$26,369 compared to the County average \$32,047. Cambridge, however, had the lowest percentage in the County (tied with Wolcott) of people with incomes below the poverty level (8.8%) according to the 2010 Census.

These differences serve as indicators of a bedroom community whose population travels outside of the town or county for higher paying employment. In this case, it is likely that residents travel to higher paying jobs in Chittenden County while enjoying the rural amenities and generally lower cost of living in Cambridge.

Percent unemployment 10 8 6 4 2 0 1990 966 866 2006 2008 992 2002 2004 994 **→** Cambridge ──Lamoille Co.

Figure 7- Unemployment rates for Cambridge, county and state

Source: Vermont Labor Market Information. \*Represents the month of April only using most recent data available.

### Unemployment

Unemployment figures are used as a primary indicator of the overall economic health of an area. Figure 7 shows unemployment rates for Cambridge and Lamoille County as compared to Vermont for the past decade. Unemployment rates for Cambridge, Lamoille County, and the State all peaked in 1992 and generally declined until 2000. The rate rose again through 2003. Unemployment rates peaked during the height of the great depression. While unemployment has since declined, it is still above 2000 levels. Overall, Cambridge historically was better than the County average and slightly worse than the State average. Recently though, the Town has lagged behind both the State and County averages.

# Livable wage.

The median household income in Cambridge for 2010 was \$61,741- an increase of 27% from 2000. County wide the median household income was \$52,232, and the statewide figure was \$51,841 (see Community Profile for more discussion). A look at household income sources in Cambridge for 1999 shows that 3.0% received income from Supplemental Security Income (SSI, a program that pays benefits to disabled adults and children), and 2.4% received some form of Public Assistance income. In 2010, this number increased to 5.5% for SSI and 2.9% for Public Assistance funding. Close to 20% of Cambridge's population receives Social Security income.

A livable wage is the salary required in order to meet a family's needs, plus all applicable State and Federal taxes. Basic needs include food, housing, child care, transportation, health care, clothing, household and personal expenses, insurance, and 5% savings. The larger the family, the more income is required to fulfill those needs. Studies by the Peace and Justice Center in 1998 set the formulas with income figures updated in odd numbered years. In 2009,

these figures show a single person needs to earn \$16.41 per hour (\$34,132 per year) to meet basic needs. This increases to over \$78,000 for a family with two wage earners and two children. Note that these income figures assume health care is paid for by the employer. This is a change from previous livable wage calculations.

Table 8. Livable wage for various family types.

Livable Wage: Basic Needs + Taxes (all figures per wage with employer-assisted health insurance)					
Family Unit	Hourly wage (Annual Wage*)				
Two adults, no children	\$13.04 each (\$54,246/ yr)				
Single person, no children	\$16.41 (\$34,132/ yr)				
Single parent, one child	\$23.04 each (\$47,923/ yr)				
Single parent, two children	\$28.58 each (\$59,446/ yr)				
Two parents, one wage earner, two children (assumes no childcare)	\$30.11 each (\$62,629/ yr)				
Two parents, two wage earners, two children	\$18.75 each (\$78,000/ yr)				

<sup>\*</sup>Annual household income

Source: Peace & Justice Center's Vermont Livable Wage Campaign

The average wage offered by employers in Cambridge in 2010 was \$27,192 which is well below the livable wage for a family and a single person. Cambridge should make every effort to support businesses interested in locating in Cambridge, especially those that will offer jobs at a livable wage. For wage and salary workers, this is typically in construction and manufacturing. Sales and service jobs generally pay minimum wage or slightly above and rarely provide benefits.

# C. Tax Receipts and Grand List

An important component of economics is taxes. Federal, State and local taxes are raised to fund services and programs. For areas with larger or more expensive services, taxes will need to be higher to pay for them. From an economic development view, taxes need to be stable (predictable) and low to minimize the burden on growth.

### Statewide taxes.

Another indicator of economic conditions is tax revenue generated by area businesses. The Vermont Sales and Use Tax and Meals and Room Tax receipts on gross sales of area businesses are two measures of economic activity. Gross sales receipts increased 6.9% between 2001 and 2006 while retail receipts increased 8.8%. Use receipts dropped tremendously over the same time frame from 1.29 million dollars to \$685,000 (47% decline). Meals and Room taxable receipts totaled more than 13.7 million dollars in 2001 and increased to 14.4 million dollars by 2006. For the fiscal year 2012 Meals and Room receipts fell to 12.2 million dollars. Meals receipts fell 7%, but the tax on rooms increased 9%. Data from Cambridge liquor sales was unavailable in 2011 so there is no comparison. County wide, meals, room, and liquor taxes all increased from 2011 to 2012.

## Grand list.

Property taxes paid by business and commercial properties are another indicator of economic activity. Figure 8 shows the value of business property on the Cambridge Grand List for 1990, 2000, and 2012. The number of parcels in each class is shown below:

Parcel type	1990	2000	2012
Utilities	14	9	10
Industrial	3	3	1
Commercial	77	80 (an addition of 3 parcels with commercial apartments)	102 (not including 20 commercial apartments)
Miscellaneous	109	111	149
Woodland	227	184	117
Farm	28	21	18

There are a few important observations of Figure 8 (next page). First is the significant growth in the grand list related to commercial development. While all classifications grew between 2000 and 2010, growth in the value of commercial properties was the most rapid.

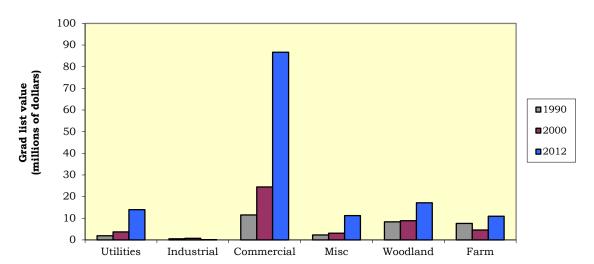


Figure 8. Property values by use (excluding residential or vacation), Cambridge

The second observation is the change in farm parcels and value over the decade. This decline in farm parcels and values was likely an indicator of a weakening in the farm economy from 1990 - 2000. Fewer farms means fewer farm parcels, and less investment on the remaining parcels decreases the overall value. Consistent with statewide and national trends, Cambridge is seeing a comeback of the working lands industries.

The third observation is the increase in value in the number of woodland parcels. While the overall value of woodland on the grand list increased from 2000 to 2012, there was a 36% loss in the number of woodland (or wooded, as the 2012 grand list refers to them) parcels.

The final and most important observation is that Cambridge is becoming more and more dependent upon residential properties to cover municipal services. Residential properties used to make up 69% of the value of the grand list (1990) and increased to 81% (2000) of the grand list. In 2012, residential properties accounted for 76% of the grand list total. This is significant in that residential properties use more in services than they pay in taxes while commercial, industrial, farm, and forest properties generally require fewer services. The Town of Cambridge will need to identify ways to bring a diversity of land uses into town, including more industrial and commercial uses, and to protect existing farm and forest parcels.

#### Property taxes

Residents of Cambridge can have the most influence on their local tax rates. Rates can be kept steady through good budgeting, including a capital budget and program. They can be kept low through efficient spending and by controlling increases in services. As roads and education are, by far, the services with the largest budgets, road policies and education policies (including land use decisions) are important to controlling tax rates. As demonstrated by Figure 9, Cambridge Municipal property tax rates have consistently been lower than the statewide average.

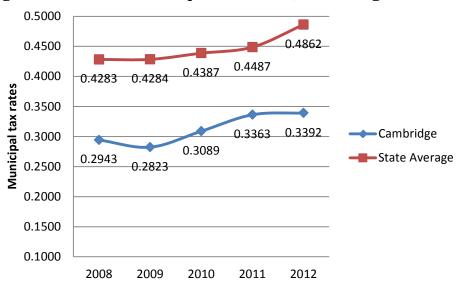


Figure 9. Effective Municipal Tax Rates, Cambridge and State Average, 2008-12

In 2008, the effective municipal tax in Cambridge was \$0.2943 per \$100 in value, while the State average was \$0.4283. The trend continued through 2012, when the effective municipal tax in Cambridge was \$0.3392, compared to a State average of 0.4862.

On the other hand, Cambridge's school property tax rates have been more in line with State averages and have exceeded the State average in some years. Figure 10 below compares the effective non-residential school property tax rate in Cambridge with the state average. Note that under Vermont's school financing system, residential and non-residential properties pay different rates. Due to this Chapter's focus on Economic Development, only non-residential rates are shown. In general, residential rates are lower than non-residential rates.

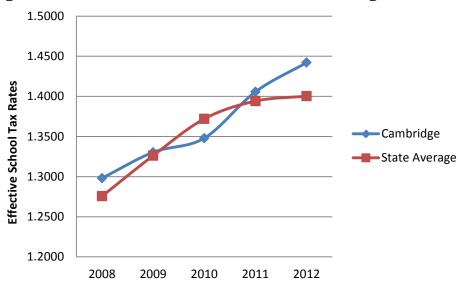


Figure 10: Effective School Tax Rates, Cambridge and State of Vermont

As demonstrated by this graph, over the last five years the Cambridge non-residential school property tax rates have increased at a similar rate as the State average. As of 2012, the effective non-residential school tax rate in Cambridge was \$1.4421, compared with a statewide average of \$1.4003. As noted in the Education Chapter of this Plan, increased enrollment at Cambridge Elementary School has triggered the need to renovate and reorganize the school facility, the costs of which have partially contributed to increased overall school spending.

When added together, the total municipal and school tax for non-residential property in Cambridge in 2012 was \$0.3392, lower than the Statewide average of \$0.4862

In 2012, Cambridge residents and businesses paid \$7,725,391.99 in municipal taxes. Including all other income, the Town of Cambridge collected \$10,965,000.00 in receipts and income. Of that \$6,422,000.00 was school appropriations. Education taxes (Act 68) are discussed in the Educational Facilities and Services Report (Section VI).

Actual spending for municipal services (excluding schools) has fluctuated over the past ten years. In 2002, the actual expenditures totaled \$2,541,000.00. This increased by 50% to \$3,809,00.00 in 2007, and then declined to \$2,011,012.03 in 2013. Some of the reduction in expenses between 2007 and 2013 can be attributed to paying off loans for past capital expenses, particularly the Town Garage and a fire truck. Establishing and annually depositing funds in a reserve fund for major capital expenses is one method to

reduce spikes in the annual budgets. Services and transportation will be discussed further in Sections V and VII (Community Facilities and Services and Transportation Reports).

## D. Factors Affecting Economic Development

In addition to taxes, discussed above, there are opportunities and constraints that exist in each Town to economic development.

### Cooperation and Coordination.

Cambridge cannot function in isolation from the surrounding communities. This interdependence must be recognized and steps taken to coordinate regional economic activities. The Lamoille Economic Development Corporation (LEDC) and the Economic Development Council of Northern Vermont offer assistance to businesses and industries and coordinate regional economic development. The Lamoille Valley Chamber of Commerce provides support for regional businesses.

### SWOT Analysis

In the winter of 2012/2013 the Cambridge Artists and Entrepreneurs (CAE) and the Lamoille Economic Development Corporation (LEDC) conducted an "SWOT" analysis with Jeffersonville/Cambridge business owners. The focus of meeting give input identifying the was to the 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.

#### Strenaths:

In the case of economic strengths, the majority of assets discussed were centered on the Town of Cambridge and the Village of Jeffersonville serving as a unique tourist destination within a close-knit community. Situated in the heart of the Green Mountains, Cambridge 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 and the Lamoille and Brewster River. 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, 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 Cambridge 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, Cambridge has limited access to services including public transportation, business-grade broadband internet, sewer capacity, 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, Cambridge 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 has been increasingly challenged by re-occurring flooding events, especially within the Village of Cambridge and Jeffersonville. SWOT analysis meeting attendees identified the need for increased planning efforts focusing on local business development. Existing economic development barriers present an opportunity and pressing need for local governments within the 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 Town specific events and businesses.

#### Infrastructure.

Adequate infrastructure is essential to support economic activities. Currently, public sewage disposal is limited to the Village of Jeffersonville and Smugglers' Notch Resort. This limits the location, scale, and type of industry that can be established in town. The local transportation network also has been a drawback for businesses and industries requiring truck access. While some areas have excellent access to Route 15 or Route 108, insufficient bridges and intersections limit other areas. Planning for future transportation improvement should take the needs of local business and industry into account.

Another piece of critical infrastructure in Town is the Lamoille Valley Railroad. Starting in 2002, the State moved to railbank the line and convert it for use as a four-season trail, known as the Lamoille Valley Rail Trail (LVRT). Cambridge should aggressively investigate ways to make the Town a hub for

activity originating on the Trail. All communities along the 92-mile rail line are going to be trying to capture the tourists traveling along the route. Communities with good parking and access to trail heads and those where riders can easily access services and attractions such as gas stations, restaurants, bathrooms, picnic areas, hotels/motels, etc. will attract the most visitors. Developing public WiFi "hot-spots" at trailheads and other key points along the LVRT could set Cambridge apart from other communities seeking to capitalize on the trail. Cambridge also has the advantage of having every major type of recreation in town. An overall plan should be developed to maximize opportunities that already include hiking trails, biking, snow mobiling, canoeing, kayaking, cross country and downhill skiing, and more.

### High Speed Internet Access

As a result of a Backroads Broadband Grant, Cambridge 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 based ethernet in Cambridge represents a major opportunity to expand and diversify the local economy. High speed internet access is increasingly essential not only for high tech industries, but for all businesses operating in the 21st century. High speed internet is a vital tool for growing the local economic base and would make Cambridge 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.

## The Regulatory Environment.

Both at the local and state levels, the regulatory environment affects the siting decisions of business and industry. Cambridge has adopted subdivision regulations, but the voters have elected not to adopt zoning. There are a few basic points that Cambridge should follow to ensure the local permit process does not become a burden to development.

The process and requirements must be explicit and consistently applied. Any bylaws should have clear standards that are enforced fairly. If developers know what rules they have to meet, it saves them time and money. Any areas of ambiguity should be addressed to provide clarity for applicants. "form-based" standards for protection of natural resources and community character rather than vague statements should be considered to address any ambiguity within the existing regulations.

Every effort should be made to coordinate with State review processes to avoid costly delay and repetition. If the State is already reviewing criteria (a wastewater permit for instance), then the Town of Cambridge should consider whether a redundant local permit is needed.

Cambridge could also consider forming a joint Development Review Board with the Village of Jeffersonville, rather than having separate review boards (Cambridge Development Review Board and a Jeffersonville Zoning Board of Adjustment). The Village Trustees and Village Planning Commission would still be responsible for drafting and adopting bylaws that apply to the Village. The Town and Village could consider adopting both zoning and subdivision regulations, if appropriate. If zoning were adopted, Cambridge would become a "10-acre town," meaning the State would only have jurisdiction over commercial projects greater than 10 acres in size; whereas the State currently has jurisdiction over any commercial project greater than 1 acre in size. This is important as Act 250 permits take considerable time and expense.

## Coordination

Public infrastructure and services are provided by three independent municipalities within Cambridge. Coordination between the various boards and commissions is needed in order to maintain a predictable business environment and to ensure that essential infrastructure is provided. To this end, meetings of the Town Selctboard, Cambridge Village Trustees, Jeffersonville Village Trustees, Cambridge Planning Commission and Development Review Board, and Jeffersonville Planning Commission and Zoning Board of Adjustment should be held on at least a quarterly basis.

# Public support.

One important factor to economic development is public support. Companies are more likely to remain in communities where they have local support. Businesses that are routinely hassled by residents may find the business moving to a community that supports the jobs, tax base, and other benefits they bring with them. Towns do not need to be passive and accept poor environmental or aesthetic conditions, but they need to work with businesses to balance the needs of both.

### **NATURAL RESOURCES REPORT (2013)**

Among the most fundamental elements of a community's development plan is a description of its natural resource base. To protect the community's natural resources and to provide a high quality of life for the residents and an attractive environment for visitors, this Plan must be based on the inherent capabilities of the land to support human activity. The following descriptions identify specific qualities of the natural resources and their relationship to use of the land.

### A. Climate and Air Resources

### Climate.

Cambridge has a temperate climate with a wide temperature range between winter and summer. (Temperatures are probably close to the Vermont average temperatures of 18 degrees for January and 68 degrees for July.) Throughout the year alternate flows of airstreams of different thermal and moisture content provides a mixture of climatic conditions. Airstreams are further affected by the topography of the area.

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. According to one source, Mount Mansfield has an annual average precipitation of 73.9 inches compared with Cambridge Village that has 38-42 inches. Average annual snowfall in the same areas is over 140 inches and 80 inches, respectively.

The 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 foundations, utility lines, and roadways are necessary to minimize damage from frost heaves. The removal and storage of snow may also require special design considerations.

# Air quality.

The United States Environmental Protection Agency sets National Ambient Air Quality Standards (NAAQS) which set acceptable levels of various types of criteria 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.

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 and wood combustion, though a good quantity of this and other pollutants migrates to Vermont from other areas of the country. The exact proportion of air pollution generated locally is difficult to quantify. If the County 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, two primary sources of local air pollution include woodstoves and automobiles. Newer woodstoves are now mandated by the EPA to contain pollution control equipment that significantly reduce particulate emissions. Replacing older woodstoves and furnaces will have a positive impact on air quality over time. Automobiles are a second local source of air pollution. Strategies such as reducing driving miles, cleaner burning engines, car pooling/ride sharing, and using alternative-fuel vehicles all would reduce automobile pollution. Increasing local employment opportunities may also reduce the need to commute.

#### B. Land Resources

### Inventory of resources.

Geography.

Elevation in Cambridge ranges from about 440 feet along the Lamoille River to about 3,900 feet where the Town's southern border crosses the ridgeline of Mount Mansfield. Cambridge has approximately 2,491 acres above 2,500 feet where Act 250 restricts development. There are approximately 7,726 acres above 1,500 feet but below 2,500 feet where neither the Town nor Act250 place limits on development at the present time.

## Bedrock Geology.

The bedrock found in Cambridge is made up almost entirely of "complex, highly metamorphosed" rocks of the Green Mountains consisting primarily of Phyllites, Gneisses, Schists with varying amounts of Greenstones, and Amphibolites." Along Route 104 west of the Village of Cambridge the bedrock is described as Schistose Greywacke, and a

few small marble outcrops exist in places. (David P. Stewart. *Geology for Environmental Planning in the Milton-St. Albans Region, Vermont.* 1974. Vermont Geological Survey. Water Resources Department. Montpelier, Vermont).

There are two known talc deposits in Cambridge. There may be extractable quantities, given the proximity to large talc deposits in neighboring communities.

### Surficial Geology.

Most of the soils in Cambridge are derived from glacial till. Generally, the upland areas are thin, stony, well drained, and shallow to bedrock. Some upland valleys have sand and gravel deposited by glacial melt water. The lowlands consist mainly of sand and gravel with pockets of silt and clay on flood plains.

## Topography.

Severe summer storms, when combined with reduced vegetative cover at higher elevations, contribute to increased peak runoff which has negative impact at lower elevations. Therefore, slope is another important factor which affects runoff. There are approximately 12,326 acres of land which have a slope of greater than 30 percent in Cambridge (see **Soil Limitations Map**). Any development will need to include design controls to address increased runoff; it will be particularly important for development activities at higher elevations and on or adjacent to steep slopes to control runoff on site.

Soils.

Since on-site septic systems are used for wastewater treatment (except in the Village of Jeffersonville and Smugglers' Village), a potential issue for outlying development projects and the Village of Cambridge is the suitability of the soil for such systems. Steepness of the slope, depth of soil to bedrock, seasonal high water table, and percolation rates are critical factors in determining suitability for on-site septic systems. It is likely that Cambridge contains many acres of soils that present severe limitations to on-site septic systems.

Development is presently controlled to some extent by the limited availability of soils suitable for septic disposal. However, future authorization by the State of new waste water disposal technologies could open up a significant portion of land that is presently considered ill-suited for development.

## Prime Agricultural and Forest Soils.

Approximately 13,745 acres (34% of the land area) in Cambridge are considered Primary Agricultural Soils as defined by the Natural

Resource Conservation Service. Of these, 3,799 acres are classified as prime agricultural soil. The rest (9,946 acres) are classified as potentially good soils of statewide importance and are protected from unwarranted development under Vermont's Land Use and Development Law (Act 250). Most of the prime agricultural land in Cambridge is located along the Lamoille River flood plain (see **Soil Resources Map**)

Agriculture and forestry are considered the "best use" of the soil resource. Responsible use of the soils enables the resource to be available for future generations. As agriculture and forestry are key land uses in Cambridge, they will be discussed in detail in the Agricultural and Forest Resources Report.

### Uses of Earth Resources.

Sand and Gravel Extraction.

In 1989 Cambridge had two active sand and gravel pits, three inactive, and one reclaimed for a total of six existing or former pits. [In Lamoille County, Cambridge ranked eighth out of the ten towns in total number of sand and gravel pits and in the number of active pits.] Cambridge has limited gravel resources due to low quality gravel and sites which are currently employed for other purposes.

Sand and gravel were created by glacial outwash deposits, making them essentially non-renewable resources. Typically, these resources can be found along the Lamoille River and in portions of South Cambridge and the Pleasant Valley. Sand and gravel are important for the construction of roads and building foundations. Shortages are caused by prematurely extracting available deposits or by building on deposits before sand and gravel have been extracted, thereby making the resource inaccessible for future use.

The location of both physically extractable (existence of sand and gravel deposit) and socially acceptable (to carry out extraction activities) sand and gravel in Cambridge needs to be determined. It is desirable that the extraction process be carried out in a manner which will minimize erosion, siltation, and pollution of surface water or groundwater. Extraction areas should be properly reclaimed at the conclusion of the extraction operation (i.e. leveled and prepared for other future use). Presently Cambridge does not have regulations regarding extraction of gravel and relies on the actions of State regulatory bodies. All new proposed gravel extraction operations are reviewed under the Act 250 review process. "Grandfathered" extraction sites, however, are not subject to review.

### <u>Limitations</u>.

Geography, geology, and soils present a variety of constraints on proposed developments. Lands over 2,500 feet in elevation are considered fragile and cannot be developed.

Geologic hazards, such as the Jeffersonville landslide, are rare but do exist in places in town. Geology also determines the slope of the land, which is a third significant constraint to development. Steep slopes -- those over 30 percent -- are generally considered undevelopable. On-site wastewater disposal systems are not permitted over 20% slope.

The primary limitations presented by soils are to septic suitability. Shallowness to bedrock or high water tables present barriers to developing compliant systems.

## Construction over Resources and Extraction Issues

Sand and gravel are important local resources and are needed for road repair and construction. Gravel deposits are also important areas for recharging ground water supplies. Earth resource extraction and/or processing activities have a high potential for becoming a substantial nuisance in the area where such activities are located. Gravel extraction potentially causes these problems:

- Noise, dust, and air pollution or radiation;
- Surface and ground water pollution, siltation, or radiation;
- Storage and disposal of waste materials, both solid and liquid;
- Increased stormwater runoff, erosion, and sedimentation;
- Spoiling of the landscape and limited utility for subsequent uses of the site:
- Decreased highway safety and increased municipal costs due to increased traffic and accelerated deterioration of highways and bridges attributed to the transportation activities generated by the earth resource operations;
- Reduced property values because of primary or secondary impacts of the proposed earth resource operations. All these factors, single and together, may act to substantially depreciate land values in the immediate vicinity of such activities and the Town in general.

While earth resource extraction comes with risks, many of these resources are needed by residents for roads and building material, or for sale as a marketable resource. Of concern is that each of these resources is finite and once depleted cannot be replaced. Additionally, development near or over the resource may, in effect, make the extraction impossible in the future. Therefore, any construction over an earth resource should account for the potential loss of that resource. The State has estimated that 31% of all sand and gravel deposits in Vermont are now inaccessible

due to State regulations, including water supply protection, critical wildlife habitat, conserved lands, and other factors. (Aggregate Resources of Vermont, VT Geological Survey 1993). Current developments over deposits have further limited the availability of the resource.

The Town, therefore, has two responsibilities. First, Cambridge needs to be vigilant in its regulation of earth resource extraction operations to prevent the creation of a nuisance. And second, the Town needs to protect the resource to ensure its availability for future residents.

### Town Gravel Pit

The Town of Cambridge currently owns and operates a municipal gravel pit, located on Stebbins Road (off of Route 108 south of Jeffersonville.) Gravel from this pit is used primarily for Town road construction and maintenance. The supply of usable gravel may be exhausted in the next decade. Once this occurs, Cambridge will either need to purchase another municipal pit or begin purchasing gravel from private suppliers. When this occurs, the Town will also need to consider restoration and potential alternative uses of the existing pit site.

### C. Water Resources

Water is an important resource from several perspectives. Historically, water provided the principal means of transportation and commerce, as well as drinking water and power generation. Today it is recognized that this resource is an essential component of the community's natural and human environment in that it provides safe and clean drinking water, recreational opportunities, wildlife diversity, and enhances the landscape.

#### Inventory.

### Ground Water

Water that is below the earth's surface is classified as ground water. It is precipitation that has infiltrated the soil and bedrock to accumulate over a long period of time. Information about the location, quality, and quantity of ground water is important for site evaluation for development. Ground water is the primary source of drinking water for the community.

For the majority of residents, private wells and springs are the primary source of water for consumption and domestic use. Residents of the Villages of Cambridge and Jeffersonville and the Village at Smugglers' Notch receive their water from municipal or community wells. A Wellhead Protection Area (WHPA) delineates each of these public water

supplies. WHPAs are defined as the surface and subsurface area surrounding a spring or well that serves as a natural recharge, collection, transmission, and storage zone for public water supply systems. Cambridge has five Wellhead Protection Areas.

The municipal WHPAs are located in three areas of Cambridge Town. Jeffersonville Village's WHPA is spring fed and is located east of the "Old Notch Road" (Town Highway 78) near the Smuggler's Notch Resort. Cambridge Village has two WHPAs; one on Bartlett Hill, and the other west of the "wrong-way-bridge" in Cambridge Village (see **Water Resources Map**).

There are also two public water supplies which serve the Village at Smugglers' Notch. Public water systems are defined by the Vermont Department of Health as serving "... at least ten (10) service connections or regularly serves an average of at least twenty five (25) individuals daily at least sixty (60) days out of the year...."

As development increases, so too will the potential for ground water contamination. Major sources of potential ground water contamination include underground storage tanks, waste disposal areas, septic tanks, commercial or industrial hazardous chemicals, some agricultural activities, road salting, and storage. The effect of agricultural practices on Cambridge's groundwater quality is unknown. Pesticides, soil additives, and other nutrients can migrate into ground water supplies, but this has not been identified as a problem in Cambridge.

On certain types of soils and on steep slopes on-site sewage disposal systems can pollute ground water supplies. In densely populated areas, even if located on well drained soils, there may be cumulative effects beyond the capacity of the prevailing geologic and soil conditions to safely accommodate waste disposal, again potentially polluting water supplies. Engineering techniques can overcome specific limitations to some degree; however, qualified officials should carefully review development proposals in areas with known soil limitations.

In terms of public investment, the prevention of ground water contamination is a more cost-effective approach to maintaining water supplies than the cleaning-up of contamination or the subsequent development of new water sources.

## Surface Waters

### a. Rivers and Streams

Features such as rivers, streams, lakes, ponds, and wetlands are classified as surface waters. The primary river flowing from east to west through Cambridge is the Lamoille River, which serves as an important focal point of the community and region. The river provides numerous recreational opportunities and receives water from a number of wastewater treatment plants.

Except for Black Creek which flows north into the Missisquoi River Drainage Basin, all of the rivers and brooks in the Town of Cambridge flow into the Lamoille River Drainage Basin. Major tributaries of the Lamoille are Brewster River, North Branch River, Judevine Brook, and Seymour River. In addition to Gallup Branch and Settlement Brook there are a number of unnamed tributaries.

Fishing, boating, and other consumptive and non-consumptive uses of water resources provide the basis for substantial income to Vermont communities. Cambridge is a destination point for sportsmen and benefits in many ways as sportsmen purchase equipment, licenses, food, lodging, and other various goods and services. According to the Vermont Rivers Study, five of Cambridge's named rivers were identified as home to fisheries (Rainbow, Brown, and Brook Trout). Cambridge's fisheries are a destination for anglers who come from all over Vermont during trout season.

Fisheries and other recreational opportunities can be diminished by shoreline encroachment, water withdrawal, sedimentation, road crossings, and pond construction. Development that occurs close to a stream bank can cause erosion and eliminate vegetation that can alter the water temperature and eliminate many aquatic species. Erosion and sedimentation can make rivers and streams impassable for recreational boaters. Road crossings can inhibit the movement of fish from one place to another for feeding and spawning and contribute to overall habitat loss.

According to the <u>Vermont Rivers Study</u>, the Lamoille and Brewster Rivers were found to be relatively unique as "Undeveloped River Corridors." Undeveloped River Corridors are river segments which are over five miles in length, free of impoundments, and have relatively unintrusive land use along their shores. Segments of the Lamoille River which were identified as special are: Cady's Falls (Morristown) to Cambridge Junction and Jeffersonville to Fairfax. The Lamoille River from Hardwick (through Cambridge) to Milton was identified as a recreational boating river. The North Branch of the Lamoille River was noted for its "stream features--meanders, oxbows, and oxbow lakes".

The Brewster River was also cited as a unique "undeveloped river corridor." The **Brewster River Gorge** is an important example of a hydro-geological feature. It is one of Vermont's deepest gorges with a long vertical drop in a natural setting. The potential for degradation of the gorge is highly likely due to high recreational use, potential subdivision, and residential growth rates in the community. ("Waterfalls, Cascades and Gorges," Vermont Agency of Environmental Conservation)

#### b. Lakes and Ponds

Cambridge has three named ponds and several very small ponds scattered throughout the community. The named ponds, Sterling Pond, Bear Pond, and Lake-of-the-Clouds, are located in the southern area of the Town in the Mount Mansfield State Forest. These ponds range in size from one to eight acres. These ponds are among the highest water bodies in the State of Vermont. Access to Bear Pond and Lake-of-the-Clouds is limited. However, Sterling Pond is a popular day hiking destination and the highest elevation trout pond in the State of Vermont. Due to this high elevation, several rare fish species can be found in Sterling Pond. These fish have also been found in the Brewster River.

## Environmentally Sensitive Areas a. Flood Hazard Areas

Floodplains are land areas adjacent to water bodies, primarily rivers, which are subject to seasonal or periodic flooding. These areas store runoff during heavy rains and spring thaws, thus slowing the velocity of water flowing downstream. Gradual release of storm water 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 watercourses and their associated shorelines when designing for construction in their vicinity.

Floodplains are considered 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 where there are high water tables. Floodplain areas in Cambridge are prime agricultural land due to the highly productive nature of the soils and can serve as recreational sites such as parks and ball fields.

Clearing of upland vegetative cover increases stream runoff peaks; the higher elevations are particularly sensitive to clearing. An increased land covering of impervious materials (e.g. roofs, roads, and parking lots, etc) associated with physical development also contributes to increased peak runoff. Since these materials do not allow for infiltration and absorption of storm water, excess water is forced onto already saturated

areas of the flood plain.

Flood Hazard Areas in Cambridge are associated primarily with the Lamoille, Brewster, North Branch and Seymour Rivers. There is also a flood hazard area associated with the Black Creek in North Cambridge. Both the Village of Cambridge and the Village of Jeffersonville are located near the fringe of (or within) the Lamoille River's 100-year flood area. Flood Hazard Areas are shown on the maps produced with this Plan, and are based on the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map, which can be found in the Town Clerk's office (see Water Resources Map).

#### Fluvial Erosion Hazards

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. (See Municipal Guide to Fluvial Erosion Hazard Mitigation.) Most flood related damage in Vermont is caused by fluvial erosion rather than inundation. Modification to a river and its banks, such as straightening, dredging or restricting access to the floodplain, can exacerbate the effects of fluvial erosion. Limiting the amount of new structures placed in defined Fluvial Erosion Hazard Areas prevents unnecessary threats to life and property and reduces the need for flood control measures.

The Vermont Department of Environmental Conservation and Lamoille County Planning Commission recently completed a "Geomorphic Assessment" of the Brewster River. 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 in-stream 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.

#### b. Wetlands

Wetlands refer to water and land areas commonly known as marshes, swamps, bogs, fens, and similar areas where water is a controlling factor in the development of plant and animal communities.

In the past wetlands were considered wastelands or areas to be reclaimed for other more "useful" purposes. More recently the many functions and values that wetlands provide have been identified. These include in part: fish; wildlife and migratory bird habitat; rare, threatened and endangered species habitat; education and research; recreation; open space; and aesthetics. These functions are important not only for their natural value, but also for their human value such as water quality improvement; storm and flood water storage; erosion control and shoreline stabilization; and the resultant economic values and benefits.

Most wetlands of at least 2-3 acres have been mapped as part of the National Wetlands Inventory. In addition to Federal law, under Section 404 of the Clean Water Act, wetlands are also subject to State law under the Vermont Wetland Rules. Both restrict the filling, dredging, or draining of wetlands with exceptions provided for certain land use activities. There are approximately 870 acres of wetlands in Cambridge. While wetlands are found throughout the community, Cambridge has three areas with concentrations of wetlands: (See **Water Resources Map**).

- 1) Along the Lamoille River (east and west of Jeffersonville), and north along the North Branch River;
- 2) In the northern part of Cambridge along Route 108 north and the old railroad bed; and in the upper reaches of Black Creek;
- 3) In the southern part of Cambridge between Upper Valley Road and Route 108 south.

#### c. Vernal Pools

Vernal Pools are seasonal wetlands, filling with snowmelt and spring rains, but often drying up by summer, creating a cycle of flooding and drying that prohibits permanent fish populations. These pools provide critical habitat for many salamanders, including some "medium" priority Species of Greatest Conservation Need, such as the Blue-Spotted, Spotted, Jefferson, and Four-toed salamanders, other vernal pool-dependent invertebrates such as fairy shrimp, and several freshwater snails and dragonflies. The loss of a single vernal pool in any given area could easily cause the demise of the local wood frog population, along with any pool-breeding salamanders, and would certainly cause the extirpation of the pool's fairy shrimp.

Vernal pools are critical habitats of incredible diversity and productivity. However, vernal pools often receive little or no protection under Federal and State regulations. In Vermont, vernal pools are not recognized as significant wetlands under the 1990 Vermont Wetlands Rules, and while they may qualify for protection as "wildlife habitat" under Act 250, they are not considered critical wildlife habitat, a designation necessary for legal protection. As a result, vernal pools are not currently protected if a development is not subject to Act 250 review.

There are 16 identified vernal pools in Cambridge (according to the Vermont Center for Ecostudies).

#### Water Quality.

In Vermont, the Vermont Water Resources Board has established a water quality classification system which specifies (1) water quality goals to be attained where actual water quality is lower than the standard, or (2) the minimum standard to be maintained where actual water quality is higher. It is important to keep in mind that the Class A, B, and C designations are water quality goals and do not necessarily reflect the present water quality of Cambridge's waterways.

Although there may be some upland headwaters which are "Class A" waters (the cleanest), the majority of the waters in Cambridge have been classified by the Board as "Class B," suitable for drinking with filtration and disinfection, irrigation and other agricultural uses, swimming, and recreation. A small section of the Lamoille River is classified as "Class C" to provide a mixing zone for treated wastewater (from the Waste Water Treatment Plant outflow where Route 15 crosses the Lamoille downstream for one mile). Class C waters are not suitable for water-contact recreation.

Under the requirements of the Clean Water Act, Vermont must prepare an assessment of the degree to which surface waters support the various uses being demanded of them. The 1992 Water Quality Assessment Report prepared by the Vermont Agency of Natural Resources indicated that current usage of both the Brewster and Seymour Rivers is threatened due to land use activities within their watersheds that may degrade water quality. According to the report, uses in the Seymour River are considered threatened at its headwaters where there is evidence of ground water contamination at the Underhill Landfill. Stormwater runoff, failed septic systems, and increased residential development threaten usage for approximately 4.5 miles from the confluence of the Seymour River with the Lamoille River in the Village of Cambridge. Use of approximately one mile of the Brewster River is considered partially impaired by iron bacteria below the old Smugglers' Notch Resort leach field. Additionally, three small watersheds serving the Lamoille River downstream from Jeffersonville were found to be impaired.

The 1992 water quality assessment also reviewed lakes and ponds. According to the report, uses of both Bear Pond and Sterling Pond are considered threatened by acid precipitation and the generally low alkalinity of the water. What is uncertain is whether this low alkalinity is due to the acid precipitation or a natural condition of the ponds. Both ponds are found at an elevation of over 3000 feet.

### D. Wildlife Resources

The identification of, and planning for, wildlife habitat needs are important planning issues at the local level. These resources play an important role in both the natural and human environment. It is estimated that both consumptive and non-consumptive enjoyment of wildlife annually contributes over 225 million dollars to the Vermont economy. If the habitat needs are not consciously considered, the viability of these areas will be gradually lost, and the future benefits, both financial and social, derived from wildlife and fisheries will be lost with them.

# Fragile and Natural Areas

Fragile and natural areas comprise some of the irreplaceable habitats, ecosystems, and natural features found as part of Cambridge's heritage. These resources provide educational, economic, historical, and visual benefits to the area's residents and visitors. They are important links to the area's past and provide information about the evolution of the natural environment.

In 1977, the Vermont Legislature established the Fragile Areas Registry (10 VSA Ch. 158). The goals and purpose of this registry were to protect these significant areas through documentation and education and to encourage their long-term protection through non-regulatory means. Under the law, "'Fragile Area" means an area of land or water which has "unusual or significant flora, fauna, geological or similar features of scientific, ecological, or educational interest." In order to be considered for designation, a site must:

- be of significant statewide scientific, ecological, or educational value; or
- be exemplary for the purposes of education or research in the natural sciences; or
- have rare, remnant, or other unusual plants or animals or contain endangered or threatened species as determined by the Secretary under Title 10, Chapter 123; or
- contain a necessary wildlife habitat as the term is defined in Section 6001(12) of Title 10.

These fragile areas are classified as physical features such as structural geologic, glacial, marine or aquatic features, or biological features such as alpine, forest, marshland communities for both flora and fauna. These areas must also be evaluated to determine if the area is truly significant and deserving of inclusion in the registry.

There are two "fragile areas" in the Town of Cambridge; Cambridge Pine Woods and Smugglers' Notch, which are presently in public ownership.

# Cambridge Pine Woods

The **Cambridge Pine Woods Natural Area** is located adjacent to the Mountain View Cemetery north of Cambridge Village. It is owned by the State of Vermont Department of Forests, Parks, and Recreation, and is listed on the State's Fragile Areas Registry. It is an old-growth stand of white pine and hemlock on a steep, sandy hill. Individual trees reach large diameter and height. The Cambridge Pine Woods Natural Area is considered an important forest community as it offers a view back to what some of Vermont's original forests may have looked like when the area was settled and because it offers an opportunity to observe forest succession as the pine trees are gradually replaced by hardwood trees.

### Smugglers' Notch

**Smugglers' Notch** is located in the southern part of the Town, in the mountain pass between Spruce Peak and Mount Mansfield. It is an exceptional example of a cold-calcareous cliff community. This site harbors several arctic/alpine plant species growing at the southern limits of their ranges. Many of the plants that appear in this community are considered rare and are protected by State law. In fact, Smugglers' Notch maintains one of the highest concentrations of rare plants in Vermont. At least 34 plant species listed as rare by the State have been documented in Smugglers' Notch. Smugglers' Notch also provides a home for several unique animals and birds. Most notable is the Peregrine Falcon who resides on the cliffs above or around the "elephants head" and are listed on both State and Federal endangered species lists. This site is also listed in the Fragile Areas Registry and is owned by the Department of Forests, Parks, and Recreation.

Smugglers' Notch is the focus of an effort to create a Management Plan for approximately 3.7 miles of State designated "Scenic Highway." The Smugglers' Notch Scenic Highway consists of that portion of VT 108 between the Smugglers' Notch and Stowe Mountain Resorts in the Towns of Cambridge and Stowe. This Management Plan will focus on both the highway itself and the area the road provides access to, including the trail network, natural formations and communities, picnic areas, and other public facilities. The final recommendations resulting from this Management Plan will provide information and guidance to the Vermont Agencies of Transportation and Natural Resources, as well as local and regional planners, regarding future development, protections, and programs for this unique resource.

### Critical Wildlife Habitat

## Deer Wintering Habitat

Vermont's deer herd is important for both environmental and economic reasons. Sportsmen from all over New England visit Vermont during the fall deer season and purchase licenses, food, lodging, equipment, and other items. According to a survey conducted by the U.S. Fish and Wildlife Service and the U.S. Census Bureau, hunters spend more than 189 million dollars in Vermont annually.

Deer wintering areas, commonly referred to as Deer Yards, are defined and delineated by the Vermont Department of Fish and Wildlife. These areas are so designated because of their vegetation, slope, and other factors that shelter the deer from the harsh winter. They generally consist of areas where coniferous forests dominate. Not only are these sites important, but so too are corridors linking them together and to other undeveloped areas in order to facilitate the deer's annual migration from summer to winter habitats. One community's deer wintering areas may serve a population from several miles around. In addition to deer, nearly half of Vermont's vertebrate wildlife species rely on coniferous forests for at least part of their life needs. It is important to note that deer wintering areas are often located on the "edge" between core habitat areas and areas with more densely populated human settlements.

In Cambridge there are eleven specific areas that have been identified as winter deer range by the Vermont Department of Fish and Wildlife. Approximately 4,470 acres in Cambridge (or 11% of the land area) are considered deer wintering areas. The largest portion of this area is near the wetland west of Route 108 North of Jeffersonville and between Routes 108 and 109. There is also a relatively large area located in, and to the south of, Cambridge Village below Route 15 (see **Critical Habitat Map**).

#### Bear Habitat

Approximately half of the Town of Cambridge is considered as black bear production habitat according to a 1989 map prepared by the Vermont Department of Fish and Wildlife. This habitat is found primarily along Mount Mansfield and Sterling Range. Major areas are also found along the southwest side of Pleasant Valley and along the Fletcher-Waterville-Cambridge border.

The contiguous and remote forestland contained in these tracts is necessary for the long-term stability of Vermont's bear population. These regions support relatively high densities of cub-producing females. The presence of black bear is an indicator of Vermont's remote forestland since a distance of least one-half mile from development is required for breeding. Forest fragmentation can make it impossible for bears to move

from one habitat to another.

#### Core Forest Habitat

While some species such as deer can accommodate human populations, many others rely on large blocks of unfragmented forest for their mating, nesting, feeding, and denning habitats. These areas are referred to as "Core Forest Habitat," and generally consist of forestlands that are at least 100 meters (328 feet) from significant development such as roads, houses, and active farmland. Species that rely on such areas include hawks, owls, songbirds, fisher cats, moose, bobcats, and black bears. Mammals such as deer, moose, bear, bobcat, fisher, and coyote may require very large contiguous forest acreage up to 600 to 7,500 acres. Fragmentation of large forest blocks through subdivision and development diminishes species' ability to access core habitat functions and may result in a change in species' composition from species such as moose, bears, hawks, owls, and bobcats, to other species such as pigeons, sparrows, starlings, and skunks. Blocks of core forest habitat are found throughout Cambridge, with the largest blocks found along Mount Mansfield and the Sterling Ridge.

# Wildlife Habitats and Corridors

Wildlife Corridors consist of connecting habitat land that links large patches of habitat within a landscape, allowing the movement, migration, and dispersal of animals and plants. Corridors are not always linear as the term implies. Riparian habitat along streams and rivers, strips of forest cover between developed areas, and even hedgerows and fencerows all represent potential connecting habitat. Corridors between large patches of habitat help ensure the ultimate viability of local wildlife populations. Wildlife corridors create a network of habitat connectivity, linking together both large and small patches of land, in both highly fragmented and highly connected landscapes.

A 2007 report by the Spatial Analysis Lab at the University of Vermont assessed the wildlife habitat and habitat corridors in the Town of Cambridge. This project concluded that the wildlife habitat in the Town of Cambridge is primarily forest cover and is remarkably unfragmented.

In 2013, the Vermont Fish and Wildlife Department completed a statewide study of "critical pathways" connecting important blocks of wildlife habitat, focused on important wildlife crossings along the State transportation network. This study identified an important wildlife corridor connecting Mount Mansfield to the northern Green Mountains along Route 15 at the "Willow Crossings" area between Hubbard Drive and the Cambridge/Johnson Town Line. This area includes a small (likely undersized) culvert under Route 15, a small brook and associated

riparian habitat, and surrounding wetlands. Among the recommendations of the report were replacing the existing culvert with a larger bridge or box culvert, enhancing riparian vegetation, and working with willing landowners to acquire conservation easements along the wetland and other surrounding lands.

### **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 particular aggressive invasive species that is becoming increasingly prevalent in Cambridge. 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' 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 outcompetes native vegetation, contributes to soil erosion, especially along stream banks, and has been known to grow through and damage infrastructure such as bridge abutments.

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 such as firewood, nursery stock, and other non-local products. While there are no official State regulations related to firewood used at private homes, the Vermont Department of Forests, Parks, and Recreation recommends that firewood not be transported more than fifty miles,. Other important actions needed to address non-native species include 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 Local citizens and the Cambridge infestations are detected. Conservation Commission can play a key role in preventing the spread of invasive species.

## AGRICULTURAL & FORESTRY RESOURCE REPORT (2013)

The use of the land for agricultural purposes plays an important role, both directly and indirectly, in Cambridge's economy. It also supports the community's traditional settlement pattern by providing a diversity of land uses and open space. Contrasting with the farmland in the valleys, the forested hills and mountains add a dramatic backdrop to the Town. Completing the mosaic of land uses are the villages and residential areas that are nestled between and within these two landscape features.

Planning for, and supporting the working landscape, is critical to maintaining this balance. Working landscapes, like farming and forestry, contribute to the Town's overall beauty, its economy, and its history. Conserving working landscapes is more than purchasing land and development rights. As will be discussed, conserving our traditional land uses involves a commitment by the community to ensure that the economic foundation that supports this way of life is maintained into the future.

# A. Agricultural Resources

## The Economy.

According to the 2012 Grand List, there are 18 properties assessed as farms in Cambridge. The statutory definition of a farm includes the cultivation or other use of land for growing food, fiber, Christmas trees, maple sap, or horticultural and orchard crops or the raising, feeding, or management of livestock, poultry, fish, equines, or bees or the operation of greenhouses or the production of maple syrup. The definition also includes production and sale of agricultural products or fuel. While agriculture was once dominated by dairy farms and while dairy remains the backbone of Vermont's working landscape, agriculture has diversified significantly over the last decade. Cambridge is no exception, as farmers add products or focus their enterprise on what current trends dictate. Given the changing face of farming, future analysis could examine farming trends in Cambridge to guide land use discussions.

According to the Vermont Department of Agriculture, the number of active dairy farms in Cambridge has dropped more than half since 1985. According to the figures, in 1985 the Town had 25 farms, and by 2001 only 13 remained. In 2012, the Department of Agriculture had licensed six dairy farms (cow, goat, or sheep dairies) in Cambridge alone. National and international market forces have forced family farming to either become larger in order to survive or to remain at a very small scale.

Reflecting the decrease in the number of farms, the 2000 Census revealed that only about 4% of Cambridge's employed persons 16 years of age and older worked in Farming, Forestry, Fishing, Hunting, and Mining. This

represented 76 residents and is a decrease of 24% from 1990. In 2010, the Census saw a further decline in persons 16 years of age and older working in Agriculture, Forestry, Fishing, and Hunting, and Mining. Fifty-six residents are employed in this industry, representing 2.8% of the population. What should be noted is that many farmers today hold primary jobs off the farm.

While the number of dairy farms has declined, the emergence of new agricultural products has led some to say that Vermont is experiencing an "Agricultural Renaissance." New agricultural products being produced in Cambridge include organic farming, wine making, organic beef, seed and nursery production, and specialty products such as cheese and bread. The growth and popularity of "micro-breweries" in the region may create opportunities for producing hops. Both traditional and emerging agricultural products represent opportunities for Cambridge landowners. During the summer months, a weekly farmers market is held in Jeffersonville. Efforts are currently under way to create an indoor winter farmers market. Cambridge farmers can also utilize new digital tools that connect consumers with local agricultural producers.

#### The Land.

Approximately 13,745 acres (34% of the land area) in Cambridge are considered Primary Agricultural Soils as defined by the Natural Resource Conservation Service. Of these, 3,799 acres are classified as prime agricultural soil, and the rest (9,946 acres) are classified as potentially good soils of statewide importance and are protected from unwarranted development under Vermont's Land Use and Development Law (Act 250). Most of the prime agricultural land in Cambridge is located along the Lamoille River flood plain (see **Soil Resources Map**).

All farms are required to meet Vermont Department of Agriculture Accepted Agricultural Practices (AAPs). These standards are designed to ensure soil conservation and promote water quality. There are also Best Management Practices (BMPs), which are optional but provide a better protection of these resources.

### Methods of Agricultural Resource Protection.

## *Use Value Appraisal Program (Current Use Program)*

The State of Vermont Current Use Program is a series of four State sponsored tax abatement programs which use financial incentives to encourage agricultural and forestland to remain in production. In each program, the property must remain in agriculture or be managed for forest use to receive tax abatement benefits. The major benefit to the landowner is that the landowner pays property tax on the "use value" instead of the "fair market value" of the property. If the property is developed, the owner pays a land use change tax. So that the Town does not lose property tax revenues, the State of Vermont

provides reimbursement to the Town for the difference between the "use value" of the property, and its fair market value.

In Cambridge about 5,000 acres of productive agricultural land were enrolled in the program in 1991. This represents about 12% of Cambridge's total acreage. By 2002 the number of acres enrolled in agricultural current use lands had increased to 6,083 acres. In tax year 2012, 22,361 acres on 150 parcels were enrolled in the current use program. All lands in the programs (lands designated agricultural, forest, and nonproductive) represent about 39% of Cambridge's total acreage.

### Purchase of Development Rights

The most well-known group involved in the purchase of development rights is the Vermont Land Trust. In a purchase of development rights, the right to develop or subdivide a parcel is bought by another party. The amount paid depends on the value of the potential development. In this way the farmer or forester receives extra money they need while still retaining the farm or forest. In addition, the property now has a lower appraised value resulting in lower property taxes. The obvious problem with using the purchase of development rights to assist farmers is the cost. In order to protect a large amount of land, one needs a huge sum of money. Also, the landowner must want to sell the rights – all purchases are willing buyer/ willing seller.

Cambridge is fortunate to have a local Conservation Commission to guide purchases in Town. While the Cambridge Conservation Commission does not have adequate funds to purchase development rights or administer easements, it is available to assist residents who wish to conserve their land by helping to facilitate contacts with organizations such as the Vermont Land Trust.

## Local Tax Relief for Agriculture

Some communities committed to helping agriculture have taken the bold step of giving property tax relief for land in agriculture. Stowe and Hyde Park are two communities in the region that continue this practice. The program works by offering additional tax relief to land already in the current use program. As education taxes are now State taxes, only the portion of property taxes going towards the municipality can be waived. Cambridge could consider this for both new and existing farms .

### Land Use Regulations

Zoning and subdivision regulations are less effective in regulating development of important land resource parcels but are also far less expensive. These types of regulation can guide development to ensure certain goals are accomplished. One valuable tool is Planned Residential Developments (PRDs) where developable lots are clustered to protect open space. This type of flexible subdivision tool allows the same number of developable lots as traditional subdivisions except that it keeps the fields open and forests unfragmented. The

Town of Cambridge believes that clustering is an effective way to preserve open space without impinging upon the rights of property owners. Consequently, the Town encourages clustering wherever feasible.

### Other Considerations Related to Agriculture.

There are many issues that affect the sustainability of agriculture in Cambridge. Some difficulties can be addressed or assisted locally while others are State or national issues. The future continuation of family farming in Town relies on the efforts of our farmers, local officials, our State Representatives and Senators, and our Representatives and Senators in Washington.

- 1) The price of milk is the most important factor affecting the future of dairy farming. The price of milk is heavily influenced by interstate competition and the Federal Farm Bill. Vermont's Representative and Senators are addressing the issue in Washington, but a permanent solution will need to be found to support farming over the long term.
- 2) Many farms are limited to a single commodity. This makes our local farms susceptible to market fluctuation and contributes to concerns over the long term sustainability. Where farms diversify into hay, wine, specialty crops, and livestock, agro-tourism, sugaring, and other farming ventures, the farm can better weather drops in market prices in one commodity.
- 3) Increasingly, nuisance lawsuits against farmers for normal practices have become a problem. Some new residents to rural communities in Vermont are unfamiliar with "rural" living. The smells and sounds of farming are a sign of spring for many but considered a nuisance for others. Courts have been split over the years and sometimes rule in favor of the new residents over the existing farms. Other factors, such as new residential wells, require farmers to take land out of production. One possible solution is the creation of a formal agricultural district where residential and other non-farming activities will be limited. New subdivisions may also be required to include "right-to-farm" language in subdivision bylaws and deeds.
- 4) The current method by which education is funded in the State is property tax dependent, and this influences the way in which land is used.
- 5) Loss of farmland to development. Of particular concern is the waste of farmland when farmland is divided into large, ten-acre lots. These lots take land out of production because they tend to be too large to mow but too small to farm. Clustering lots or creating small lots allows creation of new housing on manageable sized lots, while keeping fields open and in a single ownership.

While this is far from a complete list, Cambridge recognizes the challenges to keeping farming sustainable. While many of these cannot be solved locally, the Planning Commission, the Conservation Commission, and

the farming community should work together to find solutions acceptable to all concerned in order to address land use issues surrounding agriculture.

## The Future of Agriculture

The community believes that the protection of agricultural resources is key if we are to retain the present character of our community. Land use planning efforts must consider the economic and social factors of agricultural operations. While traditional methods for land preservation can be effective at directing development away from important farmlands, they do not guarantee that the land will be farmed. A viable agricultural economy should protect the working landscape and the family farm. In addition to farm enterprises themselves, a vibrant agricultural economy relies on the availability of appropriate infrastructure, including roads, utilities, processing, and storage capacity.

There is no way of knowing what farming will look like in ten or twenty years. Over the past decade, it has become necessary for local farms to increase in size. While 300 head of cattle was the exception in 1992, it is now becoming the norm for conventional dairy farms. At the same time, some specialty farms are finding profitable ways of raising herds of 10 head of cattle or less through use of direct marketing and value added products. The Town must remain flexible to the changing face of farming. Any policies that impact farming will need to be reviewed regularly to ensure they do not place an undue burden on the farmer.

Assuming environmental standards are met, the Town of Cambridge recognizes the need for our agriculture to grow and adapt to contemporary economic conditions. Consequently, the Town does not wish to place any municipal impediments to farm operations of various types and sizes.

#### **B. Forest Resources**

Forestland is the dominant land cover in the community - covering approximately 74% of Cambridge's acreage. While the total woodland acreage (28,000 acres) appears to be high, it does not indicate what proportion of that woodland is being managed for productive purposes.

Cambridge's forest resources contribute directly to the economy through the timber industry and the production of maple syrup. Some of the less quantifiable benefits derived from Cambridge's forest resources include habitat for game/non-game species such as deer, bear, and moose; specially adapted plant communities which are important to maintaining wildlife; water resource protection; and recreational opportunities for both residents and visitors. The beautiful colors displayed in the fall are an attraction for visitors who in turn contribute to the local economy.

While much of the forest land in Cambridge is dominated by northern hardwood forest community (which includes maple, birch, and beech stands), there are also stands of large oak, a species more dominate in southern New England, particularly in the North Cambridge area. According to some residents, oak appears to becoming more common at lower elevations throughout town.

### Timber Harvesting

Total timber harvest has declined over the last decade in Lamoille County and the State as a whole. (Town level data is not available.) According to the U.S. Forest Service, statewide increases in the volume of growing stock are twice that of harvesting rates. Past harvesting practices have selectively removed only the highest quality stems (high-grading) resulting in roughly 15% of northern Vermont's growing stock being of such poor quality that it is of little or no commercial value. Long term management, including culling of unhealthy stands, is needed to encourage the regeneration of native species and to improve overall forest quality and value from both economic and ecological points of view.

# Wood for Energy

In addition to timber, wood is also harvested for energy. There has been an overall increase in demand for wood energy, recognized at both the commercial and institutional level, with 35 schools in Vermont converting from fossil fuel to the use of wood chips for heating between 1983 and 2008. Personal consumer demands have also increased over the last decade, with one recent study depicting a residential firewood consumption increase from 275,000 cords per year in 1997 to 315,000 cords per year in 2008. Use of wood for energy represents an opportunity to continue to manage Cambridge's forests despite the poor timber market and lower quality growing stock as some wood that may not be suitable for timber may be suitable for wood chips, wood pellets, or cordwood. As noted in the Natural Resources Section of this Plan, cordwood is a major medium by which invasive species spread. Currently, Cambridge's forests are relatively free of many invasive insects. marketing of locally cut cordwood to residents of Cambridge and surrounding communities, as well as visitors to the numerous area parks and resorts could increase opportunities for Cambridge businesses and forestland owners, while also preventing the spread of unwanted pests.

### Maple Products

While timber harvesting and the wood products industry appear to be in decline, the use of Lamoille County's forest for maple products is growing. Lamoille County has witnessed a significant expansion within the maple products industry over the past decade, characterized by the growth of existing small and medium scale maple sugaring operations as well as the addition of new operations. Both the number of taps and the total amount of syrup produced in Lamoille County has increased significantly over the last decade

(again, town level data is not available). Lamoille County now produces the second most maple syrup of any Vermont County. Through the Lamoille County Planning Commission's 2011 Forest Stewardship Project, several consulting foresters reported that land previously managed for timber production is now being managed for maple syrup production.

A large portion of Cambridge's forest land is located within the Mount Mansfield State Forest. Under current State policy, land within a State Forest cannot be used for maple syrup production. This is due to the fact that syrup production and timber harvesting have been viewed as conflicting management goals in the past. Traditional sawmills operated on volume and remained profitable by "keeping the saws running." As a result, trees that had been tapped for sugaring were considered unusable as tap holes contained imperfections and made the lower 5-6 feet of a tree unmillable. This may not be the case for more modern, precision mills that produce more specialized products. In addition, there may be a niche market for furniture and turned wood that contains evidence of tap holes. Given the growth of maple syrup production in the region and changes in the timber industry, Cambridge could consider working with the Department of Forest, Parks, and Recreation to begin a test project of maple production on State land.

# Forest Product Manufacturing

The forest products industry once employed a much larger segment of Cambridge's population than it does today. Over the last several decades, many of the large sawmills in the Lamoille County Region have closed, including the Bell Gates Lumber Mill, formerly located in Jeffersonville. Currently, much of the timber produced in Lamoille County is exported to Canada for milling. Increasing the amount of forest products processed in Cambridge could provide employment in support industries such as equipment and vehicle services and providers, sawmills and other processing facilities such as wood chippers, pellet manufactures, and other value added manufacturing facilities. It may no longer be economical to operate a traditional sawmill in Cambridge; however, small "backyard" mills, portable mills, fire wood suppliers, and cottage furniture makers and wood turners all represent potential opportunities to create local employment while adding value to raw timber materials produced in Cambridge.

#### Forest Soils

The NRCS has identified the best soils to support commercial forestry, including many upland soils that are too shallow, rocky, or steep to support other types of development. As a result, primary forestry soils are generally less threatened by development but are more sensitive to site disturbance and erosion. To help prevent soil erosion, the State has adopted acceptable management practices (AMPs) to prevent soil erosion and maintain water quality on logging jobs. The Acceptable Management Practices (AMPs) for forestry in Vermont were first stipulated when the Vermont Department of

Forests, Parks, and Recreation developed the 1987 guide titled "Acceptable Management Practices for Maintaining Water Quality on Logging Operations in Vermont." Occasionally also referred to as "Best Management Practices," the AMPs are intended to prevent mud, petroleum products, and woody debris from getting into streams, ponds, lakes, and rivers. AMPs also help maintain natural water temperatures by requiring that trees be left along streams and water bodies. They are scientifically proven methods for loggers and landowners to follow for maintaining water quality and minimizing erosion. While AMPs are voluntary, they have the force of law: a violation occurs when there is a discharge to State waters and the AMPs are not in place. Any foresters in Cambridge interested in obtaining more information or assistance on the AMPs at their sites should contact the Vermont Department of Forests, Parks and Recreation AMP Program.

## Methods of Forest Resources Protecting.

The same tools used for protection of agricultural resources can be used for the protection of forest resources -- Use Value Appraisal, Purchase of Development Rights, and Land use Regulations. In 2002, 13,394 acres were enrolled in productive forestland with an additional 336 productive forestland acres greater than 1 mile from a road. There were also 968 acres of non-productive forestland in the program. As of fiscal year 2012, Cambridge had a total of 146 parcels enrolled in UVA. Of those parcels, 115 were productive forestland totaling 15,435 acres. Thirty-one parcels, comprising 1,098 acres, were non-productive forestland (e.g. deer yards, wetlands).

### Considerations Related to the Forest Resource.

Forestry is threatened in a similar manner to farming but also has some unique difficulties.

- 1) Large amounts of forestland in Cambridge are owned by the State of Vermont. Various public uses, such as recreation, wildlife management, and timber/maple production, compete for this land. Management decisions of publicly owned land should take into account the needs and interests of the local host community. As such, Cambridge would like more input on management plans related to the Mount Mansfield State Forest and other public lands located in Town. At minimum, State land managers should consider impacts that various uses have on local road infrastructure.
- 2) Encroaching development, especially on ridgelines, is a second issue threatening forestry. These areas tend to be large lot subdivisions which, like agricultural lands, fragment the resource into inefficient sized parcels for management.
- 3) A large quantity of the region's forest resources leaves the region in a raw form without being processed. Secondary and value added processing of all resource related products add to the overall strength of the economy.

#### The Future.

Increases in local property tax rates decrease the profitability of managing forestland. According to statewide estimates, an average acre of commercial forestland pays \$7.20 per acre in taxes and management costs (\$5.20 for taxes, \$1-\$2.00 for management) while the average annual value of the growth occurring on the same acre equals \$4.50 per acre. The payment made by the State through the Use Value Appraisal program lowers the tax/management cost to \$3.50 per acre allowing for reinvestment in the forestland, thereby increasing its long-term productivity.

About 9,500 acres of productive forestland in Cambridge were enrolled in the Current Use Program in 1991 (about 23.3% of the Town's acreage). As mentioned above, this figure had increased to more than 13,000 acres by 2002 and a decade later increased to 16,000 acres. This rapid growth in participating in the program probably relates to increases in property taxes in Town but also to the overall desire of residents to continue traditions of managing forests.

In the future the Planning Commission may wish to determine the location of most and least productive forest soils and to consider the type of land ownership and parcel size of various tracts in the community. Ownership of forestland (private, public, or private commercial forest owner) and the size of parcels are important considerations in understanding the viability of the resource for continued forest management and production.

#### **COMMUNITY FACILITIES AND SERVICES**

A key source for the update of this section is the Cambridge Utility and Facility Report produced by the Lamoille County Planning Commission in 2012. Other sources have been referenced as appropriate.

The Town, Village, and other public/private entities provide community facilities and services for the health, benefit, safety, and enjoyment of Cambridge residents and the general public. Careful planning for community facilities and services is essential if local goals and needs are to be met. Inadequate facilities may prevent the Town and Village from meeting existing needs or to accommodate desired growth. Also, they may cause financial burdens and contribute to environmental problems. The facilities and services currently provided in Cambridge are described below.

Planning with a vision that addresses immediate short term issues but also has insight into long term infrastructure needs is essential to provide adequate community facilities. Both privately and publicly owned facilities support the general health and safety of the community.

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

# A. Water Supply Facilities and Services

Municipal water systems serve the Villages of Jeffersonville and Cambridge). A private water supply system serves Smuggler's Notch Resort. Those households and businesses not served by these systems provide their own water through private systems (e.g. springs or wells). Section III. Natural Resources, part C Water Resources (of this Plan) includes a discussion of issues related to water quality and supply.

#### Jeffersonville Water System.

The Jeffersonville Water System is under the jurisdiction of the Village of Jeffersonville. Detailed discussion of this system, therefore, appears in the Village of Jeffersonville Municipal Development Plan. Portions of the "Cambridge Junction" area located outside of the Village boundaries are also connected to the system. No additional properties outside of the Jeffersonville Village boundaries may connect to the Village Water System at this time.

The Jeffersonville Water System is fed by two springs. "Spring 101" is located on Road 101 near Smugglers Notch Resort. The second spring, known as the The Edwards Spring is located in a woodland off Edwards Road. The watershed, wellhead protection areas, and location of the springs themselves are not in public ownership, though 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. Development within the wellhead protection area is expected to comply with State wellhead protection rules.

In addition, the Village of Cambridge owns 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 or Cambridge Village. To this end, the Village Trustees are encouraged to visit the present legal rights to water and the right-of-way for maintenance to ensure lack of use of the two springs that once served Cambridge will not be considered abandoned property.

## Smuggler's Notch Water System.

The Smugglers' Notch Management Company presently owns and operates a public community water system serving Smugglers' Notch Resort. The State of Vermont identifies the system as WSID5151. The village section of Smugglers' Notch was developed in the 1960's and has been expanding since that time. The system is regulated by the State of Vermont, and any expansion of the system would require State approval. Smugglers' Notch Management Company approximates that two thirds of the domestic water currently used by the Smugglers' Notch village comes from 8 drilled wells, with the balance coming from a surface source within lands owned by the State of Vermont. This surface water source also provides water for snowmaking purposes and fire protection.

The Smuggler's Notch Water System WHPA is also located in the Town of Cambridge. Regulation of land use within this WHPA is, therefore, the responsibility of the Town of Cambridge.

#### The Village of Cambridge Water System.

The Village of Cambridge Public Water System currently serves businesses and residents located on Route 15, north and south Main Streets, Pleasant Valley Road, Pumpkin Harbor Road, and Old Route 15. There are currently approximately 70 connections to the system. The system uses approximately 18,000 gallons of water per day and has a reserve capacity of approximately 100,000 gallons in its reservoirs. Poor soils for sewage service have limited the addition of structures for residential or commercial purposes resulting in little demand for growth in this water system.

The current distribution system was installed in 1975. Mains are depicted on Map 5. The system consists of 84,000 feet of 8 inch PVC mains. Due to the fact that the wells are located at elevations significantly above the service area, no pump stations are required. The system is entirely gravity fed

and maintains a pressure of approximately 70 PSI. There are a total of 15 fire hydrants on the system. However, the Fire Department has noted that the system may not have enough reserve capacity to extinguish a large fire and that additional water would likely need to be shuttled in, particularly if a fire involved multiple structures.

Water is provided to the system by two wells. The main well is located on Bartlett Hill. The well is capable of yielding over 100 gallons per minute. However, the well is limited to 25 gallons per minute in order to minimize negative impacts on private wells located on Bartlett Hill. A backup well is located off Pumpkin Harbor Road. This backup well yields approximately 65-70 gallons per minute. Due to the quality of the well water, no chlorination is required.

The Village of Cambridge owns property surrounding both wellheads. The Village owns approximately 7 acres near the Wrong Way Bridge in the vicinity of the Pumpkin Harbor well. The Village also owns 48 acres containing the well head protection area of the Bartlett Hill well. In addition, the Village owns approximately 68 acres of forested land surrounding the system reservoir located on the hill south of Cambridge Village. Given that the primary purpose of all the properties is to ensure protection of the wellheads and reservoir, they are not actively managed for forestry or recreation.

#### Private Wells.

All homes and businesses not served by a public water system are served by private wells. Private wells serve most residents living outside of the two Village areas. Private wells must be drilled in accordance with Environmental Protection Rules (EPRs) established by the State of Vermont Department of Environmental Conservation. The most recent EPRs can be found at the link below: http://www.anr.state.vt.us/dec/rulessum.htm

## B. Sewage and Septic Facilities and Services

There are two wastewater treatment facilities in Cambridge; one that is owned by and serves the Village of Jeffersonville and one private facility owned by Smugglers' Notch Management Corporation, serving Smugglers' Notch Resort. The remainder of the Town of Cambridge and the Village of Cambridge septic systems are privately owned. The Cambridge Health Officer is responsible for carrying out Town ordinances that address health issues related to septic systems.

Permitting of septic systems, leach fields, and wells is now a process that is performed on the State level. To comply with the State regulations individuals must apply for a wastewater and potable water supply permit from the Department of Environmental Conservation (DEC). Concerns or discovery

of a failed system should be referred by the local health officer to the Department of Environmental Conservation. DEC is available to provide guidance to maintain healthy septic systems.

## Jeffersonville Wastewater Treatment Facility.

Since the Jeffersonville Wastewater Treatment Plant is located within the Village of Jeffersomnville, most factors related to it are outside the jurisdiction of this Plan. However some aspects do have the potential to affect the Town and Village of Cambridge. There are currently no extensions of sewer lines outside of the Village limits.

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 gpd. About 50%-60% of the system's capacity is currently unused; meaning, based on a conservative estimate, about 35,000 gpd is available for future development. This represents a significant opportunity for new development within the Village and Service Area.

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.

#### Wastewater Considerations

- 1) The Lamoille River receives the outflow from the Jeffersonville Wastewater Treatment Plant. The outflow pipe is located where Route 15 crosses the river in Jeffersonville. At this time no problems with the outflow have been identified; however, should there be problems in the future, there could be an impact on the Town and Village of Cambridge.
- 2) At the present time Jeffersonville is faced with a difficult facilities problem. The water supply distribution system in the Village is in need of upgrades. At the same time, the wastewater treatment plant has significant excess capacity. The cost of this excess capacity is borne by current uses, which may create a financial burden. While these systems are outside the jurisdiction of the Town, the present situation may channel growth outside of the Village into other parts of the Town.
- 3) Access to municipal water and wastewater treatment is often considered by businesses when they choose to develop, relocate, or expand their operations. Some businesses, especially in the manufacturing and food service sectors, rely on these services.

Providing local employment necessitates maintaining adequate facilities. Future growth in areas with moderate concentrations of population, like Jeffersonville and Cambridge Village, may be hampered by inadequate facilities.

### Smuggler's Notch Resort Wastewater Treatment Facility.

Smugglers' Notch Management Company owns and operates a secondary wastewater treatment system with spray disposal to service all of Smuggler's Notch Resort facilities and homes. The system is rated to treat 167,800 gpd but is limited by disposal capacity to 165,205 gpd. The Smugglers Notch Resort Wastewater Treatment Facility also utilizes a "Living Machine" located inside a greenhouse structure. The Living Machine utilizes natural processes such as soil plant root structure to treat wastewater. Approximately 46% of the Resort's annual wastewater is treated by the Living Machine.

The system is regulated by the State of Vermont Department of Environmental Conservation Wastewater Management Division, permit #ID-9-0024. The streams which receive flow from the spray site are regularly monitored for both chemical and biological parameters. The system has an excellent long term compliance record.

# Cambridge Village

Most businesses and homes in Cambridge Village are currently served by private septic systems. Due to the age of homes and small size of lots in Cambridge Village, it is possible that some residents would have difficulty installing a modern system that complies with current environmental regulations should they need to replace or expand their existing septic systems. Given the cost and permitting involved in constructing a centralized, public sewer such as the one in Jeffersonville, it is unlikely that a similar system will be constructed in Cambridge Village. As an alternative to such systems, some communities have constructed community leach fields that serve numerous residents and businesses. An example (albeit an older system) can be found in the Village of Hyde Park. Soils on the north side of Cambridge Village may be favorable to this approach. Often, community septic systems and leach fields are part of a "decentralized" approach to wastewater treatment in which lots that cannot support onsite septic connect to the community leach fields, while some larger lots maintain private septic systems. Funds for feasibility studies for decentralized wastewater treatment are available from the Vermont Department of Environmental Conservation. (See http://wastewater.vt.gov/)

### Private Wastewater Disposal

With the passage of new State laws put into effect in 2006, all new construction must have an approved State Wastewater Disposal permit before any construction may begin. All questions regarding septic construction and wastewater disposal should be directed to the Department of Environmental Conservation within the Agency of Natural Resources.

### C. Solid Waste Handling and Disposal Facilities and Services

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 Town and the District. The Town of Cambridge operates the Transfer Station and engages with a private contractor to perform the work and activities associated with the Station. The materials collected at the Transfer Station are transferred to other licensed facilities for ultimate disposal or processing. Residents may pay a private hauler for pick up at their home rather than taking their refuse to the Transfer Station.

In 2012, the Vermont State Legislature mandated recycling and composting of food waste. By 2022, all food waste generated in Vermont will be required to be composted. Some large, institutional producers will be required to compost their food waste at an earlier date. There may be opportunities to create a public or privately operated composting or recycling facility in Cambridge.

# D. Electric Utility Facilities and Services

Two electric utilities provide services in the Town and Village of Cambridge. Central Vermont Public Service Corporation, now owned by Green Mountain Power Company, provides service in the Village of Jeffersonville and portions of the Town and Village of Cambridge. Vermont Electric Cooperative provides service in the remainder of the Village of Cambridge and the Town of Cambridge. Section IX. Energy (of this Plan) includes a complete discussion of electric facilities and consumption within the Town.

## E. Communication Facilities and Services

Communications once involved a single telephone company, some radio and television stations, and newspapers. Today there are satellite and cable TV providers in addition to digital TV broadcasting. Hard-line phone service has competition from cellular services, and newspapers compete with the broadband access to the internet for news, culture, and social media. The availability of high-speed Internet access and other information services is vital to businesses and to attracting more.

## Telephone and Cellular Service.

Fairpoint Communications owns land and buildings in Cambridge and maintains telephone lines and broadband service in the area. Long distance

service is available from all major telephone companies. Cellular service provided by AT&T and Verizon is now widely available in town and in outlying areas; however, service is still not available in some areas due to terrain.

### Cable and Satellite Television.

Jeffersonville Cable TV Corporation owns buildings, structures, and antennae in Cambridge and provides service to the Village residential cores. Satellite television service is generally available to anyone in the area.

### Data Communications and Broadband Internet Service.

Dial up internet service is available through telephone lines There are multiple primary local broadband Internet service providers: Fairpoint (DSL), Comcast (Cable), Stowe Access (Cable), Verizon and AT&T (Cellular), and VTEL (Wireless). Despite recent expansion of broadband service due to Federal and State initiatives and grants, in some areas Internet access is still only available through a dialup service (telephone line), or via satellite. Fairpoint Communications also completed their installation of Carrier Ethernet Service (AKA Metro Ethernet) equipment at the Jeffersonville Central Office (CO) in September 2012, which can allow delivering data communications with 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) to local businesses. The availability of Carrier Ethernet in Cambridge represents a major opportunity to expand and diversify the local employment base.

Broadband service also creates new opportunities for Cambridge residents to communicate with each other and with their municipal government. Through the E-Vermont Program of the Vermont Council on Rural Development, (see <a href="http://e4vt.org/">http://e4vt.org/</a>) the Town of Cambridge recently created a municipal website (see <a href="http://www.townofcambridgevt.org/">http://www.townofcambridgevt.org/</a>). Cambridge is also served by one of the most active "Front Porch Forums" in the State of Vermont. Front Porch Forum is a regional network of community and neighborhood online forums. (see <a href="http://frontporchforum.com/">http://frontporchforum.com/</a>)

### Radio and television broadcast.

Broadcast service is available depending on location within the hills and valleys. The elimination of analog service (frequencies are now used for 4G LTE cellular service) in favor of digital broadcasting has improved quality of signal but has reduced availability of service due to terrain masking. Many households now rely on cable, satellite, or broadband internet for television service.

#### Newspapers.

The closest paper with a daily circulation is the *Burlington Free Press*. The Free Press provides limited coverage to events in Lamoille County. Within the County there are three weekly papers -- the *News & Citizen*, the *Transcript*,

and the *Stowe Reporter*. The *News & Citizen* and the *Transcript* are published in Morrisville and are used by the Town of Cambridge as newspapers of record for the publication of official notices. The *Stowe Reporter* reports on events in the region although the focus is primarily on events and news within the Town of Stowe.

### F. Public Safety Facilities and Services

#### Law Enforcement.

The Vermont State Police are the primary law enforcement responders to complaints in Cambridge. The Town has the option of backup services from the Lamoille County Sheriff Department.

The State of Vermont's Incident Based Reporting System was brought online in 2003 and replaces the old system of reporting. The new system separates crimes into three categories -- crimes against people, crimes against property, and crimes against society. Because of a new crime reporting system, crime rates prior to 2003 are not comparable to recent figures. According to this system, there were 76 offenses in Cambridge in 2010, for an offense rate of 24.61 per 1,000 residents. Larceny, burglary, and vandalism/destruction of property were the most common crimes committed. For reference purposes, this offense rate is higher than Waterville and Belvidere (19.12 and 13.94, respectively), similar to Hyde Park and Morristown (24.75 and 24.80), and lower than Johnson and Stowe (55.00 and 52.60)

#### Fire Protection.

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. The Company provides primary response Fire Coverage to Cambridge (including the two Villages), and about half of Fletcher. Backup coverage is exchanged through agreements with surrounding Fire Departments. For heavy rescue coverage the Department is the primary responder for all of Cambridge. If requested, they cover other nearby towns.

The fire station is located in the Village of Jeffersonville. A new facility was built in 2012. This facility should provide for extended expansion for the next several decades. In 2012 volunteer membership was at 33 firefighters. A full roster includes up to 35 firefighters, plus 1 dispatcher, 3 fire police, and 5

juniors and cadets. Call volume has been hovering around 200 calls a year for the past five years. The Fire Department continues to regularly upgrade equipment and has maintained a capitol plan for over 20 years on truck replacement, facilities, and major equipment needs.

### Rescue.

The Cambridge Rescue Squad is a volunteer organization which provides full emergency response and medical transport service. They work in close association with the Cambridge Fire Department.

In addition to appropriations from the Town, the Cambridge Rescue Squad has conducted fund raisers and received private donations to support their work. The Squad has a new 2001 Braun type III ambulance and uses the 1995 ambulance for backup. The ambulances and equipment appear adequate at this time.

Cambridge Rescue operates out of a converted residence built in the 1960s. It 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 Rescue Squad has 15 members (down from 18 in 2000). The squad responds to more calls each year. In 2012 the squad responded to 476 incidents.

#### Emergency Communications.

All emergencies are reported using the 911 system provided through the County Sheriff's Office. Communication between municipal emergency services has been difficult due to the different systems and frequencies used. Additionally, "dead spots" exist in the Town and County which prevent hand held and vehicle communications with base or dispatch. These have been addressed regionally with radio repeater systems. In 2012, FCC regulations required all radio users to compress or narrowband their radio frequencies. This has resulted in signal loss in some cases up to 25%. Currently Cambridge is evaluating their radio coverage and identifying any known deficiencies.

### Rapid Response Planning.

Beginning in 1995, as a result of severe flooding, the County began an effort to improve coordinated responses to disasters. In light of the events of September 11, 2001, this program now has terrorism response as a significant component as well. The improved emergency communications and other projects will continue, including hazard mitigation to prevent future damage from occurring in a disaster. The Town of Cambridge is participating in these

efforts and should continue to in the coming years.

### Public Safety Considerations

- 1) As the Town's population, number of second homes, and commuters continues to increase, the community's crime rate can be expected to increase. The need for greater police protection will have to be addressed.
- 2) The Fire Department reports that some development in town cannot be suitably accessed with existing fire fighting equipment. Also, some larger developments are not including facilities which would aid in fire fighting such as fire ponds or dry hydrants. Minimum fire safety access standards should be developed.
- 3) There is a limited pool of volunteers for public safety services such as fire and rescue, especially during daytime hours. This issue will need to be addressed as Cambridge continues to grow.

### G. Health Care Facilities and Services

Cambridge Town is home to a Federally funded regional health clinic. Additionally, a variety of private health-related businesses operate in Town. A list of Medical Services and other Social Agencies in the County is available from the Lamoille County Planning Commission and on their website at www.lcpcvt.org.

- There are four primary care hospitals near Cambridge:
  - o Copley Hospital in Morrisville
  - o Northwestern Medical Center in St. Albans
  - o Fanny Allen Hospital in Winooski
  - o Fletcher Allen Health Care in Burlington

#### The Cambridge Regional Health Center

The Cambridge Regional Health Center is a tax-exempt organization providing primary health care services for Cambridge. The Health Center has been operating since May of 1977 and is located in the Village of Cambridge.

#### Long Term Care

Cambridge does not currently have an assisted living facility or a nursing home. Community members requiring these levels of care must leave the community in order to acquire these services.

### H. Cemeteries

There are eight cemeteries in the Town and Village of Cambridge, and there is at least one undelineated family plot. There are three Associations, one Cemetery Commission, and at least three private entities who oversee the care of cemeteries in Cambridge. The nearest crematory facilities are in South Burlington or St. Johnsbury. Mortician services are available in neighboring towns.

## <u>Cambridge Cemetery Association</u>.

The Cambridge Cemetery Association is the organization responsible for the care and maintenance of the Mountain View Cemetery. It was formed around 1905, and is still active. It was reported that the first settler in Cambridge was buried in this cemetery. Also, the cemetery is located where the old main highway used to pass. The Association is funded through interest from endowments and perpetual care fees that have been invested.

The Mountain View Cemetery is located on the west side of Bartlett Hill Road, adjacent to the State of Vermont's Cambridge Pine Forest Natural Area;

## South Cambridge Cemetery Association.

The South Cambridge Cemetery Association has been in existence for over 43 years. There are endowments, and the Association does not receive funding from the Town.

The South Cambridge Cemetery is roughly 150 to 175 years old and is located on the west side of the Old Notch Road.

## North Cambridge Cemetery Association.

The North Cambridge Cemetery Association is the organization responsible for the care and maintenance of the North Cambridge Cemetery. The Association was formed around 1903. The Association is funded through interest from endowments, and perpetual care deposits, and has not sought support from the Town.

The North Cambridge Cemetery is located south of Town Highway #12 (between Bartlett Hill Road, and North Cambridge Road).

#### Cambridge Cemetery Commission.

The Cambridge Cemetery Commission maintains two cemeteries: *Hopkin's Cemetery*, and the *Smillie Cemetery*. The Cemetery Commission is a two member elected board.

The *Hopkin's Cemetery* (also known as the Valley Cemetery) has grave markers dating back to at least 1811. It is 0.6 acres in size and is located on the north side of the crossover road between Upper Pleasant Valley Road and Pleasant Valley Road.

The *Smillie Cemetery* is located within the B. Miller Farm east of Route 109, south of its intersection with Quinn Road.

### Cemeteries Cared for by Private Individuals or Families.

There were at least three cemeteries in the Town, which were identified as cared for by either private individuals or families: the Cemetery on Fairfax Road (adjacent to the Sweet Farm), the East Cambridge Cemetery, and The Monument (on Boyden's Farm).

### Other Undelineated Family Plots.

At least one undelineated family plot was identified. There is one north of Town Highway #4 (Hogback Road), and West of Judevine Brook. There may be other unidentified "family" plots in the community.

### Cemeteries Generally.

The ultimate responsibility for the "Town" cemeteries lies with the Town's Selectboard. The Town's Cemetery Commissioners act on a day-to-day basis to take care of the cemeteries.

Another entity which can own and have responsibility for cemeteries in Vermont is a Cemetery Association. A Cemetery Association is a corporation that exists to conduct the business of a cemetery, but they are not a "for-profit" organization. They can own property and act on a day-to-day basis to take care of cemeteries under their purview. The Statutes reserve the right, upon the dissolution of a Cemetery Association, to turn the assets and the care of the cemetery over to the Town (18 V.S.A. §5439).

For more information about Vermont Cemetery Statutes please refer to The Secretary of State's office.

Associated services provided in the Town Clerk's Office include the receipt and recording of the State of Vermont Burial Transit Permits, annual publication of the cemeteries' fund balances in the Town Report, receipt and recording of the money received in trust, and the keeping of plats associated with the cemeteries.

#### Considerations

There are many Cemetery Associations and Commissions in Vermont, and few contractors who are skilled at doing the major repair work unique to Cemeteries. Thus it is difficult to get the contractors to commit their equipment and labor to come for "small" jobs as would be most of the work in cemeteries the size of the ones in Cambridge.

### I. 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

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 author's 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 "hot spot" which provides free internet access to the public.

In 2012, there were 38 hours/week of paid positions (Library Director at 22 hours and two library assistants sharing 16 hours). Volunteers regularly staffed about 918 hours of the Library's time in 2012, which was an increase from the 707 volunteer hours logged in 2011.

While the interior space of the Library is sufficient, the Library Director has indicated that it could be rearranged to provide better circulation, additional display areas and shelving for books, and more room for community events. Given its age, the old section of the Library is relatively drafty and could benefit from insulation and window retrofits. In addition, the Library's forced hot air oil furnace will likely need to be replaced in the near future.

#### J. Recreation

The Town of Cambridge has natural opportunities for recreation that are owned and operated by the State of Vermont, the Town of Cambridge, and private entities.

Community members volunteer their time and energy to create and maintain many of the present recreational activities that are available within our community. Those volunteers play a large role in the creation and maintenance of the recreational opportunities that have become a part of the identity of Cambridge.

The Cambridge Recreation Board consists of nine members appointed by the Selectboard. They arrange recreational programs, at this time, primarily for elementary aged children and some high school level age groups.

The Cambridge Recreation Board does not own any facilities. Thus it arranges with the School Board for the use of their facilities. It arranges for the use of privately owned facilities as well.

The Board continues to work to develop recreational facilities in the community. Good sites for such development are limited and must compete with other more profitable forms of development.

## Cambridge Recreation Fields

The Town of Cambridge owns several recreation fields located between the Brewster River and Cambridge Elementary School. The fields are managed and maintained by the Recreation Board. The fields include:

- The Williamson Field, which was donated by the Williams 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.

A small shed located on skids is used for equipment storage. Currently, much of the equipment used by recreational programs is stored at private residences or in rented storage space. The Recreation Board intends to construct a larger, more permanent storage shed between the baseball field and the Town Garage.

The fields drain and dry fairly well, which enhances their use during the spring. Fertilization and aeration of the fields has been deferred for several years and will need to begin again in the near future to maintain the health of the fields. In the past, the recreation fields were used as parking for Town Meeting. This resulted in substantial damage to the fields. The condition of the fields has improved since that practice was discontinued several years ago.

#### Other Facilities

Cambridge includes numerous areas that offer outdoor recreational opportunities, including:

A. The Smugglers Notch Scenic Highway and State Park (hiking, rock and ice climbing, skiing, biking, fishing in Sterling Pond, etc.) This area is considered to have the best ice climbing in Northern New England

- B. Brewster and Lamoille Rivers (swimming, fishing, paddling). Points of special interest include:
  - 1. Brewster River Gorge Park
  - 2. "Irish Springs" (and other swimming holes along Brewster)
  - 3. Lamoille Access Points (north of river off 108, by G.W. Tatro's, behind Cupboard Deli)

## C. Local Trail Networks

- 1. Alden Bryan Brewster River Trail
- 2. West Farm Trail System (hiking, running, horseback riding)

- 3. Smugglers' Notch-Notch and Resort
- 4. Pleasant Valley mountain bike trails
- 5. Madonna Vasa Trail (hike, ski)
- 6. Cambridge Greenway Path (walking, running, biking, playing)
- 7. VAST Trail (snowmobiling)

### D. Playgrounds

- 1. Field by Cambridge Health Center (baseball/softball)
- 2. Cambridge Village "Fire House Park" -- A small, 0.5 acre park located behind the Cambridge 360 recycling center building is owned by Cambridge Village. The parcel contains a swing set and small playground.
- G. Smugglers' Notch Resort (skiing, snowboarding, snowshoeing, skating, hiking, swimming, zip-lining, tree top adventures, disc golf)

In addition, there are several public and privately owned recreational facilities located in Cambridge and surrounding communities. These include swimming pools located at the Smugglers' Notch Resort, the Cambridge Elementary School Gymnasium, and athletic facilities at Johnson State College, which include gym facilities, a rock climbing wall, a swimming pool, and outdoor field sport facilities.

#### Local Business

Local businesses have been built to offer recreational opportunities to the public. Recreational business in the Town of Cambridge should be encouraged for the economic and physical health of the community. The Town of Cambridge presently has the following types of outfitters: Snowmobiling, canoeing, dogsledding, horseback riding, wagon and sleigh rides, fishing, and dance.

#### Recreational Planning Needs in Cambridge's Future

Concerns have been expressed regarding the limited age group served by current programs. At this time there are no programs serving adult recreational needs, and there few programs addressing high school age recreational needs. In the future, a comprehensive plan for the adequate provision of recreational activities for a wide variety of users is needed.

#### K. The Arts

The Cambridge Arts Council (CAC) is a local non-profit organization that sponsors events, artists, workshops, and discussions on the arts. CAC was integral in getting Lamoille North Supervisory Union to continue development of a standards-based pre-kindergarten through grade-12 art education curriculum for the district.

CAC receives funding through grants, fund raising, and with corporate

sponsorship and membership. One third of funding comes from Town appropriation. A majority of events have no set admission but request donations which cover approximately one third of the cost.

Cambridge is fortunate to have such a healthy and active local arts council. The planning commission should meet with CAC to discuss future facility needs and other ways that the Town can support the arts and CAC.

## **EDUCATIONAL FACILITIES AND SERVICES REPORT (2013)**

This report is drafted from an amended version of the Town and Village of Cambridge Municipal Development Plan 2003. Other sources have been referenced as appropriate.

Land use decisions that affect future growth have significant implications for educational services and their related costs. The Planning Commission must coordinate planning decisions with the School Board and Selectboard to avoid adverse fiscal impacts on the Town.

### A. Educational Facilities and Services

### Administration.

Students in pre-school through sixth grade attend classes at Cambridge Elementary School in Jeffersonville (Cambridge School District jurisdiction). Seventh through twelfth grade students attend classes in Lamoille Union High School in Hyde Park (Lamoille Union High School District jurisdiction). Cambridge students attending vocational classes go to the Green Mountain Technology and Career Center, also located in Hyde Park. All are in the Lamoille North Supervisory District, with offices in Hyde Park.

The Cambridge School Board is a five member elected board whose vision is that the "Cambridge Elementary School will inspire life-long learning and maximize return to community by coordinating efforts and establishing shared high expectations."

#### School Enrollments.

Between 2003 and 2010, the total enrollment at the Cambridge Elementary School fluctuated before increasing from 332 to 348 students (see Table 9). This translates into a Compounded Annual Growth Rate (CAGR) of 0.52%. Note that this differs from statewide trends of declining enrollments. The total school enrollment for Lamoille Union High School has been relatively flat over the last five years (see Table 10).

Table 9- Cambridge Elementary School enrollment by school year

2002-03	2004-05	2006-07	2008-09	2010-11
332	319	305	325	348

Source: Vermont Department of Education Enrollment Report

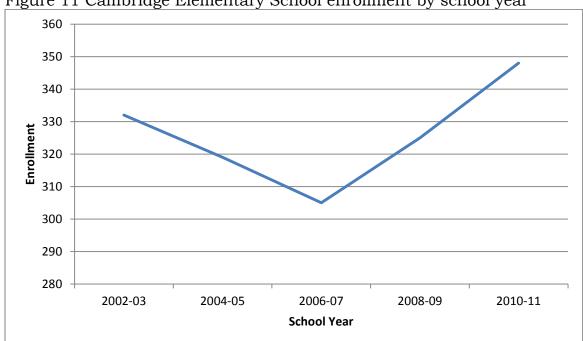


Figure 11 Cambridge Elementary School enrollment by school year

Source: Vermont Department of Education Enrollment Report

Table 10- Lamoille Union High School enrollment

	2002-03	2004-05	2006-07	2008-09	2010-11
Cambridge					
LUHS total	899	903	902	862	860

Source: Vermont Department of Education Enrollment Report

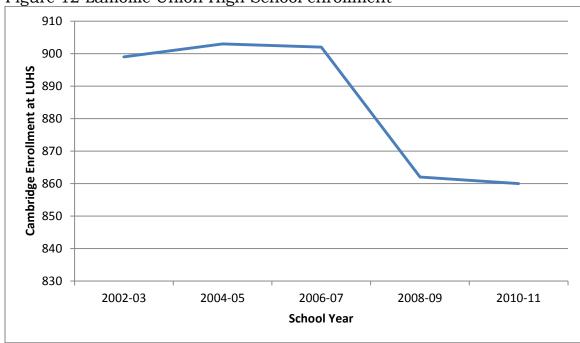


Figure 12 Lamoille Union High School enrollment

Source: Vermont Department of Education Enrollment Report

General population projections indicate a continued steady or slow increase in students (see Table 11). Enrollment figures from 10 years ago are included in Table 11 for comparison.

Table 11- Cambridge Elementary School enrollment by grade

Year	Pre K	K	1st	$2^{nd}$	$3^{rd}$	4 <sup>th</sup>	$5^{th}$	$6^{th}$	Total
2003	30	41	45	37	43	36	57	35	324
2010	44	56	52	43	39	35	45	34	348

Source: Vermont Department of Education Enrollment Report

The classes that are now in the elementary school are only slightly larger than the high school classes, which they will soon be replacing. Given the age distribution of the current population, present enrollment trends can be expected to continue over the next several years. (See Table 12 below)

Table 12- Cambridge students enrolled at LUHS by grade (2003, 2010)

Year	7 <sup>th</sup>	8 <sup>th</sup>	9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12 <sup>th</sup>	Total
2003	163	146	171	142	123	160	905
2010	142	141	152	154	129	142	860

Source: Vermont Department of Education Enrollment Report

According to State projections, Cambridge was expected to grow by approximately 16.1% between 2000-2010 and 12.9% between 2010-2020. The actual figure for 2000- 2010 was an increase of 14.8% according to the 2010 Census. The Planning Commission and School Board will need to continue to monitor trends to determine if the population growth begins to translate into more students.

#### Facilities and Services.

Cambridge Elementary

The Elementary School buildings are all located on the School District's 6.15-acre parcel in Jeffersonville. 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 15 to 80 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.

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.

The Elementary School facilities are used by other groups in the community.

## Lamoille Union High School

The High School facilities are located on a 56.2 acre parcel in Hyde Park. When it was built in 1965, the building was designed to serve 800 students. A new middle school facility was added on site in 2002 to accommodate the growing student population at the high school. The facilities should now be adequate to accommodate increased students for the coming years. As of the 2011-12 school year, the combined district-wide enrollment of grades 7 through 12 is 869 students.

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) 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. Programs include

forestry and land management, automotive technology, culinary arts, HVAC, and other technology/career focused courses of study,

## **Education Considerations**

Cost

Since the 2002-03 school year, the approved Cambridge Elementary School budget increased from 3.10 million dollars to 4.79 million dollars for FY 12. This translates into slightly more than a 50% increase over ten years. This increase is largely due to a substantial building renovation to accommodate increasing enrollment.

Over the same time period (2002 to FY 12), the secondary budget (Lamoille Union High School) has increased from 2.26 million dollars to 17.87 million dollars. Total budgeted per equalized pupil spending for FY-2010 school year was \$17,513. This is an increase from FY 2008 of spending \$15,053 per pupil for the elementary and secondary schools. Of the 108 towns in the State that belong to a union high school, Cambridge had the 13th highest budgeted per student costs. Total budgeted per equalized student spending for FY 10 for LUHS was \$15,981, the 12th highest spending of union high schools. Compared to other Lamoille County towns that participate in Lamoille Union High School, Cambridge is second highest of the four.

The Vermont State Legislature enacted Act 68 during the 2003 legislative session which revised Act 60, the Equal Education Opportunity Act which was approved in 1997. Act 68 sought to equalize the burden of taxation between the various communities within the State of Vermont by establishing statewide education tax rates on residential and non-residential property. Residential property tax rates would then be adjusted by a formula that was based on a school district education spending per pupil. To ensure equity between the local grand lists throughout the State of Vermont, Act 68 established the concept of the Common Level of Appraisal. Both the residential and non-residential tax rates are adjusted by the Common Level Appraisal determined annually for Cambridge by the Vermont Department of Taxes, Division of Property Valuation and Review.

## *Transportation*

The Elementary School District continues to own its own buses. They are used for transportation to and from the Elementary School and to transport the High School students to the Union High School and GMTCC in Hyde Park on a contract basis. According to the Elementary School Budget (2010) the transportation portion of the budget continues to decrease. From FY 11 to FY 12, this was a 10% decrease. In 2008, this budget decreased slightly due to an effort to upgrade inefficient buses. It should also be noted that the elementary school cut all funding for special education transportation in FY 12. The Lamoille Union transportation budget for FY 2012 decreased just slightly, by

\$1,000, from the previous year.

In addition to cost, issues have also been raised regarding the amount of time students were spending each day on buses. The dispersed development occurring in the district contributes to this. As more families live farther out in the rural areas, transportation costs and the time spent riding on the bus increase. According to information provided by the School Board, buses begin to pick up elementary school students at 6:50am and arrive at school by 7:30 am. Some students spend nearly an hour on the bus each way. Some high school students were spending an hour and a half each way riding the school bus. It is estimated that each individual bus stop requires at least 30 seconds.

Locating new development closer to Village and Growth Areas (see Land Use section) would reduce school bus travel time for students living in those developments. Encouragement of clustered type development patterns would reduce the length of new roads needed to be served by school buses. Tightly clustered development, such as condominium, cottage, and townhouse style development, could be served by common bus stops. Such changes in the development pattern could begin to address rising transportation costs and the continued increase in time students spend in transportation

## Safe Routes to School

Cambridge Elementary School is located in the Village of Jeffersonville and is in 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 of 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 only granted if "warranted" by a 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.

In addition to these infrastructure barriers, some parents have expressed concern about the safety of children, especially those in the younger grades, walking to school unsupervised. Formal supervision by parent and community volunteers and school staff may be necessary to allay this concern.

Population, Housing Growth and Total School Enrollments

During the 1980's, Cambridge and Eden were the fastest growing communities in the LUHS District in terms of overall population growth. Through the 1990's Cambridge had the greatest increase in population with 519 new residents. Cambridge, therefore, contributes more students to the High School than other towns in the district and is also the fastest growing community.

Since Cambridge is located close to the St. Albans and Burlington/Essex employment centers, it serves as a bedroom community for those areas. Access to employment, combined with the recreational opportunities in the community, make it a desirable place in which to live and raise a family.

At this time Cambridge must be vigilant and watch for any changes in student population that may impact the schools' capacities to service them. 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 will be relocated, and the computer lab will become mobile. If enrollment continues to grow at similar rates, additional changes may be needed.

## **B. Post-Secondary and Adult Education**

In addition to GMTCC, which offers multiple courses eligible for college credit, there are two other local institutions offering college level instruction in Lamoille County. Johnson State College 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 a campus in Morrisville, offering Associate Degrees, certificate programs, and online instruction in various pre-professional concentrations. Finally, additional adult educational opportunities are available through Central Vermont Adult Basic Education (CVBAE) in Morrisville, which offers instruction for students that are not enrolled in public schools.

Vocational training is available in nearby Fairfax at the Vermont Woodworking School (VWS). Located just minutes from Cambridge Village, VWS is located in a 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 and also provides its own immersion program. Semesters run for twelve weeks. Some housing is provided onsite. The School also leases a house in Jeffersonville that provides dormitory housing.

The VWS is not limited to educating enrolled students. Workshops are open to the public at varying prices and for varying levels of expertise. Due to

its commitment to the art and tradition of wooden crafts, in 2012 VWS was designated a State Craft Center, one of only four in the state. 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 students and non-students alike.

## C. Early Education and Child Care

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 Cambridge. 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 Learning Standards. Additionally, to receive statewide recognition, childcare programs are eligible to apply for Vermont's For information **STARS** rating system. 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 <a href="https://www.brightfutures.dcf.state.vt.us">www.brightfutures.dcf.state.vt.us</a>.) 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 Cambridge's immediate commute shed (Fletcher, Jericho, Underhill, and Johnson) Note that the

majority of these are located within Johnson, while the majority of Cambridge residents commute in the opposite direction. As Cambridge continues to grow, additional home and center based childcare facilities may be needed.

## TRANSPORTATION FACILITIES AND SERVICES REPORT (2013)

This report is drafted from an amended version of the Town and Village of Cambridge Municipal Development Plan 2008. A second key source is the Cambridge Utility and Facility Report produced by the Lamoille County Planning Commission in 1990 and updated in 2012. Other sources have been referenced as appropriate.

The transportation network serving Cambridge is critical to all aspects of life in Cambridge: commerce, recreation, commuter travel and general mobility. The efficient and safe movement of people, goods, and services, both within and between communities, is needed to maintain the vitality of Cambridge.

## A. Highways and Roads

There are approximately 107 miles of road in the Town of Cambridge. Approximately 32 of these miles are State highway, under the jurisdiction of the Vermont Agency of Transportation (VTrans). State highways (Routes 15, 108, 109 and 104) are maintained by the Vermont District #8 Highway personnel based in St. Albans. A district garage is located on Route 15 east of Jeffersonville. The Town Highway Department is responsible for the remaining roads within the town, including those in the Villages of Cambridge and Jeffersonville. There are some reciprocal arrangements for service with the neighboring communities of Fletcher and Underhill.

# Highway Network.

State routes in the Cambridge area are a narrow point in a "traffic flow" which is dispersed to the east and west. For example, commuters from Johnson, Eden, Belvidere, and Waterville must travel through Cambridge to reach employment centers in St. Albans and Burlington/Essex areas. The State route with the fastest growing average daily traffic count is Route 15, the major east/west through traffic route.

All local roads in Vermont are classified according to their importance and general use. This classification system is used to determine the amount of State Highway Assistance provided to each community. **Class 1** roads are highways that are the responsibility of the Town, but are extensions of the State highway system. There are no Class 1 roads in Cambridge. **Class 2** roads are those that are important corridors between Cambridge and other towns and carry more than a "normal" amount of traffic. Most Class 2 roads are paved. **Class 3** roads are secondary town highways that are passable the year round by standard vehicles. **Class 4** roads are all other town highways, including trails and pent roads. Typically Class 4 roads are only seasonally functional for normal vehicular traffic and have a dirt surface. Highway mileage for each class of roads in Cambridge is shown in Table 12 below.

Table 12. Town highway mileage by classification

Municipality	Class 1	Class 2	Class 3	Class 4	Total local miles (excl Class 4)	Total State
Total	0	15.430	52.96	7.480	68.39	32.465
Town only	0	13.070	49.760	7.480	62.830	29.042
Jeffersonville	0	0.440	1.730	0	2.170	2.339
Cambridge Vil	0	1.920	1.470	0	3.390	1.084

Source: VTrans 2006

### Traffic.

New development and new housing add not only the individual owner's car trips, but also service trips. Service trips (e.g. delivery trucks, mail service, general maintenance, entertainment, visitors, transportation of school children) also contribute to increased road usage. Based on studies conducted by the Institute of Transportation Engineers, (ITE) the average number of added trips that can be expected due to the addition of a single family detached house is ten trips per week day.

Growth and development in Cambridge and in communities that generate traffic that flows through Cambridge can have a negative impact on the community transportation system, especially if the transportation system is not upgraded to accommodate increased use.

Traffic volumes in Lamoille County have continued to grow steadily, especially during the 1980s and 1990s. The majority of the traffic increase has occurred on VT Route 15. The increased traffic on Route 15 can be clearly seen in traffic volumes as measured by the State Agency of Transportation.

Table 13. Traffic volume changes in Cambridge

Traffic recorder	AADT	AADT	AADT	% change	% change
location	(yr)	(yr)	(yr)	yr 1 - 2	yr 2 - 3
Upper Pleasant Valley	760	770	980	1.3%	27%
Road (TH5)	(99)	(03)	(07)		
Hogback Road (TH4)	750	880	1356	17%	54%
at Johnson Town-line	(95)	(99)	(04)		
Pumpkin Harbor	640	910	1100	42%	21%
Road (TH2) north of	(81)	(91)	(95)		
VT15					

Traffic recorder	AADT	AADT	AADT	% change	% change
location	(yr)	(yr)	(yr)	yr 1 - 2	yr 2 - 3
Lower Pleasant Valley	370	330	421	-11%	28%
(TH1) 1 mile north of	(95)	(99)	(04)		
County Farm (TH45)					

VT108 at Stowe	1700	1600	1400	-5.9%	-12.5%
Town-line	(02)	(04)	(06)		
VT108 North of Pratt	3200	4500	3400	41%	-24%
Road (TH42)	(02)	(04)	(06)		
VT108 (Main Street)	2100	2100	1900	0%	-9.5%
north of School Street	(02)	(04)	(06)		
(TH56)	,	, ,	,		
Church Street east of	3000	3600	4100	20%	14%
VT15	(92)	(96)	(00)		
VT15 west of TH39	4200	4500	4700	7%	4%
	(02)	(04)	(06)		
VT15 at Wrong Way	7500	7700	7400	2.7%	-3.9%
Bridge (BR20)	(02)	(04)	(06)		
Traffic Recorder	AADT	AADT	AADT	% Change	% Change
Locations	2003	2007	2011	(03- 07)	(07-11)
Underhill Town Line	900	790	970	-12.2	22.8
to Lower Pleasant					
Valley Rd (TH1)					
Lower Pleasant Valley	770	980	960	27.3	-2.0
Rd (TH1) to					
Williamson Rd (TH28)					
Williamson Rd (TH	1600	1800	1800	12.5	0
28) to Church Street					_
(VT 108)					
Hogback Rd (TH4)	910	720	760	-20.9	5.6
Harbor Rd (TH2) to N.	760	790	770	3.9	-2.5
Cambridge Rd (TH7)					
Harbor Rd (TH2) to	1300	1200	1200	-7.7	0
VT15					
Traffic Recorder	2006	2008	2010		
Locations					
VT15 to VT104	4700	4000	4600	-14.9	15.0
VT15 via Mansfield	7400	7100	7000	-4.1	-1.4
Ave. (TH1) to					
Pumpkin Harbor					
(TH2)					
VT15 via VT104 to	7600	6400	7000	-15.8	9.4
Mansfield Ave					
VT 15 via Pumpkin	8300	7100	7100	-14.5	0
Harbor (TH2) to					
VT108S					
VT 15 via VT108S to	6700	6500	6500	-3.0	0
	0700	0000	000		
VT108N	0700	0000			

Cambridge Jnct Rd (TH23)					
VT15 via Cambridge	5700	4900	6000	-14.0	22.4
Jnct Rd to Johnson	0100	1500	0000	11.0	22.1
VT104 via VT15 to	3500	3300	3400	-5.7	3.0
Fairfax Town line					
VT108 via Stowe	1400	1500	2100	7.1	40.0
Town Line to Ski					
Parking Lot					
VT108 Ski Lot to	3000	2000	2800	-33.3	40.0
Edwards Rd (TH28)					
Edwards Rd (TH28) to	3400	4900	4900	44.1	0
VT 108					
VT108 to VT15	1900	1800	1800	-5.3	0
VT108 via VT15 to	2700	2400	2400	-11.1	0
VT109					
VT 108 via VT109 to	1300	1100	1200	-15.4	9.1
Fletcher Town Line					
VT109 via VT108 to	1300	1400	1300	7.7	-7.1
Waterville Town Line					

Source: VTrans 2003; 2010, 2011 locations are immediately after reference road unless otherwise stated.

#### RSMS/Culvert Inventory.

LCPC assisted Cambridge by providing consultant assistance to inventory road surface conditions and culverts. This inventory was conducted in 2001 and updated in 2011. Inventories of this type are excellent tools on which to base capital budget plans for roadway projects and culvert replacement programs. The information should be updated regularly; ideally every year but not less than every three years to ensure accuracy of the condition assessment. Road Surface Management System, or RSMS is specific software that can be used to inventory and prioritize roadway surface improvement projects. Similar software can be used for culvert replacement prioritization. The 2011 inventory counted 463 culverts, with the majority being in *fair* (35%) or *good* (30%) condition. Using GIS data through the Geographic Information Systems (GIS) mapping system, has allowed the locations of all culverts to mapped for easy reference.

#### Access Management.

Roadways are designed for two different and sometimes conflicting functions -- access and movement. A hammerhead or cul-de-sac is a road designed principally for access while at the other end of the scale, an Interstate Highway such as I-89 is built primarily for movement. Conflicts and congestion result when roads and intersections designed for one function are used for other functions. Future land use decisions must take into account the primary

function of the roads which development is accessing. In order to do this, local officials should inventory the primary function of all local roads and current use patterns.

VTrans is available to work with towns to develop, through consensus, access categories that may help guide development accesses along stretches of State highway. There may be elements of discussion that could be employed on major town owned roads as well. For example, serving a new subdivision with a single access road, rather than providing each new lot with a curb cut directly onto a State Highway or Class II Town Road, can help to balance the competing needs of access and movement.

### Facilities and Equipment.

Cambridge maintains its roads and public infrastructure out of a main garage located on VT108 south. The Town also owns a 33 acre gravel pit on Stebbins Road and is able to extract material for use in roadway and other public infrastructure projects. As noted in the Natural Resources Section of this Plan, the gravel found in this pit will be exhausted in the near future. Cambridge also owns and maintains a fleet of heavy trucks with which the road network is maintained. These include one front-end loader, two graders, four dump trucks, and a one-ton truck.

## Local Road Policies.

The Selectboard has a policy for taking over new roads. It requires applicants to submit an application in the form of a petition signed by 5% of Cambridge voters. The applicant is required to bear all costs associated with the development or upgrade of the road to meet the Town's road construction specifications and to give ownership of the roadway to the Town. Roads serving fewer than 5 completed houses are not accepted, and roads shorter than 1,000 feet are considered private driveways.

Once the Town has accepted roads, the maintenance and repair become the responsibility of the Town. The Town reported that it has been able to keep the condition of its roads from deteriorating. There is a general plan for work on the roads, but it is not formally adopted. Annually the Selectboard reviews the road system with the Road Foreman, reviews complaints, and allocates available Town funds to the neediest projects.

Cambridge has adopted Town Road and Bridge Standards along with a current Roadway and Bridge and Culvert Inventory. Thus the Town is eligible for a reduced local match on grants through the Town Highway Structures and Town Highway Class 2 Roadway Program administered by the VTrans District office. Due to past problems with private roads not being accessible to emergency vehicles, the Cambridge Subdivision Regulations require private roads to meet the same standards as public roads.

## Smugglers' Notch Scenic Highway Corridor.

The Smugglers' Notch Scenic Highway Corridor is a 3.5-mile section of Vermont Route 108, of which approximately 2/3 is in Cambridge, with the remainder in Stowe. The Lamoille County Planning Commission has facilitated a project in the scenic highway corridor for a number of years. The advisory group consists of various entities including the Agency of Transportation, the Agency of Natural Resources, Smugglers' Notch Resort, Stowe Mountain Resort, University of Vermont, Green Mountain Club, and the Towns of Stowe and Cambridge among others.

The goal of the project is to protect the unique and fragile natural resources in the Notch by managing the human impact on the area through enhanced facilities and informational signage. Planned facilities in the Cambridge section include a northern gateway with improved parking and information kiosk, additional parking in the Notch proper area, a Notch proper interpretive trail, and improved parking at Big Spring and the Hell Brook trailhead. Low profile interpretive signs and improved parking will be located at each facility. All projects will emphasize use of designated areas and provide extensive information on Smugglers' Notch and its many special features.

## Bridges.

The Town owns and maintains all bridges on Town roads. The State reviews Town and State bridges over 20 feet in span, rates them according to the Federal sufficiency rating, and assigns a score from 0-100. (0 is the poorest, 100 is the highest) The bridges are determined to be (1) not deficient, (2) structurally deficient, or (3) functionally deficient. Cambridge is responsible for approximately a dozen bridges 20-feet and over that are inspected by the State. These bridges have a range of sufficiency ratings from 33 to 89. This information is on file at the Lamoille County Planning Commission and can also be obtained through the VTrans Structures division.

As noted above, Cambridge has adopted State Bridge Standards.

## Parking.

Cambridge has at least three parking locations that are acknowledged municipal lots and one State parking lot (see Transportation map). The most improved facility is located on VT 15 west of Cambridge Village and functions as a State Park and Ride Facility. This lot was surfaced with asphalt and striped as part of an adjacent paving project in 2002. Two additional parking lots also serve as Park and Ride facilities although these are less formal. One is located on VT 15 just east of the intersection with VT108. This location is gravel surfaced and also serves as parking for a boat launch. Another public parking facility is located next to the Canyon or Grist Mill Covered Bridge just south of Jeffersonville on VT108. This lot is also gravel surfaced.

In addition to the Park and Ride lots there are two recreation parking lots

-- one in the Notch and a second on Route 108 north of the steel truss bridge.

#### Intersections.

Cambridge has a number of locations that are acknowledged by the Vermont Agency of Transportation as High Accident Locations. High accident locations include VT108/VT15 and VT104/VT15 and along other sections of Route 15. Deficiencies at the VT108/VT15 intersection such as poor access definition and lack of turn lanes will be addressed as part of an adjacent bridge replacement (BR21) and roundabout project. In all, VTrans documented 79 crashes in Cambridge and Jeffersonville between 2006 and 2010.

## **Emergency Detours**

Route 15 is regularly flooded by the Lamoille River at the Wrong Way Bridge. When this occurs, traffic is detoured onto Upper and Lower Pleasant Valley Roads, which currently provide the only alternative routes between Lamoille County and the Burlington area during major flood events. When this occurs, traffic volumes on these local roads increase from about 900 vehicles per day to more than 7,000 vehicles per day. Neither road has the adequate base or geometry to accommodate such volumes on a regular basis. Due to heavy flooding, this detour was used three times in 2011. Both Upper and Lower Pleasant Valley Roads incurred heavy damages as a result. The Selectboard is currently discussing long term solutions to this issue with Vtrans.

#### Transportation and Natural Resources

Like all aspects of the built environment, transportation infrastructure can have a significant impact on natural resources. Improperly maintained roads and ditches can have negative impacts on water quality. Undersized or improperly installed culverts lead to downstream channel erosion and results in ponding of water that can undermine the road bed. In addition, some culverts may create barriers to the migration of fish and other aquatic species. Roads may also create barriers for the movement of wildlife and fragment important wildlife habit. The "Willow Crossings" area on Route 15 between Hubbard Drive and the Johnson Town line has been identified as an important wildlife crossing critical to animal populations traveling between Mount Mansfield and the Northern Greens. Vtrans workers at the District Garage have reported a high number of collisions between deer and motor vehicles in this area.

Many of these issues can be addressed through maintenance and planning. The Vermont Local Roads Program provides educational materials and financial assistance for reducing erosion on gravel roads. Undersized culverts should be replaced, and new culverts should be properly sized. In addition to reducing downstream erosion, constructing culverts wider than a stream's normal width can also facilitate passage of certain species such as fisher and bobcat. Providing periodic breaks in guardrails can improve the

permeability of a road for moose and deer and can increase human safety by allowing large animals to cross the road quickly. The construction of new roads in unfragmented core forest habitat areas should be limited in order to avoid impacts on this important resource.

# **B.** Railroads and Airports

#### Railroads

The local stretch of the Lamoille Valley Railroad was opened in December of 1872. Freight service was discontinued in 1989, and seasonal tourist excursions were discontinued in 1994. Two floods in 1995 and 1997 have washed out several sections of the line. Since that time the line has essentially gone to seed. Efforts over the years to determine what best to do with the corridor have culminated in the 2001/2002 Legislature directing VTrans to pursue the official discontinuance of rail service and subsequent railbanking of the entire line from St. Johnsbury to Swanton. As part of this process, the current lease was terminated, and VTrans re-leased the State owned corridor for recreation uses with the Vermont Association of Snow Travelers (VAST). Cambridge as well as other towns along the corridor formally expressed their support for the use of the corridor as a recreational path facility known as the Lamoille Valley Rail Trail (LVRT).

It should be noted that the line will remain in railbanked status, preserving the right-of-way of the corridor and also providing for the potential future use of the corridor once again as a rail line should it become a viable use in the future.

The closest passenger rail service is AMTRAK with depots located in Waterbury and Essex Junction. These depots service AMTRAK's "Vermonter" line with a daily run from Vermont to Washington D.C.

### **Airports**

Two public airports provide regional access to the community. These are the Burlington International Airport and Morrisville-Stowe State Airport. These airports are critical to the development of tourism and industry in Cambridge 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 Morrisville-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, a glider operation, 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 US and Canadian governments as part of rabies bait-drop to prevent the spread of rabies.

## D. Bicycle and Pedestrian

#### Sidewalks

Sidewalks in the Village of Jeffersonville are primarily located within the Village Core. A total of about 4,300 linear feet of sidewalk is located within the Village of Jeffersonville.

The only official sidewalk in Cambridge Village is a narrow asphalt walkway along Lower Pleasant Valley Road from the Village to the Bridge. The sidewalk is degraded and overgrown in some areas. While there are no formal sidewalks on North and South Main Street, the separation from Route 15 provided by the Old Village Green provides some safety for pedestrians using these streets. Still, the situation is less than ideal, especially for children, as there is no defined separation between vehicular and pedestrian space. In some areas, such definition could be accomplished without extending the impervious surface of the Streets through use of line stripping or stamped asphalt.

### Cambridge Greenway and Lamoille Valley Rail 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.

This unpaved, four-season recreation path is used in the warmer months by walkers, runners, cyclists, and people walking their pets (leashes required). There are also multiple fishing access points to the Brewster and Lamoille Rivers. In winter, the path is used for cross country skiing, snowshoeing, 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 emergency and maintenance vehicles and motorized wheelchairs. Parking is available in the Village of

Jeffersonville, at 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 built on the corridor of the former Lamoille Valley Railroad. The LVRT will pass through Cambridge. 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.

In addition, VAST also maintains a trail between Cambridge Village and Jeffersonville. This trail is located on private property and currently open to winter use only.

#### Other Trails

Several areas within Cambridge are traversed with trails and footpaths which are used by local residents for hiking, hunting, cross-country skiing, and mountain biking. The Long Trail, a hiking trail bisecting the entire State, runs through a small section of Cambridge in the vicinity of Smugglers' Notch. The Alden Bryan Brewster River Trail (ABBRT) runs along the Brewster River. Long term plans include extending ABBRT so that it runs from Jeffersonville Village to the Long Trail. Finally, The Windridge Trail System connects conserved land located between Junction Hill Road and Canyon Road with the Brewster River Gorge.

#### Bicycles

There are currently no formal connections between Cambridge Village and Jeffersonville for pedestrians and cyclists. Route 15 is the primary artery for automobiles. However, it largely lacks shoulders of sufficient width for pedestrians and cyclists. Pleasant Valley Road is a lower volume, more scenic route. However, it too lacks shoulders or formal accommodations for cyclists. Facilities could be constructed on both roads to provide for an intra-village connection. Another potential option is to work with VAST/property owners to develop a multi-season trail on the current snowmobile trail between Cambridge Village and Jeffersonville.

There are three general types of bicycle facilities. The first is a formal bike or multi-use path. These paths are usually designed for pedestrians as well as cyclists. Multi-use paths are physically separated from a road and are designed for two-way traffic. As a result, multi-use paths are usually between 8 and 12 feet wide.

The other two types of bicycle facilities are both designed for on road application. These include dedicated "bike lanes" and "shared travel lanes." A bike lane is a widened, paved shoulder dedicated to bicycles. VTrans refers to

these as "Paved Shoulder Bicycle Facilities." The Vermont Pedestrian and Bicycle Facility Planning and Design Manual recommends shoulder widths of between 3 and 5 feet for dedicated bike lanes, depending on road conditions and motor vehicle speed. VTrans recommends the establishment of dedicated bike lanes when traffic volumes exceed 1,000 AADT. "Bike lanes" would be the most appropriate way to facilitate cyclists on Route 15, given the speed and volume of traffic and prevalence of trucks on the State route.

A "shared travel lane" is a roadway in which there is no delineation between vehicular traffic and bicycles. Signage and pavement markings alerting motorists to the presence of cyclists, as well as public education, can greatly enhance the use of "bicycle routes." VTrans only recommends shared travel lanes where traffic volumes are less than 1,000 AADT. However, they have been established successfully in some areas with higher traffic volumes. Speed also plays a role in the applicability of shared travel lanes, as higher volume roads with low speeds may be safer for shared travel lanes than high-speed volume rural roads. Shared travel lanes may be appropriate on Pleasant Valley Road, provided safety issues such as vehicle speed and sight distances can be addressed.

## E. Public Transportation Services

## Route 15 Commuter

The Chittenden County Transportation Authority (CCTA) plans to begin a commuter bus route on Route 15 between Burlington and Jeffersonville in the summer of 2013. This will be the first and only regular public transportation service available in Cambridge. CCTA is currently working to identify stop locations near Cambridge Village and Jeffersonville. Unfortunately, a commuter bus will not be able to make the turns necessary to use the existing park-and-ride near Cambridge Village, and an alternative location for a bus stop will need to be identified. CCTA is open to developing permanent lots, utilizing on-street parking, or leasing existing parking space from willing property owners.

# Social Service Transportation

There are a variety of human service agencies providing transportation services in Lamoille County which are available to Cambridge 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 service 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.

## Carpools/Vanpools

Commuters who do not want to drive themselves 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.

## **HOUSING REPORT (2013)**

This report is drafted from an amended version of the Town and Village of Cambridge Municipal Development Plan 2008.

The availability of adequate housing to all people in the community reflects on the economy, tax base, and quality of life in Cambridge. Total population and the distribution of it by age and income level are major factors. As the population ages, housing needs change. As income levels change, the demand for different types of housing changes.

The economy of the area also influences housing demand. Should the economy of the area decline, demand for higher priced housing would likely decline and demand for rental units would likely increase. Changes in the tourist/recreation aspect of the economy could also bring a shift in demand for second homes.

The amount, type, and cost of housing in town directly impacts the quality of life of the area. The availability of affordable housing has also been identified as a factor in attracting business and industry to an area. Additionally, the type and amount of housing may also determine whether young families, retirees, and individuals with special needs have the ability to live in our community.

The overall goal for housing in Cambridge is to have an adequate supply of safe and affordable housing available in a variety of types for all income levels and for those with special needs. Housing should be located conveniently in relation to employment, services, retail centers, and educational and recreational facilities. Residential development should maintain the character of existing neighborhoods, allow ample green space, and be compatible with the physical capabilities of the land and existing facilities and services.

### A. Housing Demographics

Housing demographics are used to show the amount and type of housing in Cambridge and the age of units. The occupancy status is important to understanding availability of units.

#### Housing Units.

Trends related to the growth of housing units in Cambridge are similar to trends related to population growth. Table 14 shows the growth of housing units in Cambridge from 1980 to 2010.

Table 14. Number of units for each municipality- 1980-2010<sup>1</sup>

					%	%
	1980	1990	2000	2010	change	change
					80-2010	2000-10
Town + Villages	834	1,104	1,363	1,628	95.2%	19.4%
Vil. of Cambridge	98	121	102	84	-14.3%	-17.6%
Vil. of	185	197	254	261	41.1%	2.8%
Jeffersonville						

Source: U.S. Census 1980, 1990, 2000, 2010

Between 1980 and 1990 there was an increase of 270 units, but only 35 were new units added to the vVllages. From 1990 to 2000 there were 259 units added to Town, 57 of which were added to Jeffersonville. (The loss of units in Cambridge isn't clearly understood). From 2000 to 2010, the majority of new units were added to the Town and Jeffersonville while units in Cambridge Village decreased. This shows that growth in the Villages is not keeping pace with development in the rest of Town, but it is increasing at a healthy rate.

Information from the Cambridge Grand List provides a picture of how the amount and type of housing in the community is changing over time.

Table 15. Cambridge Residential Properties: 1980-2012\*

	1990	2000	% Change '90 – '00	2012	% Change '00- '12
Residential: <6 acres	500	613	22.6	754	23.0
Residential: 6+ acres	231	299	29.4	381	27.4
Mobile Homes w/o land	36	19	-47.2	6	-68.4
Mobile Homes w/ land	49	74	51.0	64	-13.5
Other (includes seasonal and	364	498	36.8	341	-31.5

<sup>&</sup>lt;sup>1</sup> For this section, housing data utilized both the Census and ACS data from 2010. Certain information was not collected in the 2010 Census and is estimated using the ACS projections. Thus, there will be slight discrepancies in the actual number of household units. Differences are noted in each table.

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condos)					
Total	1180	1503	27.4	1546	2.9

<sup>\*</sup>Does not include farms or commercial apartments.

Source: Cambridge Grand List

As shown above, Cambridge's residential properties increased by 27% between 1990 and 2000 but increased just slightly, 3%, between 2000 and 2012. The greatest percentage increase occurred in the number of residential homes on more than six acres while the most common type of housing is residential on a lot with less than 6 acres. The number of mobile homes actually decreased.

The number of seasonal properties and condominiums increased by 37% between 1990 and 2000 but decreased from 2000 to 2010. This likely represents a shift in converting properties to year round use. Still, this represents 22% of Cambridge's housing stock. Statewide, seasonal properties are approximately 15% of the housing stock.

Table 16. Housing units by number of units in structure 1990 -2010

Table 10. Housing	5 diriico oj	1101111001	OI GIIIICO I	ii bu detaie	1770 =01
	1990	2000	2010	% of	%
	units	units	units	total	change
					2000-10
Town and					
villages					
One unit	799	1,040	1,283	78.9	+ 23%
Two units	80	107	110	6.8	+ 3%
3 & 4 units	80	98	43	2.6	-56%
Five or more	23	39	56	3.5	+ 44%
Mobile home	101	79	136	8.4	+72%
Other	21	0	0	0	n/a
Cambridge					
Village					
One unit	60	57	55	65.5	- 4%
Two units	22	12	10	11.9	- 17%
3 & 4 units	29	23	13	15.5	- 43%
Five or more	6	7	6	7.1	-14%
Mobile home	2	0	0	0	n/a
Other	2	0	0	0	n/a
Jeffersonville					
One unit	106	141	113	43.3	-20%
Two units	22	45	79	30.3	+ 76%
3 & 4 units	46	65	30	11.5	- 54%
Five or more	7	24	39	14.9	+ 63%

Mobile home	9	4	0	0	n/a
Other	7	0	0	0	n/a

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

# Types of Units.

The most common type of dwelling unit is the single-family home. Other types of units include duplex (two units), and multi-family housing (condominiums and apartments). Having a variety of housing types is important to ensure there is a mix of housing opportunities for residents and visitors.

The changes seen on Table 16 show changes in all variety of housing types, although single-family dwellings are still the overwhelming majority (now 79% of all units). Especially within the village of Jeffersonville, the number of multi-family units has increased dramatically.

## Age of Units.

Both Town and Village housing is composed of a substantial portion of older structures. The high percentage of Village units built before 1940 is evidence of both historic value and potential need for repair and rehabilitation.

Table 17. Housing units by year of construction

	1980 or	1939 or Earlier		
	later			
Lamoille County	39.5%	25.8%		
Town of Cambridge	42.4%	32.5%		
Village of Cambridge	2.4%	95.2%		
Village of Jeffersonville	27.6%	46%		
Source: U.S. Census, 2000 and ACS, 2010				

### B. Housing Needs

People have different housing needs at different ages. When there is a burst of demand within a specific age group, it leads to inflation within their particular type of housing. Cambridge must track population and age statistics to ensure each group has an adequate supply of housing to meet their needs. The Vermont Department of Health

describes each group in this way:

- 20s- Lower income, high mobility, usually requires apartments.
- 30s- Beginning families, growing income, usually first time homebuyers or mobile homes.
- 40s- Growing families, growing income, step up to larger homes or make additions.
- 50s- Empty nest, income peak, now desires smaller homes or condominiums.
- 60s + 70s- Retirement, income decreasing, desire small homes or senior housing options.
- 80s- Typically single, growing frail, market for assisted living.
- 90s- Frail, institutional needs.

## Population Demographic and Housing Needs.

The change in population distribution from 2000 to 2010 indicates that there has been an increase in the typical "beginning families" population (30-34 year olds) and a substantial increase in the "empty nest" population (50's and up). The retirement ages also increased dramatically although they represent a smaller proportion than other age groups. (See Section II Community Profile- Figure 3 for Population by age groups in Cambridge).

Demographic trends indicate that the proportion of the population who are retirement age and elderly will increase over the next decade. While the middle-aged tends to be the wealthiest sector of the population, many of those in the elderly age range may be single people with limited incomes and the need to locate near services. The increasing trend shifting towards older renters over younger will impact the housing demands. From a supply standpoint, older renters expect higher quality rental units than younger renters. Based on supply information discussed above, it appears there has been an increase in the supply of rental housing. These trends will likely continue for the next ten years.

### Population, Households and Household size

Census data for 1990 and 2010 indicate that during that period the number of households increased at a faster rate (54.4%) than the number of housing units (53.1%) or the population (37.1%). The effect of having households increase slightly faster than housing units is that vacancy rates have stayed even.

The effect of having households increasing faster than population means fewer persons living in each household (see household size for renters and homeowners in Table 18). Table 18. Cambridge housing units and household sizes

Table 16. Callibriuge nousin	0			1
	1990	2000	2010	% change
				(1990- 2010)
Cambridge Town +				
Villages				
Population	2,667	3,186	3,659	+ 37.1%
Housing units	1,104	1,363	1,698	+ 53.1%
Number of households	978	1,266	1,510	+ 54.4%
Household size	2.73	2.51	2.42	-11.4%
HH size renter	2.19	2.14	2.15	-1.8%
HH size owner	2.91	2.66	2.53	-13.6%
Cambridge Village				
Population	292	235	236	-19.2%
Housing units	121	102	115	-5.0%
Number of households	114	95	104	-8.8%
Household size	2.56	2.42	2.27	-11.3%
HH size renter	2.25	2.09	2.24	-0.44%
HH size owner	2.85	2.88	2.30	+ 19.3%
Jeffersonville				
Population	462	568	729	+ 57.8%
Housing units	197	254	367	+ %
Number of households	189	248	325	+ 86.3%
Household size	2.44	2.29	2.24	-8.2%
HH size renter	2.05	1.95	2.04	-0.49%
HH size owner	2.78	2.68	2.60	-6.5%

Source: U.S. Census

In the case of the Villages, Jeffersonville behaved the same as the Town with increases in the number of households exceeding that of units and population. Cambridge Village decreased in population faster than the number of households or units.

### Occupancy status.

The Census supplies information about the occupancy status of existing housing units as shown in the table below. These numbers differ from the Grand List (discussed above) due to differences in the counting methods.

Table 19. Occupancy status of housing units in 2010

Lamoille	Town	Village of	Village of
County	w/ villages	Cambridge	Jeffersnvlle

TOTAL UNITS	12,969	1,698	115	367
Total Occupied	10,014	1,510	104	325
Owner Occupied	7,128	1,052	50	117
Renter Occupied	2,886	458	54	208
Vacant for Sale	132	28	8	4
Vacant for Rent	251	43	2	22
Vacant Seasonal	2,245	76	0	0
Not Occupied	28	3	0	2
Other	264	34	1	10

Source: U.S. Census

Approximately 13% of Lamoille County's housing units are in Cambridge, and a relatively high percentage of the units are occupied. At Census time, 89% of the Jeffersonville Village units, 90% of the Cambridge Village units, and 89% of the Town units were occupied, compared to only 77% of units within the County as a whole.

Cambridge hosts a proportionate share of the County's rental housing. Countywide, 29% of the occupied housing units are rentals. In the Town, 30% of the occupied units are rented, and over 50% of the occupied Village units are rentals.

Approximately 70% of the occupied housing in Cambridge is owner-occupied with the remaining portion renter-occupied. Occupied housing units increased by 19% during the 1990s while rented units increased 29%.

The two Villages are different than the Town as a whole in that renter occupied units out number owner occupied units. In Cambridge Village approximately 52% of the houses are renter occupied. This proportion has decreased slightly over the last decade.

Jeffersonville changed from approximately 70% owner-occupied housing in 1980 to 47% in 2000 and down to 36% in 2010. This decrease is the result of an extremely large increase in construction of rental housing. The number of owner occupied units stayed flat from 2000 to 2010 while rentals increased 58% (132 to 208).

## C. Housing Affordability

Statewide housing policy states that housing is affordable when households with incomes below County median pay no more than 30% of their income on housing costs. Housing costs for renters are rent and utilities. Housing costs for homeowners are principal, interest, property

taxes, and property insurance.

Regionally, housing affordability has improved since 1990 (at least according to the statistics). Incomes increased 44% between the two Census counts, and housing values rose only 27% and rents rose 31%. This held true for homeowners in Cambridge but not renters. Between 2000 and 2010 income grew by 37% while the housing values in Cambridge grew by 26.2% and median rent grew by 52%. Incomes, therefore, grew faster than housing values but not rent costs.

According to the 2010 ACS, many homeowners in Cambridge are spending a disproportionate amount of their income on housing. 72.8% of homeowners with a mortgage and 87.9% of those without mortgages are considered to have affordable housing. These figures are slightly better than the County averages of 68% with mortgage and 86% without. While better than the County averages there are still a large number of residents who have difficulty paying their mortgage every month. Lower income households are far more likely to have affordability problems. 64% of households with less than a \$35,000 income have housing costs that are not affordable while less than 3% of households earning more than \$50,000 cannot afford their housing.

The renters, however, are not faring as well as the homeowners. One-third of renters in Cambridge are not in affordable units, meaning they spend more than 30% of their income on housing. Cambridge is still better than the County averages for affordability where almost half of all renters (47%) had costs that were not affordable. Once again, income played a key role in affordability; 81% of renter households with incomes below \$20,000 were not affordable.

A combination of rising land and home prices, physical limits to residential growth, concentration of employment in the low-wage service sector, and increased pressure on the rental market could rapidly push Cambridge's housing out of the affordable range for low and middle income residents.

## Cost of Purchasing a Home.

Using the rough estimate that households can afford a house that is three times their yearly income, a family with an income of \$61,741 (median value in 2010) could afford a home with a sale price of \$185,223. Affordability is determined by sale prices not by property values; there may be plenty of affordable housing but if none of it is for sale, it doesn't do a buyer any good. The median sale prices for Cambridge are on the table below. These prices were derived from property transfer tax information compiled by the State of Vermont. The number in parentheses indicates the number of sales in each sample.

It would appear by this review that the median family could afford to buy the median house provided it is on less than 6 acres. This tenuous balance between median sale price and median income could easily swing in either direction given the current condition of the economy and housing market. Also, the needs and preferences of individual households may not be able to be met within this tight window of affordability.

Table 20. Median sale prices, Cambridge 2003-2007

	2003	2005	2007	2009	2011
House <6	\$145,000	\$198,484	\$199,500	\$172,450	\$175,000
ac	(37)	(58)	(38)	(20)	(27)
House 6+	\$168,500	\$237,450	\$257,450	\$230,950	\$243,950
ac	(8)	(10)	(10)	(4)	(12)
Open land	\$20,812	\$7,624	\$31,268	\$26,364	\$5,250
	/ac (25)	/ac (29)	/ac (15)	(5)	(11)

Source: VT Transfer Tax statistics

# Rental Housing.

Cambridge provides 13% of the County rental units. The median gross rent (including utilities) for a unit in Cambridge is \$50 higher than the County average of \$867 (according to the 2010 ACS). The annual average wage in Town was \$27,192, which means the median workers can afford \$680 per month on rent (30% of your income). The median rent charged in Town was \$917. In order for a median worker to rent a median priced home in Town, he or she will need income from another member of the household or work two jobs.

### Possible Avenues to Increase Affordable Housing.

Towns have limited opportunities to impact affordable housing. There are generally two ways to increase affordable housing -- a project by project basis and through regulations such as subdivision and zoning. As Cambridge does not have zoning, there are few areas that local policies may impact affordable housing today. Any bylaws, if adopted, should not prohibit or unduly burden affordable housing efforts.

One method of solving affordable housing issues is through project implementation. An example of this was the Lamoille Housing Partnership's project called the Jeffersonville Community Housing. This project was completed in December 2001 and included a mixed income, intergenerational development with 22 senior housing units and ten low income family units. These types of projects take time and money.

Cambridge should continue to support efforts by Lamoille Housing Partnership to develop such projects in Town.

If zoning bylaws are adopted, there are some provisions that the Planning Commission should consider in order to permit more affordable housing. One option to increase affordable housing includes adopting an expanded definition of accessory apartments in the zoning bylaws. Most bylaws require the owner to live in the house (not the accessory unit), which denies seniors the option of living in the smaller accessory unit and renting the larger house to generate income to supplement their retirement income. While State law defines an accessory apartment as an efficiency or one bedroom apartment, communities are also free to allow larger accessory apartments (for example, two bedroom units) if they so choose. Doing so may increase the supply of rental housing meeting the needs of young families and empty nesters in rural areas.

HomeShare Vermont represents options to provide housing opportunities without necessarily developing new housing. 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 safety of those involved. HomeShare expands housing opportunities while farmland. and other maintaining open space, forests. critical environmental areas. For more information visit http://www.homesharenow.org/ or http://homesharevermont.org/.

State law requires that zoning bylaws not discriminate against mobile homes. This should be emphasized in any bylaws. Well planned mobile home parks can provide affordable, entry-level homeownership housing options. The Sterling View Mobile Home Park in Hyde Park is an example of such a park. A developing trend in other regions of the Country are "cottage" neighborhoods, which consist of relatively small (sometimes less than 1,000 sf), owner-occupied dwellings located close together on small lots. These developments often include central buildings with common cooking and recreation facilities.

Another area where zoning can help create affordable housing is through clustered housing. State statute allows clustered housing. Clustered housing can be accomplished through a mechanism called a "Planned Unit Development." Clustered housing can decreased costs by minimizing infrastructure investment, such as shorter roads and fewer power lines. Density bonuses for affordable units have also been used in other towns.

The State "Vermont Neighborhoods" program is another option to increase the supply of affordable housing. The program offers projects that contain affordable housing and are located in proximity to State "designated village centers." The program also provides relief from Act250 and certain state taxes. It also provides a small amount of financial incentives for communities that host new affordable housing. As both Cambridge Village and Jeffersonville are designated village centers, the Planning Commission, Selectboard, and Boards of Trustees may wish to investigate if participation in this program would help to further the communities' goals.

# D. Specialized Housing Options

Within every community there are individuals or families with special housing needs. The elderly and families with children living 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 nursing homes, correctional facilities, group homes, and homeless shelters fall into this category.

The amount of special care housing depends upon the community's situation. Some individuals need only a special construction (handicapped accessibility for instance), while others need assisted living arrangements (visiting nurses), while still others may require full institutional care. Cambridge has a low demand for special housing (see below). Therefore the Town may need only some new services to meet current needs. To meet Cambridge's future needs a variety of types of facilities may be needed.

The 2010 Census and ACS summarizes some of the characteristics of those who may have special needs.

- There were 347 seniors living in Cambridge in 2010.
- Of those 347, there were 91 seniors living alone; 55 were women.
- 2.3% of seniors lived in poverty.
- In 2010, 8.1% of families in Cambridge lived in poverty.
- Of all the people in poverty, 17% are children.
- There were 209 single parent households<sup>2</sup> 145 were female householder with no husband present. 153 single parent families had children under 18.

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<sup>&</sup>lt;sup>2</sup> The U.S. Census and American Community Survey do not recognize same-sex relationships. For same-sex families with children, they are included in single parent households.

- There were 11 individuals in Town that lived in a non-institutional group home; 10 were women.
- There are no institutional facilities in Town.

# E. Seasonal Worker Housing

As the host Town for a major ski-resort and associated service-based businesses, Cambridge must consider issues related to housing for seasonal workers. Smugglers' Notch Resort and other companies rely on seasonal employees. These workers generally need inexpensive housing with short-term or no leases. Providing affordable housing for seasonal workers is essential for the success of Cambridge's tourism industry.

Seasonal worker housing can be constructed and maintained in a manner that has a positive impact on the area's aesthetics and the Town as a whole. However, poorly kept facilities could degrade the character and health of the Town. These issues could be addressed through zoning regulations by requiring site plan and/or conditional use review for these types of units. Zoning regulations could further identify appropriate locations for such types of housing (for example, along Route 108 in proximity to major resorts). By locating such housing in specific areas or along specific corridors, it becomes more feasible to provide transit and other services that benefit seasonal employees.

## **ENERGY REPORT (2013)**

This report is drafted from an amended version of the 2008 Town and Village of Cambridge Municipal Development Plan. Other sources have been referenced as appropriate.

Energy for light, heat, transportation, and the operation of equipment is essential for the economy and well-being of the community. Too heavy a reliance on any one source or type of fuel to provide that energy can leave the population vulnerable to wide market swings in energy costs. Production and consumption of energy resources may have negative environmental effects including water and air pollution and the loss of valuable working landscapes and natural habitat areas. These impacts may in turn contribute to public health problems.

Many of the factors that determine the availability and cost of fuels are beyond the control of the community. However, there are measures the Town of Cambridge and its residents can implement to influence both the Town and Lamoille County's energy future. These measures may include encouraging the development of diverse energy sources, the use of renewable energy, and implementation of conservation measures including promoting energy efficiency in proposed developments and existing structures. All energy production projects situated within the Town of Cambridge should consider their impact on natural resources, wildlife, and working lands including farm and forestland.

Energy plans are generally divided into three sectorselectricity, heating, and transportation. The first section will discuss current and potential sources of energy within each of these sectors. The remaining sections will examine energy providers and consumers by sector.

#### A. Energy Sources

#### Electricity

Electricity can be generated from a variety of sources including hydro, nuclear, coal, oil, co-generation (wood fuel) and natural gas. Other potential sources of electric energy include solar, water and wind. For the most part, renewable sources of electricity are found locally while the non-renewable sources are from out of the state.

Currently, the Town of Cambridge is home to one private solar electric generating facility; the Smugglers' Notch solar project on Route 108 North. The Town of Cambridge encourages the production of local net metered, non-intrusive power generation. However, the siting of these power generation facilities is limited by local topography. Presently,

Cambridge lacks sufficient hydro locations. Meanwhile, commercial wind resources are only found along some of our most scenic mountaintops. For more information on the distribution of wind resources within the Town of Cambridge visit the Vermont Renewable Energy Atlas at <a href="https://www.renergyatlas.com">www.renergyatlas.com</a>.

While commercial wind resources in town are limited, private landowners may consider putting up small-scale wind turbines. Cambridge supports these efforts provided they are placed in rural locations away from densely populated residential areas and that they do not have a significant negative impact on scenic resources in town. When siting wind turbines, appropriate safety and noise distances should be measured from a property line to the turbine(s). Additionally, safety distances must be sufficient to ensure sound levels will not exceed 45 decibels outside of neighboring homes, as required by the energy project's Certificate of Public Good issued by the Vermont Public Service Board.

In terms of solar resources, the Town of Cambridge has great potential for residential PV (Photovoltaic) roof-top solar systems. According the Vermont Energy Atlas there are 8 existing solar systems installed in Cambridge and over a 1,000 potential residential solar sites throughout the Town. When it comes to commercial sites with the capacity to produce 1 or more kilowatts of power, approximately 144 sites in Cambridge have commercial solar potential. The Town of Cambridge encourages both roof-top and ground level solar projects to be designed in a manner that considers the impact on productive agricultural and forest lands as well as natural resources. The siting and development of commercial solar and wind projects are exempt from local zoning and are examined by the Public Service Board under the Section 248 review process. For more information on this process visit www.state.vt.us/psb/index.stm.

### Home Heating

The heating of homes and businesses is an important sector of energy plans, especially here in northern Vermont. According to the Vermont Public Service Department, within Lamoille County home heating accounts for over 31% of total energy consumption. One local renewable energy source for home heating is wood. Solar power has also been used effectively to heat water (which is another component of home heating). Other sources of heating fuel include oil, kerosene, geothermal, and gas. Cambridge residents are encouraged to explore efficiency improvements to home heating systems to reduce overall consumption rates and air pollution caused from the burning of petroleum-based fuel propane). For products (oil, kerosene. information weatherization tips and local certified contractors visit Efficiency Vermont's webpage at <u>www.efficiencyvermont.com</u>.

# <u>Transportation</u>

According to the 2011 Vermont Comprehensive Energy Plan, statewide transportation accounts for 34% of the total energy demand, accounting for one third of Vermont's energy use. Countywide, the transportation sector accounts for 31% of the Lamoille Region's total energy consumption. The Statewide Energy Plan calls for renewable energy providing 90% of the state's energy use, and transportation changes are a major part of that effort.

The municipal fleet accounts for the largest share of the town's energy costs. Additionally, personal transportation requirements constitute the largest share of a family's energy costs. 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, the proximately of existing homes to local employment centers, and the siting of new residential developments. The Town of Cambridge encourages mixed use, compact development near the villages to stimulate local employment opportunities and reduce commute distances for town residents.

Most transportation is powered by fossil fuels (gasoline or diesel) and will be for the foreseeable future. Innovations in hybrid and electric cars continue to bring improvements in vehicle fuel efficiency.

### **B. Energy Providers**

#### Electricity

Vermont Electric Cooperative and Green Mountain Power (formerly Central Vermont Public Service Corporation) are the two utilities that provide electric service in Cambridge. The rate of growth and demand for power in the service area will affect the ability of the utilities to provide adequate power at an affordable price.

Many utilities in Vermont have been upgrading their transmission and distribution systems to increase energy efficiency. The Planning Commission may wish to work with local utility representatives from Green Mountain Power and Vermont Electric Co-op to determine what role the Commission has in promoting increased efficiency of electrical energy usage. In Vermont, the majority of transmission lines are currently owned by VELCO (Vermont Electric Power Company). In 2012 VELCO issued their most recent Long Range Transmission Plan. However, none of the areas identified for utility line upgrades fell within Lamoille County. For more information on VELCO's 2012 Transmission Plan visit www.velco.com.

## Home heating

Home heating fuel, such as oil, kerosene, and LP (Liquid Propane), wood/wood pellets, and geothermal heat is provided entirely through private companies. Wood for woodstoves is generally provided through private individuals in the area.

## **Transportation**

Fuel for transportation (gas and diesel), is provided locally by privately owned and operated service stations. If electric vehicles become common in the near future, the local electric company may explore providing some electric charging stations.

## C. Energy Consumers

## Municipal facilities and services

The Town and Village departments are major energy consumers. Over the last fifteen years efforts have been made to improve the energy efficiency of buildings and operations, however, further gains may yet be realized. Recently building efficiency improvements within municipal buildings have been undertaken during the construction of the new Fire Station. The Fire Department continues to monitor electrical use and explore ways to reduce the building's overall energy usage. The Crescendo Club had an energy audit conducted in the winter of 2012 to explore energy efficiency improvement projects for the Varnum Memorial Library. Additionally, in 2010 the Cambridge Elementary School Board contracted out a local Efficiency Vermont contractor to conduct an energy audit for the school building. The facility was last renovated in 2005. Audit results demonstrated that the school was one of the more energy efficient educational facilities in Vermont. For more information on the efficiency of the Cambridge Elementary School please refer to the Educational Facilities chapter of this plan.

Increasing efficiency energy use within all aspects of the Town and Village government will not only reduce the amount of energy consumed, but also save on local government costs. Although some energy costs are not line items in the budget, the Town and Cambridge Village (not including the elementary school) spend more than \$150,000 each year on energy (electricity, heating of municipal buildings, and truck fuels). In 2012 alone, the Town of Cambridge spent \$145,193.03 on heating and truck fuel costs for town buildings and the town's municipal fleet.

### *Electricity*

Electricity is an expenditure for all buildings and equipment owned by the Town and Village. The largest municipal consumer of electricity is the school. Despite building renovations taken place in 2005, the school's electricity costs have steadily increased due to a number of factors including an increase in student enrollment and fluctuating electricity rates. Prior to facility renovations, in 2004 the Cambridge Elementary School spent \$36,544 on annual electricity costs. Proceeding improvements the facility's electric costs increased by only \$330 during the 2006-2007 academic year. Recently the school's electric costs have continued to rise, costing \$47,681.94 in 2012. Similar to other energy efforts, efficiency in design and operation is critical to saving energy and tax dollars.

Electricity expenditures for the Clerk's Office were \$1,521 in 2001, which decreased to \$1,135 in 2007. Electricity costs for other buildings such as the garage did not have line items in the budget for those years. In 2010, the Town paid CVPS (now Green Mountain Power) \$3,500 for electricity. Since then electric costs have slightly increased. In 2012 the Town Clerk's Office/ Town Hall spent \$3,756.81 on electricity costs.

#### Heating

For all buildings maintained by the town, heating fuel is a factor in budgeting. For example, prior to renovations the Cambridge Elementary School spent \$35,506 on heating fuel oil in 2004. This figure rose to \$59,116 in 2006-07. Since 2010 the cost of fuel oil spent to heat the Cambridge Elementary School increased by over \$6,000, costing a total of \$39,740.68 in 2012. This figure varies greatly depending on winter weather and the current fuel oil rate. Other energy expenditures at the school include propane for the kitchen, costing \$4,745.24 in 2012.

Similarly the town clerk's office, town garage, and other associated facilities such as the fire department will have heating expenditures. Energy efficiency is the key to saving tax dollars. Any renovations or new construction to municipal buildings and community facilities should take into account energy efficiency in the design and construction process to save taxpayer dollars over the lifetime of the project.

Financing Strategies for Improving the Efficiency of Municipal Buildings

financing a variety of methods are for efficiency improvements for municipal facilities including grants, efficiency incentives. budgets/capital reserves, loans. bonds. 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 regarding information CEDF grants please visit: www.publicservice.vermont.gov/energy/ee files/cedf/CEDF%20Strategic

<u>%20Plan.pdf</u>. Additionally, Efficiency Vermont offers financial incentives for municipalities improving the efficiency of town facilities and services (street lights). For more information visit <u>www.efficiencyvermont.com</u>.

# **Transportation**

Municipal transportation expenses fall into two major categoriespublic transportation (school buses) and road maintenance.

School buses used \$33,106 in diesel and gasoline during the 2009-2010 school year. The school has recently purchased new buses and phased out older less fuel efficient vehicles. While the budget is still increasing rapidly, this is primarily driven by increasing fuel costs. In 2012, the school spent \$45,794.64 on diesel fuel for bus transportation.

Road maintenance does not have a fuel line item in the budget but it is a significant consideration in budgeting. Similarly, the fire and rescue services require diesel and gasoline for their trucks. These expenses are not as large as those for road maintenance.

#### Residential, commercial and industrial.

# *Electricity*

Statistics on electricity use by individuals and businesses are generally more difficult to obtain because the utility companies keep these figures confidential. According to Efficiency Vermont, in 2010 energy efficiency projects/conservation measures conducted in commercial and industrial buildings within the Town of Cambridge saved 200,220 kilowatt hours of electricity. During that same time period residential sector energy efficiency upgrades accounted for a 2.4% reduction in electricity use (savings of 341,008 kilowatt hours).

#### Heating

The 2010 ACS (American Community Survey) indicates heavy reliance upon oil as the primary heating fuel. In town, 48% of all households use fuel oil or kerosene as their primary heating fuel. Gas (usually liquid propane) was the second most common fuel and was used by 23% of houses. Wood fuel was third with 20% of houses utilizing it as a primary heat source and the remainder was split between electric heat and other fuels.

Table 21. Home heating fuels by type, number of households, and year

Type of fuel	2000	2010	% change	% change
			1980-2010	2000-2010
Gas	323	336	+572.0 %	+ 4.025%
Electric	20	113	+36.1%	+465.0 %
Oil, kerosene	722	699	+9.9%	- 44.7 %

Coal	0	0	-100%	0
Wood	190	299	+47.3%	+57.4 %

Source: US Census 1980, 1990, and 2000; ACS 2010.

Heating fuels have been shifting in use over the past thirty years in Cambridge. Table 25 shows the changes since 2000 of the types of heating fuels. Gas heat (LP primarily) has been the fastest growing heating fuel over the past twenty years. Oil continues to be the most popular and is growing at a steady rate. However, despite the recent shift in heating fuels and residential energy conservation efforts, per capita energy consumption is on the rise.

The popularity of wood heat fell during the 1990's but has since seen resurgence in popularity. Wood heat continues to be used in many homes as a supplement to the popular primary heating fuel; oil. As heating costs continue to rise, heating with renewable sources like wood have gained increasing popularity. Gas and oil are more convenient but wood heat still continues to play a main role in home heating as newer, more efficient woodstoves and wood pellet stoves ease the burden of raising fuel oil costs. Increased efficiency in these heating systems has allowed homeowners to switch back to utilizing wood as a primary heating fuel source. Many homes that have instituted more efficient wood heating systems now utilize oil as a backup fuel source. Newer woodburning heating systems including wood pellet stoves have increasingly become more cost effective for Lamoille County communities. According to Maine Energy Systems, a popular producer of wood pellet stoves, current pellet-based heating systems run at an efficiency rate of approximately 75% and cost 42% less than burning fuel oil based on oil costing \$3.50 per gallon.

Other low cost heating sources include natural gas systems. These systems are not commonly found in northern Vermont homes and commercial buildings for a variety of reasons, including the lack of a natural gas pipeline extending to communities such as Cambridge, limited energy storage opportunities, and the potential for exposed natural gas to cause significant water and air pollution. Due to potential pollution impacts, in 2011 the State of Vermont placed a 3-year moratorium on the increasingly used natural gas extraction method known as "fracking" (horizontal drilling).

New residential and business structures can affect energy savings in siting as well as in selection of materials and design (e.g. locating on a south facing exposure, installing small energy efficient windows on the north side of structures, and larger energy efficient south facing windows, properly insulating walls, basement and attic). Financing for Efficiency Projects in Commercial and Residential Buildings

The Town of Cambridge encourages both commercial and residential property owners to invest in efficiency upgrades to conserve energy and lower long-term heating and electric costs. To ease the cost of residential renewable energy and efficiency projects several towns including 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 via a special assessment on the property'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 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 <a href="www.efficiencyvermont.com">www.efficiencyvermont.com</a>.

# *Transportation*

In 1989, 28 percent of Cambridge residents traveled over a half hour to their place of work. By 1999 this increased to 59 percent. In 2010, the estimated travel time to work was 32.9 minutes. With more people in town and a greater percent commuting out of town to work, the highways are becoming busier during the early morning rush. Adding to the growing problem, Cambridge also is experiencing an increase in commuting traffic that passes through town. Future development should be sited in a manner that provides safe and convenient access to local employment opportunities and services. All new road projects on paved state and town highways should consider pedestrian and bicycle safety and connectivity to other bike/ped facilities (trails, sidewalks, wide road shoulders) as outlined in the 2011 Complete Streets Legislation.

The key to making improvements in transportation is with energy efficiency – by driving less, using more efficient vehicles, carpooling, or using public transportation. According to the 2010 American Community Survey, 77.7% of all commuters from Cambridge drove alone to work while only 15.6% carpooled. As gasoline prices fluctuate and automobile emissions continue to impact air quality, efforts should be made to encourage commuters to share rides and to investigate other ways to

reduce the individual's dependency on the private automobile. Viable alternatives need to be safe, convenient and enjoyable as well as energy efficient.

In addition to ridesharing and utilizing nearby public transit the Town of Cambridge should explore the need for additional or improvements to existing pedestrian and bike facilities. As required by the 2011 Complete Streets legislation, new road projects should be designed in a manner that safely accommodate all users including non-motorists. Increasing pedestrian and bike connectivity (widen road shoulders, extend sidewalks in villages) throughout the Town of Cambridge can provide safer travel routes and reduce residents' and visitors' dependence on automobiles for local commuting and shopping trips. For more information on promoting energy efficiency in the transportation sector please refer to the Transportation chapter of this plan.

# Integrating Flood Resiliency into Energy Practices

While the above conservation strategies identify areas for energy efficiency improvements and cost savings, often times local energy plans fail to address concerns related to the impact of local flooding events. In more recent years, the Town of Cambridge has experienced an increase in major re-occurring flood events, causing repetitive damage to private properties and local infrastructure including utility lines. Past flood damage has primarily been concentrated within the two villages (Jeffersonville and Cambridge Village) and at low elevation points along Route 15 and 108. With several structures situated within the 100-year floodplain, it is critical for Cambridge property owners and utility providers to consider strategies to prevent future damage to utility lines, private heating and cooling systems, and to reduce pollution 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, burying utilities underground, tying down fuel tanks, and considering the switch to non-renewable energy sources that are less likely to contaminate floodwaters (wood pellets, solar, etc...).

# HISTORIC, SCENIC, AND ARCHAEOLOGICAL RESOURCES (2013)

This report is drafted from an amended version of the Town and Village of Cambridge Municipal Development Plan 2008. Other sources have been referenced as appropriate.

Special features that reflect the cultural development and character of the Town include its historic sites, buildings, districts, and scenic areas. The visual character of a community is of value to its residents, businesses, and visitors.

#### A. Historic Resources

Evidence of Cambridge's past is found throughout the Town and Villages 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.

# <u>History.</u>

The Town of Cambridge has a long and varied past, which is responsible for the values and traditions held by residents today. The Town should ensure that the history behind the Town is available for residents, new and old, to enjoy. Several accounts of the history of Cambridge have been written. More information about the History of Cambridge can be found by contacting the Cambridge Historical Society.

### Historic Structures and Districts

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 pre-history.)

National Register designation does not affect the owner's right to modify, maintain, or dispose of 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. The Cambridge Meeting House and the Jeffersonville Historic District are listed on the National Register.

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. Two historic districts (Jeffersonville and Cambridge Borough) and 64 independent sites/structures were listed in the inventory. Most of the "independent" structures are privately owned homes and farms scattered throughout the community. A preliminary review of the inventory indicates some inaccuracies that need to be corrected if it is to be useful in future planning activities.

While Cambridge Village is not officially listed as a "Historic District," it is the historic center of the community. In keeping with the historic pattern of Vermont villages, Cambridge Village contains a mix of homes, businesses, and civic uses. In addition to the buildings themselves, the historic character of Cambridge Village is defined by the relationship of the structures with one another and with streets and green space. Buildings with generally narrow front yards and front porches line North and South Main Street, contributing to the feeling of a "public" area around the Old Village Green (which is bisected by Route 15).

# Village Center Designation

In 2012, at the request of the Cambridge Village Trustees, the core of Cambridge Village received "Village Center Designation" from the State of Vermont (See Cambridge Village Center Designation Map). This designation places no restrictions or obligations on private property. Rather, owners of commercial and multi-family 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. 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.

### Historic Bridges

There are three covered bridges in the community which are listed on the National Register: Grist Mill Covered Bridge, Poland Covered Bridge, and Gates Farm Covered Bridge (all entered in 1974). The Poland Covered Bridge was restored in 2006, with assistance from the Vermont Agency of Transportation's Transportation Enhancements Program, but is not currently open to vehicular traffic.

#### **B. Scenic Resources**

Scenic resources include views observed from both a stationary point and while moving along a road or path. They include natural scenes or a mixture of natural and man made elements (such as houses, roads, farms).

There is much natural beauty in the community that contributes to the quality of life of residents and is appealing to its visitors. A drive on almost any of the roads in Town puts the "observer" in contact with farmland, pastures, hills, forests, historic buildings, and views of the nearby mountains, rivers, and streams. Two features in particular contribute to the scenic character of Cambridge -- the traditional landscape pattern and ridgelines.

The traditional landscape pattern includes open fields and meadows with their patterns contrasted by rolling forested hills and ridgelines. Cambridge has a unique and historic built environment of dispersed settlements. The mixture of farmland and small villages nestled between the ridgelines of the Green Mountains creates a rolling landscape of scenic visits. The Lamoille River and Brewster River add to this landscape. The blend of historic sites and picturesque natural scenery also contributes to Cambridge's resemblance of a traditional New England town, with a vibrant village center surrounded by rural country side. It should be noted that these landscapes are the result of more than two centuries of farming.

Prominent ridgelines, including Mount Mainsfield and the Sterling Ridge, provide a scenic background to Cambridge, both within Town 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. Ridgelines are also prized locations for high-end residential development. Poorly planned residential development could compromise the scenic qualities of these areas. However, it is possible to locate development in the Town's uplands in a manner that preserves scenic qualities by careful placing structures below the top-of-ridge and minimizing site clearing and grading.

As noted previously, the portion of VT 108 south of the Smugglers' Notch Resort has been designated as a State Scenic Highway. The Smuggler's Notch Scenic Highway encompasses approximately 3.7 miles of VT 108 in the Towns of Cambridge and Stowe and is one of two State-designated scenic highways in Vermont (The other is VT 125 through

Middlebury Gap). Smuggler's Notch is most noted for its dramatic cliffs, winding and narrow roadway, scenic vistas, and hiking and climbing opportunities. The Notch is also part of a 5,000 acre natural area hosting a variety of unique geological and ecological features, including several rare arctic plants and nesting pairs of Peregrine Falcons – a State and Federally protected species. Open to vehicles from May through November, thousands of visitors pass through Smuggler's Notch as sightseers or commuters, while others stop to hike and explore the trails or to climb the boulders and cliffs.

Cambridge's scenic resources have not been fully inventoried. Future efforts to protect scenic resources require the development of criteria for evaluating a specific scenic area. Such criteria should be as objective as possible and should be locally developed with participation by a broad range of members of the community.

# Methods for Preserving Scenic Resources

Scenic resources, while valued by residents and visitors alike, are difficult to regulate. Cambridge values its many beautiful vistas, forested hills, and open fields, but it would be unfair to deny the right to develop based on how one's property looks from a roadway. In order to balance the rights of property owners with requirements for attractive and safe development, the Town should consider adopting site plan approval for all non-residential proposals.

The purpose of site plan approval is to promote quality development rather than preventing development. Poorly designed projects or ones that are inflexible to commission recommendations may be denied approval, but the intent is for the standards to be flexible. In developing guidelines, the Planning Commission should strive for standards that will promote quality, attractive developments. Where possible, proposals should protect open space, retain natural vegetation, screen parking lots from view, be of a pleasant appearance, and other similar requirements.

Subdivision regulations should also reflect these principles. Lot lines should protect open space and scenic ridgelines, as should conserved areas of any planned residential developments. Subdivision standards can provide a mechanism for a property owner to fully develop their land while situating new lots in a way that maintains the scenic quality of the area (for example, by placing building lots at field's edge or along windrows). This is especially important along State routes that are most heavily traveled and contribute to Cambridge's attractiveness to the tourism industry. Any subdivision standards related to scenic resources should be carefully crafted based on extensive community input and should provide clear guidance for the Development Review Board,

property owners/applicants, and other interested parties.

Telecommunication towers are another area of special concern with respect to scenic resources. Towers cannot be barred from Town, but they can, and should, be regulated to ensure they are sited and constructed appropriately. Where feasible, rather than constructing multiple towers, antennae should be collocated on a single towers.

Both Mount Mansfield and the Sterling Ridge have been identified as sites with the potential for wind energy development. If such development occurs, service and access roads shall utilize existing woods roads and trails whenever possible 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.

Finally, it is important to note that both of the scenic resources listed above – the traditional landscape pattern and forested ridgelines -- are the result of active management of land by property owners. Ensuring that use of land for agriculture and forestry is economically viable may be the most effective means of maintaining these resources.

# C. Archaeological Resources

Cambridge contains an archaeologically sensitive corridor associated with the Lamoille River valley and extending up to Smugglers' Notch along the Brewster River. Archaeologically sensitive corridors are areas that have certain environmental factors present which make them more likely than elsewhere to have had early human occupation. These factors include topography, sunlight exposure, distance to water, and availability of food and other important resources. Federal and State laws protect archaeological sites. Developers planning to work in the potentially sensitive corridor should contact the Vermont Department for Historic Preservation while in the early planning stages of a project to determine whether the location of a proposed project could have an impact on a significant archaeological site.

# LAND USE AND DEVELOPMENT PLAN (2013)

This report is drafted from an amended version of the Town and Village of Cambridge Municipal Development Plan 2008. Other sources have been referenced as appropriate.

The land use pattern of any community is typically characteristic of several interdependent influences: physical constraints of the land, historical development patterns, transportation routes, economic influences, and personal preferences. This pattern of uses and development give a community character and serves as the foundation for future development.

# A. Current Land Use Pattern

The development pattern of Cambridge is typical of the communities throughout northern Vermont. This pattern is one of traditional New England settlement with compact village centers surrounded by agricultural and forest lands. The Villages of Cambridge and Jeffersonville, both located along the Lamoille River, serve as the activity centers of the community with community services, commercial and industrial activity, and higher density residential development. The area known as Cambridge Junction once served as an important access point to the two railroads that served the community at the turn of the century.

The Lamoille Valley bisects the Town from east to west and provides some of the region's most productive agricultural land. The valley also provides important transportation corridors providing access to the community via State highways. The flood plains along the Lamoille River serve as the primary location for agricultural activity in Town - with high concentrations of prime agricultural soils.

Areas such as the Pleasant Valley, and North and South Cambridge, both have their own concentrations of agricultural land uses. These farmlands are typically divided by other land uses creating smaller and more dispersed units of farmland than along the Lamoille River. North Cambridge in particular has more dispersed farmland, smaller lot sizes, and higher density rural development than other parts of the community with the exception of the village centers.

The community's higher elevations and steep slopes are typically forested - much of which is covered with mixed hardwoods and with stands of softwood dominating the highest ground. Most of this forestland is in medium sized blocks from 100 to 500 acres and serves as private woodlots with some commercial harvesting. Larger commercial

forestland, in blocks from 500 to 3000 acres, is found along ridgelines and mountaintops. In addition to wildlife, recreational, and economic benefits, these forestlands provide the backdrop for the seasonal display of color that dominates the landscape every fall.

Cambridge's high elevation land is also home to the Smuggler's Notch Ski Resort. Smuggler's Notch is located in the southern tip of the community and encompasses the northern faces of Morse Mountain, Madonna and Spruce Peaks, and the old settlement area of Morse's Mill. The Village at Smuggler's Notch is characteristic of a compact, high-density mixed-use development. Surrounding the ski area is predominantly forested land - most of which is part of the Mount Mansfield State Forest, with a few, small residences and commercial businesses near the Village.

It is this combination and hierarchy of land use activity, in combination with contrasting open and forested land, that provides the essential character of Cambridge. It is this pattern and character of development that the community wishes to maintain into the future.

#### B. Future Land Uses and Areas

Land Use ties together each of the other elements found within this Plan. This section provides a broad vision of Cambridge's future and provides general guidance on limitations and considerations for future land development. This section discusses the proposed land use areas and land uses.

### General Land Use Statement

Cambridge is located along a major transportation corridor and between several major employment centers. As a result, Cambridge has evolved into a bedroom community in which many residents commute outside of the community for employment. It is likely that Cambridge will experience increasing residential and commercial development pressures over the next decade.

At the same time, it is the desire of many residents to maintain the qualities that make Cambridge attractive in the first place. Many of these qualities are the result of a development pattern that has evolved within the community over the past 200 years. This pattern is characterized by compact residential and commercial development in our Village centers, surrounded by an active, rural landscape comprised of working farm and forest lands, and residential development that is sensitive to the limitations of the land, community services, and the

viability of productive resource lands.

To this end, new growth and development should generally be focused 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 type and intensity of development in each area will vary based as discussed below. Together, these areas are referred to as Village and Growth Areas in this Section and throughout the Plan.

# Village of Cambridge

The Village of Cambridge is proposed to remain a historic center with higher density residential development, commercial establishments, agriculture, and industrial uses consistent with the scale and surroundings. Until such time as sewerage or other off-site wastewater treatment options become available, density will be limited by the soils' ability to absorb on-site septic systems.

Despite the limitations created by lack of wastewater, there is still potential for some small-scale businesses in these village areas. Certain commercial uses, such as offices and retail stores, require significantly less wastewater capacity than residential uses, making commercial use of existing structures on small village lots a viable option (see Table 22 below).

Table 22. Wastewater Capacity for Residential and Non-Residential Use

Business Type	Use equivalent 1- bedroom	Use equivalent 3- bedroom	
Office	9 employees	28 employees	
Day Care Facility	2 care providers,	4 care providers,	
(no meals)	7 children	24 children	
Day Care Facility	1 care provider,	3 care providers,	
(1 meal)	6 children	18 children	
Doctor's Office	2 staff,	4 staff,	
Doctor's Office	7 patients	28 patients	
Retail store 9 employees		28 employees	
Restaurant, Tavern or café	4 seats	12 seats	

Source: Vermont Environmental Protection Rules

As a result, property owners could conceivably develop new, small businesses in existing buildings and lots within Cambridge Village. None-the-less, the Table also demonstrates the limits of this option. For example, it would be difficult to develop even a moderately sized café on many village lots without additional wastewater capacity. If the lack of

sewage capacity is identified as an issue, or if failing on-site wastewater systems becomes an issue in the future, the community should investigate the feasibility of alternatives such as developing a decentralized wastewater system (a single or series of community leach fields) or connecting to an existing sewage treatment plant.

Agriculture is expected to continue especially in the flood hazard area in the north and in large agricultural parcels in the southern portions of the village.

# Cambridge Junction

Cambridge Junction is expected to continue as a small cluster of commercial, residential, and industrial development. Cambridge Junction is connected to the Village of Jeffersonville by the Cambridge Greenway, Lamoille Valley Rail Trail, and Route 15. Cambridge Junction is also located close to the Windridge Trail System on Junction Hill Road. As further investments are made into amenities such as a LVRT trailhead and river access, Cambridge Junction may grow into a hub for recreational development.

#### Ski

Smugglers' Notch Resort has been provided its own area on the grounds that it has its own sewage treatment facility. The resort is expected to have a mix of residential, commercial, and recreational development associated with the area. Protection of the scenic and aesthetic qualities of the area, both within and outside the resort, is critical to success of the area in the future. When feasible, development in this area should be accessed via Route 108, or private roads managed by the resort, rather than public side roads. If side roads are used to access major development related to the resort, improvements to the roadway and road structures, commensurate with new traffic generated, should be required to accommodate additional traffic.

# **Enterprise**

The Enterprise area has been established to provide an area for industrial growth that has good highway access and where businesses can operate without conflict with residential areas. Most lots in the Enterprise area are fully developed, with the exception of several small lots with severe restrictions to development due to steep slopes.

#### Jeffersonville

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.

# Route 108 South

This area includes lands along Route 108 south of Jeffersonville. This area has been established to balance the pressure of commercial and visitor development with aesthetic and scenic concerns as well as the need for safety along this highway corridor. In the future, development in this area should be of a scale and character that maintains the historic feel of the road and continues to protect stretches of open space along the route to the notch.

This corridor provides access to the Smugglers Notch Resort, other tourist destinations, and the Smugglers Notch Scenic Corridor. The scenic natural of this route, which includes views of the Sterling Range, Brewster River Valley, and Mount Mansfield, is also an important facet of this area. Finally, many residents from Cambridge commute to destinations in communities to the south. Development in this area should be designed to balance these sometimes competing objectives. When feasible, shared access points and/or internal circulation roads should be developed between parcels along Route 108 South. Further, new buildings and development sites should be designed and located so as to minimize disruption of scenic views along the corridor.

In order to prevent the appearance of strip development along Route 108, the most intense development should be focused toward existing development clusters located between Pratt and Stebbins Road. Mixed use development is encouraged in this area, as is seasonal worker housing. Several notable open green spaces exist in this area. Development on these parcels should attempt to retain green space, and organize new structures to give the appearance of a "village green" or foreground meadow. Pedestrian connections, either sidewalks or recreational trails, are encouraged to connect developments within this area.

#### Rural residential

The rural residential area is a broad area covering lands all over Cambridge. Development within the rural residential area should be consistent with specific site conditions and at a scale consistent with its proximity to major highways and existing growth centers. Protection of open space and natural resources and the maintenance of existing working landscapes are additional objectives in these areas.

#### Conservation/Forest

The conservationforest area has been established to protect the scenic ridgelines and to provide an upper elevation limit (1500 feet) where development may occur in Town. The conservation/forest area will provide habitat for wildlife, wilderness for recreation, and large tracts of working forestland. Lands within this area should receive high priority

for conservation funding.

# Flood hazard area

The purpose of this area is to minimize and prevent the loss of life and property, the disruption of commerce, the impairment of the tax base, and the extraordinary expenditures and demands on public services that result from floods. Lands within this area should receive high priority for conservation funding.

#### LAND USES

The following section provides an overview of various land uses. This section will provide information on the types and scale of uses and will describe where various uses should be allowed or encouraged in the future, based on the Land Use Areas outlined above

#### Agriculture

The viability of existing agricultural operations in the community must be protected. Prime agricultural soils, proximity to markets, agricultural infrastructure, and other agricultural operations must be maintained in order to ensure the existence of a critical mass of farms in the Town.

Agricultural land uses can occur only where the necessary land base is available and, therefore, cannot be placed or moved as a community or as adjacent landowners see fit. This is especially important when planning additional residential or commercial development adjacent to agricultural lands. Such development must take into consideration the inherent activity, noise, and odors associated with agriculture when considering development options.

Development in agricultural areas must take efforts to minimize the fragmentation of existing farms and concentrations of prime agricultural soils. Where development of agricultural land is necessary and desirable, development should be clustered on marginal lands so as not to negatively impact the continued viability of any remaining or adjacent farms. Consideration should also be given to maintaining access to remaining working farmland, the visual impact of development, and the loss of open space.

A diversity of agricultural operations throughout the community is encouraged in an effort to maintain working open space, to support the viability of other farms, and to diversify the community's economic base. Agricultural land uses should be sensitive of their potential impact on surface and ground water quality and adjacent non-agricultural land

uses.

To achieve the goals of this Plan, the rural residential area will play a prominent role in the future of agriculture in Cambridge. This area should offer the most flexibility to balance agricultural uses and development. Residential development is expected in this area. In order to reduce conflicts between agricultural and new residential uses, clustering of residential development to protect agricultural soils and open space is encouraged and could be required. Careful siting of certain land uses may minimize these situations. In addition, new residential subdivisions may be required to provide screening or buffering along the subdivision boundary and adjacent agricultural uses and soils, and/or to include "right-to-farm" language in deeds protecting neighboring agricultural uses from nuisance lawsuits.

### Forest Land

As with agriculture, the continued viability of Cambridge's forested lands must be preserved. Continuity of forestland at higher elevations and its dispersal throughout lower elevations should be maintained. Efforts to maintain a diversity of forest uses and benefits, both private and public, must be considered.

Like agriculture, forestland management can occur only where the necessary land base is available and, therefore, cannot be placed or moved as a community or as adjacent landowners see fit. This is especially important when planning additional residential or commercial development adjacent to commercial forestlands. Such development must take into consideration the inherent activity, noise, and traffic associated with forestry when considering development options.

The costs of fragmentation, the forest's ability to provide multiple resource benefits, and the viability of commercial forestry need great consideration when development is proposed. The clustering of development should be encouraged so as to minimize the impact on the multiple private and public benefits and to maintain contiguous blocks of forestland throughout the community. Continued access to forested parcels for management activities and the availability of the resource for commercial uses should be assured. Special consideration for impacts caused by soil erosion and runoff should be given when developing forestlands due to the typically steep nature of the site.

All development and management activities on forestland should give consideration to wildlife habitats and travel corridors, recreational uses, water quality and quantity, and the visual landscape.

The conservation/forest area is proposed in order to protect

commercial tracts of timberland from fragmentation. Active management of timber is expected in the rural residential area as well. On-site value added operations, such as "back-yard" and portable mills, are also expected in these areas.

#### Residential

High and medium density residential development is encouraged in Village and Growth Areas. The rate and timing of such development must be in consideration of the availability and capacity of municipal facilities and services. To ensure the availability of affordable housing options for all residents, a variety of residential densities and housing options must be encouraged.

The community also recognizes that many people desire to live in a more rural setting. Rural and seasonal residential development in areas important for resource conservation and use should be clustered in such a way as to minimize its impact on resource use, recreation, wildlife habitat, and the visual landscape. In addition to resource protection, such clustering should serve to minimize the cost of housing, energy use, and the provision of municipal services.

All residential development should take into consideration the inherent limitations of the land to support development, the conservation of productive resource lands, and its visual impact on the landscape. In addition, large multi-unit residential development should be phased over a reasonable period of time in order to minimize its impact on community facilities and services.

All residential development must be designed with:

- Adequate septic disposal systems that protect both the public health and the environment;
- A safe drinking water supply without interference to adjacent private and public wells;
- Necessary access for fire and rescue vehicles and personnel; and
- Safe access to the Town's highway network that provides the minimum interference with existing traffic patterns.

The highest density of residential development is expected in the Village of Cambridge, Cambridge Junction, and Ski Area. Residential development, including seasonal worker housing, is also expected along Route 108 South, focused between Pratt and Stebbins Road. . Residential development within the rural residential area should be lower density. In this area, overall density will be dependent on specific site conditions. For example, higher overall densities are appropriate on parcels with few natural resource constraints and/or with access to State

highways or paved local roads. Residential development is also expected in the Route 108 South Area, provided aesthetic and highway access management considerations are met

# Commercial and Industrial Development

Cambridge encourages commercial and industrial development within the community where that development is in keeping with the scale and character of the community, is compatible with adjacent land uses, and is sensitive to the inherent limitations of the land and community services. Careful consideration should be given to siting of any commercial or industrial use to minimize impact on neighboring properties.

#### Commercial Goods & Services

Land uses associated with commercial goods and services are typically those which are responsible for the distribution of goods and services and do not add value to a commodity. These include businesses such as wholesalers, retailers, and professional services.

These land uses should be encouraged both separate from, and where appropriate, mixed with residential development in or near Village and Growth areas. Small home businesses are acceptable in the rural residential area, provided such businesses are of a scale and design that is in character with the surrounding neighborhood. Strip development along highway corridors is strongly discouraged.

Commercial development should be of such scale and character so as to be compatible with existing land uses and structures and considerate of the availability and affordability of housing for employees and the availability and capacity of municipal services. Such development is encouraged to be clustered in such a way so as to minimize impact on resource lands, traffic congestion, aesthetics, and municipal services and should make efforts to lessen the proliferation of signs and lighting.

Commercial recreational opportunities are encouraged throughout the community. Any new commercial recreation should serve to enhance Cambridge's viability as a quality, small-scale resort community by taking advantage of the community's natural assets, existing recreational opportunities, and rural landscape.

#### *Industrial*

Land uses associated with industrial development are generally those which add value to a commodity or product. These may typically be defined as those involved in the manufacture, processing, fabrication, packaging, or assembly of goods. In addition, firms involved in the movement, storage, and in some cases sales of products are included. Such uses might also include trucking, construction, and warehousing.

Industrial development should be of such a scale and character so as to be compatible with existing land uses and structures and is encouraged to locate near public facilities, such as water, sewage, and power. Associated space and access requirements and noise and traffic impacts should be considered when locating in or near village centers. Industrial development should be developed sequentially so as to minimize the potential burden on the community's services and infrastructure. Industrial development must also be considerate of potential impacts on water and air quality, adjacent land uses, resource lands, transportation systems, the availability and affordability of housing for employees, and the visual landscape.

In order to achieve the character and scale of industrial uses to be compatible with existing land uses and structure, industrial uses can be classified by their intensity of use. Higher intensity, heavy industrial development is expected in the Enterprise area. 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.

Lower intensity, light industrial uses could locate in Villages provided they are not disruptive to the nearby village setting. This would include processing, packaging, or assembling goods, technology or research based facilities, artist/artisan studio space, and indoor storage/warehousing of goods incidental to the principal use. Such uses would not require unenclosed structures or outside storage, would not cause adverse environmental pollution, would not emit noxious fumes or obnoxious noise and lighting. Such low intensity industrial uses must be designed to fit into the existing historic character and pedestrian scale of the Village. These uses would have minimal adverse impacts. Examples of low intensity industrial uses could include value-added food and drink processing facilities.

Small home industries should be permitted in rural residential provided they are of a scale and design that is in character with the surrounding neighborhood.

### E. How the Plan relates to neighboring communities and the region

The Town of Cambridge looks forward to cooperating with our neighboring towns to improve services and planning for all residents and visitors. This Town Plan is one step towards achieving this goal. The Planning Commission, Selectboard, and Trustees believe this Town Plan complements the efforts of our surrounding communities.

# Johnson

Johnson is Cambridge's neighbor to the East. Cambridge and Johnson are connected by Route 15 and Hogback Road. The Lamoille River flows from Johnson through Cambridge. As noted elsewhere in this Plan, an important wildlife corridor connecting Mount Mansfield to the northern Green Mountains is located along Route 15 at the "Willow Crossings" area between Hubbard Drive and the Cambridge/Johnson Town Line. The Johnson Town Plan identifies areas along the Cambridge border as within the Forest and Agricultural Districts. The uses and densities planned for these areas are compatible with the Cambridge Town Plan.

### Waterville

Waterville is located to the north of Cambridge. Route 109 connects the two towns. Certain public services located in Cambridge, such as the Varnum Library, also serve residents of Waterville. As a result, the two communities are fairly integrated. The Waterville Town Plan identifies areas along the Cambridge border as within the Agricultural/Rural Residential District. The uses and densities planned for these areas are compatible with the Cambridge Town Plan.

#### Stowe and Morristown

Stowe and Morristown are located to the south of Cambridge. The entirety of Cambridge's border with both communities is located within the Mount Mansfield State Forest. As a result, land use conflicts are not anticipated. Route 108 connects Cambridge to Stowe through Smugglers Notch. This Route is closed during the winter months.

#### Underhill

Underhill is located to the southwest of Cambridge. Cambridge is connected to Underhill by Pleasant Valley Road. Much of the Underhill/Cambridge border is located within the Mount Mansfield State Forest. The Underhill Town Plan identifies areas along the Cambridge border as within the Rural Residential and Soil and Water Conservation District. The uses and densities planned for these areas are compatible with the Cambridge Town Plan.

### Westford

Cambridge shares a small border with the Town of Westford located along Route 15. The Westford Town Plan identifies areas along the Cambridge border as within the Agriculture, Forestry, and Residential District. The uses and densities planned for these areas are compatible with the Cambridge Town Plan.

#### Fairfax

Cambridge shares a small border with the Town of Fairfax located along Route 104. The Fairfax Town Plan identifies areas along the Cambridge Border as within the Conservation District. The uses and densities planned for these areas are compatible with the Cambridge Town Plan.

#### Fletcher

Much of Cambridge's western and northern borders are with the Town of Fletcher. Cambridge is connected to Fletcher by Route 108 and Pumpkin Harbor Road. The Fletcher Town Plan identifies areas along the Cambridge border as within the Conservation, Forest, and Rural Residential/Agricultural Districts. The uses and densities planned for these areas are compatible with the Cambridge Town Plan.

# 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, Cambridge is actively engaged in a planning process that ensures 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 Cambridge Planning Commission and the Town and 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 regional objectives are compatible with the Land Use Areas defined earlier in this Plan.

# Chittenden County and Northwest Vermont Regional Plans

Cambridge borders two other regions – Chittenden County and Franklin County (which, along with Grant Isle County, make up the Northwest Vermont Region). Growth and development in these regions will have an impact on future land use in Cambridge. As noted earlier in this Plan, many Cambridge residents commute to Chittenden County 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.