PAWLET

TOWN PLAN

Adopted: February 2, 2016

Acknowledgements

Pawlet Planning Commission
Eric Mach, Chairman
Paul Elsholz, Vice Chairman
Lenny Gibson, Secretary
Fred Stone
Gary Baierlein
Wayne Clarke
Harry Van Meter
Elizabeth Gibson, Acting Clerk

Many hours of volunteer work preparing and writing parts of this plan were contributed by The Pawlet Energy Group: Susan LaPorte, Ken Friedman, Elizabeth Gibson, Nancy Morlino, Harry Van Meter; The Agriculture Working Group: Fred Stone, Philip Ackerman-Leist, Timothy Hughes-Muse, Donald Campbell, and John Malcom; and Emergency Management Director and Health Officer Bob Morlino.

A sincere thank you to the many people of Pawlet who contributed photos to this Town Plan.

Pawlet Selectboard
Mike Beecher, Chairman
Sarah Ludlam, Vice Chairman
Bob Jones
Edgar Cleveland
Charles Weeden

RUTLAND REGIONAL PLANNING COMMISSION

Edward Bove
Barbara Noyes Pulling
Steve Schild
Monika Ganguly-Kiefner
Susan Schreibman
Mary Lamson
Kitt Shaw
Mary Kay Skaza

Prepared with the assistance of a FY15 Municipal Planning Grant from the Vermont Department of Housing and Community Affairs and the Rutland Regional Planning Commission.

Table of Contents

I. INTRODUCTION 4
II. OBJECTIVES and IMPLEMENTATION 5
III. LAND USE and RELATED RESOURCES 10
IV. TRANSPORTATION 22
V. UTILITIES and FACILITIES 27
VI. ECOLOGICAL, SCENIC, and HISTORIC RESOURCES 37
VII. EDUCATION and CHILD CARE 43
VIII. ENERGY 49
IX. HOUSING 57
X. FLOOD RESILIENCE 62
XI. REGIONAL and SURROUNDING TOWN COMPATIBILITY 68
XII. ECONOMIC DEVELOPMENT 70
Appendices 78

I. INTRODUCTION

The Pawlet Planning Commission has prepared this Pawlet Town Plan under the authority of the Selectboard. The Commission will present this Plan for a warned public hearing. After the public hearing input is considered, the Plan will be forwarded to the Selectboard for their own warned public hearing, where further input will be considered before the Selectboard vote on approval and subsequent submission to the Rutland Regional Planning Commission for its review.

This Plan is prepared pursuant to VSA 24, Chapter 117: *Municipal and Regional Planning and Development*. The Pawlet Town Plan is devised to be compatible with that Statute, with the Rutland Regional Plan, and with approved plans from adjoining communities.

This Plan seeks to reflect the objectives and needs of Pawlet's citizens and may be used as a guide to the future growth and development of the Town. In preparing this Plan, the results of a survey reported in *Appendix C* have been accounted. Additionally, a special effort has been made to consider:

- all types of uses in the Town—including farming, residential, commercial, and industrial
- all types of residents—including young and old, working and retired, seasonal and year-round
- all socioeconomic levels

II. OBJECTIVES AND IMPLEMENTATION

OBJECTIVES

The purpose of this Plan is to guide development according to the following major objectives of the Town of Pawlet:

1. Promote the health, safety, and general welfare of all the inhabitants.
2. Protect and conserve the value of property.
3. Conserve and encourage the value of community, as reflected in the examples of:
   - volunteerism
   - neighborhood cohesion
   - spontaneous assistance offered by townspeople to each other
   - social supports provided by churches, schools, scouts, 4-H, and other formal and informal groups

4. Maintain the integrity of Pawlet and West Pawlet as respective villages within the framework of the Town.
5. Achieve the best possible quality of environment for the Town's residents.
6. Provide appropriate sites in the Town for residences that will be required by population growth in the foreseeable future, including accommodating the need for affordable housing.
7. Minimize the tax burden on property owners by maintaining a community that operates efficiently and economically.

8. Emphasize the Town's support of a diverse farming economy, where both large and small operations help sustain the community, recognizing and respecting the differing needs of both farmers and non-farmers.
9. Encourage the maintenance and conservation of agricultural lands for the production of agricultural products, and promote soil conservation practices that protect the long-term productivity and viability of agricultural soils.
10. Support and promote the critical mass of external infrastructure that agriculture requires.
11. Permit, where appropriate, commercial and industrial enterprises that provide gainful employment for Town residents and augment the tax base of the Town.

12. Encourage the continuance of home and cottage industries in the Town.
13. Keep the rugged and more

remote mountain and forest areas free from development, reserving them for forestry and other uses appropriate to their wilderness character.

14. Develop long range plans for recreation and education in cooperation with other towns and the region.
15. Develop long range plans for public water supply and sewage disposal systems for village areas. In areas not served by the public systems, require a population density low enough to insure the permanent feasibility of private water supply and sewage disposal.

IMPLEMENTATION

General

In view of these major objectives, specific topics to be implemented follow. Implementation must be achieved through (1) changing and adopting zoning regulations and other land use controls, (2) making inclusions in the capital improvement budget as part of the Town's financial planning process, (3) developing policies, (3) cooperating with other government agencies, (4) pursuing various studies, and (5) educating residents.

Most of the responsibility for implementation rests with either the Planning Commission or the Selectboard. Sometimes one body is primarily responsible, sometimes both share responsibility and must work together. For some issues the Emergency Manager needs to take a significant role, and sometimes the Energy Group. Both, however, operate under the oversight of the Selectboard, and the cooperation of the Selectboard is essential to accomplish implementation. Keeping the Selectboard informed is therefore necessary in all cases.

Land Use and Zoning

The Planning Commission has a central role for developing ordinances and policies in the Land Use and Zoning Bylaws - with the approval of the Selectboard.

Agriculture

One of the principal concerns of the Planning Commission in respect to land use and zoning is preserving the agricultural heritage of the Town and developing the agricultural future of the Town. To do this the Planning Commission must stay in dialog with all those engaged in agricultural pursuits, encourage public awareness of agricultural issues and needs and conservation issues, and attend to the various infrastructure concerns that are necessary to support agricultural activity. Matters relevant for consideration of agriculture are detailed throughout this plan, especially in *Section III Land Use, Section VI Ecological, Scenic, and Historic Resources, and Section XII Economic Development.*

Other land use concerns the Planning Commission must address include the effect of regulations in the various zones and any issues that call for modification or refinement of regulations. Floodplain and other fluvial issues have come especially to prominence after the flooding caused by Tropical Storm Irene, and these issues often require working with appropriate State, regional, and Federal agencies.

Solar siting is another issue that has come much to the fore, one that directly affects agricultural land use.

Transportation

The Selectboard has primary responsibility for transportation and utilities and facilities in the Town.

The Selectboard is the authority for a number of transportation issues, in many cases securing cooperation from the Agency of Transportation. Safety concerns are prominent highway issues, especially involving vehicle speed and pedestrian and bicycle safety. Grant funding can be pursued for addressing these issues.

Regarding Town highways, the emergency situation created by Tropical Storm Irene has given importance to improving Chet Clark Road because it could provide the only route of travel between Pawlet and West Pawlet in severe flooding that impairs connections via State roadways.

Utilities and Facilities

A number of issues developed in this planning process require attention by the Selectboard and the Planning Commission:

- Drinking water
- Stormwater drainage
- Sewage
- Emergency Services
- Town Hall
- Capital Budget
- Recreation

Ecological, Scenic, and Historical Resources

The Town should continually seek funding and other means to:

- Preserve the quality of its natural resources
- Sustain its natural habitat and the wildlife it supports
- Preserve its air quality and the scenic views that are enhanced by the air's clarity
- Protect the quality of its rivers and streams
- Develop and promote the recreational opportunities afforded by these resources
- Maintain and enhance the Town's historic resources

Education

Education is almost exclusively the concern of the Pawlet and Unified School Boards. The Mettawee School would like the help of both the Planning Commission and the Selectboard in these ways:

- Publicize openness to visits by parents and other community residents
- Develop the School's partnership with emergency management
- Support its function as a Red Cross shelter. Significant funding for purchase of an emergency generator is being pursued, but more is needed through donation or otherwise to fund the purchase

An ancillary concern that is developing for the Town is the potential consolidation of districts in the Bennington-Rutland Supervisory Union. This could result in the loss of Pawlet's special designation of Granville middle and high schools for Pawlet students.

Energy

The Pawlet Energy Coordinator and Group have made a number of recommendations for the Town in the course of the current planning process. It especially recommends that the Pawlet Selectboard confirm its support of the policies and recommendations outlined here and work with the Pawlet Energy Group to make Pawlet a place where energy resources are used so as to minimize consumption, cost, and environmental impact.

The Energy Group asks that the Selectboard set an example of energy efficiency with its properties and that it develop effective outreach programs for educating residents about important energy programs and resources, including PACE, NeighborWorks of Western Vermont, Efficiency Vermont and Green Mountain Power.

Recommendations for the Pawlet Energy Group itself:

The Pawlet Energy Coordinator and Group should develop a comprehensive list of energy-related programs to be implemented over the next five years and update this list for the Selectboard each year.

The energy group should also continue to network with other town energy groups and keep informed of relevant regional and statewide events, such as the annual VECAN meeting, other climate change conferences, and the Rutland Regional Planning Commission.

Flood Resilience

Flood resilience involves another set of issues that have come to the fore after the flooding caused by tropical storm Irene. These issues, like others raised by Irene, often require working with appropriate regional and State agencies.

These issues include development concerns about not worsening flooding, as well as flood hazard area mapping, restoring natural river functions, and storm water issues.

Emergency management is another concern related to flood resilience. Issues include providing assured emergency communication between the fire departments and the highway department.

Coordination and outreach efforts are yet another aspect of flood resilience, planning emergency operations, educating about flood hazards, and communicating effectively with State agencies and neighboring towns.

Economic Development

A central factor in Pawlet's economic development is maintaining the character of the Town that makes it attractive to new residents in terms of its school, its community nature, and its aesthetic.

The Planning Commission and the Selectboard must strive jointly to:

- Provide an economic climate that encourages and grows the sort of small businesses, trades, and occupations, that have thrived in the Town, and leverage past success to promote new enterprises
- Preserve the Town's agricultural heritage and encourage development of new agricultural projects
- Foster commercial incubation by developing means that bring together Pawlet's business people, its creative people, its not-for-profit people, its educators, and others who could provide ideas and interactive stimulation
- Promote business opportunities afforded by fiber optic infrastructure

> THE FUTURE OF OUR TOWN WILL REFLECT THE BALANCE WE ARE ABLE TO STRIKE BETWEEN PRESERVING THE BEAUTIFUL LANDSCAPE OF PAWLET AND ENCOURAGING LOCAL BUSINESS AND ENTERPRISE. KEY TO THIS PROCESS IS ENGAGING THE LOCAL RESIDENTS IN TOWN PLANNING AND OTHER ASPECTS OF TOWN GOVERNMENT AND ENCOURAGING YOUNG, TALENTED PEOPLE TO LIVE IN PAWLET.
>
> -survey respondent

The Planning Commission must keep Village Center designations current and pursue the opportunities that the designations afford, including State and federal grant opportunities.

The Commission must explore options to continue to meet the needs of its residents for safe and affordable housing.

The official website of the Town of Pawlet, www.pawlet.vt.gov, provides extensive information and could be used to greater advantage by the Town. The Mettawee School

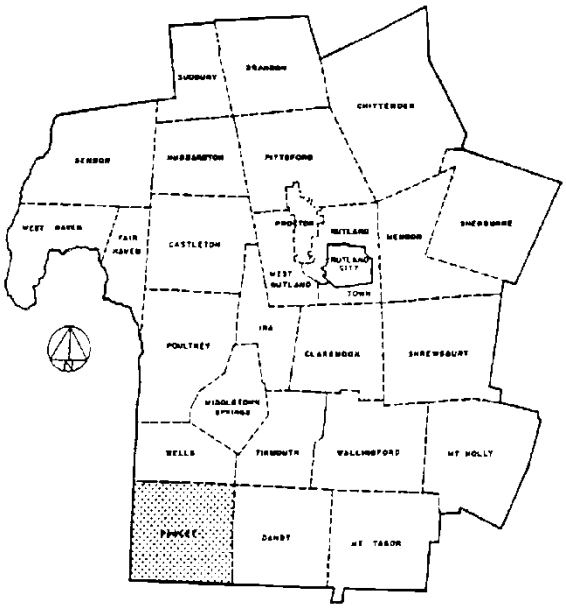
ensures digital literacy for the Town's children, and peer influence fosters digital literacy in many adults. Digital means have become a fundamentally useful basis for implementing the Town's plans.

III. LAND USE AND RELATED RESOURCES

LOCATION

Pawlet is located 25 miles southwest of Rutland on Vermont's western boundary. The closest urban concentration is the Village of Granville, just across the New York State line to the west. Adjacent towns to Pawlet are Wells on the north, Danby on the east, Rupert to the south and Granville and Hebron, New York, to the west.

Location of Pawlet in the Rutland Region



POPULATION DISTRIBUTION

In the 2010 U.S. Census, the population of Pawlet was 1,477. The Town is rural in nature with several population concentrations. The two major population centers are Pawlet Village, located at the junction of Routes 30 and 133, and West Pawlet, located at the junction of Route 153 with Railroad Street and Egg Street, close to the Town border with Granville, New York. The Town offices are located in Pawlet Village. West Pawlet developed around the former railroad depot and the slate industry, which operated numerous quarries in the vicinity.

Smaller concentrations of population are located at Spruce Gum (east of West Pawlet) North Pawlet, Spanktown (north of Pawlet Village), the Town Hill development (east of Pawlet Village), and Jockey Street (south of Pawlet Village). The area on Route 149 adjacent to the

New York State border town of Granville has historically been a thickly settled area of mixed use—housing, commercial, and industrial.

MAJOR HIGHWAYS

The principal highway in the Town, Route 30, runs roughly southeast to northwest through the Town. Route 30 begins in Brattleboro and terminates in Middlebury. The other major highway in the Town, Route 133, begins at the intersection with Route 30 in Pawlet Village, heads easterly less than a mile and runs northeasterly to the four-corner meeting point of Pawlet-Wells-Tinmouth-Danby and ends finally in West Rutland.

TOPOGRAPHY

A ridge of mountains, the most prominent physical characteristic of the Town, runs through it in a northerly direction. The highest elevation on it is Bald Mountain at 2,088 feet. A parallel ridge lies to the east, its peaks just beyond the borders of the Town. The slopes of this latter range within the southeastern Town borders rise over 2,200 feet, up toward the 3,110-foot peak of Woodlawn Mountain in Danby. The lowest elevation in the Town, 421 feet, occurs in the Mettawee River Valley, which runs through the Town from southeast to northwest, on the eastern side of the principal mountain ridge.

The Mettawee River Valley, south view from Haystack summit.

The Valley, in its breadth, is both a significant feature of the Town and a notable topographic feature in comparison to narrow valleys in much of the rest of the State. The Mettawee River, flowing through the Valley, links most of the settlements in the Town and lessens the impact of the natural barrier of mountains that separate Pawlet Village from West Pawlet. A second major river, the Indian River, flows from south to north near the western border of the Town and into New York State, where in Granville, New York, it joins the Mettawee, which ultimately flows into Lake Champlain.
The Mettawee River Valley, primarily, and the Indian River, to a lesser extent, provide Pawlet with broad level land that contributes to the persistence of farming. Pawlet is the southernmost town to experience the effect of Lake Champlain, which moderates temperatures and provides a longer growing season.

LAND USE PATTERNS AND CURRENT/FUTURE ZONING

Land Use

Agriculture, especially dairy farming, constitutes the most prominent land use in the Town. The lands in the valleys of the Mettawee River, Flower Brook, and the Indian River and along the Route 133 corridor are used extensively for farming and dairying. A significant number of these lands have been protected from development by conservation trusts. In 2013 the Town adopted Unified Bylaws which promote clustered development, thereby affording a new level of protection for agricultural and open lands. The industrial uses in the Town are principally quarrying and processing of slate and gravel, trucking, and bulk fuel storage.

There are self-employed tradespersons, construction and excavation contractors, landscapers, and loggers, and there are numerous cottage industries, including weaving, pottery, cabinetry, cut and pierced lampshades, jewelry, and sewing. There are also numerous commercial activities that are facilitated by the development of the digital/electronic/computer realm and its Internet manifestations. They include illustration, graphic design, publishing, and video production. Several commercial establishments are also present in the Town, including ones that provide retail, banking, and professional services.

Residential development is dense in the West Pawlet and Pawlet villages, with approximately 61 residences in Pawlet Village and 132 in West Pawlet. Commercial establishments are interspersed with residential development in both villages.

Pawlet Village and West Pawlet have been designated as Village Centers by the State of Vermont. Village Center designation is an important tool used to protect and enhance the characteristics of the areas that are valued by the community. The designations can improve Pawlet's vitality and livability by supporting the goals of this plan, including those regarding land use. The Designated Village Centers are shown on the Education and Community Facilities Map.

Authorized by 24 V.S.A. §2793a, Village Center designation recognizes and encourages local efforts to revitalize Vermont's traditional village centers. In accord with the land use goals of the State of Vermont, the designation encourages compact village centers surrounded by working rural lands. The designation must be renewed every five years.

Older housing is located in a linear pattern along the roads of the Town, in the historic New England manner. Newer housing is generally located away from roads, partly in clustered developments, which permits fewer and more efficient roadways and can foster a sense of community within the cluster.

Current Zoning

The current zoning regulations (Unified Bylaws) of the Town define the following principal districts:

- Highland (H). The Highland District consists of all land in the Town above 1,500 feet elevation. The purpose of this District is to protect the forest resources, the natural beauty, the purity of the watershed headwaters, and the more delicate ecological balance of these areas.
- Flood Plain Overlay (FP). The Flood Plain Overlay District shall be superimposed over any other zoning districts to include designated Special Flood Hazard Areas in and on the most current flood insurance studies and maps published by the Department of Homeland Security, Federal Emergency Management Agency, National Flood Insurance Program, as provided by the Secretary of the Agency of Natural Resources pursuant to 10 V.S.A. Chapter 32 § 753. Where there is a conflict between the underlying zoning district and the Flood Plain Overlay District, the more restrictive regulation shall apply.
- River Corridor (RC). The River Corridor Protection Overlay designates the land area adjacent to a river that is required to accommodate the dimensions, slope, planform, and buffer of the naturally stable channel and that is necessary for the natural maintenance or natural restoration of a dynamic equilibrium condition and for minimization of fluvial erosion hazards, as delineated by the Agency of Natural Resources in accordance with river corridor protection procedures (10 V.S.A. Chapter 32 § 752.) The River Corridor and Floodplain Management Program, developed by the Vermont Agency of Natural Resources (ANR), delineates areas subject to fluvial erosion. For more information: http://floodready.vermont.gov/flood_protection/river_corridors_floodplains/river_corridors.
- Forest and Agriculture (FA). The Forest and Agriculture District consists primarily of land below 1,500 feet elevation which has slopes of more than 15%. The purpose of this District is to limit residential use therein to a sufficiently low density to preserve water purity and insure safe and adequate sewage disposal.
- Industrial (I). The Industrial District is in the western part of the Town adjacent to and including the present location of quarrying operations. The purpose of this District is to promote the general welfare and the sound economic development of the Town and to encourage the best use of land in areas most appropriate for the location of suitable industrial establishments, but not to exclude agricultural use.
- Village and Commercial (VC). The purpose of the Village and Commercial District is to combine residential use with compatible commercial establishments in the traditional village pattern in order to provide pleasant living conditions and to promote convenient shopping and service facilities.
- Agriculture and Rural Residential (ARR). The purpose of the Agriculture and Rural Residential District is to insure the preservation of the natural resources and the rural

and scenic qualities of areas that are planned to be predominantly agricultural and residential in character.

The adoption of Unified Bylaws in 2013 has given a significant additional dimension to zoning regulations. The Unified Bylaws have added a Flood Plain and a River Corridor Protection Overlay. Notably, they promote clustered development, which facilitates growth while affording an enhanced prospect of protection for agricultural and open lands. The adoption of subdivision regulations in the Unified Bylaws has changed the Town's Act 250 classification from one to ten-acre, which has transferred the regulation of some development from the District Commission to a Town Development Review Board.

Residents value agriculture

Approximately 40% of respondents responding to a survey conducted for this Plan indicate that protecting farms and farmland is the most important of various issues regarding Pawlet's future. No other issue is so outstanding.

The specifics of land use described above, as they apply to the various areas of the Town, are detailed by the maps preserved in the office of the Town Clerk and available on the Town website www.pawlet.vt.gov.

Future Zoning

Major topics that have recently become increasingly important for land use policies and planning are agriculture, solar siting, and storm water management.

Agriculture

Agriculture has traditionally been and continues to be a major and distinctive feature of land use in Pawlet.

Today, land use must support the transition to fewer and smaller farms that offer a greater diversity of farm, food and fiber products, as well as vegetables, vine crops, beef, pork, maple goods, and various fruits.

Section XII Economic Development and the sidebar below provide more detail about agricultural and other business developments.

THE FUTURE OF AGRICULTURE IN PAWLET

(from the Agriculture Working Group: Fred Stone, Philip Ackerman-Leist, Timothy Hughes-Muse, Donald Campbell, and John Malcom)

The Mettowee River Valley and, to a lesser extent, the Indian River Valley, provide Pawlet with broad, level land and highly valued soils that contribute to the persistence of farming in the town, especially dairy. However, given shifting economic and workforce conditions, the decline in the number of dairy farms has freed up good land for other agriculture ventures. Much of the prime cropland has been protected from development by inclusion in the Mettowee Valley Conservation Project.

The shift in Pawlet's agriculture over the past several decades warrants careful attention if the town is to retain its rural character. In 1974, there were 39 dairy farms in Pawlet, shipping milk from 2,390 cows. At present, in 2015, there are fewer than 10 dairies shipping milk from approximately 1,200 cows. Other agricultural enterprises include vegetable, vine crops, beef, pork, and maple, with few fruits represented.

The economics of farming in recent years have caused many of Pawlet's farm businesses to make major production decisions which have typically included change in farm size, adoption of new technologies, and new marketing initiatives. In addition, since the late 1990s, Pawlet has seen an increase in the number of farms that have sold their development rights which has prompted investment in the town's agricultural economy.

In determining what the Town of Pawlet's goals and objectives should be for the next five years, the Agriculture Working Group considered a number of questions, including:

1) How important is it for farm land to stay in production?
2) How important is farming to the local economy?
3) Are more marginal farm lands (hay fields, hill farms, etc.) important?
4) Where does Pawlet want to focus growth and possibly discourage conservation?
5) At the same time, how does the town make it clear to conservation groups that it wants the groups to continue to invest in the agricultural economy here?
6) Are there specific agricultural economy infrastructure opportunities to create new markets for Pawlet, such as food processing, storage, and distribution?
7) Should Pawlet encourage solar installations on agricultural land?
8) Should the town consider additional Planned Unit Development (PUD), Planned Residential Development (PRD), or other "density bonus" development strategies in its zoning?
9) Are there town parks, public access points, or other land acquisitions that would make the town even more pleasant?

In summary, because Pawlet's future as a town founded upon farming and framed by its agricultural landscape is dependent upon the planning and pursuit of a number of the interrelated goals and objectives, the Agriculture Working Group proposes the following:

GOALS

1) Encourage the public's commitment to support a diverse farming economy, where both large and small operations support the community, with the differing needs of farmers and non-farmers recognized and respected.

2) Encourage the maintenance and conservation of agricultural lands for the production of agricultural products, and promote soil conservation practices that protect the long-¬term productivity and viability of agricultural soils.

3) Promote sustainable farming and sound forest management practices, and with them the long-term viability of our agricultural foundation.

OBJECTIVES

- The maintenance of a diversity of farm scales and farm and food products.
- The creation of multiple value-added opportunities for farmers and food entrepreneurs.
- Appropriate zoning and town support for additional processing infrastructure.
- Recognition, support, and celebration of the town's remaining dairy infrastructure.
- Strategic support of local markets for farm products, including the historic Mach's General Store and other direct market and aggregated market opportunities.
- The strategic establishment of agritourism as a complementary means of income for farmers and others by virtue of making Pawlet a destination for agricultural and artisanal products.
- Enhancement of educational efforts in the Mettowee Community School and other associated educational institutions by exploring Pawlet's agricultural heritage with increased on-farm experiences and farmer class visits, as well as further development of school gardens, local food purchasing, and vocational training.
- Strategic pursuit and development of a local "Mettowee Made" branding campaign for food, agriculture, arts, and crafts.
- Further development of value-added forestry products and custom logging operations to support farmers and other landowners.
- Maintaining a focus on farms that produce food and fiber.
- Careful monitoring that the town maintains a "critical mass of agriculture" such that vital supporting enterprises (equipment dealers, veterinarians, etc.) are able to remain viable.
- Continued pursuit of creative land conservation strategies that work for a variety of farmers and a diversity of farm scales and types.
- Fostering an additional and diverse array of food/agriculture sector jobs with fair wages.

- Further implementation of regional workforce training and land management training opportunities for new farmers & entrepreneurs.
- Finding solutions to the maintenance of large conserved parcels in light of agricultural operations that require smaller footprints.
- Focused town-wide celebrations of Pawlet's agricultural heritage and future that build town pride and identity.

Some of the suggestions above have been integrated into various sections on preceding pages of the Town Plan. It is the hope of the Agriculture Working group that the town periodically reviews this report and considers adopting more of these proposals in coming years.

Vermont enacted a right-to-farm law in 1981 and added significant amendments in 2004. The statute essentially provides protection for existing farming activities in "urbanizing areas" from nuisance suits by new neighbors and that existing properly conducted agricultural activities were entitled to a presumption that they were not a nuisance unless the plaintiff could show that the activity had "a substantial effect on the public health and safety." The amended right-to-farm law continues to protect farms and farmers by creating a rebuttable presumption that agricultural activities are not creating a nuisance.

To be entitled to the presumption under the amended statute, the farm operations must be conducted according to the following conditions:

- in conformity with federal, state, and local laws and regulations (including required agricultural practices, a term defined by the Secretary of Agriculture)
- consistent with good agricultural practices
- established prior to surrounding non-agricultural activities
- not significantly changed since the commencement of the prior surrounding non-agricultural activity

Essentially, as long as a farm complies with the law, operates consistently with "good agricultural practices," is established before surrounding residences or other non-agricultural activities are, and does not "significantly" expand or change its operations after surrounding residences or other activities are established, a court must presume that a residential neighbor's nuisance claim is invalid.

The Town of Pawlet strongly supports the state right-to-farm law and will advocate for stronger provisions as needed.

Solar Siting

Recent concern for renewable energy and the allocation of subsidies for technologies that provide it has led to increasing initiatives for solar development projects. The existence of three-phase electrical power lines in Pawlet's Industrial District provide attractive opportunities for siting these projects. The Town requires, however, that these projects be limited to designated industrial zones, which are readily available. In this case, the inactive slate quarries could be considered as sites.

Solar generation facilities and their ancillary infrastructure must not be situated in places that occupy currently used agricultural and forestry lands, nor on those lands not currently in use for farming, but that are potentially useful for new agricultural uses and their supporting infrastructure.

Neither should solar generation facilities nor their ancillary infrastructure be situated in ways that compromise the Town's rural aesthetic, extraordinary viewshed, and valuable place on the Stone Valley Byway. These features provide important lures for tourism as well as attractions for the sort of residential development that has historically brought otherwise city-dwellers to the Town, providing employment for construction trades, landscapers, and other services required by second home owners and retirees. Additionally, the recent provision of fiber optic connectivity makes it inviting for remote workers and entrepreneurs to relocate from urban areas to Pawlet's more enjoyable environment.

Stormwater Management

A comprehensive, effective system of storm water management combines Low Impact Development (LID) and Green Stormwater Infrastructure (GSI). Details are discussed in *Section V, Utilities and Facilities*.

Recommendations for Land Use and Zoning

To implement the objectives cited by this Plan, the following recommendations are made respecting future zoning and land use:

- Provide strong support for the continuation of traditional agriculture as well as for innovative endeavors, including enterprises that add value in terms of production and processing or by provision of complementary services
- Pay special attention to the infrastructure needed to support agriculture, maintaining sufficient agricultural activity to keep providers of infrastructure economically viable
- Assist small farmers in using portions of land under agricultural land conservation agreements
- Modify industrial zoning, presently a single district, into two types of districts, heavy and light. Locations of these districts and the kinds of activities allowed in each should take into account existing uses and issues such as noise, site safety, materials storage, operating hours, site lighting, and parking
- The parking problem in the Pawlet and West Pawlet village and commercial (VC) districts should be more fully addressed. Many of the smaller, pre-existing commercial

lots have inadequate areas for parking. In such cases, common-parking areas should be developed, or areas for overflow parking should be identified

- Development of affordable housing should be considered especially in the West Pawlet Village Center. It has potential housing stock as well as an underutilized wastewater treatment facility
- Enhance the flexibility of land use regulations to accommodate and facilitate new developments in agriculture and the protection of the resources that support them
- Continue working with the appropriate State agencies and organizations to develop policies and plans regarding river corridors and floodplains
- Undertake policy initiatives to insure that solar generation facilities and their ancillary infrastructure are situated in places that do not compromise the Town's values

RELATED RESOURCES

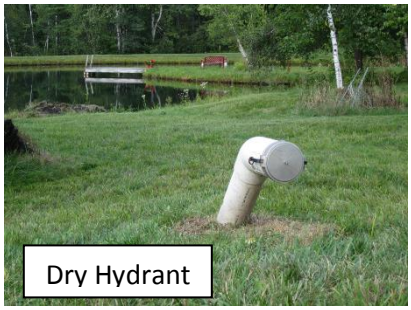
In addition to the treatment here, resources are variously addressed in the Sections *IV Transportation*; *V Utilities and Facilities*; *VI Ecological, Scenic, and Historic Resources;* and *VIII Energy*.

Water

The Town is favored in its water resources. It has adequate supplies for the personal use of its residents, as well as rivers, streams, and wetlands that provide recreation and natural beauty. The latter aspect of water resources is addressed here, and in *Section VI, Ecological, Scenic, and Historic Resources*. The former aspect of water resources is addressed in *Section V, Utilities and Facilities*.

The Town should continually seek to protect its water resources—rivers, streams, marshes, and other wetlands. To insure the full protection of these resources by federal and state laws, the Town should seek to make their designation especially clear in respect to:

- areas along the Mettawee and Indian Rivers and the streams in their watersheds
- the adjoining marshes and wetlands
- the marshes and wetlands along the Town's northern and southwestern borders
- resources for agricultural irrigation and for processing of agricultural products to ensure the quality of water for these uses
- the importance of water access for fire and emergency use



As scientific understanding of streams and waters continues to develop, ongoing efforts should be undertaken to preserve the quality of these resources within the Town.

Water resources are also treated in *Section V, Utilities and Facilities and Section VI, Ecological, Scenic, and Historic Resources.*

Wildlife

It is critically important in the planning process to appreciate the impact of land use on the existence and viability of wildlife ecosystems. Wildlife is plentiful within the Town. Particularly notable are animal populations of deer, wild turkey, and bear. Besides animal wildlife, several areas of notable ecology are present in the Town. Policy and planning considerations regarding these resources are treated in *Section VI, Ecological, Scenic and Historic Resources*.

Highways

The highways of the Town represent an important resource for the mobility of its residents and its visitors. They are also important because they facilitate emergency services. Their safety and adequacy are critical.

Highways are treated extensively in *Section IV, Transportation*. Highways are significant also respecting land use. Routes 30, 133, 149, and 153 should be preserved from purely linear development at least by limiting curb cuts. Development should also be encouraged to take place in clusters away from these highway corridors by limiting road access to these corridors. The Unified Bylaws adopted in 2013 make significant gains toward realizing these purposes.

Any new private road construction in the Town should be done by and at the expense of the owners or developers of the subject lands. Such roads should be constructed according to the appropriate Town or State road standards, even though the Town is not obligated to accept them as Town roads. It is especially important that these roads afford easy access for emergency vehicles. Recent State regulations stipulate the importance of covenants between abutters for the maintenance of common private roads in areas of development.

The mileage of roads the Town must maintain and remove snow from should be kept to a reasonable minimum to stabilize the Town's highway costs.

Minerals

Sand and Gravel

Sand and gravel deposits are abundant throughout the Town. Many of these deposits are actively being extracted. Most pits lie within Agricultural and Rural Residential (ARR) districts and represent conditional uses therein. Existing zoning regulations govern these uses.

The primary concern of the Town is that extraction shall not: reduce a site to waste land; disrupt water tables; nor produce other effects, such as silting, which damage adjoining property. If extraction is done in phases, as is often required by Act 250 requirements, reclamation should be completed for each phase before a new phase is undertaken.

Clay

Though none is extracted presently, deposits of clay that may be commercially viable are found in the Town.

Slate

The vein of colored slate found in the western part of Pawlet is unique in the world. The vein runs for about 25 miles from Rupert, Vermont, to north of Castleton, Vermont. A mile at its greatest width, it straddles the Vermont–New York border. The slate in this vein is unique for the variety of its colors—green, gray, purple, red—in combination with the strength of the material. Companies mining this slate are small and family-owned, with one exception. Some of the companies and their milling operations are based in Vermont, others in New York, but they may draw from quarries in either state.

The major products of slate are flooring and roofing tile. Some large structural pieces such as countertops are produced, as well as a variety of specialty items. "Flagging" stone for walks, terraces, and the like is produced from slate that usually cannot be worked more finely. Some waste slate is also crushed to produce a more durable and attractive surface material for driveways than gravel. Unprocessed waste is readily available for fill, for only the trucking cost.

The mining and processing of slate represent two relatively distinct phases. In the last two decades the proportion of labor required for the mining phase has diminished markedly, because modern heavy equipment has been introduced into the quarries (or "pits"). In former times much of the processing also was done at the side of the pit. Now the raw slate from several pits may be trucked to one mill. With the new use of machinery, rubble is no longer deposited in the tall piles that may still be seen on the local horizon. Instead it is dumped in low piles more suited to the operations of trucks. Also, since only a small portion of the slate that reaches the mill actually becomes finished product, waste that would previously have been produced near a pit is moved farther from it.

The mining and finishing of slate is largely non-polluting. Blasting is relatively minor, compared to other types of rock mining, because slate is fragile, and there is a premium on the extraction of as large pieces as possible. Finishing slate requires large amounts of water for lubrication and for cooling cutting and grinding processes. Water is readily obtained from currently unused pits, which fill from ground water. The water is recycled.

Slate mining differs in at least two important respects from other types of mining and resource extraction:

1. Quarries tend to remain in operation for a long time—even more than a century—without a substantial increase in size. The amount of value added by the labor of finishing is extremely high in proportion to the value of a quantity of the material itself. The mining itself represents a minor operation compared to the processing of slate.

2. Slate that has frozen cannot be worked into a finished product. Because of this, extraction can only be done in small quantities at a time in winter. Pits that are not actively worked are allowed to fill with water to protect the remaining slate.

The areas of slate quarrying and processing in Pawlet have been delegated by the Zoning Ordinance to the existing Industrial District (I) in order to forestall conflict with residential uses. While such conflict may be forestalled, criticisms of quarrying center on the waste piles from old quarries and the “abandoned” quality of quarries that are not currently used.

Traditionally, quarries had been opened and closed depending on commercial demands generally and particularly on demand for one or another color of slate.

IV. TRANSPORTATION

INTRODUCTION

This section describes the Transportation Plan adopted by the Town of Pawlet. The purpose of the Town Transportation Plan is to provide guidance for the maintenance and necessary development of roads and other ways to facilitate travel that benefits the inhabitants of the Town respecting their commerce, safety, and leisure, while preserving the rural character of the Town. The road system of the Town is shown on a map available in the Appendix A.

EXISTING ROADS

Pawlet has four distinct classifications of roads: Rural Minor Arterials, Rural Major Collectors, Rural Minor Collectors and Local Roads. Presently these roads are adequate for Pawlet's needs.

There are three highways of major importance to the Town: State Highways 30, 133, and 149. Classified as Rural Minor Arterials, they provide the primary transportation connections within the Town and to the rest of the region.

Definitions

Rural Minor Arterials move large volumes of traffic from one part of town to another. Off-road access is a secondary function of arterials, and curb cuts therefore are limited.

Rural Major Collectors carry traffic from local roads to arterials.

Rural Minor Collectors are similar to rural major collectors, except they carry less traffic volume.

Local Roads provide access to property abutting the public right-of-way. Local roads are not intended for use by through traffic.

Inventory

Rural Minor Arterials

Route 30 runs southeast to northwest through the Town. It follows the Mettawee River Valley from Dorset to East Rupert and passes into Wells. Route 30 provides the major connection for Pawlet to Manchester in the south and Poultney and Middlebury in the north. Except for the portion between Route 153 and the Wells Town line, which is rated fair, the road has been given a good sufficiency rating for the length of Pawlet. The road is wide, with good shoulders and good passing sight distances. Through most of Pawlet the road has a somewhat widened paved shoulder for bicyclists.

Traffic volumes on Route 30, recorded 0.4 miles north of River Road, have increased in recent years, from 1,800 Average Daily Traffic (ADT) in 2008 to 2,500 ADT in 2014. Route 30 also has the largest number of accidents on Pawlet's roadways. Twenty-seven of Pawlet's 60 reported accidents in 2010-2015 have happened on Route 30.

Route 133 runs northeast from Pawlet Village to and through Middletown Springs, Tinmouth, Ira, and thence to West Rutland. This road is a major route to and from Rutland for all towns through which it passes. The Danby-Pawlet Road extends from the intersection of Route 133 to the townline.

Route 149 connects Route 30 with routes 22 and 22A in New York State, which are major arteries for travel to the South and North. Route 22 connects with routes for New York City. Route 22A, after running briefly through New York State, provides an important route north to Burlington from this part of Vermont. Route 149 also connects to the Lake George area of New York State.

Rural Major Collectors

One numbered State Aid road passes through the Town, Route 153. It serves a collector function. Within the Town, Route 153 connects the Village of West Pawlet with Route 30 and points north, and with the Village of Rupert to the south.

Rural Minor Collectors

River Road, a paved road (Town Highway #1) runs parallel to the Mettawee River from Butternut Bend on Route 30 to an intersection with Route 153. It is an important shortcut connector between the villages of Pawlet and West Pawlet, which are the two major clusters of population in the Town.

North Road, a paved road, runs from an intersection with Route 30 in North Pawlet north to Wells. The Button Falls Road, a paved road, is a principal route from Pawlet into Granville, NY, in addition to Route 149, described above.

Local Roads

With the exception of a few short, paved streets in the villages of Pawlet and West Pawlet, all local roads have only gravel surfaces. Most traffic on them is only for local access, although the roads differ considerably in the amount of traffic that they bear.

Developments

- As part of the statewide Enhanced 911 program, the Town of Pawlet in 1998 officially adopted names for all of its roads, over and above the numeric designation that was the sole official designation previously
- The intersection of Route 30 with North Road (Town Highway #5) has been marked with warning signs on both roads
- The intersection of Routes 30 and 149 at Blossom's Corner has been improved by changed alignment of Route 149, but visibility problems remain when approaching it along Route 30 because of trees that grow in the line of sight across a slight bow Route 30 makes at the intersection
- Pawlet participated in the High Risk Rural Road Program in 2013 for the Danby-Pawlet Road and minor safety improvements, such as signs, are expected be implemented in 2015 to effect these improvements

Issues

Road Safety

Pawlet's most significant issue with respect to road safety is vehicle speed on its roadways. In the last decade the Town undertook to establish and post speed limits on its local paved roads. It has no jurisdiction over speed limits on State roads, however, so it must resort to petitioning the Agency of Transportation to consider reducing speed limits on parts of the State roads that local experience deems hazardous for existing speed limits. Route 30 contains several hazardous sections, as outlined below:

- The first is located in Pawlet Village, where a curve over the Flower Brook Bridge coincides with the angled intersection of Route 133 and two local roads. A beginning response to this situation is detailed in the discussion of the *Pedestrian Access Study* below
- Another hazardous area is the intersection of Route 30 and River Road (Town Highway #1) at the base of Butternut Bend. This intersection is hazardous due to the angle of the intersection, as well as the angle and elevation of the curve on Route 30. Caution signs and reduced speed limits may be appropriate here
- The intersection of Route 153 with Route 30 has become somewhat hazardous due to increased traffic volumes since construction of the new Mettawee Community School on Route 153 nearby
- Inadequate provision for slow moving farm vehicles, prevalent because of the extensive farming in Pawlet, creates dangers on the local highways. More extensive warning of such vehicles is required, as well as places for these vehicles to pull off the highways to allow other vehicles to pass

Pedestrian Access Study

In October 2014, the AARP, in coordination with the Rutland Regional Planning Commission and residents of Pawlet, conducted a walk audit to assess the safety of Pawlet's village center. The audit covered the intersection of VT Route 30 and VT Route 133 and School Street. While the village center was found to be appealing overall, auditors found pedestrian conditions to be unsafe due to high driver speeds, and a lack of pedestrian infrastructure, including a lack of crosswalks and pedestrian signals and poor sidewalk connectivity.

Following the walk audit, the following changes were recommended:

- Reduce speed on Route 133 approaching the intersection with Route 30 and implement traffic calming measures approaching the village center in order to reduce motorist to speed
- Narrow the lane width at the intersection of Route 30 and Route 133 by creating a wider shoulder with striping. (Both VTrans regulations and the Manual on Uniform Traffic Control Devices (MUTCD) guidelines for traffic standards and safety allow for a lane width of 10 feet)
- Add 4 crosswalks to the intersection, one at each intersecting roadway
- Consider rapid flashing beacons, and walk signals
- Reduce speed limit in village center to 25 mph
- Restore existing sidewalk along Route 30. Increase connectivity by adding additional sidewalks that connect residences with amenities and services in the village center.
- Create wider shoulders to accommodate pedestrians

During the audit, residents of Pawlet expressed a desire for enhanced pedestrian mobility and support in the village center to encourage community vibrancy.

Some steps the Town could take to work towards this goal include:

- Apply for Bicycle and Pedestrian Program and Transportation Alternatives grants for active transportation infrastructure
- Have the Selectboard seek safety improvements for West Pawlet Village and the monument intersection there
- Improve the condition of Route 153 on the south of and into West Pawlet Village
- Encourage more enforcement of speed limits in the Village

Maintenance and Improvement

The State Agency of Transportation undertook a new approach to transportation issues in 1993 with the establishment of regional transportation bodies. Pawlet is a member of the Rutland Region Transportation Council, which resulted from this initiative. As the regional transportation bodies became established, the Agency now turns to the regional bodies for some prioritization of highway projects. The Agency has also begun to avail the regional bodies to vet a variety of local assistance and grant projects.

The longstanding system of State aid processes and categories remains the greatly preponderant means of major funding for local roads and bridges, but the Town now works in a more complicated transportation situation. Currently, towns large enough to employ managers have an edge in that situation because those managers include securing grants

and funding as part of their jobs. Small towns such as Pawlet may lose out if they cannot adequately monitor new transportation developments. The attention required taxes traditional volunteer resources.

While the Town must continue its traditional pattern of relations to the Agency of Transportation and the transportation districts, and its concern for proper layout of highways and implementation of efficient flow of traffic on its highways, it must also begin to see beyond the traditional "asphalt, gravel, and concrete" perspective. A world in which information often becomes more important than physical resources means that an electronic database may become as important as a quarry for gravel.

Development

Pawlet has no plans to construct any new Town highways. New roads may be constructed by private individuals in the course of development or subdivision, but they must meet the Town's road specifications or the Town's subdivision road specifications.

An important Town road upgrade to consider, however, is to improve the Chet Clark Road. The Road is a class 4 road that is not maintained in winter and only minimally otherwise. It is the only Town road that connects the villages of Pawlet and West Pawlet. All other connection between the two villages is via state highways. Chet Clark Road provides potentially a more convenient connection for citizens coming from West Pawlet, and especially points south, to vote or transact business at the Town Hall. It might also be the only possible connection on the south side of Flower Brook in the event of a flood emergency that renders the Flower Brook bridges respectively on Routes 30 and 133 unusable.

The Town has no formally designated parking areas for facilitating carpooling, which has become increasingly important for commuters in recent years. The State has developed Go! Vermont http://www.connectingcommuters.org as an online resource to facilitate carpooling and other transportation assistance. Some locations are used informally for carpooling, but more formal designation ought to be considered.

US Census data from 2010 indicates that 70% of a Pawlet workforce of 791 were solitary commuters and 9% were carpoolers.

OTHER

Delaware and Hudson ROW

The former Delaware and Hudson Railroad right-of-way has been deeded to the State Agency of Transportation and is administered by the Department of Forests and Parks. No wheeled vehicles are allowed, other than bicycles, and no new residential crossings are permitted. Existing crossings and farm crossings are still permitted. This ‘trail’ is a significant recreation resource.

Bicycles

Bicycle traffic, especially in tour groups, has become significant in Spring through Fall. The Town should work to see that shoulders on State roads are widened to provide for cyclists

when other improvements are made. The Town should also consider bicyclists' safety in designing improvements to State Aid and local roads as well, and might consider working with tour group offices to identify the better routes through Town.

PLANNING

This new orientation of the State Agency of Transportation has a two-fold significance for the Town. First, it means that the Town must pursue an activist role to move its transportation concerns forward. Second, it gives the Town a significant voice in respect to transportation matters in the region generally.

In both regards, it is very important that the Town send effective representation to the Rutland Region Transportation Council and to the Rutland Regional Planning Commission. If the Town sends different representatives to each of these bodies, the representatives must coordinate closely in order to be effective. Effectiveness also requires that representatives acquire extensive knowledge of State policies, regulations, rules, and procedures.

V. UTILITIES AND FACILITIES

DRINKING WATER

Present Supply

Significant numbers of driven wells, dug wells, and springs provide water in most of the Town. Drilled wells are generally used for newly constructed residences. In Pawlet Village, the Lathrop Spring, located below Cemetery Hill, provides water to three single-family dwellings, three rental units, and four commercial establishments.

In the far western area of town, 75% of homes draw their water from drilled wells averaging 200 feet in depth. These wells penetrate an underground slate ridge underlying much of the area.

Sulfur in the water degrades the quality of some wells in the town. This is more of an aesthetic issue than a health concern. Older town plans have noted that nitrate contamination may be an issue in some of the shallow wells in North Pawlet. However, recent water data compiled by the VT Department of Health do not indicate a problem with nitrate. On the other hand, arsenic levels in local wells have been known to exceed the maximum contaminant level. While the vast majority of wells tested in Pawlet do meet the standard for arsenic, information is critical. It is recommended that residents, test their water regularly. For more information on testing frequency and how to order the appropriate test kits see http://healthvermont.gov/enviro/ph_lab/water_test.aspx.

Planning

The rural areas of the town should continue to rely on individual sources for domestic drinking water. The villages of Pawlet and West Pawlet presently have no great problem obtaining potable water on an individual basis, except that wells must often be very deep.

Any planning for municipal water supply should include provision of adequate water for fire protection as well as for domestic use.

The recharge areas for major springs should be protected from contamination. Groundwater resources should be protected in a similar manner. Compilation of well log records and GIS or similar mapping should be used to help identify aquifers. Regular testing of wells by their owners through available State and other programs should be encouraged. Compilation of data from such tests could provide a valuable resource for future Town planning.

The Water subsection in *Section III, Land Use History and Resources*, addresses additional concerns relevant to future planning.

STORM WATER DRAINAGE

Present Conditions

Pawlet lies entirely within the Mettawee River watershed. An effective system of stormwater management would reduce sedimentation and minimize erosion in local streams (such as Flower Brook, Indian River and Mettawee River), as well as limit the movement of pollutants into more distant surface waters (including Lake Champlain).

A fairly extensive storm drain system exists in the village areas to prevent flooding along the roads. The main stormwater infrastructure clusters are:

- In Pawlet Village there are several short stormdrains that cross School Street. Nearby, long lengths of pipe drain stormwater along Route 30. Others cross the southern end of Route 133
- In West Pawlet Village, a stormdrain runs the length of New Street

There is also drainage infrastructure at key areas along Route 153.

The highway department removes debris from inlets periodically and cleans sediment from piping as needed. The drop inlets are only effective if they remain clean and free of sediment build-up. These should be maintained regularly to ensure their effectiveness at removing sediment from stormwater.

Pawlet's dedication to a low density environment places it in a favorable position to realize the advantages a comprehensive, effective system of storm water management that combines Low Impact Development (LID) and Green Stormwater Infrastructure (GSI).

LID refers to an approach to land planning and site design that tries to prevent and minimize environmental degradation. GSI refers to and relies on the physical elements (natural or man-made) of the landscape to address or minimize impacts from storm water runoff. In other words, LID is a series of planning principles and GSI is a set of physical best management practices. Reference the following links:

http://lid-stormwater.net/background.htm
http://www.vtwaterquality.org/stormwater/docs/sw_gi_2.0_green_stormwater_infrastructure.pdf

In 2015, the town engaged with local partners to complete a stormwater master plan. This study found a number of stormwater-related implementation projects, which utilize GSI

practices, with 12 being listed as viable projects. Pawlet will continue to work with its local partners to complete the identified projects.

Planning

The inventory of culverts and stormdrains should be maintained and updated as needed. The Town should work with partners, such as state agencies, the Poultney Mettowee Natural Resources Conservation District and the Rutland Regional Planning Commission to write related grants to complete projects. A layer of storm drain data should be added to the Town's online GIS (Geographic Information System).

SEWAGE

Present Conditions

In West Pawlet Village, the municipal sewage system has about 130 users (hook-ups) and has a maximum capacity of roughly 200. The wastewater treatment facility (WWTF) was fully refurbished in 2013. Solids are shipped to the Rutland WWTF, where anaerobic digesters complete the decomposition process.

Sewage throughout the rest of Pawlet is treated on the lots of the individual or multifamily housing units that generate it. The units use septic tanks in combination with drywells or leach fields. Homeowners are responsible for periodically pumping the sludge out of their septic tank and disposing of its contents.

Future Planning

The rural areas of the Town should continue to rely on individual on-site subsurface means for sewage treatment, and residential densities should be kept low enough to allow such disposal without problems to adjacent neighbors or water supplies. State septic regulations provide important protection for the Town. The enforcement of these regulations is indirect. Compliance is mostly left to scrutiny as part of the property transfer process. State approval of new or refurbished septic systems is now recorded as part town property records.

Future planning for sewage and treatment systems that may be required in the Town should explore all options that have become feasible as alternatives to traditional chemical/mechanical methods. Biological treatment methods and other methods that do not generate sludge pose potentially costly disposal problems.

The Town should also anticipate problems that may occur in the future due to requirements for septage disposal and seek to encourage methods such as dewatering and composting that will facilitate the disposal of septage with minimal or no risk to public health.

SOLID AND HAZARDOUS WASTE

In the spring of 1999, the Town closed its landfill for solid waste disposal on the outskirts of West Pawlet; the facility had reached capacity. For disposal of solid waste, the Town now directs its residents to use one of the nearby transfer stations in the region. The closest option is on Route 22 in Granville, New York - a privately run facility operated by Earth,

Waste and Metal. A second, more distant, option is the transfer station on Gleason Road in Rutland, Vermont. Pawlet maintains a schedule of hazardous waste disposal days for residents to rid themselves of items not disposable as ordinary transfer station waste.

ELECTRICAL

Small Scale Generation

Net metering in Vermont provides incentives to utility customers who invest in small scale electrical generation. Homeowners who generate more energy than they use get credit for adding power to the electrical grid. Typically solar (photovoltaic) panels are used, but Pawlet's landscape provides opportunities to generate power from other sources as well, such as hydroelectric, biomass, and wind.

The use of solar power also allows some Pawlet homeowners to live comfortably in places distant from electric distribution lines — entirely "off the grid."

The dam that forms the Mill Pond at the intersection of routes 30 and 133, was once used as a private source of hydropower. It is currently inoperable. However, there are plans to refurbish it and put it back into service. Some local dairy farmers have experimented with “Cow Power,” a program offered by Green Mountain Power that produces electricity from the methane in cow manure. Similarly, other biomass such as corn stalks, can be used for power generation.

Although the use of alternative sources of power is strongly encouraged, Pawlet's economy depends on tourism and agriculture. Therefore, siting decisions for solar panels, wind turbines, and their maintenance roads should be balanced against the aesthetics and the value of fertile soils. For more information, see *Section VIII, Energy*.

Large Scale Generation and Distribution

Green Mountain Power merged with Central Vermont Public Service (CVPS) in 2014. Using the high voltage transmission mains owned by Vermont Electric Power Company (VELCO), Green Mountain Power serves local homes and businesses. Their fuel mix consists largely of hydroelectric power from Canada and a fair amount of nuclear power generated from New Hampshire. (Vermont Yankee stopped operation in 2014). They have approximately 2,000 customers in the local area, which covers Pawlet, Rupert and portions of Wells. Their nearest service fleet is based in Poultney, VT.

The transmission system routes electrical lines to the Pawlet substation on Bull Frog Hollow Road where it splits into two branches for distribution. One branch runs alongside the Granville border and serves the Village of West Pawlet. The other runs along Route 30. It serves Pawlet Village and continues south to Dorset. These are radial lines; they are fed from one direction. Interruptions in service may be more frequent than in areas with built-in loops, since maintenance close to the substation affects the entire distribution line.

Three-phase power is available in many areas of Pawlet. It is present along Route 30, next to Route 153, on Briar Hill and near the slate quarries. For specific locations, an online map is available at http://caigisonline.com/pawletvt/.

EMERGENCY MANAGEMENT

The Town of Pawlet has a volunteer Emergency Management (EM) staff of three:

- Emergency Management Director
- Emergency Management Coordinator
- Emergency Management Public Information Officer

Pawlet Emergency Management is responsible for coordinating the various components of the emergency management system: fire, law enforcement, emergency medical services, public works, volunteer groups and State resources. The four phases of Emergency Management, mitigation, preparedness, response, and recovery, are managed by the EM staff.

EM writes the majority of Hazard Mitigation Grants for the Town, which primarily involve culvert replacements.

The Town has an emergency notification phone system through Vermont Emergency Management's VT Alert System.

The volunteer staff should be increased in the future in order to accommodate and manage multiple day events. In addition, a more permanent location for an Emergency Operations Center should be considered.

The Town of Pawlet has two American Red Cross-certified shelters (West Pawlet Firehouse and the Mettawee Community School).

FIRE PROTECTION

Pawlet is served by two volunteer fire departments, located respectively in West Pawlet and in Pawlet Village. All dispatch is now subsumed under the Enhanced 911 system, described below. Both Fire departments and EMS are dispatched from Washington County, NY, Department of Public Safety. The Pawlet fire departments can call upon other Rutland, Bennington and Washington County NY departments to provide mutual aid assistance.

Any future housing development in the Town should provide for water. If that is not possible, an adequate fire pond or access to another acceptable water supply should be provided as recommended by the fire departments. For new roads, the Town will follow requirements set out in its Unified Bylaws and by state's Complete Streets Program.

The Town fire wardens have the responsibility for wildland fire suppression, maintaining records and enforcement of forest fire laws including issuing burn permits and issuing fire prevention tickets as required.

The Pawlet Volunteer Fire Department firehouse is considered a critical facility by the Federal Emergency Management Agency (FEMA). As the firehouse is in the Flower Brook Floodway and has experienced two flood events, consideration should be given to an alternate location in the future that meets the needs of the department, the community, and is in a safe location.

POLICE

Police protection is provided by two Town constables and by the Vermont State Police, currently from a headquarters in Fairhaven, by dialing 911. Response time for State Police is extended because they usually must cover some distance and because State Police personnel are limited. Police protection from the Rutland County Sheriff has been tried on a trial contractual basis. The Town constables are required to complete specified hours/courses of training in order to maintain their certifications.

EMS

Emergency Medical Service is provided by the Granville Rescue Squad (Granville NY). The squad has approximately 55 members with a mix of volunteer and paid personnel. Training levels go from Basic First Aid/CPR to Paramedic level. Equipment includes four Advanced Life Support ambulances and one Basic Life Support Ambulance. They are also equipped with a bariatric stretcher, Scene Support Unit, a rescue snowmobile sled and an ATV.

ENHANCED 911

A unified system for obtaining emergency services, Enhanced 911 is now in place for the entire state of Vermont. To support this system, all roads have been given street names and all buildings have had street numbers assigned to them. Building locations are listed in a comprehensive database that emergency dispatchers use to dispatch fire, police, and emergency medical personnel. Whenever anyone dials 911 from a stationary telephone, the address of the building where the telephone is located immediately shows on an information screen at the appropriate emergency dispatch center. The dispatcher thereby knows where an emergency situation exists even if the caller is incapable of identifying the location.

HEALTH

The Mettawee Valley Family Health Center, located on route 149 in Pawlet, provides general primary care, behavioral health, and minor emergency medical services to area residents. In concert with facilities in Castleton, Brandon, Rutland and Shoreham, plus a dental clinic in Rutland, these clinics, known as the "Community Health Centers of the

Rutland Region," comprise a charitable corporation governed by an independent board of directors. As a Federally Qualified Health Center (FQHC), the Corporation is partly subsidized by federal funds. For health care clients this means sliding scale fees and full acceptance of Medicare and Medicaid. FQHC status yields readily available, affordable health care for the community and an enhanced system for delivery of health care. These clinics, in accord with purposes of the Affordable Care Act, are growing preventive care and education programs and team approaches to patient care.

Rutland Regional Medical Center and the Southwest Vermont Medical Center (in Bennington) offer major medical services within a reasonable distance of the Town. Volunteers at these medical centers often help provide transportation and other support services for patients and their families. The Granville Rescue Squad (summoned through the Enhanced 911 system) provides rapid aid and transport to people in the Pawlet community when they experience medical emergencies. Other rescue squads provide backup.

The Visiting Nursing Association & Hospice of the Southwest Region works with homebound and elderly residents. With offices in Dorset, Rutland and Bennington, the VNA provides services including, but not limited to: home health aides, long distance health monitoring, occupational therapy, palliative care and hospice care. For those in need of end-of-life care outside the home, the Haynes House of Hope in Granville, NY offers a quiet, comfortable home for the terminally ill and their immediate family.

TELECOMMUNICATIONS

The telecommunications market continues to change rapidly. Thus Pawlet's telecommunications structure is varied. Pawlet village and eastern Pawlet are served by VTEL, which offers both telephone and Internet services including gigabit fiber optic technology. Additionally, VTEL offers wireless internet service in Pawlet but this service does not transmit traditional television, landline phone or cell phone signals. Fairpoint Communications provides DSL Internet service to the West Pawlet area via copper telephone wire. Comcast offers broadband Internet data transmission via cable. However, economies of scale sometimes prevent the installation of infrastructure in sparsely inhabited areas. Satellite Internet services are also available but are generally quite costly.

There are no cellular transmission facilities in Pawlet resulting in most of the Town lacking cellular service. This results in both an inconvenience to residents and travelers through the Town as well as a deficiency in the ability to access 911 when a landline is not available. The Town should encourage the installation of cellular service that is consistent with Article III, Section 12 of the Town of Pawlet Unified Bylaws.

Pawlet's fiber optic services provide download speeds that are comparable to and even superior to those of urban areas, allowing residents the employment at a distance that is increasingly available in the rapidly developing digital era.

TOWN ADMINISTRATION

The legislative body of the Town, its Selectboard, administers the Town, with help from the Town Clerk and the Town Treasurer. The Selectboard has recently hired an administrative assistant. Other Town officials include the Listers, the Planning Commission, the

Development Review Board, the Zoning Administrator, the Auditors, and the Constables. Town highway workers are under the supervision of a foreman, who is an appointee of the Selectboard.

The Town Hall has a digital network that connects the computers in its offices and to the VTEL wide area network. This allows the Town to meet the wide variety of contemporary requirements for inward and outward communication with State offices, residents, and businesses. The next step for digital services is projection capability to support information requirements and collaboration needs for meetings of Town bodies. The Town should also consider streaming video for these meetings as an effective means of increasing citizen participation in these activities.

As the Town grows and government requirements increase in complexity digitized information systems provide an important way to address demands on Town administration and services.

INFORMATION SERVICES

In addition to the warning process required by State statute, the Town publishes a periodic newsletter, and maintains a website and various email lists to convey information to Pawlet residents.

The Pawlet Newsletter has been published three or four times a year by the Town since 2003 to encourage involvement in town activities. Approximately 1,140 copies of the newsletter are distributed free of charge to Pawlet residents and non-resident taxpayers. News items concern mainly the activities of the town office, but also includes those of various community groups and organizations. During the past 12 years, the printed newsletter has increased in size, picked up more advertisers and developed an online presence. Publication of newsletter content is coordinated with more frequent postings to the Town's website and the distribution of "Pawlet eNews" notices to an e-mail group of about 245 members. Additionally, each issue of the newsletter can be viewed on-line at the Town of Pawlet website http://pawlet.vt.gov/.

The Town website offers an increasing amount of information that includes minutes of Selectboard and Planning Commission meetings (as required by Vermont law effective July 1, 2014), as well as ordinances, regulations, and links to town maps. In 2014 the web site logged 6,296 unique visitors and 14,095 page views — an increase of 11 percent from the number of visits during 2013.

The GIS (Geographic Information System) for Pawlet is available online and can be viewed at: http://www.caigisonline.com/pawletvt/. Several layers of maps are included that give zoning information, soil information, parcel ID, abutting owner information and more.

Additional town information is available from Town Clerk Deb Hawkins. Community members are also encouraged to join Front Porch Forum, a website that helps neighbors connect by hosting regional networks of online neighborhood/town forums. Anyone can sign up for the Pawlet Wells Front Porch Forum at http://frontporchforum.com/registrations.

CAPITAL BUDGET

A capital budget allows for planned efficient use of limited financial resources. It can also serve as a basis for establishing impact fees, which could fund the reserve account for acquisitions or upgrades.

The Town should maintain its capital budgeting program. This budgeting program would inventory the present condition of all public facilities such as roads, the sewer plant, Town buildings, fire and rescue vehicles, etc. It would project and plan for replacement, maintenance, upgrading, expansion, or whatever else might be anticipated for each facility. It would estimate the cost, and devise some method of building a reserve fund gradually so that no sudden, emergency increase in taxes would occur.

Town Properties

1) Town Garage, 313 Danby Rd.
2) Garage ("equipment building"), 3307 Route 153
3) Wastewater Treatment Facility, 49 Railroad Ave.
4) Town Hall, 122 School St.
5) Library, 141 School St.
6) Gravel Pit, 2628 Route 30
7) Vacant Lot, 5732 Route 30
8) Nelsonville Cemetery, 1226 Route 153
9) Blossom Hill Cemetery, 420 Route 149

The Town owns a number of buildings and associated property--principally the Town Hall, located in Pawlet Village, and the Town Garage, located on the Pawlet-Danby Road, about a mile east of the Village, and the sewage treatment plant in West Pawlet.

Both the Town Hall and the Town Garage stand in need of major repairs. Renovation of the Town Hall, chosen by the voters over new construction, has been proceeding for several years. It is now about three quarters done, with the completion of the upstairs auditorium the last major remaining task. Besides Town monies, volunteers have obtained grants and solicited significant private funds. The Town at this point should establish a working committee to make recommendations and pursue the Town Hall renovation project to its necessary completion.

The Town has not had a program for systematic evaluation and maintenance of its buildings. Consequently, the need for substantial expenditures arises suddenly. This situation suggests strongly the need for a program of systematic attention to the Town's facilities. It also underlines the need for a capital budget.

RECREATION AND OPEN SPACE

School playgrounds, the Delaware and Hudson Rail Trail, fishing holes on the Mettawee, and the hiking paths on the conserved lands accessing Haystack Mountain comprise the main public facilities for recreation in the Town. The West Pawlet Fish and Game Club has a private reserve off Route 153. Just south of the Pawlet-Rupert town line is the Mettawee Valley Community Center (MVCC), a 13.5-acre site located off Route 30. A private volunteer board oversees the facility. The Board consists of three members each from Rupert, Pawlet and Dorset.

The MVCC is centered on a multipurpose recreational field that provides playing space for youth baseball and adult softball and short field soccer or football. The facility includes a volleyball court, horseshoe pits, a playground, and picnic facilities. Future plans anticipate fire pits for the picnic area and electricity to the site. There are hopes for tennis courts, a

multi-purpose building, and possibly a pond. Also envisioned are camping facilities for youth organizations such as Scouts.

Construction of the MVCC has represented significant volunteer efforts, including donations of equipment time. National Guard engineers also contributed substantial efforts of personnel and equipment. There have been substantial donations of gravel for fill and grading, as well as monetary contributions.

Other recreational opportunities in the Town include fishing, hunting, hiking, and cross-country skiing. These activities often take place on private lands with permission of the owner. Of concern to local sportsmen is the increasing amount of land that is posted and owned by persons residing out of the State. Obtaining permission to hunt and fish on lands that have previously been available has become increasingly difficult, either because the absence of the owner makes it so, or because of the reluctance of an owner who is not familiar with local attitudes and customs. This situation results in decreased recreational opportunities.

Conservation acquisitions in North Pawlet by The Nature Conservancy provide a significant opportunity for public access and recreation.

In the future, as part of approval of subdivisions, especially large ones, regulations could be adopted requiring a developer to donate a portion of land for recreational purposes, or to contribute fees in lieu of land to an open space fund.

Before future growth makes it difficult, if not impossible, provision should be made for open space and recreational needs by adopting a land use policy that supports the farming economy, and public acquisition of land for the development of recreation facilities.

ENTERTAINMENT AND FAMILY ACTIVITIES

For indoor entertainment, residents may turn to a local art gallery--such as the Pawlet Art Collective, The Pawlet Potter, and the Indian Hill Gallery of Fine Photography. Other art locations within a stone's throw of the Town's borders are the Roy Egg Shop and the Green Hill Studio.

Pawlet Library on a Winter Evening

The Pawlet Library is a destination for family activities. The library offers reading materials, books on tape, and audio-visual media. It provides a space for classes (such as yoga, dance, Tai Chi, arts and crafts), activities for children (story time, Lego Club) and a venue for two book clubs. For more information, see the *Library* subsection of *Section VII, Education and Child Care.*

There are additional recurring events, including pancake breakfasts at both fire departments, a wild game supper at the

outset of deer season at the Pawlet fire house, the Woodchuck Festival by the West Pawlet fire department in February, the annual Library book sale, fire department auctions, Art on the Green, and historical society programs. The Pawlet Community Church stages popular roast pork dinners Saturday nights during most of the year except summers.

VI. ECOLOGICAL, SCENIC, AND HISTORIC RESOURCES

NATURAL HERITAGE and ECOLOGY

The Town, as a matter of policy, seeks to preserve and enhance the quality of its natural heritage and its scenic and historic resources. In addition to this section, related topics are treated in *Section III, Land Use History and Resources, and Section V, Utilities and Facilities.*

The Town also recognizes that the abundance of wildlife in the area depends critically on the health of the natural ecology.

Ecologically significant natural communities and habitats within the Town have been identified in a report entitled "Biological Natural Areas of Western Rutland County," prepared by the Nongame and Natural Heritage Program of the Vermont Department of Fish and Wildlife.

The report identifies three areas of statewide significance and four of local significance in Pawlet:

Sycamore Forest

<u>Statewide</u>

1. North Pawlet Hills
2. The Pattern
3. Pawlet Sycamore Forest

<u>Local</u>

1. Tadmer Hill
2. Indian Hill
3. Highgo Hill
4. Sprucetop

The report suggests guidelines for managing these areas to preserve their value.

In the North Pawlet hills approximately 2,000 acres of unbroken forest survive, undeveloped and practically without impact by any human use since its beginnings after the glaciers retreated at the end of the last ice age. The forest is home to two unique natural communities, one of hickory-hop hornbeam and the other of dry elfin oak, both found on the south-facing aspects of the hills. These unique communities also appear on the south-facing aspects of hills collectively named "The Pattern" that define the west side of the Mettawee Valley. The Pattern notably comprises a wilderness that

extends for fifteen miles, crossed in one place only by a class 4 Town road. Another unique forest community, this one of sycamore, lies to the southwest of River Road, the connector between Pawlet and West Pawlet. Hunting opportunities abound, from birds to deer and even bear. Since Pawlet became the point for reintroduction of the wild turkey to Vermont more than fifty years ago, its habitat has proved ideal for increasing flocks.

Besides excellent hunting, Pawlet offers many opportunities to observe wildlife. The ubiquitous margins of wood and meadow afford great variety for the bird watcher. Hawks are never absent from the summer skies, drawn along with owls and other raptors to the bountiful prey of field and wood. Ponds and wetlands attract the majestic Blue Heron. Long V's of geese cross the skies in spring and fall.

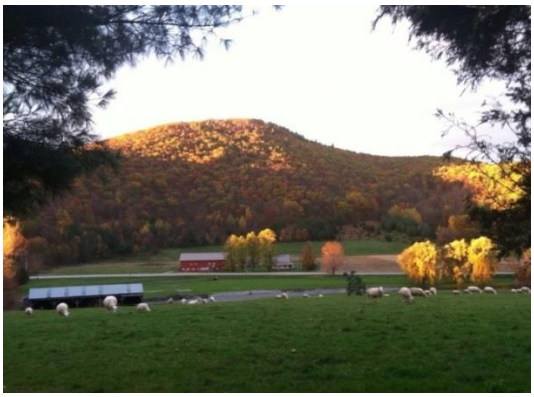
The habitat supports numerous four-footed creatures besides those that mainly interest hunters. Beaver, mink, otter, raccoons, and muskrat populate the riverine environment. An observer can also glimpse foxes, fishers, bobcats, and all the smaller land creatures. The other-worldly song of coyotes rings clear on a still night.

In order to sustain the habitat that supports its wildlife population, the Town must seek to preserve and even expand the connections between natural communities. Pawlet's connecting habitat is part of a large habitat block that extends northeast through Tinmouth and Clarendon to the Pittsford Ridge.

A connecting habitat is land that links larger patches of habitat within a landscape, allowing the movement, migration and dispersal of animals and plants. Riparian habitat along streams and rivers, strips of forest cover between developed areas and even hedgerows/fencerows all represent potential connecting habitat.

Although connecting habitat is often associated with wide-ranging mammals (bobcats, black bears), or animals requiring a great deal of space to meet their daily needs (such as barred owls or otters), it is equally important for animals with relatively small ranges, as well as for plants. Establishing and preserving wildlife corridors allows plants and animals to colonize new habitat as climate change, succession, or other ecological processes force them to migrate. A free flow of migration is essential in the face of natural and human-made changes in order to ensure that native species have the means to interact, reproduce and maintain a robust ecosystem.

Air and Viewshed



Air is ubiquitous and invisible, but it is critical to the function of life and all the natural systems of the planet, as well as the cultural and industrial capacity of humanity.

As a rural town, without the substantial workplace and industrial facilities of urban environs, Pawlet's potential for negative impact on air quality is minimal.

Forests play a major role in cleaning air, in addition to their extremely important beneficial effects on water quality and their powerful hydrologic function.

Water

Pawlet's rivers, streams, and wetlands provide wildlife habitat, recreation, natural beauty, and hunting and trapping resources. Vernal pools are important breeding and early development venues for amphibians. Pools, wetlands, ponds, and streams, both seasonal and sustained, are vitally important for a great variety of creatures that populate the ecological web.

Flower Brook, from the Village Mill Pond to its confluence with the Mettowee River, is considered impaired due to chronically high bacteria levels in the water. In addition, several tributaries to Flower Brook show signs of accelerated erosion ad gullying, exacerbated by Tropical Storm Irene. The Poultney Mettowee Natural Resources Conservation District has been working with the Town on a number of projects to address water quality concerns in the Flower Brook watershed.

For related topics, see *Section III, Land Use History and Resources, and Section V, Utilities and Facilities*.

Conservation

Landowners, town officials and a local non-profit, Friends of Haystack, along with several conservation groups, have made a concerted and substantial effort to preserve many of Pawlet's most valuable natural and agricultural assets. The Vermont Land Trust was first on the scene. The trust began the Mettawee Valley Conservation Project (MVCP) in 1986 to coordinate the growth, management, and resource conservation activities of the towns of Pawlet, Rupert and Dorset.

Since then more than 5,510 acres of private lands, mostly forested, have been conserved in Pawlet alone, primarily with The Nature Conservancy and the Vermont Land Trust. This equals more than 20% of the town's land mass. The Vermont Housing and Conservation Board has substantially supported the Conservancy's efforts over the years.

The North Pawlet Hills Natural Area, a conserved area now of 1,444 acres, is the most significant. Friends of Haystack, http://www.friendsofhaystack.org/ successfully conserved the summit of Haystack Mountain in 2012. This mountain, with its sheer cliffs and dramatic outcrops of slate and quartzite is the most distinctive topological feature of the Town. It is now combined with the previously conserved area to the north that encompasses Middle and Bald Mountains. These northern Taconic mountains are locally called the Three Sisters.

Besides the Haystack preserve, many of Pawlet's conserved forested lands allow public access for recreation with only some limitations.

In addition to the conserved forest lands, a substantial amount of open farmland is protected from development and associated escalating land prices, because the Vermont Land Trust holds the development rights. The Trust insures that the lands are additionally protected and dedicated to affordable agricultural use by retaining the right of repurchase at the original price they were sold to a working farmer, if that farmer choses to relinquish them.

While this conservation is very helpful for the Town's agricultural purposes, it needs to attend to the following objectives:

- Continued pursuit of creative land conservation strategies that work for a variety of farmers and a diversity of farm scales (sizes) and types
- Further implementation of regional workforce training and land management training opportunities for new farmers & entrepreneurs
- Finding solutions to the maintenance of large conserved parcels in light of agricultural operations that require smaller footprints

SCENIC RESOURCES

Despite more than a century's changes, farming and quarrying remain the heart of the Town's economy and its most visible activities. Pawlet sits in the middle of one of the most geologically diverse regions of the world. The region ranges from the mountains of the Adirondacks to the White Mountains of New Hampshire, and attracts interest of geologists globally. On the surface of Pawlet's land broad farm fields open vistas of valley against the rising hills. The height of cornstalks measures the passage of summer. Patches of bright green smaller fields punctuate the forests on the hills. Cows and sheep animate meadows, and hawks soar in the wide skies.

Old pictures of the Town reveal a landscape largely clear of forest, which had been cut for fuel and potash. The massive return of forest since the late nineteenth century testifies to Nature's resilience. The logging that once more contributes to the local economy now proceeds with care so as not to mar the landscape.

Pawlet actively seeks to preserve its rural and natural character. To support the always hard-pressed farming economy it has supported extensive conservation easements by such means as purchase and sequestration of development rights devised by The Nature Conservancy and the Vermont Land Trust.

The Mettawee River flows through many scenic vistas from southeast to northwest across almost the entire diagonal of Pawlet. One of its particularly striking scenic features is the Mettawee River gorge that extends from below Cole Bridge for approximately 1/2 mile. Button Falls in North Pawlet roars with its volume.

The Mettawee grows in size as it gathers from numerous tributaries and wetlands that support varied wildlife. It provides swimming and boating recreation, and excellent fishing. The largest tributary, Flower Brook, issues into a scenic mill pond in Pawlet Village. Flower Brook has its own large tributary, Beaver Brook. These two, and numerous other tributaries to the Mettawee, offer many additional fishing opportunities.

Everywhere rises a backdrop of hills. Woodlawn Mountain, Pawlet's highest, lies to the east, its three peaks rising even taller across the Town line into Danby. To the west lies the long line of The Pattern. Haystack Mountain, the Town's distinctive natural emblem, rises abruptly from the valley in North Pawlet. The summit of Haystack is treeless, exposed rock that affords striking views of the Mettawee Valley and beyond. Its modest 1,919-foot summit is a relatively easy, well delineated hike through the surrounding conserved forest. The summit's views provide a reward that is very great in proportion to the effort required for hiking it.

HISTORIC RESOURCES

The Vermont Division for Historic Preservation has authored and issued a publication, "The Historic Architecture of Rutland County," Curtis B. Johnson, Editor, 1988, which details historic resources that the Town should preserve.

The Town of Pawlet was chartered in 1762. Although the separate villages of Pawlet and West Pawlet tried to split the Town in 1886, they remain united, together with a number of small, and still largely distinct, hamlets. Pawlet Village is the hub of the Town, located at the intersection of Routes 30 and 133 and on Flower Brook, near its confluence with the Mettawee River. West Pawlet Village, the Town's other major settlement, stands at a five-corner intersection of Route 153 and roads that lead immediately into New York State. The old roadbed of the Delaware & Hudson Railroad, converted now to a trail, runs through the West Pawlet Village center, and the Indian River flows nearby before joining the Mettawee.

The two villages and various hamlets provide varied historic interest. Both villages and the hamlet Spruce Gum, an extension of West Pawlet, are National Register designated districts. These three districts contain seventy-eight sites listed on the National Register. Over seventy sites in addition to these districts bring the Town's total to more than one hundred and fifty.

Pawlet's many pre-1850 homes offer visitors pictures of 19th century charm, while providing living shelter for their residents. The rich architectural history is displayed by well-maintained structures that exhibit a variety of styles, including Colonial, Greek Revival, Italianate, and Queen Anne. This architectural landscape of exceptional beauty and diversity sits against a landscape that varies dramatically from the broad, intensely-farmed Mettawee Valley to the abrupt hills of North Pawlet.

The Town Hall, in Pawlet Village, is a two story Victorian Italianate structure. It is on the National Register of Historic Places, and it has served Town government continuously since it was built in 1881. Though rearranged inside, its exterior is untouched. The upstairs, a large auditorium and stage, has been substantially restored recently, financed by public monies, grants and private funding solicited by volunteers. An elevator has been added to provide accessibility, and an added fire escape has upgraded the safety conditions so the auditorium

can again be used for public gatherings, which had been suspended when conditions fell below safety code.

Across from the Town Hall, on a small green, stands the former Village School. It is a Queen Anne-Colonial Revival structure, built in 1911. Superseded by a new school in North Pawlet, recent careful restoration has converted it to a beautiful Town library. The Green itself has recently been renovated and improved by the addition of granite curbing that both gives the Green aesthetic definition and prevents encroachment by parked vehicles. Parking spaces have been delineated by striping, and all the surrounding roadway is now paved, replacing roadway that was previously gravel.

Also in the Village, Mach's Market, a general store, sold items from groceries to hardware and provided an informal meeting place for the local populace is currently under renovation that will transform much of it into a brewpub. Built by Joseph Fitch in 1808, this was the first brick building erected in Pawlet. Fitch's Tavern and Inn is not only historic, but unique in construction that extends it over the Flower Brook Gorge. A portal in the center of the store allows visitors to look directly down into the Gorge to the brook below. It may be the only indoor fishing hole in Vermont. The building today remains largely as constructed in 1808. In addition to the original store and apartments, an annex holds a brick oven. The building is currently under renovation toward the end of developing a restaurant and brew pub, plus a smaller general store area and a butcher shop.

The West Pawlet Village retains much of its character from the heyday of the slate industry. That industry had declined to only a vestige by the 1970's, impacted substantially by manufactured roofing materials. Toward the end of the twentieth century the industry greatly revived, fed by a Japanese appetite for natural building material and the consequences of the 1980's Berkeley, California fire, which spawned regulations that shifted the high-end housing market in California from cedar shingles to fireproof, slate roofing.

The revival employs contemporary industrial methods, but the vestiges of Victorian methods remain in evidence. Although the quarry poles that supported networks of cables for hauling slate from the pits have largely rotted and fallen, the massive piles of waste slate, often carefully stacked against encroachment on roads and parts of the West Pawlet Village, remain. Quarries extend all along a twenty-five mile vein that is the largest deposit of colored slate in the world. Most are small, independent operations. The Slate Valley Museum in nearby Granville, New York has displays, exhibits, presentations, and important photographic documentation about all aspects of the history, current operations, and science of slate quarrying in the area.

Several one-room schoolhouses survive in the Town. The Braintree School on Warren Switch Road in West Pawlet, which was constructed in 1880, is on the National Register of Historic Places. The Pawlett Historical Society, founded in 1973, owns

this and another one-room brick schoolhouse in North Pawlet and has renovated them extensively. The Society publishes a newsletter with articles of local interest, including winning historical essays written annually by the sixth grade school children. It arranges several programs a year for the membership and the general public.

Only two churches remain standing from those built during Pawlet's history, West Pawlet's Baptist Church from 1881 and Pawlet Village's Methodist Church from 1841. The Methodist church is Gothic Revival structure built to replace a former church that burned. The replacement church also suffered a fire that destroyed its original steeple. The Church made do with an inferior substitute steeple for many years. Years of fund-raising suppers and supportive donations allowed the Church to commission a new steeple that replicates the original one. It was finally erected in 2004.

In addition to the Town Hall in Pawlet Village and the Braintree School on Warren Switch Road in West Pawlet, the Nathan Allen House on Rt. 30 is also on the National Register of Historic Places.

Besides the history revealed in structures, several cemeteries in the Town provide historic interest.

Future

The scenic beauty of the Town's environs is immediately apparent to anyone who raises their eyes to the hills or settles him or herself beside a stream. Also, the historic character of the Town is written against its scenic setting. All these resources increase steadily in worth compared to their loss from the world beyond this precious place. It is the interest of the Town to seek ways to maintain these resources.

VII. EDUCATION AND CHILD CARE

OVERVIEW

The Town of Pawlet joined with the adjacent Town of Rupert to form the Pawlet/Rupert Union Elementary School District by Articles of Agreement, ratified November 21, 1995. A Union School Board, comprising seven members, governs the district. Members are elected to the Board by each town in proportion to its population. At the time it was established the District built a new facility in North Pawlet to school all elementary students from Pawlet and Rupert. The new school, which opened in September 1998, replaces

the previous facilities in both towns.

A separate Pawlet School Board, whose purview is only the Town, oversees education for grades 7-12. Approximately half of students in these grades attend school in the neighboring town of Granville, NY. Approximately one-fifth attend Long Trail School, a private school in Dorset. Most of the remainder are divided between Burr & Burton, a private academy in Manchester, Poultney High School, and Dorset Middle School. The rest attend schools out of the area. The Pawlet School Board subsidizes the tuition of students who choose to attend other schools at the tuition rate of Granville.

Transportation is provided by a bus company contracted by the Pawlet and Rupert School Boards. The buses serve students in grades pre-kindergarten through 12 in Pawlet and Rupert. High school students are transported to Granville and Salem, NY.

Besides K-6 education, the Mettawee School, through its principal, directs an Early Education Program. In addition to the standard means of preparing students for the elementary curriculum, the program provides special education and it coordinates some social, medical, and dental services for its students

The Early Education Program offers an inclusive preschool program for all 3 and 4 year-old children, including those with disabilities and developmental concerns. The program offers early literacy, mathematics, exploratory science activities, and social skills education, and uses developmentally appropriate preschool practices, as defined by Federal standards for Early Childhood Education. The goal of Early Education is full preparation for students to enter kindergarten with no disparities in the skills needed for success. Once an independent program, early education for all 3 and 4 year olds, both regular and special education, is now under the direction of the Mettawee Principal. Notably, the Mettawee Community School Early Education Program is the longest continuously operating preschool-for-all program among Vermont's public schools.

Special education programs include individualized educational plans for students with disabilities. Services are provided by teams variously comprising teachers, teacher assistants, a learning specialist, a speech and language pathologist, parents, occupational and physical therapists and other support personnel.

The number of homeschooled students in the school district varies annually. The school extends opportunities for them to participate in some academic activities and sports, as well as offering these students social opportunities.

The school reaches out to the larger community in various ways, always encouraging community residents to visit and especially to attend special events. Its premiere event is the annual Thanksgiving dinner, to which students invite grandparents and other important persons in their lives. Parents serve the dinners, and the entire school engages in the preparations. The school also holds luncheons for the community's seniors.

The school engages an important partnership with the local volunteer fire departments of

Pawlet, West Pawlet, and Rupert to build the students' awareness of the departments' functions and educate the students about safety.

Recently, the school has partnered with Pawlet's emergency management to help the students learn emergency programs and procedures, and the school has become an emergency Red Cross shelter.

FACILITIES

The school facility, which still maintains its new appearance, is located in North Pawlet on Route 153, close to its intersection with Route 30. It is a one story, wood frame structure with 14 classrooms for grades Pre-K through 6. It includes a combination gymnasium and auditorium that seats 600 people, a music room, library with computer center, an art room, and a modern kitchen. The kitchen provides a breakfast and a hot lunch program. Fifty-six percent of students currently qualify for lunch at no cost.

Technology

The school endeavors to provide students and teachers with the technology that has become essential for contemporary education.

The school has a fiber optic, extremely fast connection to the Internet and the World Wide Web. Because this fast connection allows students to work with cloud applications, the school can afford to purchase inexpensive devices that effectively provide the same capabilities that previously required expensive devices with costly resident software. Consequently, each student in grades 3-6 has his or her own computer. Every classroom has an iPad, and the kindergarten, first, and second grade classrooms each have 3-5 iPads.

There is an iMac desktop in each classroom to facilitate large projects and printing. Each classroom has a projector and cameras to use in conjunction with it to facilitate sharing work between students and teachers.

The school currently has three interactive whiteboards, with plans to acquire an additional one each year, until all 14 classrooms have them.

There is publically accessible Wi-Fi throughout the school.

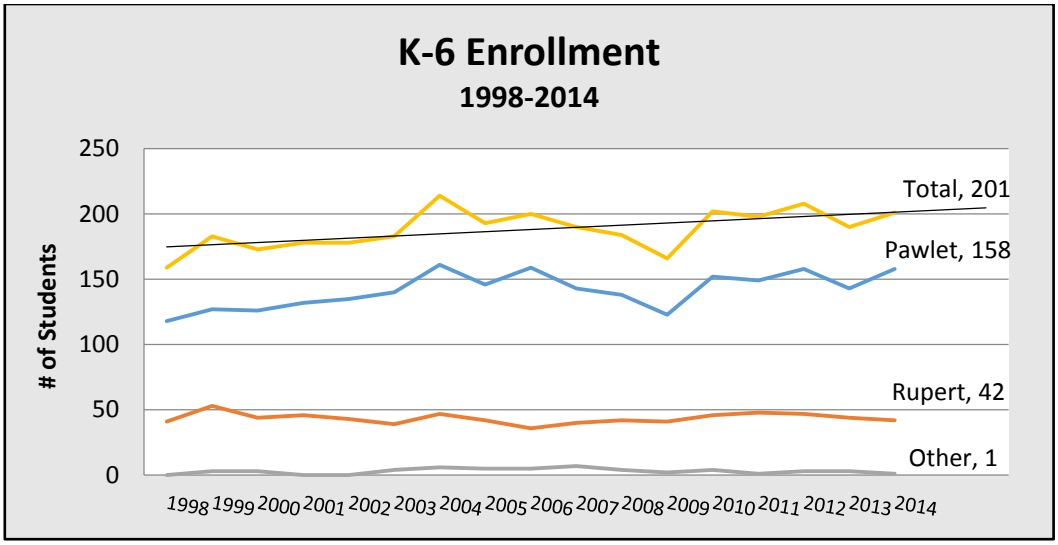
Digital technology in the school not only facilitates the traditional aims of education, but it also serves the purpose of developing the students' digital literacy, a skill that has become critical in our contemporary culture and promises even greater importance in the future.

Digital literacy also facilitates use of the Internet, which opens up the world in a manner only dreamed of even a few decades ago. The relative isolation of a small rural community historically limited its students' experience. Radio and television provided a window to look out on the world, but the interactive possibilities of the Internet open that window and allow experience to flow out as well as in.

As for the central technology of traditional education, the school has an extensive library and a very active librarian, who especially activates that technology for the students in the school.

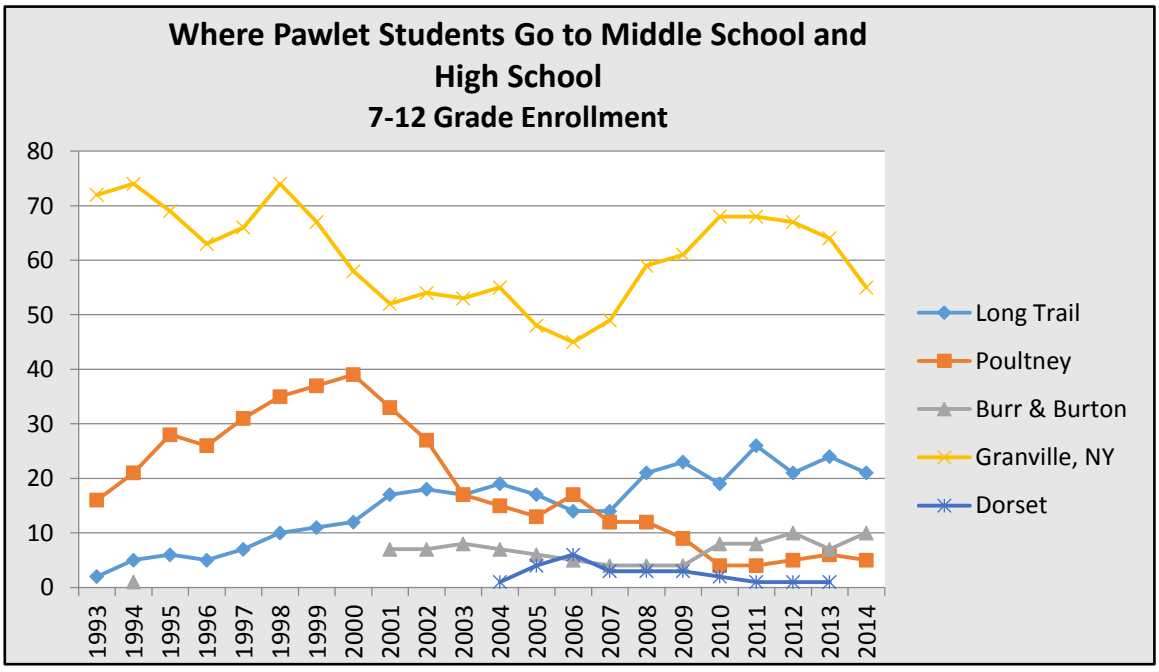
ENROLLMENT K-6

The following chart shows K-6 enrollment for the school since 1998, the first year students from both Pawlet and Rupert both attended. Occasionally students from outside Pawlet and Rupert are enrolled in the Mettawee School.



ENROLLMENT 7-12

Students in grades 7-12 for both Rupert and Pawlet attend a variety of mostly local high schools. Granville, New York is the designated high school for Pawlet, and Salem, New York is the designated high school for Rupert. The following chart shows the numbers of Pawlet students in the variety of schools they attend.



In percentage terms, as noted previously, approximately 54% of students in grades 7-12 attend school in the neighboring town of Granville, NY. Approximately 20% attend Long Trail School, a private school in Dorset. Approximately 14% are divided between Burr & Burton, a private academy in Manchester, Poultney High School, and Dorset Middle School. The rest attend schools out of the area.

HOME STUDY

A small segment of the Pawlet school population is being taught at home. According to UD #47, over the past five years, the number of students (pre-school-12) being home-schooled has been as high as 16 in FY13 and as low as 6 in FY15 for an average of 13 students per year.

CHILD CARE

According to the 2010 U.S. Census, Pawlet has 85 children under the age of five. Vermont Bright Futures Child Care Information System data from 2015 indicate that the Town has six regulated child care providers, including two after school programs for school-aged children. In addition to its Early Education program and in response to a scarcity of child care providers in the community, the Mettawee Community School has begun an After School Program as a safe and supportive extension of the school day. The professional staff has developed a comprehensive curriculum for introducing students to new and rewarding experiences after school. Time is allocated for children to work on school assignments, participate in fine/gross motor activities and socialize in a structured social setting. A state-licensed program, the Mettawee Community School After School Program, is committed to providing the requisite structure so students learn to make positive, healthy choices.

The program is available to students in grades K-6. The program begins at 2:30 and ends at 5:30. A daily snack and recess break is provided. The After School Program is open on all full school days and follows the school wide rules. Fees are as follows:

Daily (2:30-4:00 p.m.) $8.00, (2:30-5:30 p.m.) $10.00

Weekly (2:30-4:00 p.m.) $40.00, (2:30-5:30 p.m.) $50.00

Families may enroll by the week or by the day. Program fees are due, along with the enrollment form, in advance of the day/week a child will be attending the program. Subsidies are available to qualified families upon application.

An important aspect of child care is incorporating early education, which has proved to confer a significant advantage for children's accomplishment later in their educational careers. The Town's well-established pre-school programs through the Mettawee Community School are fundamentally important to the Town's future.

SCHOOL SUMMARY

Enrollment

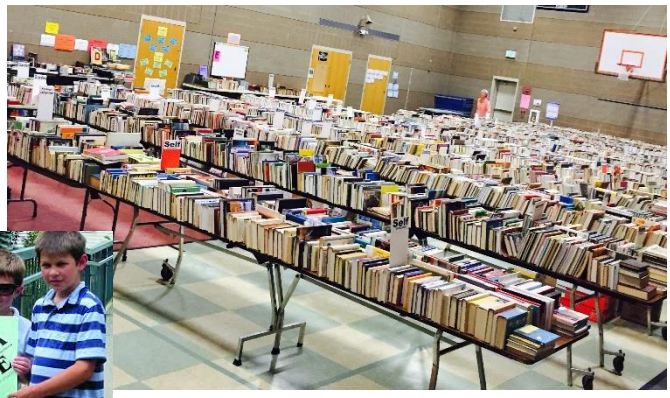
- Elementary school enrollment has been trending up since 1998

- The total number of Pawlet students enrolled in middle or high school (grades 7-12) has risen slightly from 95 in 1993 to 107 in 2014
- Since 2010 the proportion of Pawlet students attending Granville has declined
- Long Trail School has shown the greatest proportionate increase
- Poultney High School has greatly decreased in proportionate enrollment
- Ongoing concerns for the School:
    - Encouraging the Town to publicize openness to visits by parents and other community residents
    - Develop the partnership with emergency management

Fully implement function as a Red Cross shelter. An emergency generator is substantially funded, but more is needed through donation or otherwise.

PAWLET PUBLIC LIBRARY

The Pawlet Public Library is in Pawlet Village, housed in the Town's former school there. Built in 1911, the school closed its doors in 1998 when the Mettawee Community School commenced operation. Soon afterwards the Town undertook to move the Library from its small quarters in the Town Hall to the adjacent former school building. The building was redesigned in 2000 and renovation commenced in the following year, restoring the original, pleasing aesthetic. The redesign and renovation were funded by both public and private funds. The community provided additional goods and services. The building reopened as the Library in 2002, and the Library was officially designated as the municipal library in 2009 by the voters of Pawlet.



The library recently went from a four to five star rating in *Library Journal's* annual rating of top libraries in the nation. It is currently one of only two libraries in the state of Vermont with that honor. That honor is based on high combined per capita outputs, including visits, circulation, public access computer use, and program attendance.

The library is governed by an independent Board, elected by the Town. It employs its own librarian. It is financed by the Town and its own sources, including private funds and its outstanding annual book sale. It benefits from the activities of many volunteers.

The library offers books, DVDs, eBooks, use of computers, a fax machine, printer, and one-on-one technology assistance to help residents use their own digital devices. The library hosts a variety of classes and activities, including Story Time, Pre-School Art & Music, Hullabaloo dance, Tai Chi, Bone-builders, Mommy & Me fitness, Summer Reading, and two book clubs.

For the future the role of the library as a Wi-Fi hot spot might support development of a sort of incubator for digital entrepreneurs.

PAWLET SCHOLARSHIP FUND

Pawlet is relatively unique in having a private endowment fund, originally established by a civic-minded resident, which provides scholarship assistance for adult residents. The Pawlet Scholarships Committee provides grants for any post-high school education, including college and vocational training. Recent high school graduates, as well as adults of any age from Pawlet are eligible. Awards are made annually. Grants from the fund have been awarded not only to help with tuition for college, but also auto repair school, computer science training, baking school, and training in herbal remedies.

The fund is administered by an independent board of directors. The Committee supplements its endowment by sponsoring an annual dinner event, traditionally on Ground Hog Day, and an art show and sale, held annually on Labor Day weekend.

OTHER EDUCATIONAL OPPORTUNITIES FOR CHILDREN AND ADULTS

A variety of volunteer organizations in Town offer additional programs, such as the Oxbow Mountain 4H Club of Pawlet, the Pawlett Historical Society, Haystack Hustlers Seniors, and the Masonic Lodge.

Planning

The 2015 session of the Vermont Legislature passed a bill (Act 48), signed by the Governor, that seeks to facilitate consolidation of school districts. The Bennington-Rutland Supervisory Union is exploring this possibility. Such a consolidation could result is the loss of Pawlet's designation of Granville middle and high schools for those students.

VIII. ENERGY

OVERVIEW

This section describes current and projected energy use patterns and suggests how Pawlet can best encourage energy conservation and efficiency, as well as recommend suitable alternative technologies. It also discusses the relationship between energy, land use, and development patterns.

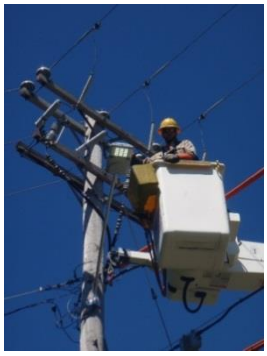
The Town of Pawlet is committed to facilitating energy efficiency improvements. The second major energy goal is to apply suitable renewable energy technologies, as called for in the State's Comprehensive Energy Plan. Such renewables should be implemented only in ways that minimize adverse impacts on public health, safety, welfare, historic and planned pattern

of development, environmentally sensitive areas, and the town's most highly valued natural, cultural and scenic resources – particularly its agricultural lands.

Pawlet Energy Coordinator and Group

Pawlet has a Town Energy Coordinator appointed by the Selectboard, who leads the five-member Pawlet Energy Group. The group has been meeting monthly since 2010 and offering educational programs for residents, facilitating home and municipal building energy improvements and recently completed, with Efficiency Vermont, a streetlight study that will result in very significant energy cost savings to the Town. The energy group also recommended that the Town adopt the PACE (Property Assessed Clean Energy) program in 2015, which was approved by the voters in the March Town Election that year. The activities and minutes of the Pawlet Energy Group are posted at the Town Web site: http://pawlet.vt.gov/town-offices/energy-group/.

Statewide Trends



Statewide the energy landscape is shifting rapidly toward cleaner and more plentiful energy. Although nearly one-quarter of all energy presently consumed comes from renewable sources, Vermont remains a net importer of energy – primarily from petroleum sources.

Vermont's Comprehensive Energy Plan sets ambitious goals of providing 20% of the state's electricity needs with renewable energy sources by 2017 and 90% of energy needs across all sectors from renewable resources by 2050. The state also established a statutory goal of reducing greenhouse gas emissions 50 percent by 2028 and 75 percent by 2050.

The economics of many renewable energy projects are affected by state and federal incentives, tax credits, and mandates. Consequently public policy decisions determined outside the Rutland Region will play an important role in the size and type of renewable energy facilities developed in Pawlet.

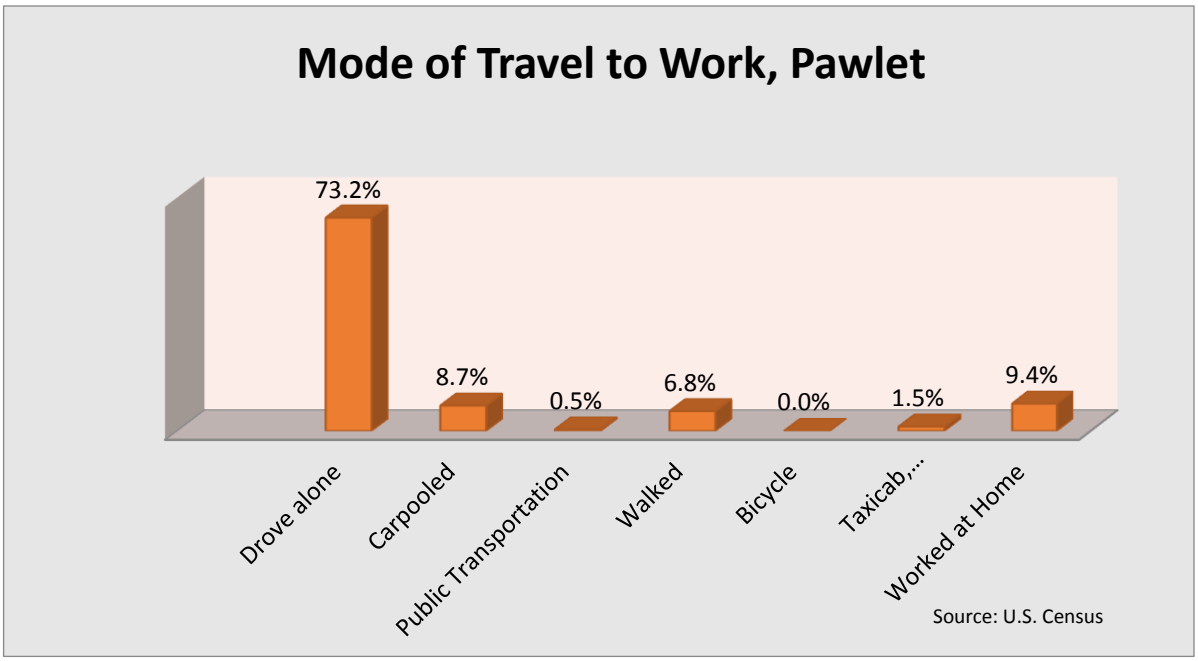
For additional information on statewide trends, see the Vermont Comprehensive Energy Plan http://publicservice.vermont.gov/publications/energy_plan and the Rutland Regional Plan http://rutlandrpc.org/rutlandregionalplan.php.

CURRENT ENERGY PROFILE OF PAWLET

As in other nearby communities, most of the energy consumed in Pawlet is for transportation and home heating.

Transportation

According to the U.S. Census (2009-2013 American Community Survey 5-Year Estimates), 73% of Pawlet residents drive alone to work, have an average commute of 22 minutes, and 23% of them work outside Rutland County. Other than carpooling, there are no viable alternatives to driving to work alone. There are no official Park and Ride lots in the town and only very limited public transportation.



The energy required for transportation can be reduced by promoting the use of more fuel-efficient vehicles, developing compact village centers that attract public transportation and encourage other modes of travel, such as bicycle and pedestrian, and supporting the continued implementation of Vermont's "Complete Streets" legislation passed in 2011. Advanced vehicle technologies, such as plug-in hybrid electric cars, offer significant energy-savings potential as well.

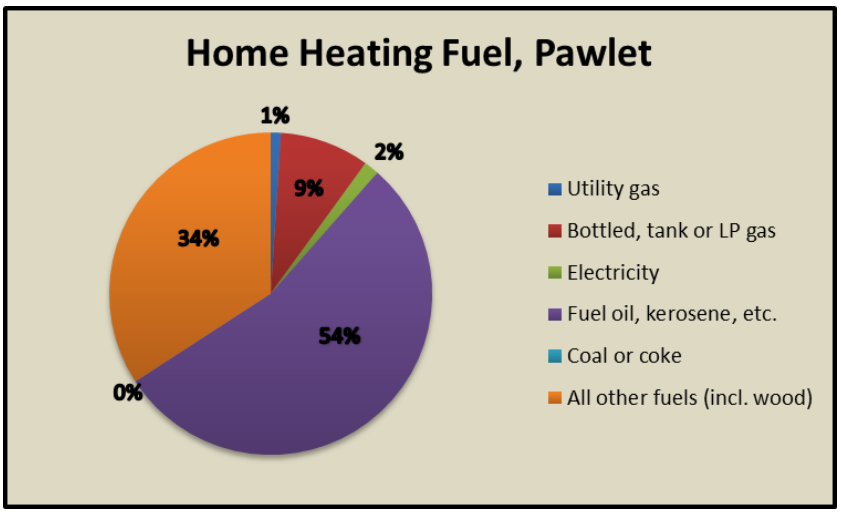
Compact development reduces vehicle miles traveled by 20-40% compared to suburban development (*Growing Cooler*, Urban Land Institute). And the recent advent of fiber optic, high speed Internet service will also help by making it possible for more residents to work at home. Fiber optic technology has not yet come to West Pawlet.

With regard to energy used for transportation, the Town of Pawlet should:

- Encourage compact development patterns
- Support alternate modes of transportation, such as walking, bicycling and public transportation
- Promote ridesharing via the Town website and social media such as Facebook and Front Porch Forum. Go Vermont, a web-based service, facilitates ridesharing http://www.connectingcommuters.org/
- Work to provide more public parking in the Pawlet Village center
- Consider how to reduce the fuel consumption of its municipal vehicles

Home Heating

According to the 2010 U.S. Census, fuel oil heated 54% of all homes in the Town of Pawlet, significantly less than the rate for Rutland County, which is 66% fuel oil-based.



Note: Woody biomass home heating fuel data are not available through the U.S. Census.

With regard to energy for individual home heating, the Town should continue to promote opportunities for home energy improvements and alternative fuel sources. The Pawlet Energy Group considers such opportunities as top priorities.

Electricity

The prices for electricity in Pawlet have been relatively stable over the last 20 years, at rates comparable to the rest of New England. Even so, electricity rates for residential, commercial and industrial uses in Vermont are 32-46% higher than the national average (U.S. Energy Information Administration, 2014).

The utility Green Mountain Power (GMP) provides electricity to Pawlet. GMP has a total of 84 miles of distribution lines in Pawlet. Most of GMP's power is currently purchased through long-term contracts with Hydro-Quebec, and the long-term viability of these contracts is uncertain.

As a result of federal, state and local tax incentives, some homeowners in Pawlet have installed solar photovoltaic systems for electricity. The under-utilized industrial zone is the Town's preferred site for industrial-sized solar projects, as cited in *Section III, Land Use History and Resources*.

ENERGY PROJECTIONS, SUPPLY AND DEMAND

The Town's projected energy demand, which will be affected by its demographic trends, will continue to represent a significant expense for the average resident in the coming decades – even with improved efficiency and shifts to alternative fuels.

As explained more fully in the Economic Development Section, Pawlet has witnessed a steady rate of population growth since 1970, with an overall increase of 25%. While the number of households has also increased during that period, the average size of a household has declined. Older people tend to live on fixed incomes, and the largest age group for Pawlet residents is now 45-64. The problem is exacerbated by a relatively high poverty rate, 13% of all families.

Also relevant is the condition of homes in Pawlet. Older buildings are generally less energy efficient, and many of Pawlet's homes are of older building stock, as are its municipal buildings. Older buildings do offer significant opportunities for energy improvements, such as insulation, improved glazing, and other weatherization measures. Several programs and financing incentives are available to encourage energy efficiency, such as Efficiency Vermont and NeighborWorks of Western Vermont. The Town should continue to explore and promote these resources to minimize its overall consumption of energy and reduce the burden of energy costs for its residents.

For example, the Town Hall, built in 1881, has undergone some energy improvements, as has the Library, which dates back to the early 1900's. Many residents are taking similar measures for their homes and supplementing weatherization improvements with alternative energy sources, such as solar panels and heat pumps.

RENEWABLE ENERGY RESOURCES: FEASIBILITY, PERMITTING AND PLANNING CONSIDERATIONS

Alternative energy in the form of renewable sources, such as appropriately sized and sited solar or wind systems, can provide significant amounts of reasonably priced, clean energy well into the future. Pawlet supports the use of renewable energy provided it fits with the character of the town and its natural environment, and is supported by the community through a collaborative siting process.

Relevant Renewable Energy Technologies

Solar – Solar energy can be thermal or electric. Solar thermal for heating water, a cost-effective way to reduce reliance on fossil fuels, works well in Vermont. Photovoltaic (PV) solar systems capture sunlight and generate electricity. Vermont's total installed PV capacity is small compared to larger states, but Vermont is already one of the top 10 states for PV on a per capita basis. The State offers incentives for net-metering (selling excess solar electricity back to the utility grid). Federal tax incentives provide up to 30% of the cost of PV systems through 2017.

Siting issues over solar generators have arisen in the Rutland Region because of the proliferation of solar, particularly utility-scale and commercial PV systems, and the lack of meaningful community involvement or benefits.

The Town supports residential solar PV installations, especially roof-mounted panels that do not impact land use. Community-scale arrays would only be suitable for siting in the Town's under-utilized industrial zone, as explained more fully in *Section III, Land Use History and Resources*.

Wind – Wind power has become economically viable in some places. The turbines come in various sizes for on-site electricity for homes, businesses, schools and communities; utilities use larger-scale systems to add power to the grid. Such utility systems are typically sited on

mountain ridgelines. But these areas are visually prominent, host-sensitive habitats for plants and wildlife, and are home to the headwaters of some of the region's most pristine waters. Noise and health problems have become major issues for neighbors of the three large operating wind projects in northern Vermont. Proposed projects have been withdrawn due to opposition in towns north and east of Pawlet, along the Taconic Range.

The Town of Pawlet does not have any suitable sites for ridgeline wind towers and consequently cannot support such large-scale systems. Small-scale installations for private residential use might be feasible, depending on site-specific considerations.

Hydropower – The gravitational force of flowing water can be directed through a turbine to generate electricity. In-state hydropower provides some of Vermont's cheapest electricity, and, along with out-of-state hydro – most notably from Quebec – accounts for a substantial portion of Vermont's energy portfolio.

In the Pawlet Village Center, in the past water from the Mill Pond dam on Flower Brook has been used to supply power to Mach's General Store. That generator was operational from 1983 until 2003. The feasibility of reinstating a turbine at the dam and starting up other community scale hydro projects should be investigated, given the prevalence of potential hydropower sites in Pawlet.

Geothermal – Geothermal energy takes advantage of the heat from the earth or air. A heat pump circulates water to extract and upgrade this heat and distribute it throughout a building. The resulting cooled water is then returned to the earth or air to be re-warmed. The system is reversed in the summer to provide cooling. Air source heat pumps are being found to be more cost-effective in Vermont than ground-source heat pumps, which are much more expensive to install.

The Town should encourage homeowners to consider using heat pumps as a source of clean, low-cost energy. These systems can be retrofitted to existing homes or incorporated into new structures. Efficiency Vermont and Green Mountain Power both offer important heat pump programs.

Woody Biomass – Biomass refers to the use of a wide variety of organic material, such as wood, grass, dedicated energy crops, sewage sludge and animal litter. One in six Vermont homes uses wood products as its primary heating source. In Pawlet, that ratio is even higher, with a large percentage of homes using some form of wood heat, including pellets, chips, and firewood. This will likely continue to be a significant source of thermal energy for the Town, and the Town should work with the energy group and fire departments to promote safe and clean combustion practices.

Biogas – Biogas technologies derive energy from sources of methane gas, such as human sewage, animal manure, and food wastes. These wastes are processed in an anaerobic digester, and the resulting methane gas is collected and used to power natural gas engines

and generate electricity. Methane digesters are in the early stages of adoption, and a few systems are installed on some large farms in Vermont. Given the prevalence of dairy farms in Pawlet, biogas could represent an important option.

State Assistance for Renewables

To assist small-scale and community renewable energy projects, Vermont has a Clean Energy Development Fund and a feed-in tariff for small renewable energy facilities. The feed-in tariff, called the Standard Offer, guarantees owners of small renewable installations a specific price for their power and requires electric utilities to buy all power offered until a statewide cap is reached. Standard offer contracts are often in place and locked into a location before host towns and neighbors learn about of the project. Pawlet urges developers to meet with the town before finalizing project locations.

Since 1998, the Vermont Public Service Board has issued "Certificates of Public Good for Interconnected Net Metered Power Systems," permitting electrical utility customers in Vermont to generate their own power using small-scale renewable energy systems. In the net-metering program any excess power generated that is not used by the customer is fed back to the utilities, and customers are credited on their next monthly bill. This program is also available to farmers generating up to 150 kilowatts. Group net metering is also allowed, so that neighborhoods can join together to install one renewable energy facility benefitting several residences. Group net metering is important because not everyone has a good south-facing site for PV. Siting, however, must take into account the conditions stipulated under *Solar Siting* in *Section III, Land Use and Related Resources.*

ENERGY EFFICIENCY AND CONSERVATION

Policy and Goals

The Town considers energy conservation and efficiency a planning priority, since it is always more cost-effective to conserve than produce energy. The importance of energy efficiency is reflected in Vermont's planning statutes, which require an energy plan be adopted as part of a municipal plan. Efficient use of energy has significant cost and health benefits and also helps the Town conserve its scenic resources.

Energy efficiency measures have direct economic and health benefits to communities. Approximately $0.80 of every dollar spent on energy efficiency remains in Vermont, while approximately $0.80 of every dollar spent to purchase energy leaves the state.

The health and comfort benefits of energy conservation are quite significant. Buildings that are properly insulated and ventilated are more comfortable and have better indoor air quality, with fewer health problems as a result. And by lowering the use of fossil fuels, we are releasing less pollutants into our environment and lowering our carbon impact.

Major goals for the Town of Pawlet in regard to conservation and efficiency are to:

- Improve efficiency in municipal facilities
- Promote local access to available regional, state and federal programs
- Research the fuel efficiency of municipal vehicles
- Promote town-wide transportation efficiency

- Encourage the improvement of building efficiency in the private sector

Programs and Resources

The Pawlet Energy Coordinator and Group represent the most significant resource for shaping a cost-effective and environmentally sensitive future for the Town. The Energy Group should coordinate its activities with the Planning Commission and the Selectboard and also stay aware of the support offered by various regional and state organizations, such as Efficiency Vermont, NeighborWorks of Western Vermont, Button-Up Vermont, and the Vermont Energy and Climate Action Network.

The Property Assessed Clean Energy (PACE) Program is administered by Efficiency Vermont and allows homeowners to invest in home energy improvements through a special assessment tied to the property. The creation of a PACE district is the first step in making this program available in the municipality. In 2015 Pawlet voters decided to make Pawlet a PACE district.

INTEGRATING ENERGY, LAND USE, and TRANSPORTATION

Land use patterns significantly affect energy consumption. Transportation is a leading source of energy consumption.

Supporting compact, mixed-use development surrounded by rural open areas and working lands also maintains the traditional land use pattern that residents and visitors associate with the history and character of the town. Maintaining large tracts of healthy forests and productive farmland not only provides the contrast with the built environment, but ensures long term access to local food supplies and forest products.

IMPLEMENTING THE ENERGY PLAN FOR PAWLET

Recommendations for the Town:

- Address gaps in its current understanding of local energy use patterns, and the extent of alternative systems in place, such as solar panels, electric cars, heat pumps
- Develop effective outreach programs for educating residents about important energy programs and resources, including PACE, NeighborWorks of Western Vermont, Efficiency Vermont and Green Mountain Power
- Adopt the policy recommended in *Section III Land Use, History, and Resources* regarding the siting of non-residential solar arrays and other potential energy-related installations. In the past few years, an increasing number of developers of such systems have approached the Energy Group, Planning Commission, and Selectboard, and a consistent policy is very important. Presently, the ultimate authority rests with the Public Service Board, which must take into account the applicable Town Plan
- Lead by example by making town buildings and other facilities energy efficient and seeking ways to make the municipal vehicles more fuel-efficient. Research the use of energy-efficient design when applications are made for new residential and commercial buildings within the town

- Evaluate the feasibility of installing PV solar panels at the Mettawee Community School
- Encourage more energy-efficient modes of transportation by promoting ridesharing, walking, biking and public transportation and increasing public parking in the Pawlet Village Center

Recommendations for the Pawlet Energy Coordinator:

The Pawlet Energy Group should develop a comprehensive list of energy-related programs and standards to be implemented over the next five years and discuss this with the Selectboard. Projects could include LED streetlight conversion, PACE program approval, solar assessment for the Mettawee Community School, a heating system for Town Hall auditorium, investigation of solar arrays in Pawlet's industrial zones, energy efficient affordable housing developed by organizations such as Habitat for Humanity.

The energy coordinator should also continue to network with other town energy groups and attend relevant regional and statewide events, such as the annual Vermont Energy & Climate Action Network (VECAN) meeting, and other climate change conferences.

IX. HOUSING

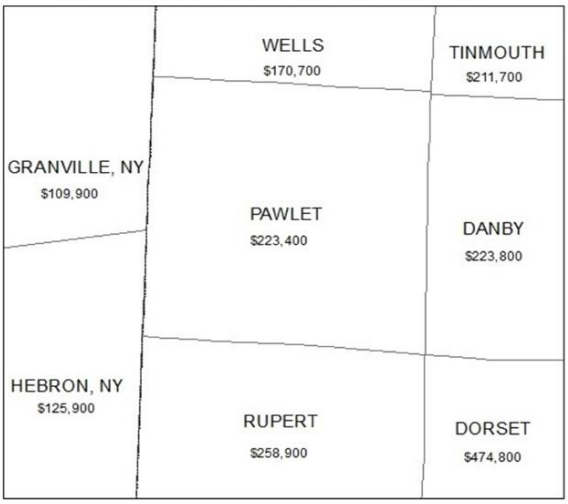
Housing requires examination from perspectives of value, cost, and availability. The data used in this and other sections of this Plan is drawn from the 2010 Census.

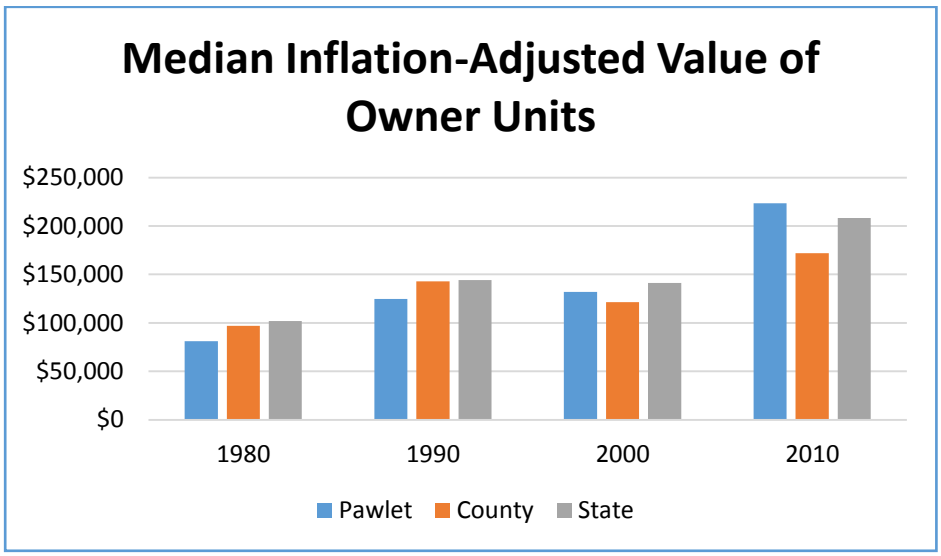
HOUSING VALUES

Location is a key indicator of property value. Pawlet's immediate neighbors to the north and west have lower median home values, while Rupert and Dorset have higher median home values.

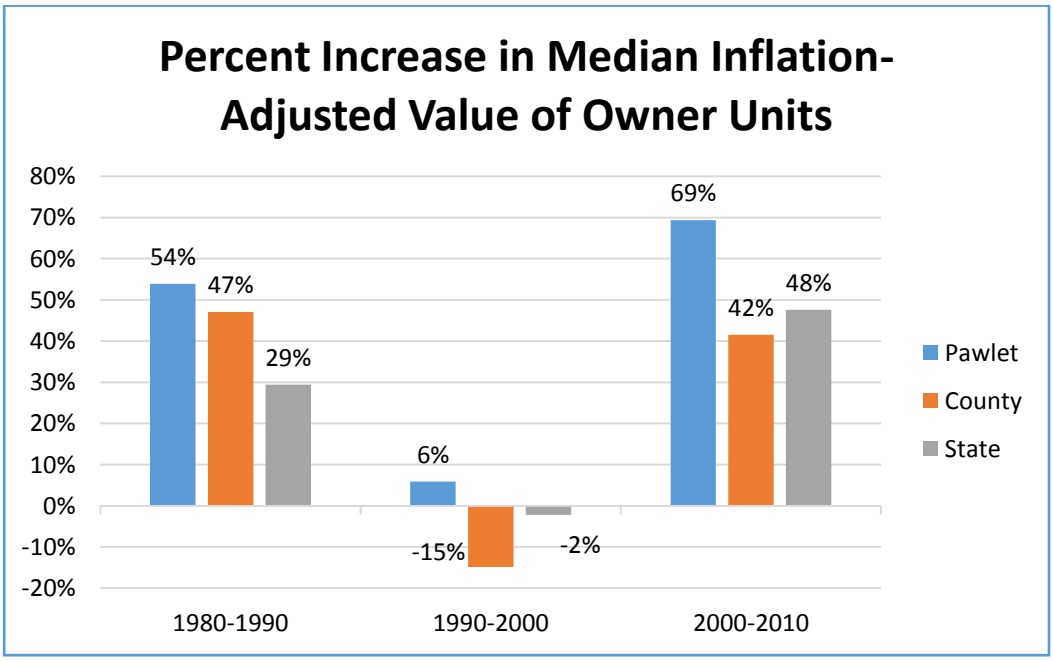
As the chart to the right illustrates, the inflation-adjusted median value of owner-occupied housing in Pawlet now exceeds the value in both Rutland County and the State for the first time since 1980.

Median Home Values in Adjacent Towns





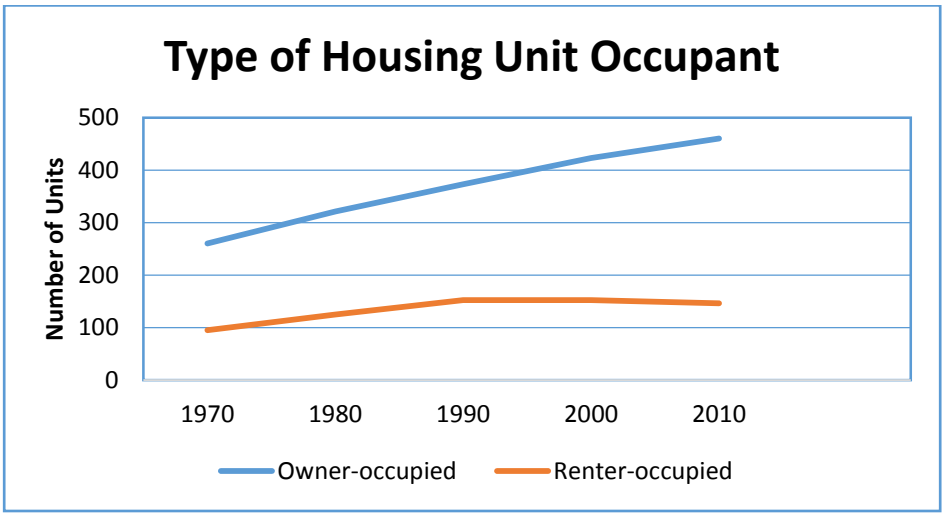
The median inflation-adjusted value of owner housing units in Pawlet has increased at a significantly greater rate in the decade 2000-2010 than the rate for the County or State. The growth of housing value in Pawlet is both greater and faster than for both the County and State for the period 1980-2010.



NUMBER AND AVAILABILITY OF HOUSING UNITS

The number of owner-occupied housing units in Pawlet has increased steadily since 1970. The number of renter-occupied units increased more slowly from 1970 to 1990, but since then it has decreased slightly. The following chart compares the 50-year history of the

number of owner-occupied and renter-occupied housing units. In 2010, 22% of housing units were renter occupied.



Another perspective on housing is provided by the length of time that people have lived in housing units. The table below shows that people tend to stay in their housing units for rather long times. By adding the percentages in the chart, we find that 49% of householders have been in their units since 1999 or earlier. There is a large influx of new homeowners that occurred between 2000 and 2009. This is likely due to the success of the Mettawee Community School district--established by voter approval in 1998.

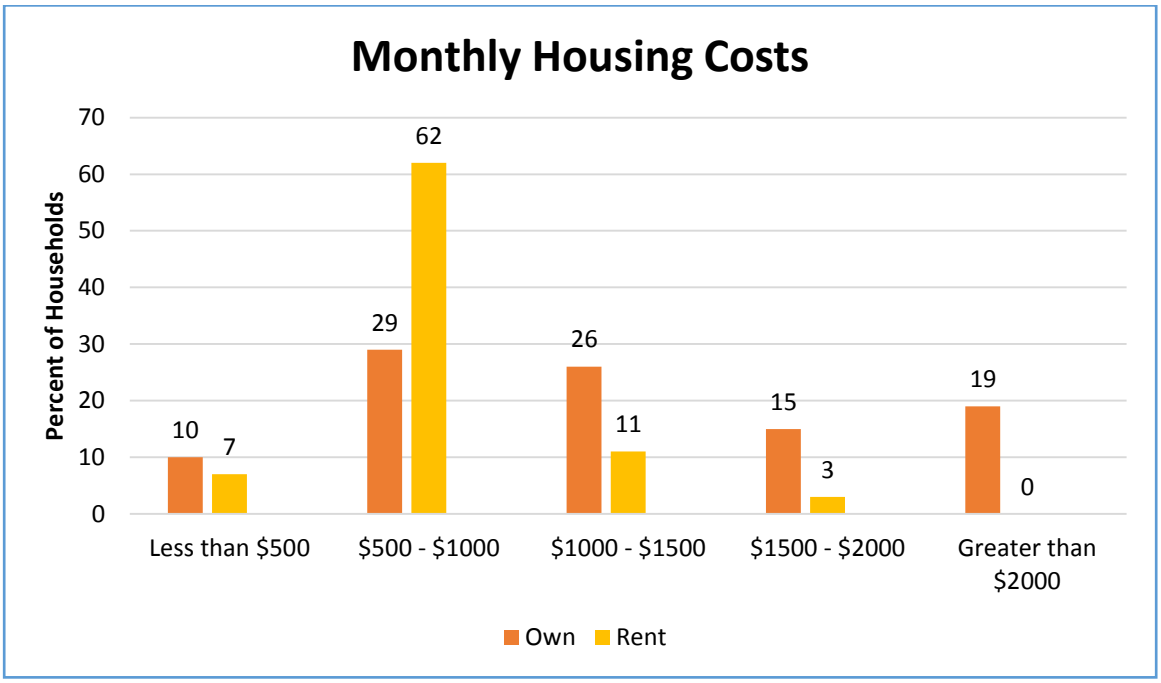
YEAR HOUSEHOLDER MOVED INTO UNIT		
Occupied housing units	598	100%
Moved in 2010 or later	69	11.5%
Moved in 2000 to 2009	236	39.5%
Moved in 1990 to 1999	94	15.7%
Moved in 1980 to 1989	98	16.4%
Moved in 1970 to 1979	37	6.2%
Moved in 1969 or earlier	64	10.7%

HOUSING AFFORDABILITY

One approach to evaluate the affordability of housing is to compare costs with median income. Additional data on median income can be found in *Section XII Economic Development*.

Median Income-Inflation Adjusted to 2010		
Year	Family	Household
1980	$35,795	$33,588
1990	$45,798	$38,939
2000	$54,134	$50,484
2010	$56,765	$46,130

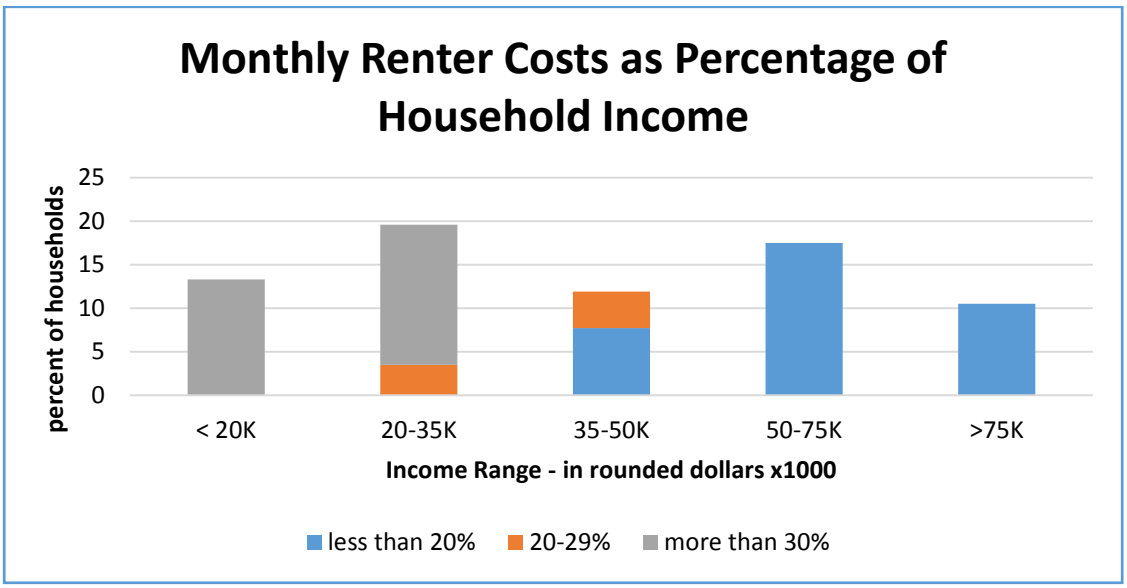
Federal guidelines define affordable housing as housing that costs a household no more than 30% of its pre-tax monthly income for rent or a mortgage payment. Calculated for a month, the 30% guideline for the household median income amounts to $1,153. The chart below reveals that 39% of owner households and 69% of renter households pay less than $1,000 per month in housing costs.



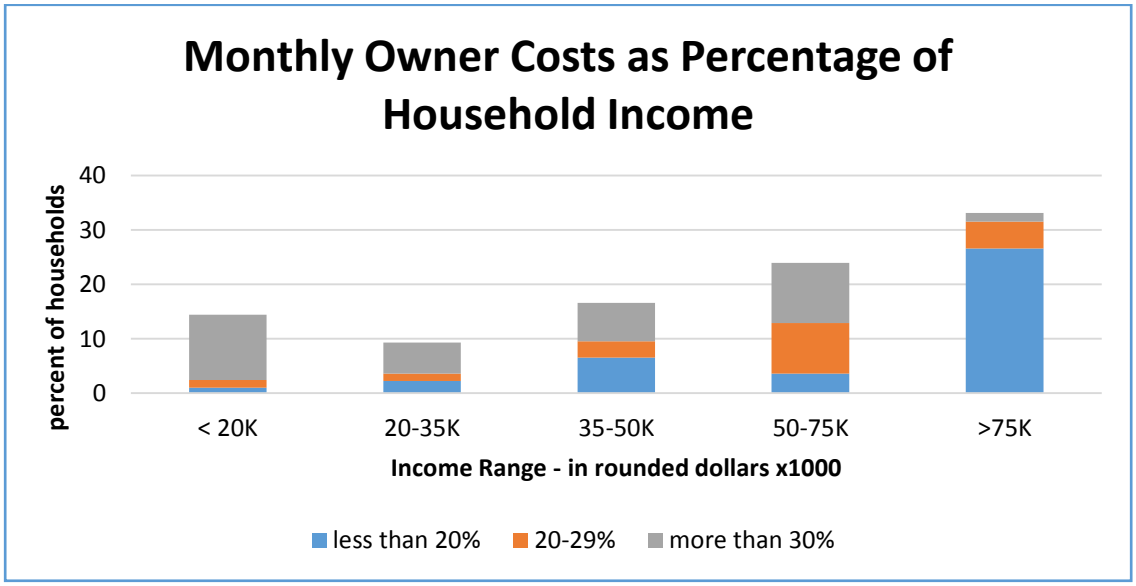
Note: Percent of owner households do not add up to 100% because many pay no cash rent or have negative incomes.

Importantly, not every household earns nor pays the median. More light may be shed on this subject by dividing residents among income classes. As one might expect, those with lower incomes are impacted more by rising housing costs.

As the following chart shows, all the renter households that earn less than $20,000 per year pay more than 30% of their income on housing.



The next chart shows that 83% of homeowners who earn less than $20,000 per year pay 30% of their income on housing. It is also true that 11% of Pawlet homeowners who earn between $50,000 and $75,000 per year spend more than 30% of their income on housing.



Additional factors that shape the attitudes of people in the Town need to be considered as well.

- The construction of a new elementary school has made Pawlet more attractive to families who would previously have chosen Dorset or Manchester on the basis of school quality. Furthermore, the impact of Act 60 is anticipated to equalize educational quality between towns.

- The age structure of Pawlet, Rutland County, the State, and the Country is undergoing a dramatic shift due to aging population. Another related trend is that residences now tend to house fewer people. These issues are described further in *Section XII Economic Developments.*

Conclusions

Residents often stay in one place for long periods of time. About half of the homeowners in Pawlet have lived here 15 years or more. Affordable housing is an issue of concern to both renters and home-owners.

Future

The Town of Pawlet should:

- Conduct a detailed housing needs assessment
- Identify key parcels for infrastructure, growth and development
- Lastly, but most importantly, the Town should continue to work closely with the community to ensure needs are being met.

Survey respondents were asked to rate two questions:

- *Should Pawlet encourage development of some affordable residences for young, local families?*
- *Should Pawlet encourage development of some suitable residences for elderly of the Town?*

In both cases the questions were answered, 'The Town probably should.'

X. FLOOD RESILIENCE

Pawlet's flood resilience plan is designed to:

- Protect the citizens, property and economy, and the quality of the Town's natural resources by addressing flood risks
- Ensure the Town is able to recover from flooding quickly, in a manner that improves flood resilience
- Encourage development in Town that does not worsen flooding.
- Restore natural river functions

Pawlet is committed to updating flood hazard areas and river corridor designations and enhancing flood area regulations and also identifying other lands as necessary to prevent flooding. The Town will also continue to emphasize emergency preparedness and planning, related education and outreach, as well as the coordination of the various local groups involved in these efforts.

Flooding is Vermont's most frequent and costly type of natural disaster, specifically inundation and flash flooding. Inundation happens when water rises onto low lying land.

Flash flooding is a sudden, violent flood which often causes fluvial erosion, also known as stream bank erosion.

Vermont is experiencing more frequent and severe flooding, and this trend will persist. Since 1960, average annual precipitation has increased 5.9 inches; almost half of this change in rainfall has occurred since 1990.

The Agency of Natural Resources lists the major initiatives, programs, and assessments regarding climate undertaken by the State agencies, departments and institutions http://www.anr.state.vt.us/anr/climatechange/Vermont_Initiatives.html.

Prominent is the 2014 Vermont Climate Assessment (VCA), http://vtclimate.org/. It is the first state-scale climate assessment in the country and speaks directly to the impacts of climate as they pertain to our rural towns, cities and communities, including impacts on Vermont tourism and recreation, agriculture, natural resources and energy.

According to the Assessment, precipitation will continue to increase, particularly in the winter months The Vermont Climate Assessment (VCA) paints a picture of climate variation in Vermont and calls for strategic planning to sustain the social, economic and environmental fabric of our state in the face of climate variation.

Precipitation has lately occurred in shorter, more intense bursts that tend to run off the land rather than filter into it. Records across Vermont show that “flashy flows” are increasingly common in the State’s rivers. Also, increases in precipitation during the winter may lead to added snowmelt and flooding in the spring.

MAPPING AND ASSESSING FLOOD HAZARD AREAS

Maps are required to meet the new state requirement of identifying flood hazard and fluvial erosion areas and designating areas to be protected. Because the methods of mapping inundation and fluvial erosion corridors differ significantly, two types of maps are needed: the existing flood hazard maps and river corridor maps.

The National Flood Insurance Program (NFIP) was created by the Federal Emergency Management Agency (FEMA) to address inundation hazards. Flood insurance rates are based on Flood Insurance Rate Maps (FIRMs) or Digital Flood insurance Rate Maps (DFIRMs), which delineate areas of the floodplain likely to be inundated during a flood. These are identified as Special Flood Hazard Areas (SFHAs) are those with a 1% annual chance of flooding, the measure now used by most federal and state agencies and by the National Flood Insurance Program. Town participation in NFIP is voluntary. It’s important to know that in Vermont, two thirds of flood damages occur outside of federally mapped flood areas.

Vermont’s River Corridor and Floodplain Management Program, developed by the Vermont Agency of Natural Resources, delineates areas subject to fluvial erosion. River corridor maps take into account the fact that rivers are by nature dynamic. A certain amount of erosion is natural when Pawlet floods because of the town’s terrain and frequent storms. Furthermore, development in the river corridor and stream channel engineering over time have increased channel instability. Such management practices may create the illusion of

stability – but when engineered channels are tested by a high flow, such as a flood, stability cannot be maintained. Special mapping and geomorphic assessments can identify fluvial erosion hazard areas along rivers, which allows for a more comprehensive definition of high hazard areas

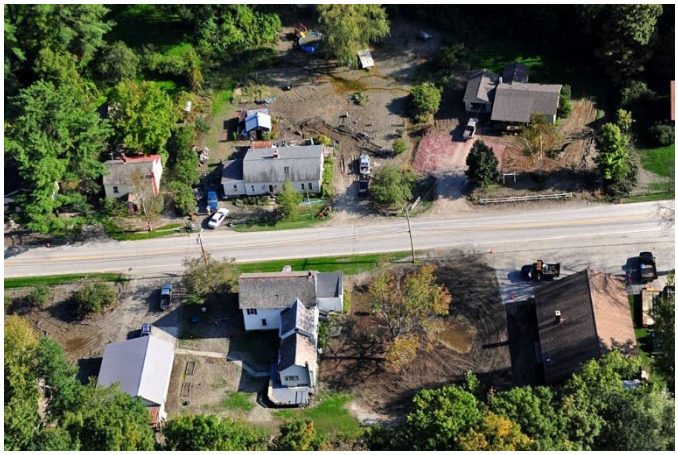
Stream Geomorphic Assessments in Pawlet

Several bodies of water in Pawlet have been analyzed according to protocols for stream geomorphic assessments (SGA) recommended by the Vermont Agency of Natural Resources. The purpose of these studies is to determine river and stream alterations because they affect water flows and could potentially lead to future flood damage. Phase 2 SGAs have been conducted of the Mettawee River Watershed, including the Mettawee River, Indian River, and Beaver and Flower Brooks.

The SGAs for the Mettawee River and Flower Brook suggest potential remediation actions that could reduce the risk of future flood damage, including: restoring buffer areas, reducing sediment loading, improving roadside ditches, re-orientating culvert crossings, excluding livestock from direct access to stream channels, changing cropping practices to reduce direct runoff, and addressing the high concentration of paved road surfaces and roof tops in the vicinity of the mill and gorge. For more information, see https://anrweb.vt.gov/DEC/SGA/finalReports.aspx.

River corridor assessments help communities decide how to best protect, manage, and restore watershed resources. In 2013, the Town of Pawlet adopted river corridor protection by protecting the Special Flood Hazard Area and Fluvial Erosion Hazard (FEH) zones from new encroachments in its Unified Bylaws. Since then, statewide River Corridors have been made available that cover more streams in town and include a 50' setback on small streams (those with a watershed of less than two square miles). The town will include the new River Corridors in an upcoming update of its Unified Bylaws. River Corridors and FEMA Flood Hazard Areas (FEH) of the Town of Pawlet are designated in the Future Land Use map included in this Town Plan.

HISTORY OF FLOODING IN PAWLET



According to the Town's Local Hazard Mitigation Plan, Pawlet tends to experience flooding at least once every 3 or 4 years. In January 1996, county-wide flooding resulted in a FEMA disaster declaration, with $38,577 in damages in Pawlet. In January of 2000, severe storms led to a federally declared disaster that caused $38,624 in damages in Pawlet. More recently Tropical Storm Irene devastated Vermont in late August of 2011; the Town of Pawlet received $318,600 from FEMA due to damages from flooding and fluvial erosion for that disaster.

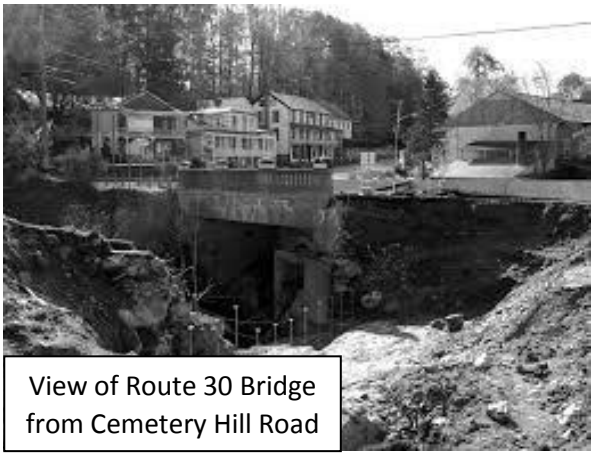
Lessons from Tropical Storm Irene

An emergency preparedness meeting called by the Pawlet Selectboard in September 2011 identified several issues in the wake of flooding from Tropical Storm Irene. In addition to Selectboard members, that meeting was attended by representatives from the two volunteer fire departments, the Highway Department, Pawlet Health Officer and members of the general public. The major problem areas identified during that debriefing were:

- Need for improved radio communication for the fire departments and the Highway department
- Traffic control, communication with public, people coming out to look instead of staying home and being in the way of the emergency crews. Town needs to invest in road closed signs and more cones for traffic control
- Need for an additional Red Cross Shelter. The West Pawlet Fire Department is the only shelter in town and isn't accessible to everyone. (The Mettawee Community School has now also been designated a shelter. It has acquired the major portion of funds needed to purchase a generator and is pursuing the remainder)
- Need for emergency management director to coordinate activities during a flood event

Since that meeting, the Town has appointed an Emergency Management Director who has updated the Town's emergency operation plan and procured better radio equipment. Efforts to improve and upgrade culverts have continued, as the Town continues to apply for funding through the Better Back Roads grant program.

Pawlet Roads Vulnerable to Flooding



View of Route 30 Bridge from Cemetery Hill Road

Flood-related road damage typically occurs on narrow and steep roadways, low-lying roads that follow a frequently flooded waterbody, or road segments near curves in the river.

Specific problem areas in Pawlet which historically have had flooding:

- VT Rt. 133—erosion behind firehouse
- VT Rt. 133—flooding over road for over ½ mile where Flower Brook runs alongside road. Creates access problems and dangerous travel conditions
- VT Rt. 149— Mettawee River floods over road. Creates access problems and dangerous travel conditions
- River Road—Mettawee River floods over road at the intersection with Route 153, which creates access problems and dangerous travel conditions
- VT Rt. 153—flooding over road in several areas
- West Pawlet Village—5 homes flooded along TH 19.
- Sawmill Road—road and bridge damage caused by flooding
- Tadmer Road – repeatedly damaged roadway; one culvert still needs upgrade to eliminate flooding risk

Lands that Minimize Flooding

Riparian buffers reduce flood hazards and stabilize stream banks, attenuate floods, provide aquatic and terrestrial habitat and wildlife corridors, filter runoff, absorb nutrients, and shade streams to keep them cool. Wetlands also prevent flood damage and are a vital component for maintaining the ecological integrity of land and water. In addition, upland forests also moderate flood impacts and attenuate flood impacts. Steep slopes, on the other hand, can be a detriment during flooding by amplifying water volume and velocity in rivers and streams.

Because impervious surfaces prevent the infiltration of water into the soil, these man-made surfaces exacerbate flooding by increasing the amount and velocity of storm water runoff, particularly in areas where these surfaces are prevalent.

The Poultney Mettowee Natural Resources Conservation District has been working with the Town to help stabilize stream banks and address issues related to storm water runoff. This work has included planting trees along Flower Brook and working to improve infiltration of storm water into soils. Pawlet recognizes the value of having protected areas for water "calming" to minimize future flooding. There is one such area at the confluence of Beaver and Flower Brooks on conserved land. For more connections between watershed resources and flooding, see *Section VI, Ecological, Scenic and Historical Resources.*

PAWLET'S FLOOD HAZARD AREA REGULATIONS

The Town's Flood Hazard Area Regulations, updated in the town's Unified Bylaws in November 2013, meet requirements for participation in the NFIP. The land use bylaws in Article VII do not exacerbate flooding and fluvial erosion because they do not allow new development, fill or removal of wetlands in the River Corridor or Special Flood Hazard Area, as depicted in the Flood Plain Overlay District on the town Zoning District Map.

E-911 mapping indicates that 30 structures in Pawlet are within the SFHA (1% annual chance of flooding). These are identified on the Rutland County DFIRM dated 2008. Three critical or public structures in the Pawlet Village Center are in the SFHA or 0.2% flood hazard area, according to E-911 mapping: the Town Hall, Firehouse, and Vermont Telephone Company switch building.

NFIP Participation

The Town of Pawlet received a flood hazard boundary map in June of 1974. The Flood Insurance Rate Map (FIRM) and Flood Insurance Study were first published in September of 1978, and Pawlet joined the National Flood Insurance Program in 1978. The Rutland County DFIRM became effective in August 2008. The hydrology and hydraulics were updated in the DFIRM.

As of January 2015, there are 12 flood insurance policies through the NFIP covering $2,819,300 in value for properties in Town. Flood insurance is available for any structure in

town regardless of previous losses or location. The cost of flood insurance premiums rises in areas identified at a high-risk level.

Pawlet qualifies for an Emergency Relief and Assistance Fund (ERAF) rate of 17.5% (the highest rate) for post-disaster funding.

LOCAL HAZARD MITIGATION AND EMERGENCY OPERATIONS PLANS

The Pawlet Local Hazard Mitigation Plan (LHMP) was adopted in 2011 as an Annex to the Rutland Region All-Hazards Mitigation Plan. The LHMP identifies known hazard issues in town and allows the Town to seek FEMA Hazard Mitigation Assistance funds to reduce current risk levels. The Town of Pawlet's Local Emergency Operations Plan (LEOP) was adopted in March of 2015 and is reviewed annually. The LEOP encourages flood preparedness and identifies a process for response planning. Both documents can be viewed at the Pawlet Town Clerk's office; copies are also available by contacting Bob Morlino, Pawlet Emergency Management Director, robertm850@aol.com.

RECOMMENDED ACTIONS

The Town of Pawlet knows from hard experience that becoming more flood resilient is essential. To do so will require ongoing work and coordination within the town between the Planning Commission, Selectboard, Highway Department, Emergency Management, and the West Pawlet and Pawlet volunteer fire departments. Additional regional and state resources will also be required, and the Town is committed to continuing to work with the Rutland Regional Planning Commission, the Poultney Mettowee Natural Resources Conservation District, and other relevant organizations. Specific tasks and areas of concern related to flood resilience for the Town of Pawlet are outlined below.

Flood Hazard Area Mapping and Development Concerns

1. Incorporate VT ANR River Corridor mapping into Town Plan and Unified Bylaws. Identify all flood areas not designated in FEMA's maps or in the Vermont ANR's maps, but that are flooded during a weather event, as these should be added to local flood regulations.
2. Prohibit new buildings and development within river corridors.
3. Prohibit building of emergency service facilities, power substations, and municipal buildings in special flood hazard areas.

Storm Water Issues

1. Complete the Town's Storm Water Master Plan and consider the need for additional storm water master planning and/or further assessment of backroads.
2. Ensure that municipal plans and Unified Bylaws include provisions for such practices as cutting back on impervious surfaces and implementing green infrastructure techniques to reduce storm water runoff volumes and velocities.
3. Explore funding sources for storm water management, such as the creation of a storm water utility.
4. Use the Phase 2 geomorphic assessment of the Mettawee River and Flower Brook to reduce the risk of future flood damage, with measures such as: buffer restoration, reducing sediment loading, improvement of roadside ditches, re-orientation of culvert crossings, excluding livestock from direct access to stream channels, changes in cropping practices to reduce direct runoff, and addressing the high concentration of paved road surfaces and roof tops in the vicinity of the mill and gorge.
5. Develop more consistent, accurate and thorough identification of wetlands areas through the use of best available data and the adoption of updated maps.

Coordination and Outreach Efforts

1. Continue to work with first responders, Pawlet Emergency Management, and the highway department to plan improved emergency response capacity (operations, training, and equipment) during natural disasters, as identified in the Local Emergency Operations Plan.
2. Establish and sustain a flood hazard area education and outreach effort to support flood damage mitigation and better insure community residents and property for future flood damage.
3. Advise the State of Vermont, as a matter of record, of serious state highway flooding that has occurred and potential state highway flooding hazards in the Town of Pawlet.

XI. REGIONAL AND SURROUNDING TOWN COMPATIBILITY

REGIONAL PLAN COMPATIBILITY

This Plan is extensively compatible with the Rutland Regional Plan. Some differences of emphasis occur, mainly due to the more rural and agricultural character of Pawlet compared to the urban and suburban parts of the Region, the relative size of Pawlet's population and economy, and Pawlet's mostly residential habitation.

It shares the Regional Plan vision of providing a place where residents enjoy a high quality of life, particularly deriving the benefits of rural life and character; a place with a well-cared-for environment; and a place with a vigorous economy, particularly informed by the sorts of local business, cottage industry, and creative endeavor that enhance the rural character of the Town.

Pawlet sends representatives to the Regional Planning Commission Board and regional Transportation Council.

SURROUNDING TOWNS: WELLS, DANBY, RUPERT, DORSET AND GRANVILLE, NY

Pawlet is notable among its surrounding towns in Rutland County for its longstanding Zoning Ordinances, which have effectively moderated the Town's development. By virtue of their long standing, the Ordinances provide a solid basis for building the Town's future. In 2013 the Zoning Ordinance was superseded by a Unified Bylaws. Among other things, the Unified Bylaws instituted subdivision regulations that promote cluster development. The Bylaws established a Development Review Board due to the Town's change from one to ten acre Act 250 status.

Similar to neighboring Rutland County town plans, this Plan places a priority on land use patterns that maintain their rural character. The areas that Pawlet shares with these towns notably exhibit continuity of rural character.

Pawlet has direct road connections with Wells and Danby. The Wells connection is mostly via State Route 30 and the North Road in Pawlet.

The Bennington County towns of Rupert and Dorset, adjacent to Pawlet, share in their plans a concern for maintaining rural character in land use patterns. The territories on both sides of the borders Pawlet shares with these towns do notably exhibit continuity of rural character. Rupert and Pawlet are visually seamless agriculturally in the Mettawee Valley and on the western part of their border. In between they share a range of forested hills.

Rupert and Pawlet now share a union school district for their elementary students.

The border Pawlet shares with Granville, NY, is partly in agricultural use, partly industrial use, and abuts the Village of Granville. The industrial use areas of both towns largely share contiguous border areas, as do the agricultural areas. Presently there are no significant cross border use discrepancies between the two towns.

Relationships between Pawlet and Granville share a long history. Granville has traditionally been a market center for Pawlet. That role has changed with the development of modern transportation, but it is still an immediate source for many needs of Pawlet residents, such as groceries, hardware, pharmacy, and automotive. It also provides elements of agricultural infrastructure important for Pawlet, including farm equipment and supplies and veterinary services.

Pawlet avails the services of the Granville Rescue Squad and provides it financial support in annual resolutions by Pawlet's voters. Granville secondary schools have been Pawlet's designated secondary schools for decades, although an increasing percentage of Pawlet students have enrolled in other schools during the last few years.

Pawlet is a member of the Solid Waste Alternative Communities, but Pawlet has no transfer station itself. Residents use the Washington County transfer station in Granville for recycling and on a pay and throw basis for trash.

Pawlet has longstanding mutual aid agreements with Granville and Vermont towns.

XII. ECONOMIC DEVELOPMENT

Pawlet is a small, rural community with an economy that has traditionally focused on agriculture, quarrying, and trade. The traditional economy is only a part of the current one, which comprises a broad service sector and significant employment of residents commuting to work outside the Town, and telecommunicating to work from home.

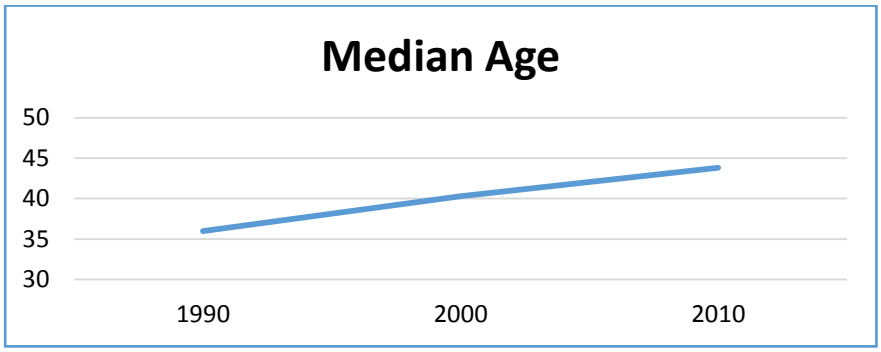
The most basic consideration of Pawlet's economic development begins with population and its characteristics, including age structure. Next come considerations of employment and income.

HOUSEHOLD COMPOSITION

Pawlet has had steady growth over the last 40 years. Despite the increase in population, the number of households and the size of Pawlet households have gotten smaller.

AGE STRUCTURE

The following chart shows the trends of age structure in the Town.



In 1990, half of the population was 36 years or younger. In 2010, the younger half of the population was 44 years or less. The increase has been steady.

Economically, this represents a significant change in the composition of the potential workforce and those who conduct volunteer activities in the Town from younger to older.

Pawlet's trends are in many respects similar to national ones, which suggest

- Senior households are on track to nearly double in the next 15 years.
- By 2030, the aging baby boomer population will expand the number of households with folks aged 65 and up nationally to 46 million, from 25.8 million in 2010.

Although the elderly are typically more healthy and robust than they were four decades ago, they generally require more in the way of medical and social services. Also, there are significantly more elderly and especially very elderly. Their needs can impact many of the circumstances that the Town needs to consider when planning, especially transportation and access.

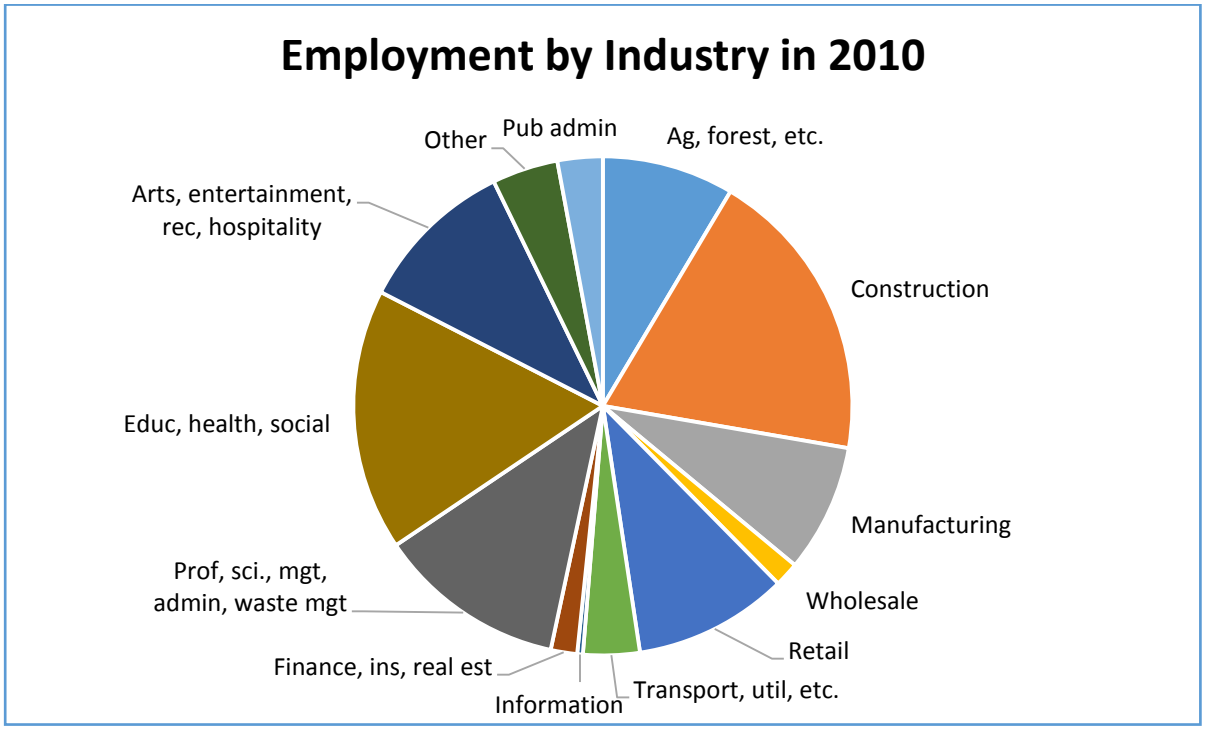
But this is not to cast a negative light on the older population, for their age and experience offer benefits. They often have a longer perspective on the Town's history and an increased sense of civic responsibility.

The growth of the senior population may have some positive effects for the local construction trades. With many seniors choosing to stay in their homes, remodelers will be busy, focusing on making homes safer and easier to navigate. Among such projects: Making doorways and showers wheelchair accessible; lowering cabinets in kitchens and bathrooms; and installing brighter lighting and exterior ramps.

Regarding services, growth in numbers of residents with limited mobility is apt to produce increased need for transportation to medical appointments, shopping, and other destinations.

EMPLOYMENT

The following chart shows numbers relatively of people employed in various sectors of industry.



The census has added the category, "Professional, scientific, and management, and administrative and waste management services. This new category largely reflects mental, rather than manual labor, and so generally requires more education and, in part, reflects the growth in the Education and Health Care sector.

The overall employment numbers for Pawlet are robust, as shown in the following table:

	1970	1980	1990	2000	2010
Employed	**430**	**552**	**688**	**688**	**819**
Unemployed	**n/a**	**31**	**34**	**21**	**42**

The unemployment rate for Pawlet in 2010 was 4.9% of the labor force, which was considerably below the national average.

The civilian labor force numbered 861 out of a population over age 16 of 1250, so 819 people were employed and 42 were unemployed. 15% of the Pawlet workforce works at home.

PERSPECTIVES

Factors concerning the economy of Pawlet can be discussed from two perspectives, internal and external. Externally, Pawlet's economy looks immediately to the surrounding region for employment and business opportunities. The Internet opens up small places to the larger world, however. It makes it easy to advertise without spending the large sums that traditional print and broadcast require.

With its new developments in agriculture Pawlet is in a very favorable position to leverage the interests of students who are drawn by ecological interest to nearby Green Mountain College and to take advantage of the national recognition it draws.

The main large-scale production in Pawlet consists in dairy products and various forms of slate. The principal service that extends beyond the Town is afforded by two trucking companies. The market for all these and the forces that affect them extend well beyond the region. Pawlet, as a geographically isolated town, has little or no influence regarding external economic factors, even though most of its residents' incomes depend on them or on such government transfer payments such as Social Security. Nonetheless, Pawlet can get beyond some of these constraints by thinking creatively about the digital future.

The internal economic development for Pawlet is largely dependent on the initiative and ingenuity of residents.

Internal to the Town are restaurants and general stores and auto repair. Other businesses and employment include self-employed tradespersons, construction and excavation and weatherization contractors, landscapers, loggers, and numerous cottage industries, including weaving, pottery, cabinetry, handcrafted specialty lampshades, jewelry, and sewing. Professional services are delivered by attorneys, foresters, counselors, acupuncturists, real estate brokers, photographers, chiropractors, and others. There are also numerous

commercial activities that are facilitated by the development of the digital/electronic/computer realm and its Internet manifestations. They include illustration, graphic design, publishing, and video production.

Besides dairy cows, beef, sheep, goats, and alpacas are raised. There are small vegetable farms, seasonal maple syrup operations and niche activities that add value to farm products, including cheese-making and specialty foods.

Pawlet's natural conditions provide a fertile environment for developing new agricultural endeavors. One of the major prospects for Pawlet's agricultural future is the development of value-added operations.

Consider Bardwell Farm is exemplary. It has been making nationally award winning cheeses for the past dozen years and employs over 20 full and part time local people. Its direct operation is now making 100K pounds of cow and goat cheese annually. Plus its own livestock, it is keeping two bovine dairies in operation by sourcing. With its own operations, sourcing, and cooperative marketing support of other businesses it is supporting numerous families.

The Consider Bardwell Farm model reveals possibilities that are significant for the future of agriculture in Pawlet, not only by demonstrating the importance of value-added agriculture. The model also shows how networking can enhance the growth of partners and other entities in the network. What is more, Consider Bardwell Farm has become a source of inspiration for other farmers.

The Agriculture Working Group has advanced a number of other ideas with possibilities for agriculture-empowered economic development:

- The creation of multiple value-added opportunities for farmers and food entrepreneurs
- Appropriate zoning and town support for additional processing infrastructure
- Recognition, support, and celebration of the town's remaining dairy infrastructure
- Strategic support of local markets for farm products, including the historic Mach's General Store and other direct market and aggregated market opportunities
- The strategic establishment of agritourism as a complementary means of income for farmers and others by virtue of making Pawlet a destination for agricultural and artisanal products
- Enhancement of educational efforts in the Mettawee Community School and other associated educational institutions by exploring Pawlet's agricultural heritage with increased on-farm experiences and farmer class visits, as well as further development of school gardens, local food purchasing, and vocational training

- Strategic pursuit and development of a local "Mettawee Made" branding campaign for food, agriculture, arts, and crafts
- Further development of value-added forestry products and custom logging operations to support farmers and other landowners
- Careful monitoring that the town maintains a "critical mass of agriculture" such that vital supporting enterprises (equipment dealers, veterinarians, etc.) are able to remain viable
- Fostering an additional and diverse array of food/agriculture sector jobs with fair wages
- Focused town-wide celebrations of Pawlet's agricultural heritage and future that build town pride and identity

Agritourism A potential complement to agritourism is the recent development of what's generically called Air B-n-B, or short-term residential rentals. Pawlet has not been a tourist destination in the recent past as have been nearby lakes and seasonal resorts. Perhaps because of this it has not had inns or other such accommodations. Developments such as Air B-n-B potentially address this lack, as well as make small Bed and Breakfast operations possible, which could dovetail with agritourism developments. Air B-n-B itself has begun to provide significant added income for Pawlet and nearby residents. It also brings new kinds of tourists to the Town, who while looking for activities off the regular tourist track, serendipitously discover the vistas of the Mettawee Valley.

Air B-n-B is an important example of business development profoundly facilitated by the Internet, which has become a dramatic means of disintermediation and delocalization of commercial and other enterprise. Pawlet is in now a unique position to take advantage of the Internet, because VTEL's deployment of gigabyte optical fiber provides connectivity with speeds greater than can be had in many urban and suburban areas in the US.

As a relatively new development, the Air B-n-B opens up a new channel in between standard rentals and inns and hotels in the hospitality spectrum. Consequently, there is no regulatory perspective yet developed on this hospitality format. Pawlet should work with appropriate State agencies and legislators to develop a supportive regulatory framework.

The digital realm The high degree of digital connectivity provided by fiber optic is very attractive to people who desire to live in a rural environment and work over the Internet. It can also provide employment opportunities for residents who wish to develop effective skills for operating in the digital world, which opens enormous opportunities for work. It also allows freelancing with skills people already have.

The major requirement for successful work in the digital realm is education. Fortunately, the Internet provides access to proliferating educational and training opportunities. While these opportunities can readily be pursued from home, shared society can provide encouragement

for people engaging them. By fully developing its connectivity the Library could provide a supportive incubation space, especially if it were to undertake some coffee house functions. This could add to the service the library currently provides by offering meeting space to local groups.

The major stimulus for business and economic development is creativity. Fostering creativity is facilitated by bringing people with ideas that can promote commerce together. Pawlet cannot accomplish this on the scale of population dense location, but it could promote creativity by looking for ways to bring together its business people, its creative people, its not-for-profit people, its educators, and others who could provide ideas and interactive stimulation.

The Town can immediately work to develop a comprehensive listing of businesses and other endeavors in Pawlet to feature on its Web site, with links in turn to Web sites of those businesses and endeavors, as a means of enhancing the economic climate of the Town and promoting the Town's presence in the larger world of tourism and potential clientele.

Village Centers

Pawlet Village and West Pawlet have been designated as Village Centers by the State of Vermont, as authorized by 24 V.S.A. §2793(a).

Village Center designations can be used to protect and enhance the characteristics of areas valued by the community. The Town can use the designation as one means of managing economic growth to ensure the future of its tax base and quality of life. Effective use depends on residents organizing into groups to hatch ideas and carry them to fruition. A supportive attitude toward such endeavors by the Town bodies and officers can be an important means of helping them succeed.

Village Center designations need to be renewed every five years. The Planning Commission will work with the Regional Planning Commission to reinstate village designations and keep them current.

The West Pawlet Village Center suffered a blow when its general store was destroyed by fire a few years ago, and the rebuilding effort failed despite support from residents, leaving only a partially completed new construction. An attempt to repair this situation could provide economic stimulus to West Pawlet. The recent development of a bed and breakfast and an out-of-the-home prepared food business offer means to fill the gap and more. The Town must consider the importance of nourishing such

endeavors, especially at their beginning stages, as important to economic development.

Pawlet Village has lost a general store to business exigencies, but there are plans well underway to repurpose much of the building that housed it into a brew pub. A second nearby general store still operates successfully, and there are two other restaurants nearby, as well as a few other businesses.

The main constraints on development in the Pawlet Village center are the lack of sewer infrastructure and severely limited parking. A current investigation under the auspices of the Poultney Mettowee Natural Resources Conservation District holds promise of addressing the wastewater situation in Pawlet Village. An initiative by the Town to analyze and develop proposals for parking could be a helpful spur for Village development.

SUMMARY

Pawlet's population growth and growth rate has been steady and moderate over the last four decades. The number of its households have grown, only slightly slowing down since 1990. The household size dropped significantly from 1970 to 1990, but has leveled off since. This has created a comfortable trajectory for development.

Demographically there has been a dramatic increase in the median age of the population, from 36 in 1990 to 44 in 2010. This reflects national trends, except they have been held down by immigration. Lacking this, the worry for Pawlet is a decrease in the number of residents in their prime working years.

Employment has shifted most notably from manufacturing to education, health, and personal services, but the unemployment rate has remained substantially below state and national rates.

Inflation adjusted income, which increased for both households and families from 1980, in 2010 has not grown for families and leveled off for households. Over three decades family income has grown compared to Rutland County and is now 97% of the County average, but it stands at only 83% currently compared to the State. Household income, however, has grown as a percentage of both, currently at 94% of State and 108% of County medians.

Most of the economic data suggests Pawlet is doing relatively well, but a number of issues in this Plan point out the need to keep working on various fronts so that Pawlet will keep abreast of its needs and move effectively forward in the face of an ever more rapidly changing economic and demographic environment. Some critical issues:

- Maintain the character of the Town that makes it attractive to new residents, in terms, at least, of its school, its community nature, and its aesthetic
- Provide an economic climate that encourages and grows the sort of small businesses, trades, and occupations, that have thrived in the Town and leverage past success to promote new endeavor

- Preserve the Town's agricultural heritage and encourage development of new agricultural endeavors
- Foster economic development by seeking ways to bring together Pawlet's business people, its creative people, its not-for-profit people, its educators, and others who could provide ideas and interactive stimulation
- Promote business opportunities afforded by the fiber optic infrastructure
- Develop a comprehensive listing of businesses and other endeavors in Pawlet to feature on its Web site, with links in turn to Web sites of those businesses and endeavors, as a means of enhancing the economic climate of the Town and promoting the Town's presence in the larger world of tourism and potential clientele of the Town's offerings
- Keep Village Center designations current
- Investigate design possibilities for providing more parking access in Pawlet Village

APPENDICES

A. Maps

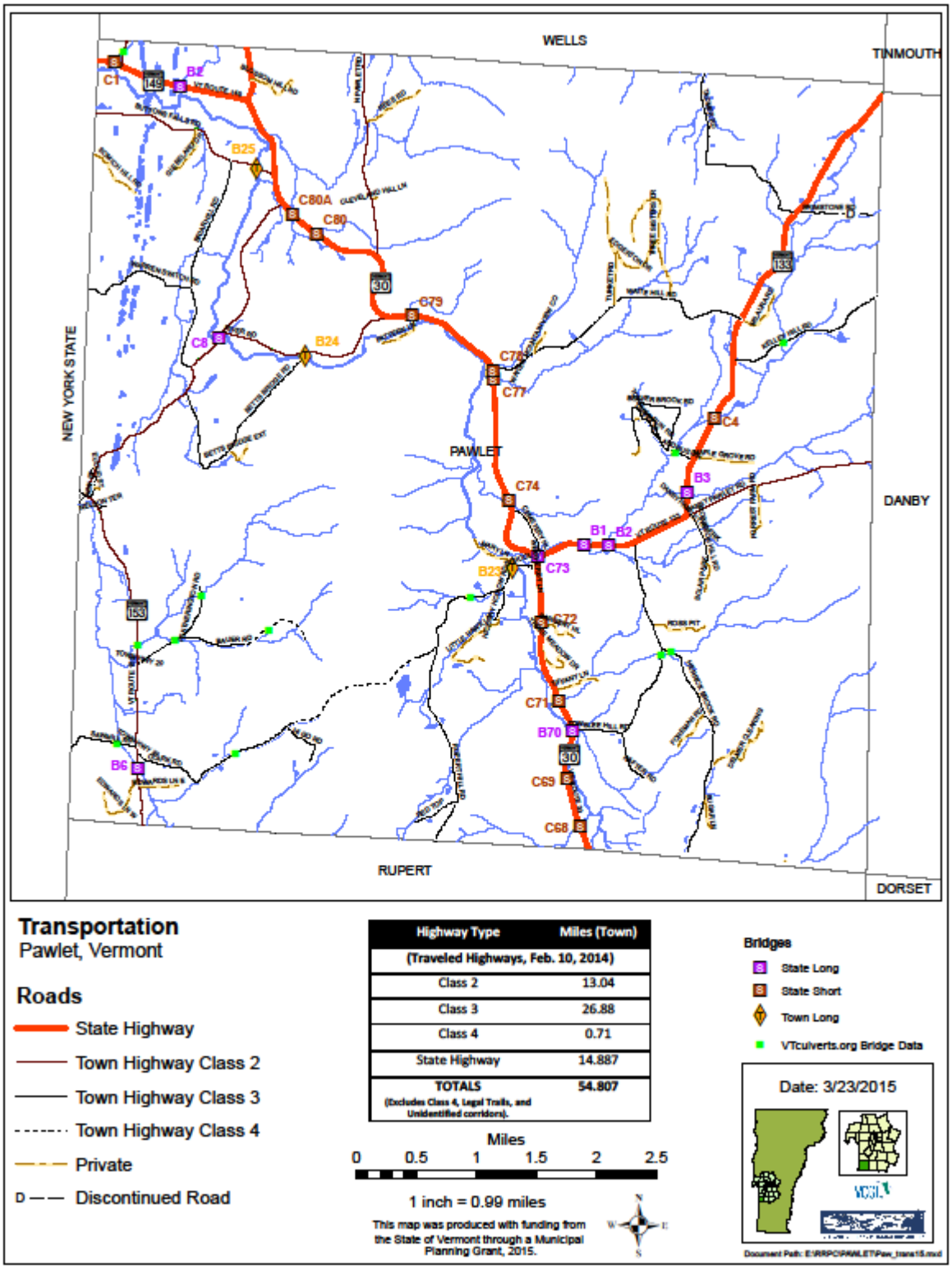
a) **Transportation**
b) **Future Land Use**
c) **Education and Community Facilities**
d) **Natural Resources 1**
e) **Natural Resources 2**

B. Survey 2015

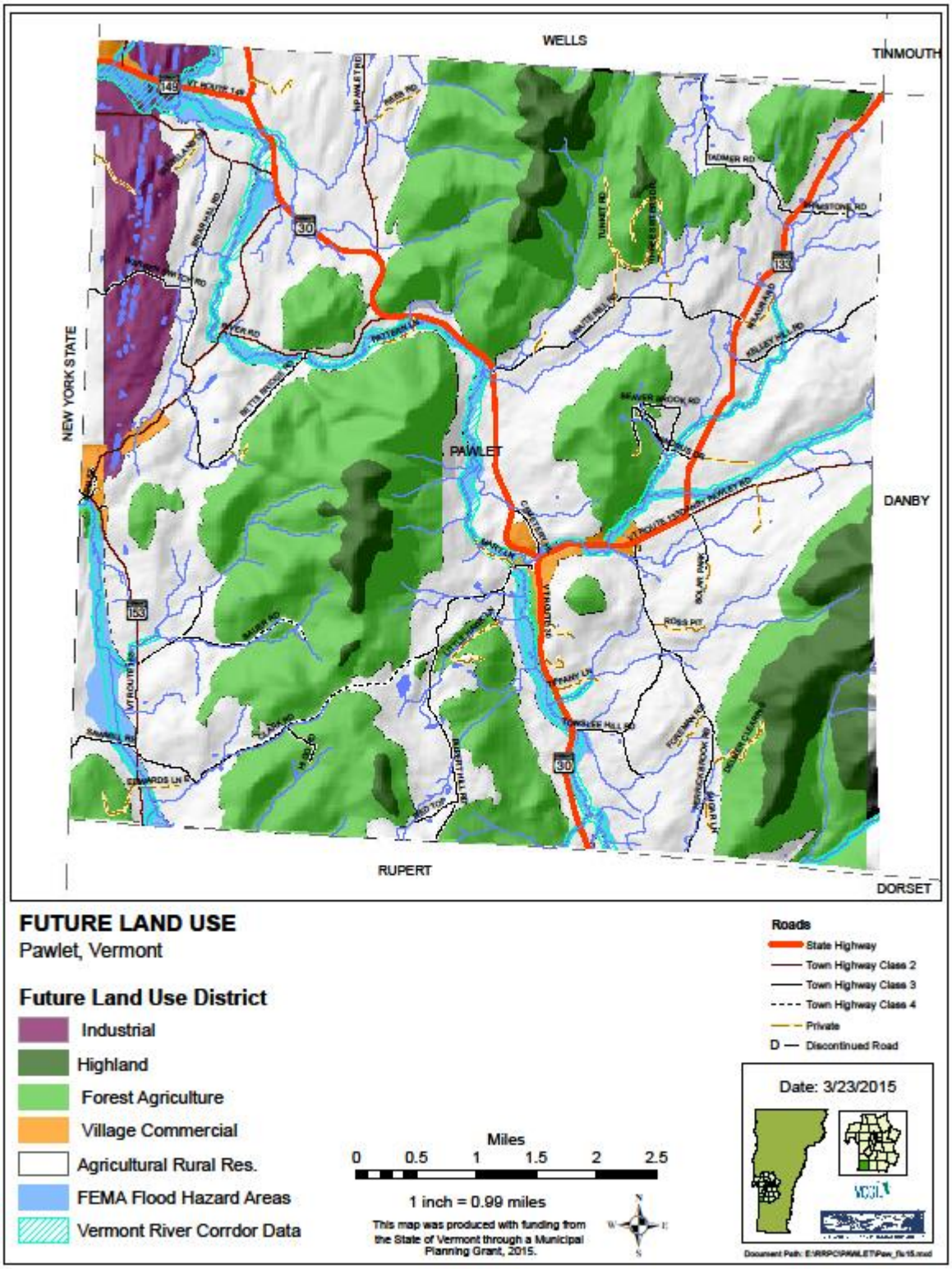
a) **Results**
b) **Survey Form**

C. Endnotes

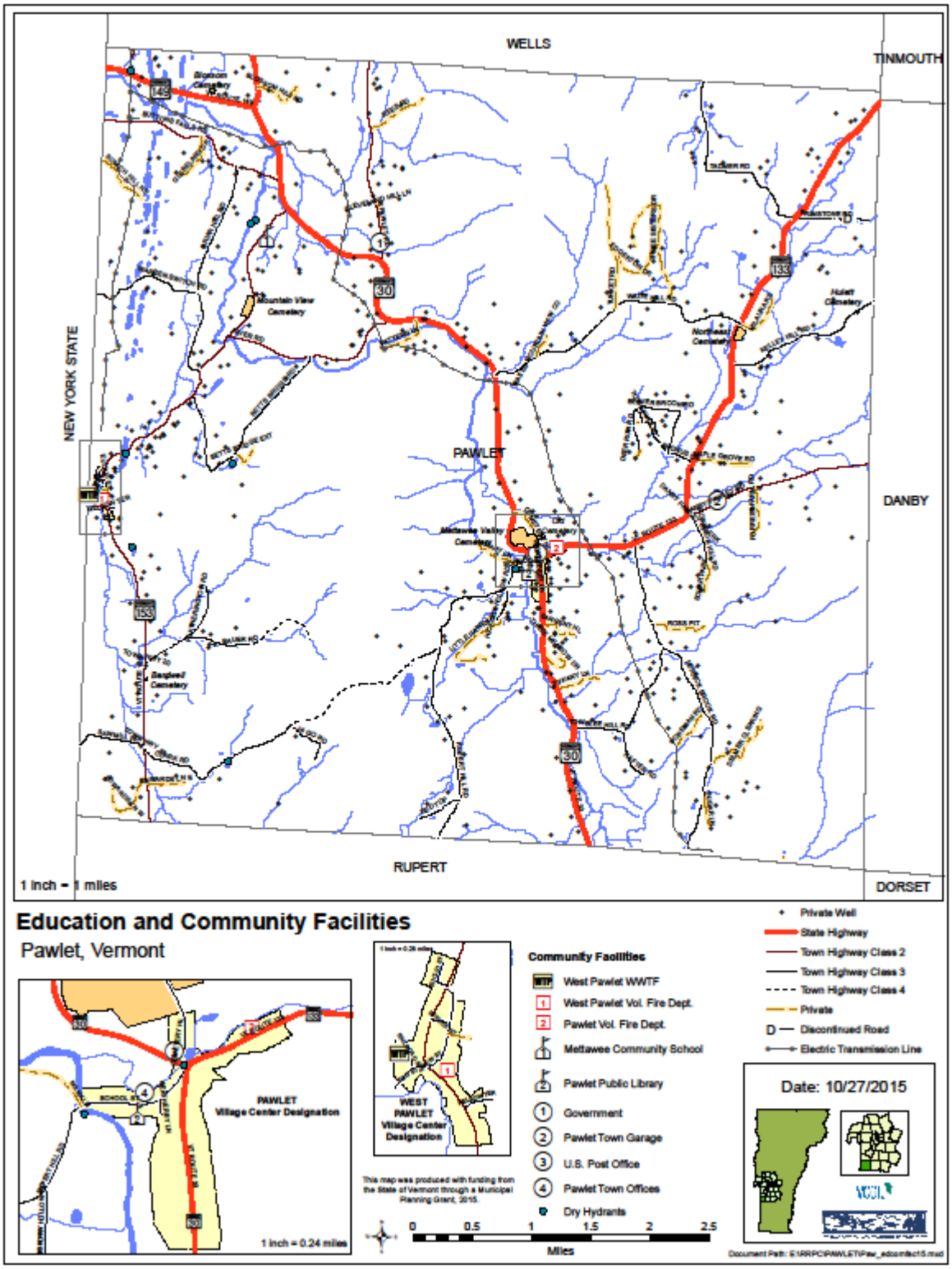
a) Transportation



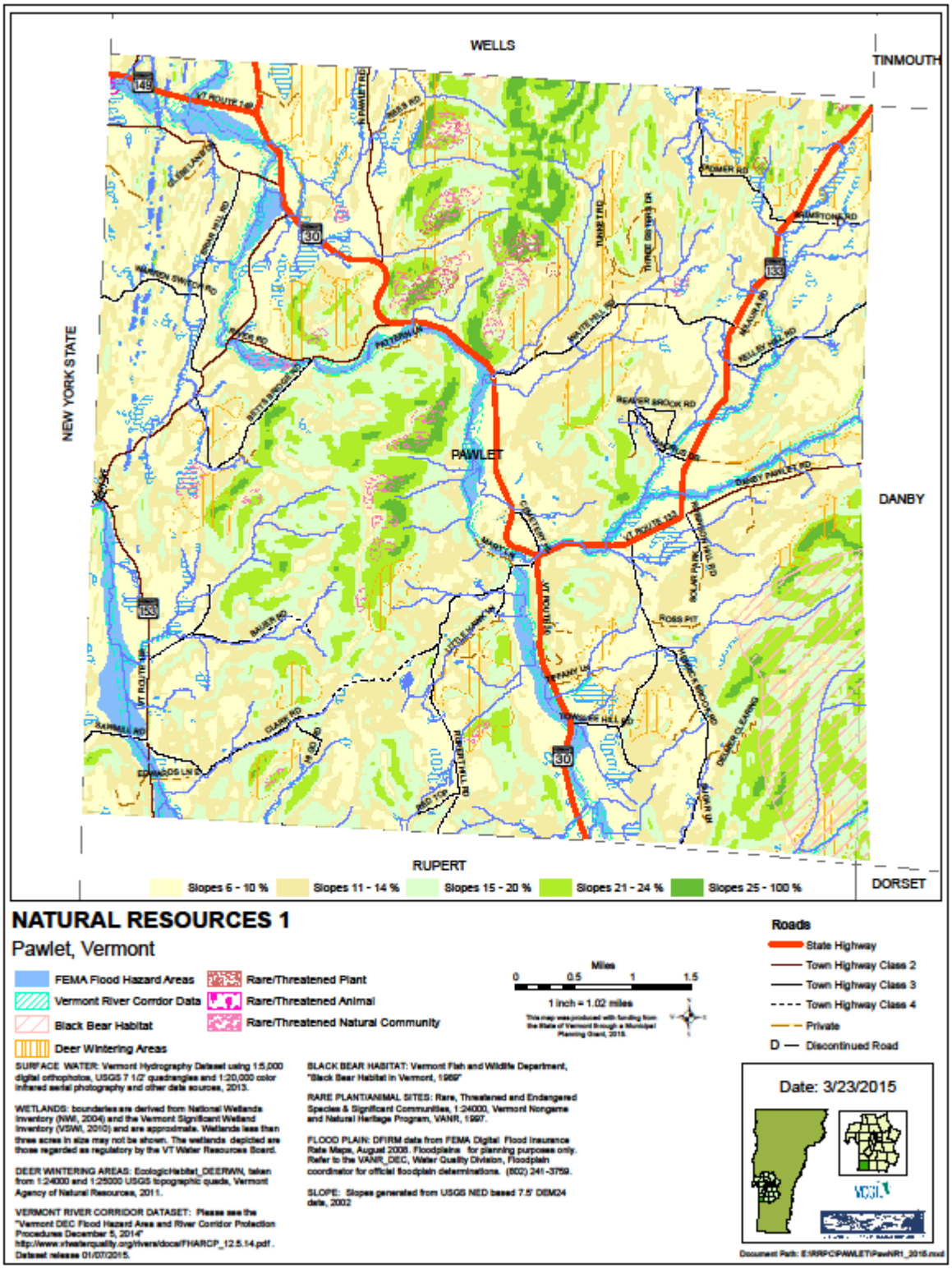
b) Future Land Use



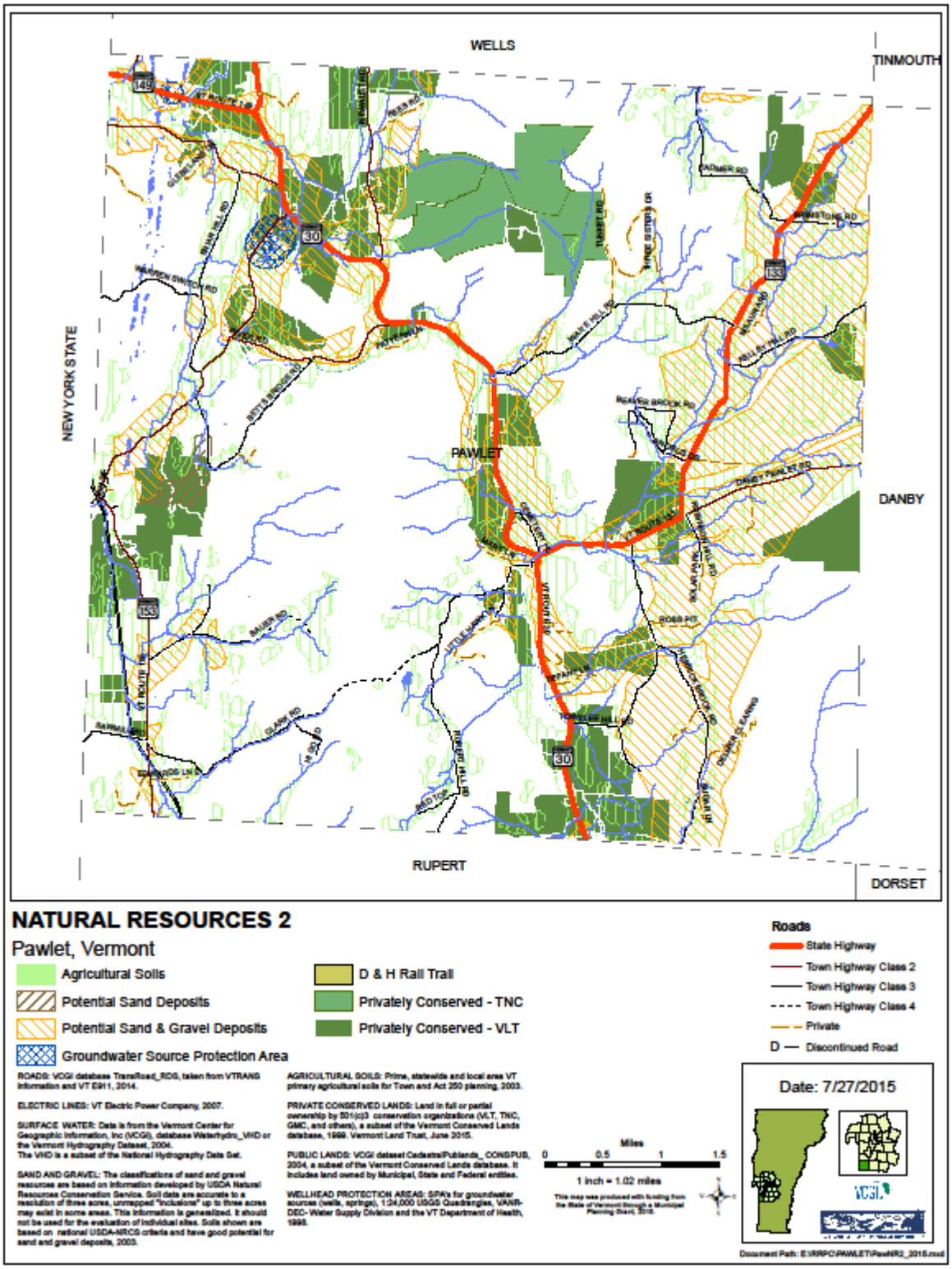
c) Education and Community Facilities



d) Natural Resources 1



e) Natural Resources 2



Appendix B

a) Results of 2015 Pawlet Survey

This was a non-randomized survey. Its results, therefore, are only suggestive, not definitive. It gathered responses mostly by mail and some by an online method.

Demographic

Three quarters of the people responding to this survey have lived in Pawlet more than ten years and half of the others more than five years.

The average household has three people.

Approximately 80% of the people responding to the survey use email. Facebook is used by many.

Approximately 25% of the respondents use the Town website.

Most respondents get their news from TV or radio. Many also read a newspaper.

Ranking Items

Approximately 40% of respondents indicate that they think protecting farms and farmland are the most important of all choices offered for regarding Pawlet's future. No other choice comes even close nor is outstanding.

b) SURVEY FORM

Are you a (check one) ☐ full-time resident *or* ☐ part-time resident

Approximately how long have you lived in Pawlet?

☐ less than 3 years ☐ 3-5 years ☐ 5-10 years ☐ more than 10 years

How many people live in your household? _____

Circle each of the following age groups that *any* member of your household belongs to:

⁞ 5 years old or under ⁞ ⁞ 6-18 years old ⁞ ⁞ 19-44 years old ⁞ ⁞ 65 years or older⁞

Do you use (check all that apply): ☐ email ☐ the Pawlet Town Website ☐ Facebook ☐ Twitter ☐ other social media (specify) _____

Do you get your local news from (check all that apply and identify): ☐ TV Station(s)_____ ☐ Radio Station(s)_____ ☐ Newspaper(s) _____ ☐ Pawlet Newsletter ☐ Pawlet eNews ☐ Website(s) _____

CIRCLE ONE RESPONSE TO EACH OF THE FOLLOWING QUESTIONS:

What is your opinion of the rate Pawlet is growing?

much too slow | too slow | about right | too fast | much too fast

Should Pawlet encourage development of some affordable residences for young, local families?

definitely yes | probably | don't know | probably not | definitely not

Should Pawlet encourage development of some suitable residences for elderly of the Town?

definitely yes | probably | don't know | probably not | definitely not

How much should Pawlet spend on education?

much less | somewhat less | same as now | somewhat more | much more

Should Pawlet encourage its artists, craftspeople, and other small-scale entrepreneurs?

very much | probably | don't know | probably not | definitely not

How much *importance* do farming and agriculture have for Pawlet's future?

very much | moderate | don't know | little | none

How much *importance* do volunteer activities have for making Pawlet a good place to live?

very much | moderate | don't know | little | none

Should Pawlet develop policies concerning renewable energy?

definitely yes | probably | don't know | probably not | definitely not

---

From the list of items below *choose* up to five you think are very important for Pawlet's future.

Write the *letter* of the item you consider the most important after '1st choice,' write the *letter* of the next most important item after '2nd choice,' and so forth:

1st choice_____; 2nd choice_____; 3rd choice_____; 4th choice_____; 5th choice_____.

A- Protecting farms and farmland

B-Developing public transportation

C-Encouraging community activities

D-Developing flood resiliency

E-Improving roads and bridges

F-Preserving historic sites and structures

G-Preventing pollution of streams, wells, and other water sources

H-Supporting employment training

J-Encouraging young families and people to live in Pawlet

K-Strengthening the sense of community

L-Other (specify) _____

Appendix C: Endnotes

1. All data cited in this document is drawn from the 2010 United States Census data, unless otherwise stated.

2. Definition of *median*: When a series of home prices, for example, is arranged in increasing values, the median value is the value that half the prices are greater than and half are less than. It is usually gives a better characterization than an average, or mean, does.