

# PLANNING MANUAL

---

For  
Vermont Municipalities



Vermont Department of Housing & Community Affairs  
2000

# **PLANNING MANUAL**

**for Vermont  
Municipalities**

**2000**

State of Vermont  
Howard Dean M.D., Governor

Agency of Commerce and Community Development  
Molly Lambert, Secretary

Department of Housing and Community Affairs  
Gregory G. Brown, Commissioner

The Department of Housing and Community Affairs (DHCA) has available the *Vermont Municipal and Regional Planning and Development Act* (Chapter 117), and other materials to assist municipal planning and zoning officials. To order these, or for more information about other available resource materials, contact DHCA, (802) 828-3211. Or 1-800-622-4550 (in Vermont).

Published in 2000, 1993, 1989, 1988, and 1987 by the Vermont Department of Housing and Community Affairs

1987 Edition Written by: Humstone Squires Associates  
Burlington, Vermont

Revised by: Vermont Department of Housing and  
Community Affairs

Editing & Design: 2000—Planning Division Staff  
Department of Housing and Community Affairs

1993—Orchard Press  
Montpelier, Vermont

1987—Robinson Book Associates,  
Burlington, Vermont

Illustrations: Koshen Czechorowski

Maps: Geographic Information Systems Laboratory  
University of Vermont

This manual was developed in accordance with Section 4304 of  
Title 24, Vermont Statutes Annotated.

Printed on recycled content paper

The Department of Housing and Community Affairs (DHCA) has available the *Vermont Municipal and Regional Planning and Development Act* (Chapter 117) and other materials to assist municipal planning and zoning officials. To order these, or for more information about other available resource materials, contact DHCA (802) 828-3211 or 1-800-622-4553 (in Vermont).

Published in 2000, 1993, 1989, 1988, and 1987 by the Vermont Department of Housing and Community Affairs.

1987 Edition Written by: Humstone Squires Associates  
Burlington, Vermont

Revised by: Vermont Department of Housing and  
Community Affairs

Editing & Design: 2000—Planning Division Staff  
Department of Housing and Community Affairs

1993—Orchard Press  
Montpelier, Vermont

1987—Robinson Book Associates,  
Burlington, Vermont

Illustrations: Koshen Czechorowski

Maps: Geographic Information Systems Laboratory  
University of Vermont

This manual was developed in accordance with Section 4304 of  
Title 24, Vermont Statutes Annotated.

Printed on recycled content paper

# Contents

## 1 Introduction to Planning in Vermont

1.1 Need for Planning .....	1
1.2 Framework for Planning in Vermont .....	3
1.2.1 Planning Law in Vermont.....	3
1.2.2 Planning Goals in Vermont.....	4
1.2.3 The Vermont Municipal and Regional Planning and Development Act .....	4
1.2.4 Municipal Planning Programs in Vermont .....	7
1.3 Responsibility for Planning .....	9
1.3.1 Role of the Municipality .....	9
1.3.2 Role of the Regional Planning Commission .....	9
1.3.3 Role of the State.....	10
1.3.4 Role of the Council of Regional Commissions.....	12
1.3.5 Union Municipal Districts .....	14
1.3.6 Solid Waste Districts .....	15
1.4 The Planning Process.....	15
1.5 A Coordinated Planning Process .....	17

## 2 The Municipal Plan

2.1 Definition of the Plan.....	19
2.1.1 General Description .....	19
2.1.2 The Elements of a Municipal Plan.....	20
2.1.3 Relationship of the State Planning Goals to the Plan Elements .....	22
2.2 Purpose of the Plan .....	22
2.3 Using the Plan.....	22
2.4 Preparation and Adoption of the Plan .....	24
2.4.1 Responsibility of the Planning Commission .....	24
2.4.2 Responsibility of the Legislative Body .....	26
2.4.3 Adoption by Australian Ballot .....	26
2.4.4 Public Participation.....	26
2.4.5 Effective Date .....	28
2.4.6 Adoption of Regional Plan by Municipality .....	28
2.4.7 Municipal Plan Approval.....	28
2.5 Maintenance and Amendment of the Plan .....	30
2.5.1 Responsibility of the Planning Commission .....	30
2.5.2 Amendments Proposed by Other Parties .....	31
2.5.3 Written Reports on Amendments.....	31
2.5.4 Readoption and Amendment Procedures .....	33
2.6 Legal Considerations .....	33
2.6.1 Proper Adoption Procedures .....	33
2.6.2 Foundation for Municipal Regulations and Programs ..	33
2.6.3 Use of the Plan in Act 250 .....	34

### **3 The Municipal Planning Commission**

3.1 Designation of the Planning Commission .....	35
3.1.1 Membership.....	35
3.1.2 Terms of Membership .....	36
3.1.3 Ex-officio Members.....	36
3.1.4 Joint Zoning Board of Adjustment and Planning Commission.....	36
3.1.5 Joint Planning Commissions .....	36
3.1.6 Planning Department in Urban Municipality.....	37
3.1.7 Development Review Board.....	37
3.2 Role of the Planning Commission .....	37
3.3 Powers and Duties of the Planning Commission.....	38
3.4 Organization and Procedures of the Planning Commission.....	39
3.4.1 Officers.....	39
3.4.2 Rules.....	39
3.4.3 Meetings .....	40
3.4.4 Records.....	41
3.4.5 Annual Report .....	41
3.5 Technical Assistance .....	41
3.6 Expenses.....	42

### **4 Organization of the Planning Program**

4.1 Getting Started.....	43
4.2 Designing the Planning Program .....	44
4.2.1 Outline the Process .....	44
4.2.2 Set the Work Schedule .....	44
4.2.3 Determine the Planning Period.....	46
4.2.4 Prepare Public Participation Program.....	46
4.2.5 Plan the Budget .....	50
4.2.6 Coordinate with Adjacent Towns, the Region and State Agencies .....	51
4.3 Keeping the Plan Current .....	52
4.3.1 Evaluations .....	52
4.3.2 Updating Requirements .....	52
4.3.3 Expand the Data Base.....	53
4.3.4 Reassess Goals and Objectives.....	53
4.3.5 Revise Implementation Program .....	53
4.3.6 Focus on Geographic Areas.....	53
4.3.7 Focus on Topics.....	54
4.3.8 Revise the Format.....	54
4.4 Sources and Uses of Technical Help .....	54
4.4.1 Regional Planning Commissions.....	54
4.4.2 Staff.....	55
4.4.3 Conservation Commissions .....	55
4.4.4 Planning Consultants.....	55
4.4.5 Federal and State Agencies.....	55
4.4.6 Colleges and Universities .....	56
4.4.7 Interns.....	56
4.4.8 Other.....	56

## 5 Collecting and Analyzing Information

5.1 Conduct a Preliminary Assessment .....	57
5.2 Identify Information Required.....	59
5.3 Make a Community Profile .....	59
5.3.1 History .....	59
5.3.2 Population.....	59
5.3.3 Housing .....	60
5.3.4 Affordable Housing .....	64
5.3.5 Economy.....	66
5.3.6 Fiscal Conditions .....	68
5.4 Prepare a Base Map .....	71
5.5 Analyze Physical Condition .....	73
5.5.1 Soils .....	73
5.5.2 Topography.....	77
5.5.3 Water Resources.....	80
5.5.4 Natural Areas.....	85
5.5.5 A Summary of Physical Capability for Development.....	86
5.6 Analyze Existing Land Use and Special Feature.....	89
5.6.1 Pattern of Development .....	89
5.6.2 Resource Production.....	91
5.6.3 Special Features.....	95
5.7 Analyze Community Facilities and Services .....	101
5.7.1 Transportation.....	103
5.7.2 Education.....	111
5.7.3 Recreation.....	112
5.7.4 Libraries.....	113
5.7.5 Water Supply .....	114
5.7.6 Sewage Disposal.....	114
5.7.7 Solid Waste Management .....	115
5.7.8 Gas, Electricity, Cable, Telephone Service, and Towers .....	116
5.7.9 Energy .....	116
5.7.10 Public Safety and Emergency Services.....	118
5.7.11 Health and Human Services.....	119
5.7.12 Administrative Services.....	120
5.8 Using GIS .....	120
5.9 Summarize Data Collection and Analysis .....	121
5.9.1 Identify Needs and Options for Land Use .....	121
5.9.2 Identify Needs and Options for Community Facility and Services.....	122
5.9.3 Identify Needs and Options for Community Development.....	123
5.9.4 Identify Needs for Environmental Resources .....	123

## **6 Developing the Plan**

6.1 Establishment of Goals and Objectives.....	125
6.1.1 Definition of Goals, Objectives, Policies and Programs .....	125
6.1.2 Need for and Use of Goals and Objectives in a Plan.....	126
6.1.3 Developing Municipal Goals and Objectives.....	127
6.1.4 Consistency of Municipal Goals and Objectives with State Planning Goals .....	127
6.2 Formulation of Plans.....	128
6.2.1 The Need for and Use of Plans.....	128
6.2.2 The Contents of a Municipal Plan.....	129
6.2.3 Organizing the Plan.....	138
6.3 Selecting an Appropriate Implementation Program.....	141
6.3.1 Bylaws .....	142
6.3.2 Other Regulations .....	145
6.3.3 Programs .....	145
6.3.4 Coordination of Public Actions.....	147
6.3.5 Coordination of Private Actions.....	148
6.3.6 Special Projects .....	149
6.4 Financing .....	149
6.4.1 State Planning Funds.....	149
6.4.2 Community Development Block Grants .....	150
6.4.3 Impact Fees .....	150
6.4.4 Taxation .....	151
6.5 Conclusion .....	151

## **Appendix**

A. Checklists and Certification for Adoption .....	153
B. Resources .....	162
C. Glossary.....	167
D. Selected Bibliography .....	169



# Preface

The purpose of this manual is to provide a guide for the municipal planning commission in fulfilling its role and responsibilities as set forth in 24 V.S.A. chapter 117, the Municipal and Regional Planning and Development Act. A major role of the municipal planning commission is to develop the municipal plan. *The Planning Manual for Vermont Municipalities* provides information that will help the planning commission with this complex task, from designing the planning program to adopting the plan.

Since the planning process is a circular one rather than linear, it can often seem never-ending and thus overwhelming. It is a challenging process, but this manual is designed to help municipalities meet those challenges. It will help you break down the planning process into manageable steps. Once you outline your process, you can focus on each step, one at a time, and still keep a perspective on where that step falls within the process.

The introductory chapter describes the framework for planning in Vermont: who is responsible for planning and what the planning process is. In subsequent chapters the manual describes a municipal plan, the role of the planning commission, how to get ready to prepare or amend a plan, how to develop the plan itself, and then how to implement it.

You will spend much time going back and forth between different sections of the manual. The book is meant to become dog-eared. The margins are left wide in order to give you space to make your own notes. Throughout the manual and in the appendices we have referred to many resources that can help you. We urge you to use them.

Good luck and enjoy!

Department of Housing and Community Affairs  
June 2000



# 1

## Introduction to Planning in Vermont

Since 1960, a remarkable transformation has occurred in the economy of Vermont, which is moving away from its traditional bases in agriculture, natural resources, and manufacturing toward its new bases in the post-industrial age: service industries, tourism, information industries and high technology manufacturing. This transformation has been accompanied by, and in part fueled by, rapid population growth and physical development at a scale without precedent in Vermont history.

—Vermont Law School, *Vermont's Next Decade of Growth: Development Policies for the 1980's*, June 1985

The economic transformation in the state over the last thirty-five years, and the population changes associated with it, stimulates the need for communities to examine their current conditions and their prospects for the future. To benefit from change, communities must recognize and understand the problems and opportunities that they face and must identify their goals for the future. Communities have a choice in the ways they can provide for orderly growth, balance the natural and built environments, provide for community functions and services, and respect their heritage - the settlement patterns, neighborhoods, town centers, and rural landscapes that have evolved with time. This opportunity to choose a future is a fundamental reason for planning.

Over 90% of Vermont's cities and towns are engaged in a planning process to address problems and opportunities and to meet goals. While these plans often have proven satisfactory during periods of little or no growth, many municipalities have found them to be inadequate in light of new challenges.

Critical planning issues face Vermont municipalities today. These issues vary from community to community. Some towns have emerged as suburban growth areas with sprawling residential subdivisions, congested commercial strips, and spacious industrial and business parks. These towns are now confronted with the loss of open space, the demand for urban services, and a need to redefine their image. The urban centers these suburban towns surround are striving to maintain the viability of their downtowns, to respond to low- and moderate-priced housing shortages, and to

### 1.1 Need for Planning

upgrade antiquated water systems, storm drainage systems, and streets.

Some rural communities are experiencing piecemeal, large-lot subdivision that wastes valuable farmland and forest land and increases housing costs beyond the reach of many residents. Once distinctive centers for rural life, villages often are indistinguishable from the rapidly developing landscape around them. In resort areas, large-scale vacation home developments are concentrated at the bases of ski areas and along local access roads. At peak periods of the year, the small towns that serve the resorts suddenly face big city problems—traffic congestion, inadequate sewage disposal and water supply, and the need for police protection.

The effects of vacation home development on towns may not be clear. Real estate prices generally rise, making it very difficult for people who grew up in or work in a resort community to own a home there. Roads and utilities may need to be expanded or upgraded. Even schools that may not be affected when a home is a vacation retreat may need to be enlarged if vacation homes are converted to year-round use.

Communities also are realizing that many of the issues they face cannot be solved on a local basis. Some towns have found that the location of a large employer in a neighboring town has increased housing development within their boundaries. Some municipalities have found inefficiencies in trying to solve problems, such as solid waste disposal and traffic congestion, without cooperating with other towns.

Economic changes in the state have created booms in some regions, while other areas have been bypassed by the new prosperity. Several urban centers have suffered serious economic decline after the loss of major employers, while remote towns that once had thriving farms and productive forests have seen young people and families move away.

A well grounded economic development element in a municipal plan can encourage and facilitate appropriate development. It can guide people seeking to build housing or start a business in town. It can also help the municipality avoid doing things that might inadvertently discourage desirable development. A plan can also reduce the likelihood of conflict arising around development, and can ease the local and state permit process. District environmental commissions rely on municipal plans unless the issue is one of substantial regional impact; a strong economic development element can help clarify the town's intentions as to projects regulated by Act 250.

Uncontrolled land development threatens Vermont's finite resource areas, such as shorelines, watercourses, wetlands, natural

areas, ridgetops, historic sites and districts, lands needed for public recreation and open space, and productive farmland and forest land. Once these resources are physically altered or subdivided, the opportunities for preservation, public access, or management are severely limited or lost altogether.

Vermont communities today are looking for ways to manage their growth, to plan for future facilities in a fiscally responsible way, and to deal with the cumulative effects of piecemeal, uncoordinated development. They are seeking solutions to allow increased appropriate development while protecting open spaces and agricultural resources. Communities are trying to find ways to provide housing at prices that are affordable to area residents. Municipalities are studying and implementing ways to meet their capital investment needs.

### *1.2.1. Planning Law in Vermont*

Two major pieces of legislation have established the framework for planning in Vermont. The first is **24 V.S.A. chapter 117**, the Municipal and Regional Planning and Development Act, also known as the Vermont Planning and Development Act or Chapter 117. The second is **10 V.S.A. chapter 151**, known as Act 250, which regulates land use and development projects.

Chapter 117 was originally enacted in 1967. It permitted the establishment of municipal and regional planning commissions, and set forth general purposes to guide them. Municipalities were given the option to develop plans and implement them through regulations and a capital budget and program. The standards and procedures to which municipalities must adhere in their planning programs were prescribed. The law has been amended over the years, and in 1988 significant amendments were enacted that are popularly known as Act 200.

Municipalities still have the option to plan or not plan, however, they are all members of regional planning commissions. Regional planning commissions have to prepare a regional plan. Another important aspect of Act 200 is the requirement that state agencies that affect land use prepare a plan every two years.

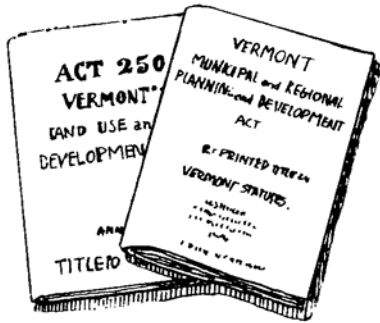
The second piece of legislation, Act 250, sets forth state policies on land use and development to guide municipalities and regional and state agencies. It also establishes criteria to be considered during a development review process for projects meeting the definition of "development" or "subdivision."

The policies in Act 250 and the stated purposes of Chapter 117 should be followed in the preparation of municipal plans. Details as to how to utilize these policies in local plans can be found in Chapter 5.

## **1.2 Framework for Planning in Vermont**

### 1.2.2 *Planning Goals in Vermont*

The Vermont Planning and Development Act sets forth general purposes that have been part of planning law in Vermont since it was first enacted in 1967. In short, the general purpose and intent of Chapter 117 is to encourage appropriate development of lands in the state in a manner which will promote public health, safety, welfare, prosperity, and comfort; to protect areas from overcrowding, traffic congestion, and loss of peace, quiet and privacy; to facilitate the creation of an optimum environment; and to provide the means and methods for municipalities and regions to plan for eliminating and preventing development problems and to implement those plans. See **24 V.S.A. §4302(a)** for the full text of the purposes.



Recent amendments have added process and substantive goals, which represent generally accepted planning practices, to guide municipal, regional and state agency planners in achieving those purposes. The goals also provide a framework for the coordinated planning process envisioned by the legislature. In 1989, all regional planning commissions devised "implementation guidelines" to help themselves and member towns address all the goals as they developed their plans. Even though the substance of the goals was simplified in 1990, the guidelines are still useful for local planners.

Figure 1.1 lists the four process goals as they are found in **24 V.S.A. §4302(b)**. The statute also sets out 12 substantive planning goals in **24 V.S.A. §4302(c)**. These are shown in Figure 1.2.

### 1.2.3 *The Vermont Municipal and Regional Planning and Development Act*

The Vermont Municipal and Regional Planning and Development Act provides the framework for municipalities to achieve orderly development in accordance with duly adopted plans. Chapter 117 specifies the process, requirements, and guidelines by which municipal plans are to be developed, reviewed, and adopted. The Act includes guidelines and requirements for the content of plans, timelines, and adoption and amendment procedures. Chapter 117 enables the establishment of municipal planning commissions and sets forth their terms, method of appointment, powers, and duties. Communities that have prepared and adopted plans are authorized to adopt bylaws that conform with the plans. Chapter 117 spells out precise procedures for bylaw adoption, administration, and enforcement. It enables the adoption of capital budgets and programs for communities that have adopted facilities and services plans. Finally, it authorizes the establishment of

Figure 1.1  
VERMONT PLANNING AND DEVELOPMENT ACT  
PROCESS GOALS

1. To establish a coordinated, comprehensive planning process and policy framework [that] shall guide decisions by municipalities, regional planning commissions, and state agencies.
2. To encourage citizen participation at all levels of the planning process, and to assure that decisions shall be made at the most local level possible commensurate with their impact.
3. To consider the use of resources and the consequences of growth and development for the region, the state, as well as the community in which it takes place.
4. To encourage and assist municipalities to work creatively together to develop and implement plans.

regional planning commissions and the adoption of regional plans.

The 1988 amendments to Chapter 117 were enacted in recognition of the increasingly complex nature of our changing society. The actions of one town increasingly affect its neighbors, and this reality has led us to change some of our ways as independent municipalities. Commercial development along a highway may affect traffic in several towns. The employees of new businesses in one town may live in an adjacent town, which then will have to provide public services without the benefit of the increased tax base. Some issues should be resolved at a regional level. For example, with new environmental standards for lined landfills, it no longer makes sense for each town within a region to have its own place to dispose of trash.

Considering these factors, the 1988 amendments called for coordination among towns, regions and state agencies as they prepare their plans and encourages public participation throughout the process. Decisions are to be made at the most local level possible commensurate with the impact of the decision.

A key change in the law requires that state agency plans be compatible with town plans that have been approved by the regional planning commission. The approval process is also one of coordination and compatibility. The municipal representatives to a regional planning commission may vote on the sufficiency of a town's plan if the town so chooses. This peer review enables one

town to point out the potential spillover effect of another town's plan and is intended to raise the effectiveness of town plans by allowing these concerns to be worked out early in the process. Compatibility of local plans should help state agency plans to achieve, in turn, compatibility with those approved plans.

The criteria for regional review for approval are listed in **24 V.S.A. §4350(b)**. In order to approve a municipal plan, the regional planning commission must find that it is consistent with the state planning goals established in **24 V.S.A. §4302(b)**, that it is compatible with the regional plan, that it is compatible with approved plans of other municipalities in the region, and that it contains all the elements included in **24 V.S.A. §4382(a)(1)-(10)**. The process of this review for approval is discussed further in Section 2.4.7 of this manual.

Another 1988 amendment was the creation of the Council of Regional Commissions to review regional and state agency plans, and

Figure 1.2  
VERMONT PLANNING AND DEVELOPMENT ACT  
SUBSTANTIVE PLANNING GOALS

1. To plan development so as to maintain the historic settlement pattern of compact village and urban centers separated by rural countryside.
  - A. Intensive residential development should be encouraged primarily in areas related to community centers, and strip development along highways should be discouraged.
  - B. Economic growth should be encouraged in locally designated growth areas, or employed to revitalize existing village and urban centers, or both.
  - C. Public investments, including the construction or expansion of infrastructure, should reinforce the general character and planned growth patterns of the area.
2. To provide a strong and diverse economy that provides satisfying and rewarding job opportunities and that maintains high environmental standards, and to expand economic opportunities in areas with high unemployment or low per capita incomes.
3. To broaden access to educational and vocational training opportunities sufficient to ensure the full realization of the abilities of all Vermonters.
4. To provide for safe, convenient, economic and energy efficient transportation systems that respect the integrity of the natural environment, including public transit options and paths for pedestrians and bicyclers.
  - A. Highway, air, rail and other means of transportation should be mutually supportive, balanced and integrated.
5. To identify, protect and preserve important natural and historic features of the Vermont landscape, including:
  - A. Significant natural and fragile areas;
  - B. Outstanding water resources, including lakes, rivers, aquifers, shorelands, and wetlands;
  - C. Significant scenic roads, waterways and views; and
  - D. Important historic structures, sites, or districts, archaeological sites and archaeologically sensitive areas.
6. To maintain and improve the quality of air, water, wildlife and land resources.
  - A. Vermont's air, water, wildlife, mineral and land resources should be planned for use and development according to the principles set forth in 10 V.S.A. section 6086(a).



to help resolve disputes by non-adversarial means or, as a last resort, by an administrative procedure. The Council is a statewide body consisting of municipal and regional planners, state agency heads and members of the public.

As the source of the enabling authority for municipal planning actions, Chapter 117 is an indispensable guide and tool for the development of municipal plans.

#### *1.2.4. Municipal Planning Programs in Vermont*

A major incentive for planning in Vermont was provided from the late 1950's to the 1970's by the "701" grant program of the U.S. Department of Housing and Urban Development. Urban municipalities in Vermont were the first recipients of funds from this program. Later, funds were made available to regional

7. To encourage the efficient use of energy and the development of renewable energy resources.
8. To maintain and enhance recreational opportunities for Vermont residents and visitors
  - A. Growth should not significantly diminish the value and availability of outdoor recreational activities.
  - B. Public access to noncommercial outdoor recreational opportunities, such as lakes and hiking trails, should be identified, provided and protected wherever appropriate.
9. To encourage and strengthen agricultural and forest industries.
  - A. Strategies to protect long-term viability of agricultural and forest lands should be encouraged and should include maintaining low overall density.
  - B. The manufacture and marketing of value-added agricultural and forest products should be encouraged.
  - C. The use of locally-grown food products should be encouraged.
  - D. Sound forest and agricultural management practices should be encouraged.
  - E. Public investment should be planned so as to minimize development pressure on agricultural and forest land.
10. To provide for the wise and efficient use of Vermont's natural resources and to facilitate the appropriate extraction of earth resources and the proper restoration and preservation of the aesthetic qualities of the area.
11. To ensure the availability of safe and affordable housing for all Vermonters.
  - A. Housing should be encouraged to meet the needs of a diversity of social and income groups in each Vermont community, particularly for those citizens of low and moderate income.
  - B. New and rehabilitated housing should be safe, sanitary, located conveniently to employment and commercial centers, and coordinated with the provisions of necessary public facilities and utilities.
  - C. Sites for multi-family and manufactured housing should be readily available in locations similar to those generally used for single-family conventional dwellings.
12. To plan for, finance and provide an efficient system of public facilities and services to meet future needs.
  - A. Public facilities and services should include fire and police protection, emergency medical services, schools, water supply and sewage and solid waste disposal.
  - B. The rate of growth should not exceed the ability of the community and the area to provide facilities and services.

planning commissions, which assisted towns in the development of plans and bylaws. As a result, a majority of both urban and rural municipalities in Vermont had plans and zoning bylaws by the mid-1970's.

After the demise of the HUD "701" program, funding of the regional planning commissions was continued by the State of Vermont. The 1988 amendments to Chapter 117 for the first time made state funds directly available to municipalities for planning, and significantly increased state funding for regional planning commissions. The source of these funds is the Municipal and Regional Planning Fund, which receives a percentage of the funds brought in by an increase in the property transfer tax.

Both municipal and regional planning commissions receive state funding based on formulas established by rules of the Department of Housing and Community Affairs. The legislature directed the Department to consider the following factors in developing the rules for dispensing funds to municipalities: population; indicators of growth, such as grand list, local development permit activity, and property transfer tax activity; level of development activity in nearby municipalities; community need indicators, such as per capita income and percentage of population considered lower income; and existing level of municipal and financial support for planning. The legislature originally directed that a minimum level of funding be made available under the formula to all municipalities. See **24 V.S.A. §4306**.

However, in hard economic times, the legislature subsequently has waived municipal funding by formula for a given year and directed the Department to allocate funds according to a competitive process in which not all municipalities are funded.

Municipalities contribute funds to their regional planning commissions according to policies established by each region. Regional planning commissions collect and maintain data, and provide technical assistance to municipalities in the preparation and amendment of plans, and the development of bylaws to implement them. Each region and its member towns have devised the manner in which these services are provided and supported.

There are special purpose planning programs in Vermont, such as the Community Development Block Grant program, administered by the Department of Housing and Community Affairs.

## 1.3 Responsibility for Planning

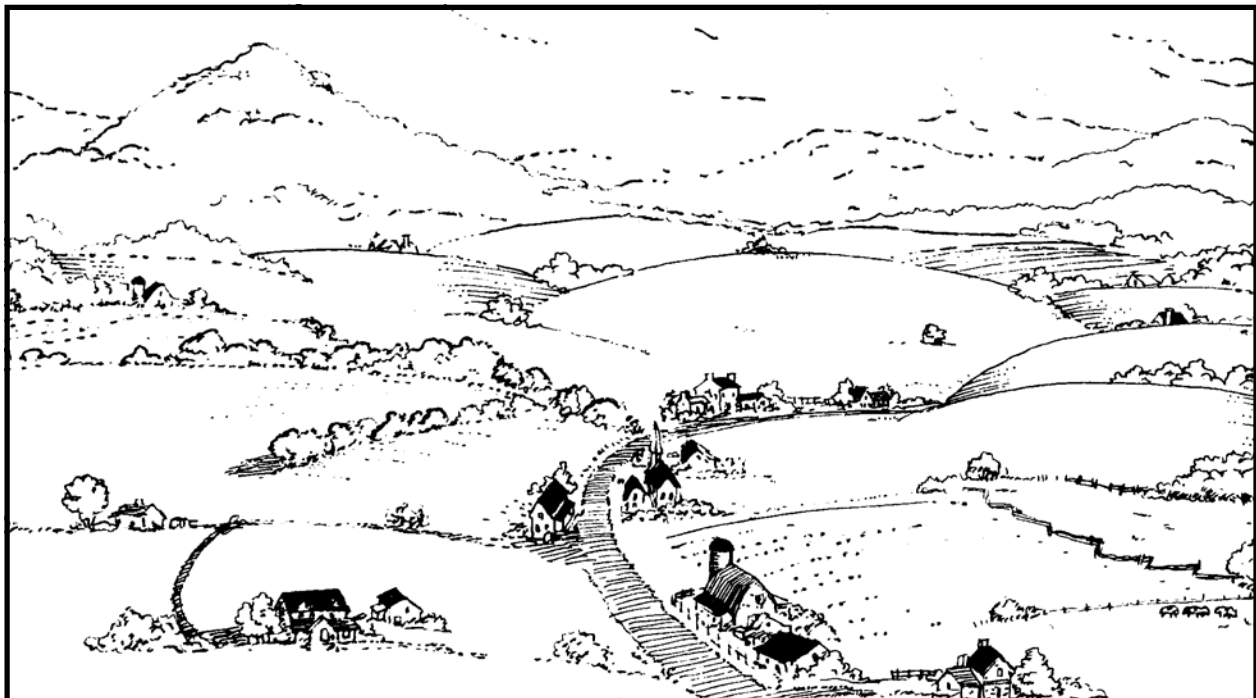
### *1.3.1 Role of the Municipality*

Any municipality may undertake a comprehensive planning program including related preliminary planning and engineering studies, and prepare, maintain and implement a plan within its jurisdiction in accordance with this chapter. **24 V.S.A. §4381(a).**

Not only is it the municipality's role to undertake local planning activities, but also to participate in regional and state planning programs. As members of the regional planning commission, municipalities participate in the decisions of the commission, including the adoption of the regional plan. Through their legislative bodies and planning commissions, municipalities are parties to the review of applications under Act 250.

### *1.3.2 Role of the Regional Planning Commission*

There are twelve regional planning commissions in Vermont. These commissions were formed by towns to provide a continuing program for comprehensive and functional area-wide planning. The powers and duties of regional planning commissions include, but are not limited to:



- promotion of intermunicipal cooperation and coordinated development
- provision of technical assistance to municipalities for the
- preparation and maintenance of plans, studies, bylaws, and other implementation activities
- preparation of and amendments to regional plans and related
- preliminary planning and engineering studies
- preparation of studies and recommendations on land development,
- urban renewal and beautification, transportation and scenic preservation, and conservation of energy
- implementation of programs in cooperation with municipalities for
- appropriate development, improvement, protection and preservation of the region's physical and human resources

See **24 V.S.A. §§4345 and 4345a** for the full text of regional planning commission duties, both optional and mandatory.

The plan that a regional planning commission is now required to prepare is intended to accomplish the following general purposes, set forth in **24 V.S.A. §4347**:

- guiding coordinated, efficient, and economically sound development in the region
- promoting the health, safety, order, convenience, prosperity, and welfare of the region's inhabitants
- accomplishing efficiency and economy in the process of development

Municipalities in Vermont find the regional planning commissions valuable resources for background data and maps; suggested planning goals, objectives, and policies; techniques for implementing plans; assistance in program development and administration; and information on regional trends, development patterns, and issues. Therefore, the regional planning commissions can and do play an important role in the municipal planning process.

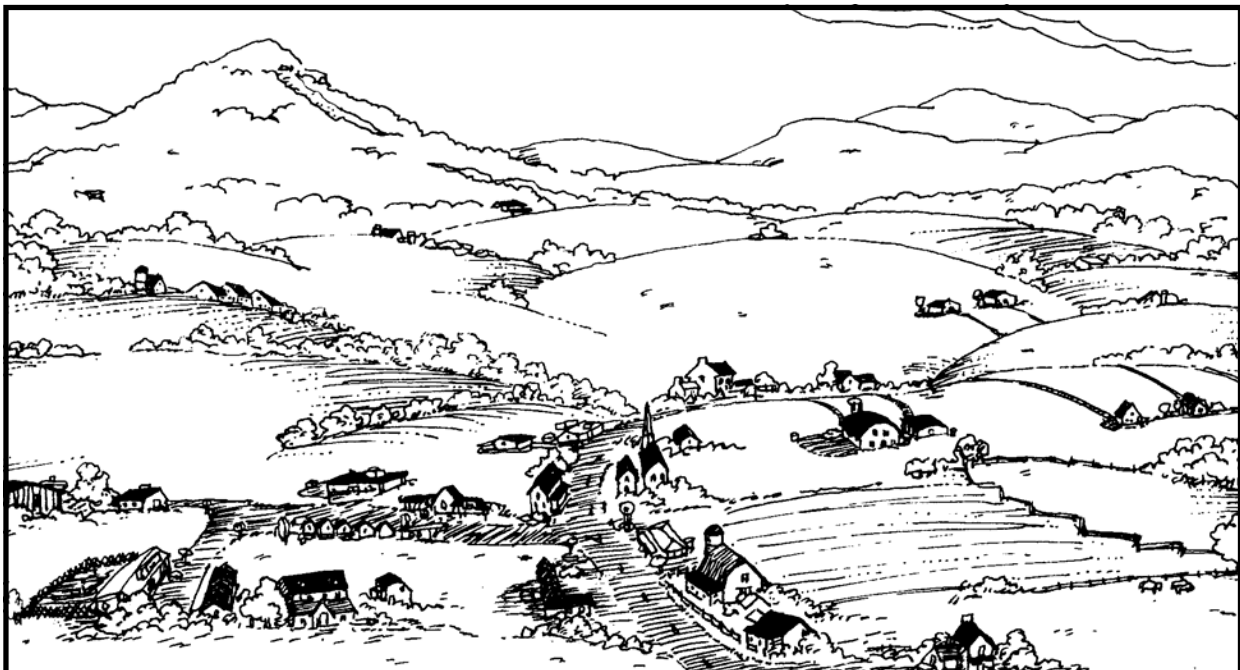
### *1.3.3 Role of the State*

The State of Vermont through its legislative and executive branches establishes the authority for local and regional planning, sets forth planning policies and guidelines, and undertakes its own planning for state capital investments, transportation, housing, social services, economic development, and environmental protection.

The Vermont legislature adopts the laws under which municipalities are authorized to plan. Chapter 117, described above, is the primary law guiding local and regional planning. Municipalities operating under charters may also be authorized to undertake planning or planning-related actions by legislative approval or charter amendments. The legislature also adopts laws that affect local and regional planning. Act 250 (the State Land Use and Development Law), environmental protection laws, taxation laws, and authorizations for grant and loan programs are examples of legislation that affect land use planning. These statutes may contain standards, policies, and guidelines that affected or participating municipalities must follow.

The executive branch of the state government is responsible for the development of the capital budget for state investments. These investments—including road improvements, municipal water pollution control and water supply facilities, local and state recreation land acquisition and development, and government buildings, such as courthouses, administrative offices and jails—affect both the way municipalities grow and the nature and pattern of their development.

State agencies also undertake planning for the activities and resources for which they are responsible. There are plans for solid waste management, air quality, transportation, housing, and outdoor recreation, to name a few. These plans are usually implemented and administered through state capital investments, regulatory programs, grant and loan programs. See Appendix D



for a list of state plans.

In addition to the planning that agencies have previously engaged in, a new role for certain state agencies was created by the 1988 amendments. Title 3 V.S.A. §§4020 and 4021 provide that the Governor identify those agencies that have programs or take actions affecting land use, and that the identified agencies prepare plans. Each agency's plan, planning process, and programs and actions must be "consistent" with the goals of 24 V.S.A. §4302, and "compatible" with the plans of municipalities with approved plans, regional planning commissions and other state agencies. This policy changes the way state agencies will have to deal with municipalities and regional planning commissions. State agencies will have to work closely with local governments and regional planning commissions to ensure that state programs and actions are compatible with policies set out in local and regional plans.

#### *1.3.4 Role of the Council of Regional Commissions*

The Council of Regional Commissions was created under 24 V.S.A. §4305 for purposes of review and coordination. The Council consists of one representative selected by each of the twelve regional planning commissions. That Council member must be a municipal representative to the region. In addition, the Governor appoints five members: three state agency or department heads, and two representatives of the public. The Council, therefore, reflects the opinions of municipal and regional planners from all areas of the state, and the perspective of high state government officials and the public as well.

The role of the Council is to provide a forum where regional and state agency plans may be reviewed for their consistency with the planning goals, and their compatibility with other plans. The Council reviews proposed regional plans and amendments to determine whether the plan contains all the elements required by law, and whether it is consistent with the planning goals and compatible with other regional plans. In addition, a town may ask the Council to review a regional plan for compatibility with an approved municipal plan. Every five years, the Council reviews adopted regional plans. Lack of funding for the council has kept it inactive since 1995. It exists in statute and appointments only, but could be activated whenever necessary to respond to an appeal.

Every two years, state agencies are to adopt or readopt their plans, and a two-step Council review is part of that biennial process. The Council reviews proposed state agency plans to determine if they are consistent with the planning goals, and compatible with the plans of the regions and other agencies. A

town may ask the Council to review a state agency plan for compatibility with its approved plan. The Council then makes comments and recommendations to the agencies. After the agencies have adopted their plans, which they are to do by January 1 of each odd-numbered year, the Council reviews the adopted plans and writes an evaluation that is sent to the Governor, the legislative leadership and the regional planning commissions. Copies are available to the public on request. The Council's review functions provide an important avenue for coordination among municipal, regional and state agency planners. With the council's functions basically suspended, the review of state agency plans has also been suspended.

The Council's dispute resolution functions are also part of the legislative scheme for a coordinated planning process. On request, the Council offers mediation services and conducts a "formal review" of certain regional planning commission decisions.

Mediation may be requested at any time when a dispute arises between a regional planning commission and a state agency or a municipality. This informal procedure allows the parties to the dispute to select a neutral third party to help manage the process by which the parties discuss their interests and try to find a solution satisfactory to all involved. The mediator has no power to impose a decision on the parties, but rather helps them articulate their concerns as clearly as possible. The parties participate actively in the search for a solution, and therefore have a vested interest in making it work.



"Formal review" may be requested after a regional planning commission has confirmed or declined to confirm a municipal planning process, acted on a request for approval of a municipal plan, or adopted its own plan. The law sets forth the people and entities that can request or become parties to a formal review, and the criteria for each review. The formal review is an administrative procedure. Parties do not need to have lawyers, although they do need to present the facts and their arguments as clearly and concisely as possible. The formal review is conducted by three members of the Council of Regional Commissions who constitute a "regional review panel." The ruling of the panel may be appealed to the Vermont Supreme Court. However, the court does not hear new facts; it merely looks at the record of the proceedings before the panel. Therefore, it is important for the parties to present their facts and arguments fully to the panel.

#### *1.3.5 Union Municipal Districts*

The original boundary lines for Vermont towns were established in the eighteenth century, often with little regard for the lay of the land or for patterns of settlement. These artificial, political delineations frequently conflict with the actual natural and socio-economic conditions. Neighboring towns commonly share transportation networks, surface water drainage areas, recreation facilities, and employment centers. Where such "communities of interest" involving two or more towns exist, it may be advisable to create a multitown planning process. The Mad River Planning District, comprising the municipalities of Fayston, Waitsfield and Warren, is an example of a multitown planning district. The regional planning commissions, described in the preceding section, do approach issues from an area-wide perspective, but they too have fixed, predetermined geographic areas that may not fit the need.

In such cases, towns may consider the authority provided them through **24 V.S.A. chapter 121** to create a union municipal district. The enabling statute is quite flexible and grants the union municipal district any powers that "are exercised or are capable of exercise by any of its participating municipalities, and are necessary or desirable for dealing with problems of mutual concern." **24 V.S.A. §4866**. Within this context, a district could be merely a forum for the discussion of issues and exchange of information, or it could be a jointly administered planning and regulatory program. By pooling resources and by drawing upon their combined population base, towns cooperating in such a district may find that they can carry out more sophisticated and comprehensive planning. It is important to emphasize, however,



that a union municipal district has only those authorities and responsibilities that its member towns choose to grant it.

### 1.3.6 Solid Waste Districts

In 1987, the legislature passed Act 78 concerning the management of solid waste in the State of Vermont. The new law established a hierarchy of priorities for the future management of solid waste: reduction in generation of waste; reuse and recycling; processing to reduce volume needing disposal; and, finally, land disposal of residuals.

The law also required that planning for solid waste management, although still a responsibility of the municipalities, be done at a regional level. Municipalities must either join a regional solid waste district or work with their regional planning commissions. The solid waste district is an example of a union municipal district. Each solid waste district is required to adopt a regional plan for the management of solid waste within the district. For towns not belonging to a solid waste district, the regional planning commission must adopt such a plan.

While the state was made responsible for developing a State Solid Waste Management Plan describing overall state strategy for implementing requirements of Act 78 and for providing technical and financial assistance to the regional entities, Act 78 clearly placed the responsibility for management and facility decisions on the regional and local entities.

The single most important planning function of the municipality is to prepare and maintain the comprehensive municipal plan. Developing the plan is usually the community's introduction to the planning process. Once embarked upon, the planning process is continual—the completion of one step will lead to the next step. Each step in the process is critical to good planning. Communities should be aware of all the steps regardless of the step in which they are currently involved.

The **first step** in this process is the *formulation of the planning program*. During this step, planners design the program for developing or amending the plan and identify sources for technical assistance. This step provides the framework under which municipalities proceed to develop their plans.

In the **second step**, planners *collect and analyze background information*. This step begins with a preliminary assessment of the community's aspirations, problems, and opportunities and is followed by intensive data gathering and study. Make an inventory

## 1.4 The Planning Process

of the natural environment, existing structures and current land uses in town, and the educational and economic resources of the community. Such information is essential for further defining the problems and opportunities confronting the municipality and for evaluating the alternative approaches to solving planning issues.

The **third step** is *establishment of goals and objectives*. Goals and objectives provide a coherent vision for the community and guide recommended actions to implement the plan.

The **fourth step** is the *preparation of the plan*. In this step the municipality will set forth its specific plans for land use, transportation, community facilities and services, and the other topics described in the planning goals. These plans will address the planning issues defined in the second step and will be designed to meet the goals and objectives developed in the third step.

An important part of the plan is the implementation program. The program defines the specific actions the municipality will take to implement the plan and carry out the goals and objectives. These actions provide the specific measurements for evaluating progress in carrying out the plan. Often the implementation program includes identified areas for further detailed study that the plan itself is unable to adequately address.

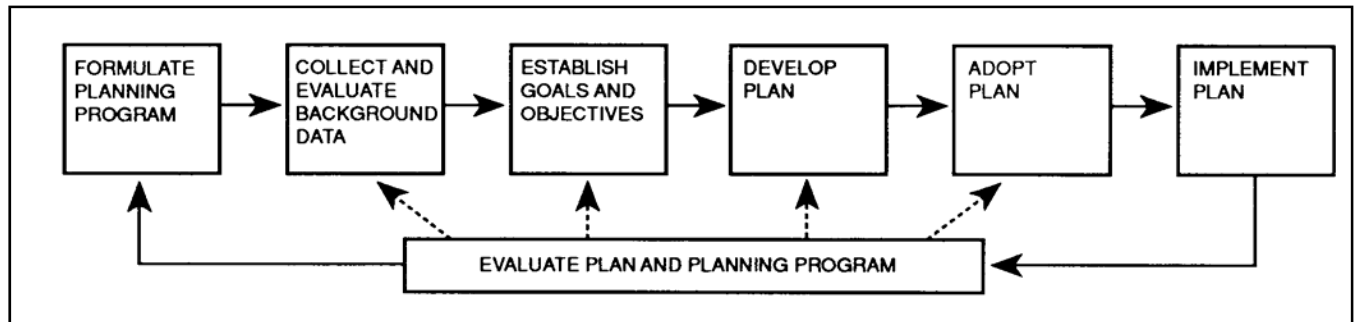
The **fifth step** in this process is *adoption of the plan*. In the past, all town plans were adopted by vote of the legislative body. Now, a town may also publish a warning for a regular or special town meeting to determine whether the voters want to adopt their plan by Australian ballot. If the voters select the Australian ballot option, the voting to adopt the plan is warned and conducted. The 1990 amendments to Chapter 117 permits a town to decide whether it will submit its plan to the regional planning commission for approval, and, if so, whether to submit it before or after the town adopts the plan.

The **sixth step** is the *implementation of the plan*. In this step, regulations are adopted, amended, administered, and enforced. Other actions, such as the adoption and maintenance of a capital program or the administration of a community development program, may occur in this step as well. Through implementation, the goals, policies, and recommendations of the plan are carried out.

Planning is an ongoing process requiring evaluation, updating, and amendment to fit changing needs and opportunities. Therefore, the cycle of the planning process begins anew following the **seventh step** *evaluation of the plan and planning program*.

Figure 1.3 illustrates the planning process.

Figure 1.3



## 1.5 A Coordinated Planning Process

The Vermont planning goals address both the planning process and the substantive issues surrounding development and preservation of resources. A major goal is to establish a coordinated, comprehensive planning process and policy framework to guide decision-making by municipalities, regional planning commissions and state agencies. A second important goal encourages citizen participation at all levels of the planning process, and seeks to assure that decisions will be made at the most local level possible commensurate with their impact. Taken together, these goals are at the heart of the planning process in Vermont.

*Municipalities* are directed by law to solicit public participation, and to hold working sessions at times and places that are intended to make it easy for people to attend and participate. When a town has developed a plan, it must send copies to neighboring towns, the regional planning commission, and, on prior written request, to business, conservation, low income advocacy and other groups. If one town has a concern with another town's plan, the towns are urged to try to resolve the dispute in an informal, amicable way. If they are unable to do so by themselves, the regional planning commissions have the specific duty of convening an ad hoc working group to address the issues.

A town also participates in the coordinated planning process as a member of its regional planning commission. By law, each regional planning commission must decide what constitutes substantial regional impact in that region. By participating in defining substantial regional impact, a municipal representative helps determine whether a project will be controlled by the regional plan or the town plan if the plans conflict.

In addition to helping coordinate the planning activities of member towns, *regional planning commissions* must communicate with each other during the planning process, and their plans must be compatible with those of adjoining regional planning

commissions.

*State agencies* are also part of this coordinated planning process. Their plans, planning process, programs and actions must be compatible with regional and approved municipal plans. A coordinated planning process depends on timely communication and assistance among towns, regional planning commissions, and state agencies. Establishing such a network may seem like a formidable task. However, most regional planning commissions consider providing planning services and technical assistance to member towns to be their primary function. Therefore, the regional planning commissions are very likely to be aware of the areas where coordination is needed among member towns and between a town and the region. In addition, the Department of Housing and Community Affairs is working with other state agencies, the regional planning commissions, and the towns to establish procedures for conveying relevant planning information between towns and state agencies. A town should also contact relevant state agencies directly to communicate about the respective planning processes of the town and the agency. Conversely, an agency should contact a town that is in the process of planning to discuss issues that are or should be addressed in both the agency and the town plan.

# 2

## The Municipal Plan

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

### 2.1 Definition of the Plan

#### 2.1.1 General Description

The municipal plan is both a thorough research document of the community's present condition and a guide for accomplishing community aspirations and intentions through public investments, land use regulations and other implementation programs. Plans are based upon surveys of existing conditions and probable future trends in the municipality, the regions, and the state. Based on these surveys and trends, plans should identify residential, commercial, and industrial uses, forests and agriculture, and public facilities that are needed. Sufficient space and appropriate locations for these uses should be provided. The implications of planned uses on adjoining communities and the region must be considered as well.

When planning land uses, the following factors should be considered:

- the capability of the land to support the uses
- the availability of community facilities and services necessary to accommodate the uses
- the need to prevent overcrowding of land and buildings
- the interrelationship and compatibility of proposed land uses with existing ones
- the need to ameliorate undesirable conditions
- the consistency with other policies of the community.

A municipality is not *required* to plan, but is *enabled* by statute to develop and adopt a municipal plan. If a community chooses to do so, Chapter 117 sets forth the elements that are required as part of a municipal plan. **24 V.S.A. §4382.**

### *2.1.2 The Elements of a Municipal Plan*

In order to adequately analyze the current condition of the community and establish a course of action for achieving a desired vision, the municipal plan must contain ten specific sections, or "elements," which cover various aspects of land use issues. These elements, required by statute, should describe in detail how identified needs and opportunities are to be addressed. The information in all the elements should also indicate how each of the 12 state planning goals listed in **24 V.S.A. §4302** will be reached. The ten required elements are: (See **24 V.S.A. §4382(a)** for full text.)

1. a statement of objectives and policies to guide the future growth and development of land, public services and facilities, and to protect the environment
2. a land use plan consisting of a **map** and statement of present and prospective land uses
3. a transportation plan (**map** and statement) showing existing and proposed highways and streets, and other transportation facilities, including parking, public transit, terminals, bike paths, and scenic roads
4. a utility and facility plan (**map** and statement) showing existing and proposed educational, recreational, and other public sites and facilities, including hospitals, libraries, power generating plants and lines, water supply, sewage disposal, refuse disposal, storm drainage, and recommendations to meet future needs for community services
5. a statement on the preservation of rare and irreplaceable natural areas, scenic and historic features and resources
6. an educational facilities plan (**map** and statement) of present and projected uses and needs
7. a recommended program for the implementation of the plan
8. a statement of how the plan relates to plans and development trends of neighboring communities and the region
9. an energy plan, including an analysis of energy resources, needs, scarcities, costs, and problems; a statement on conservation of energy; a statement on development of renewable energy resources; and a statement on patterns and densities of land use likely to result in conservation of energy
10. a housing element, including a recommended program for addressing the housing needs of low and moderate income persons.

Remember, all ten elements must be included for the plan to meet the requirements of Chapter 117. Otherwise, there is a chance that the plan, if challenged, might not be considered a legal plan. If this determination were made in court, the municipality would not be able to use their plan in Act 250 (see section 2.6.3 of this manual). It also could not be used as a basis for local zoning.

Likewise, a plan that does not include the four required maps has the chance of being considered incomplete and thus not a true plan. The four required maps are land use, transportation, utilities and facilities, and educational facilities. Other elements, such as natural and historic resources, may also include maps. (See Chapter 5 of this manual for a discussion on mapping.) The topics may be covered on separate maps or combined together on one or several maps. However they are done, the map or maps of the four required elements need to be included in copies of the plan for it to be complete.

The ten elements are the topics that *must* be covered in the plan. The community may opt to include additional topics, such as, a section on economic development or health and social services.

The elements of the plan, addressing various aspects of land use within the community and potential changes to that land use, must relate to each other. Goals, objectives or recommended courses of action covering one element should be consistent with those found in the other elements. For example, your plan may end up containing objectives from different sections that, when taken together, might need some reconciling:

- promote economic development by recruiting new businesses to town
- maintain, without expanding, existing roadway, water and sewer systems
- growth and development should not exceed capacities of local facilities and services
- restrict growth, other than detached single family homes, to the village center
- reduce the amount of traffic congestion in the village

Reconciliation should be done before the plan is adopted to avoid later confusion and aggravation when trying to implement it. How these inconsistencies are reconciled is a process of weighing priorities, based on the community's needs and desires. It should be an open process, involving the community, for these kinds of decisions involve politically sensitive judgments.

### *2.1.3 Relationship of the State Planning Goals to the Plan Elements*

As each element is addressed in the plan, the appropriate statewide planning goals should be taken into consideration. For example, in drafting the transportation element, one would be guided by *Goal 1* (historic settlement patterns), *Goal 4* (safe, convenient and efficient transportation network), *Goal 5* (protecting natural and historic features), *Goal 6* (quality air and other resources), *Goal 7* (energy efficiency), *Goal 8* (public access to recreational opportunities) and *Goal 12* (efficiency of public facilities and services). Other elements will be guided by some of the same goals along with other planning goals. Using the same twelve standards should help the different parts of the municipal plan achieve consistency as well as compatibility with other municipal, regional and state agency plans using the same standards. Table 2.1 shows how the state planning goals can relate to the elements of the municipal plan.

## **2.2 Purpose of the Plan**

The principal purpose of a municipal plan is to be a guide for the achievement of short-term and long-term community goals. To do that, a good plan will:

- define the community's vision for its future
- state and promote community values in its goals, objectives and programs
- establish a process for orderly growth and development
- balance competing interests and demands
- provide for coordination and coherence in the pattern of development
- provide for a balance between natural and built environment
- reflect regional conditions and consider regional impacts
- be consistent with statewide goals and policies
- address both current and long-term needs
- give specific guidance while retaining enough flexibility to be useful when faced with unforeseen circumstances

## **2.3 Using the Plan**

An adopted plan has the potential for many uses. Each plan will define the way it is to be used in its implementation section. The plan will be used by municipal officials (including planning commissions, selectboards, town managers), municipal departments, regional planning commissions, state agencies, the



Table 2.1  
RELATIONSHIP OF STATE PLANNING GOALS TO  
ELEMENTS OF THE MUNICIPAL PLAN

<i>Plan Element<sup>(1)</sup></i>	<i>Goals that Relate<sup>(2)</sup></i>
1. statement of objective, policies, and programs	ALL
2. land use plan	ALL
3. transportation plan	1,4,5,6,7,8,12
4. utility and facility plan	7,8,9,12
5. policies on preservation of resources	5,6,7,9,10
6. educational facilities plan	1,3,7,12
7. recommended implementation program	*** <sup>(3)</sup>
8. statement of how plan relates to neighbors and region	1,2,4,9,11,12
9. energy plan	1,4,7
10. housing element	1,3,4,11,12

---

(1) The *Plan Elements* are those contained in 24 V.S.A. §4382 (a) (1-10).

(2) The numbers listed are the goals contained in 24 V.S.A. §4302 (c) (1-12). See Figure 1.2 of this manual. The goal numbers listed under each element are the ones that *primarily* relate to that element. In addition, there are 4 “process” goals, contained in 24 V.S.A. §4302 (b) (1-4), which apply to the plan in general and the process of its development. See Figure 1.2 of this manual. Thus they relate to all 10 elements.

(3) This element does not relate directly to specific goals, but rather indirectly to all the goals through the other elements.

---

Environmental Board, as well as by residents and businesses. Among the uses of the plan are the following:

*A long-term guide:* The plan is a long-term guide by which to measure and evaluate public and private proposals that affect the future physical, social, and economic environment of the community.

*A basis for community programs and decision-making:* The plan is a guide to help achieve community goals. Information in the plan is used for developing the recommendations contained in a capital budget and program or an impact fee program, for establishing a community development program, and for providing direction and content of other public and private local initiatives, such as, farmland protection, recreation development and housing.

*A basis for municipal regulatory actions:* The plan serves as a foundation for the provisions of zoning regulations, subdivision regulations, an official map, shoreland bylaws, and flood hazard area bylaws, and as a guide for the decisions made under these regulations.

*A source of information:* The plan is a valuable source of information for local boards, commissions, citizens and businesses, and other governmental organizations, such as, neighboring towns, state agencies and regional planning commissions.

*A source for planning studies:* Few plans can address every issue in sufficient detail. Therefore, many plans often recommend further studies to develop policies or strategies to meet a specific need.

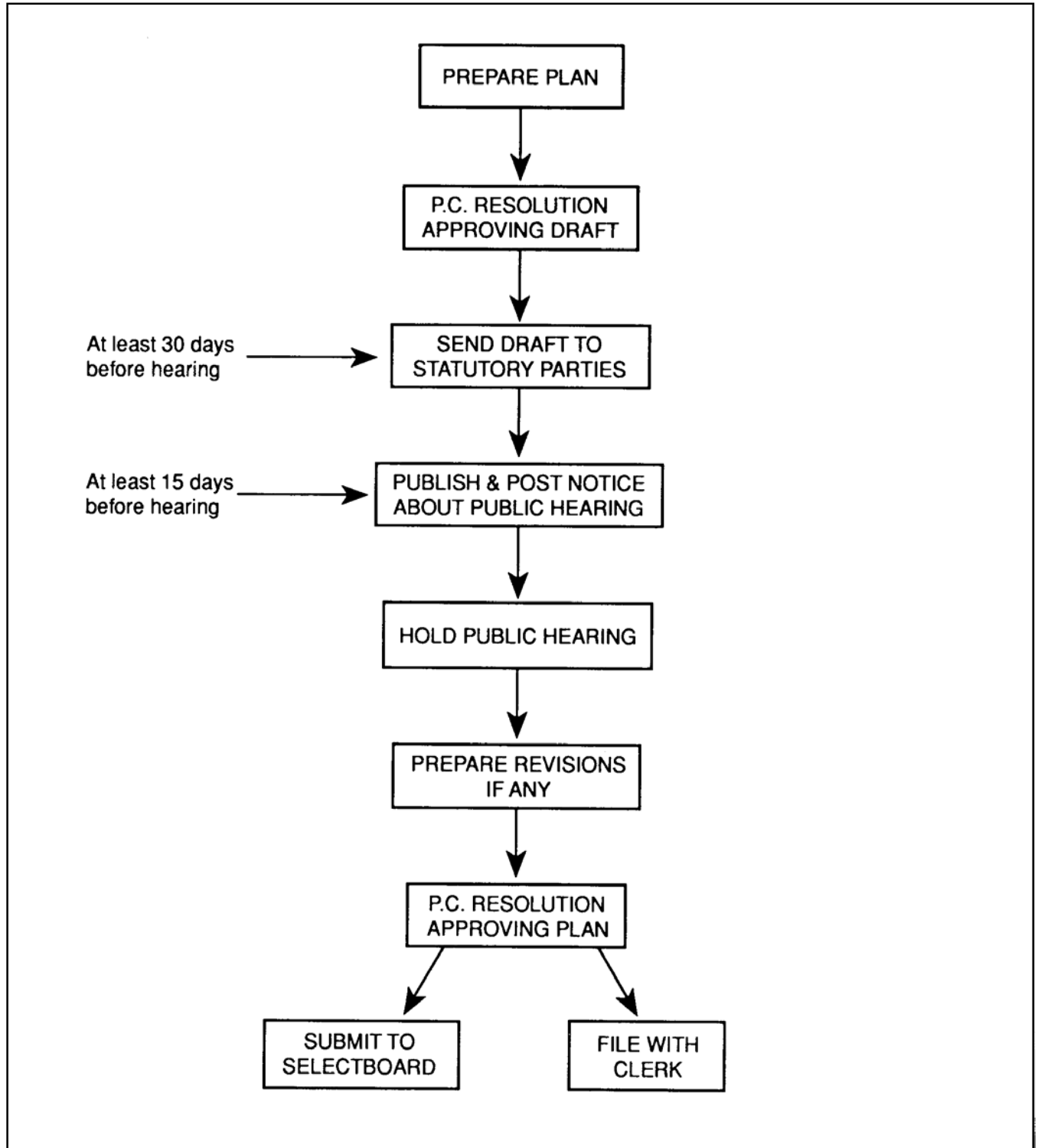
*A standard for review at the state and regional levels:* Act 250 and other state regulatory processes identify the municipal plan as a standard for review of applications. Municipal plans are important to the development of intermunicipal, regional and state agency plans and programs.

## 2.4 Preparation and Adoption of the Plan

### 2.4.1 Responsibility of the Planning Commission

The planning commission is responsible for preparing the plan, distributing the plan, holding public hearings on the plan, and submitting it to the legislative body for consideration. The planning commission must comment or prepare a report on any changes proposed by the legislative body. The planning commission must follow the specific requirements for preparation of the plan set forth in **24 V.S.A. §4384**. (See Figure 2.1 and Appendix A.)

Figure 2.1  
PLAN ADOPTION  
RESPONSIBILITIES OF THE PLANNING COMMISSION



### *2.4.2 Responsibility of the Legislative Body*

Chapter 117 spells out the official role of the legislative body in developing and adopting the plan. According to the statute, the legislative body is responsible for reviewing the plan, holding public hearings on the plan, and adopting the plan. The legislative body may make changes to the plan in accordance with provisions of Chapter 117. (See Figure 2.2 and Appendix A.) **24 V.S.A. §4385.**

### *2.4.3 Adoption by Australian Ballot*

If the voters of a municipality choose, either at a regular meeting, such as Town Meeting, or at a specially warned meeting, the municipality may adopt or amend its plan by Australian ballot. Once the town has decided to use this method of adoption, it must be used every time unless it is rescinded by the voters. Again, the meeting to rescind, either at a regular meeting or at a special one, must be properly warned according to **17 V.S.A. chapter 55.**

In order for adoption by Australian ballot to be effective, the selectboard and planning commission should take some precaution. Particular care must be made to include the public throughout the planning process so that the voters are informed of all the issues and impacts of the plan. In addition, remember that adoption by Australian ballot is a two-step process: the voters cannot vote on whether to adopt the plan until they have first chosen, by Australian ballot, to use this method of adoption.

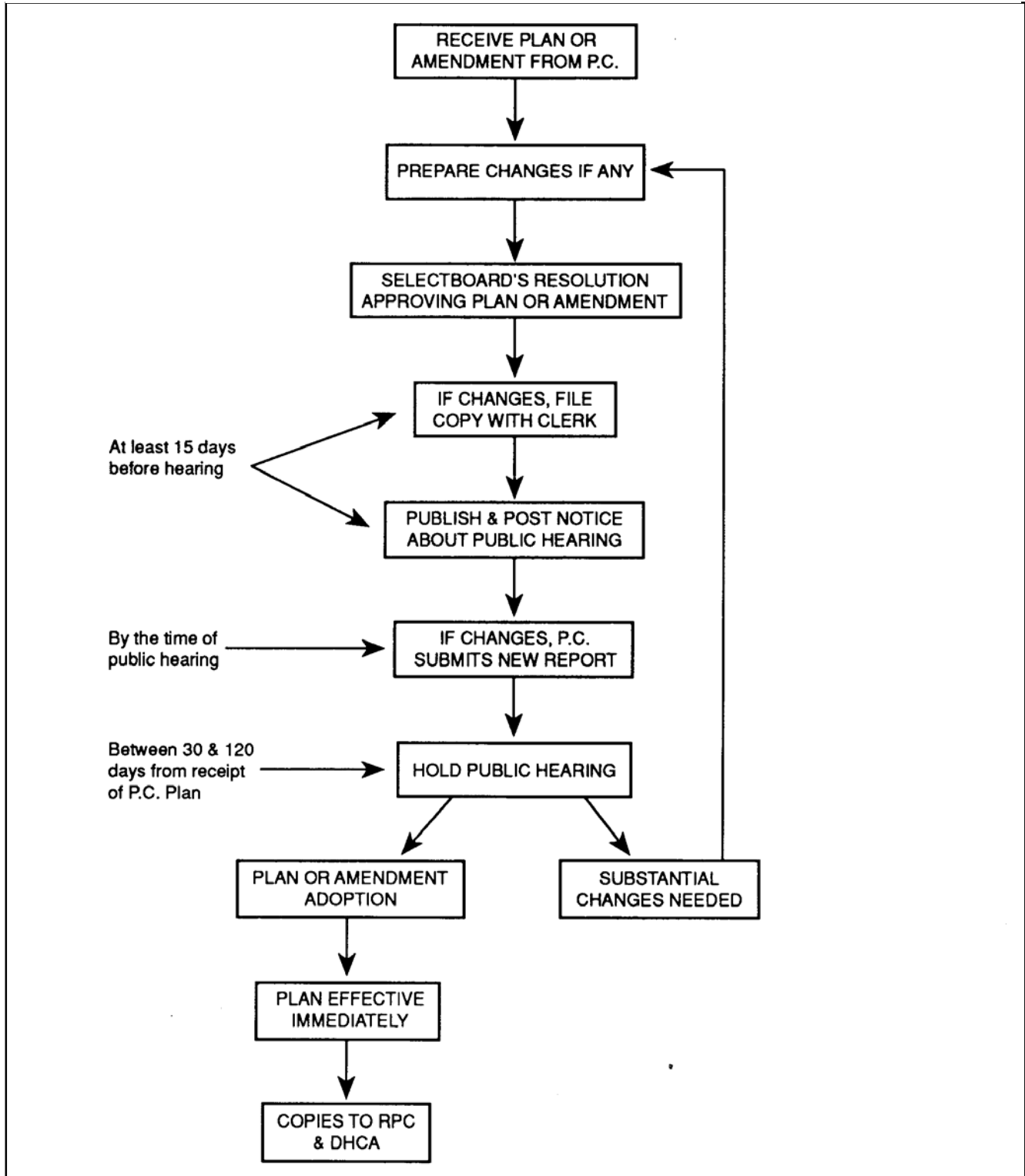
### *2.4.4 Public Participation*

Vermont law requires that at least two public hearings (a planning commission hearing and a legislative body hearing) be held to ensure public involvement in developing plans before they are adopted. Larger municipalities must hold at least three hearings. In addition, to generate support and understanding throughout the planning process, more active community participation is essential.

Chapter 117 discusses citizen participation in two places. In **24 V.S.A. §4302(b)(2)**, citizen participation is encouraged at all levels of the planning process. **Section 4384(a)** directs the planning commission to solicit participation of local citizens and organizations at the outset of the planning process, as well as throughout the process, by holding informal working sessions.

Citizen participation is vital for assisting planning commission decisions concerning the plan and for promoting community

Figure 2.2  
PLAN OR AMENDMENT ADOPTION  
RESPONSIBILITIES OF THE LEGISLATIVE BODY



understanding of planning needs and issues. Citizens who are not well informed can present obstacles to the implementation of the plan through bylaw rejection and non-support of local programs. Developing a good plan requires a well-thought-out process for public participation. Chapter 4 of this manual contains a discussion on ways to involve the public in developing the plan.

#### *2.4.5 Effective Date*

The plan becomes effective immediately upon adoption by the legislative body or voters. **24 V.S.A. §4385.**

#### *2.4.6 Adoption of Regional Plan by Municipality*

Chapter 117 enables a municipality to adopt a regional plan or a portion of a regional plan as its municipal plan. The regional plan must have been prepared and adopted by the regional planning commission before it can be adopted by a municipality. The adoption procedures are the same as for a plan prepared by a local planning commission. **24 V.S.A. §4349.**

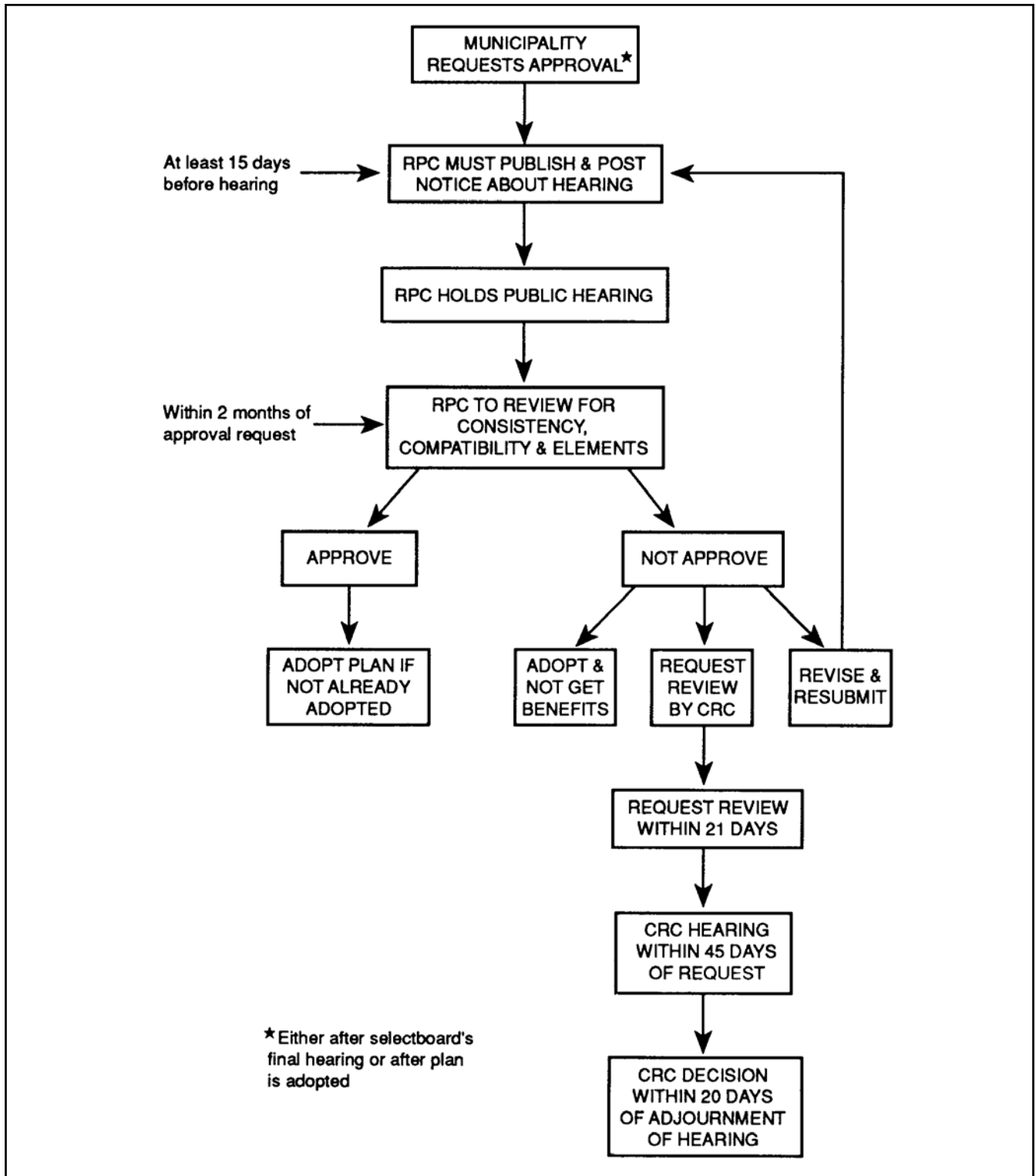
#### *2.4.7 Municipal Plan Approval*

If a municipality wishes to have its plan reviewed by the regional planning commission for consistency with the statewide goals and compatibility with the regional plan and approved municipal plans within the region, it may submit the plan to the regional planning commission after the last hearing by the legislative body, either before or after it is adopted. Review for approval is NOT required, but there are certain benefits a municipality can receive if its plan has been approved.

A town must have an approved plan to be confirmed. Confirmation is required for a town to receive state planning funds or levy impact fees. A town with an approved plan can request a review by the Council of Regional Commissions of a state agency plan for compatibility with its plan. However, even if a town does not request such a review, state agency plans must by law be compatible with approved municipal plans. **24 V.S.A. §4350.**

The law spells out the criteria under which the regional planning commission will conduct the review, and a time frame for its completion. The regional planning commission must hold a public hearing before rendering its decision. (See Figure 2.3 and Appendix A.)

Figure 2.3  
MUNICIPAL PLAN APPROVAL  
OPTIONAL



If the plan is approved or disapproved, the municipality's legislative body has three choices:

- They can modify the plan, based on recommendations, and resubmit it to the regional planning commission for review. If the plan was already adopted, it would have to go through the complete amendment process described in **24 V.S.A. §§4384 and 4385**; if it had not been adopted, it would need to go through only the stage described in **§4385**, OR
- They can ignore the decision and adopt the plan anyway, if not already adopted, OR
- They can request a formal review by the Council of Regional Commissions. Chapter 117 outlines the process of formal review in **24 V.S.A. §4476**.

An adopted plan that has not been approved by the regional planning commission is still a valid plan. It can be used as a basis for bylaw development or amendment; it can be used to guide municipal decisions, and it has standing in an Act 250 hearing, unless the project has significant regional impact (see Section 2.6.3 of this manual).

## **2.5 Maintenance and Amendment of the Plan**

### *2.5.1 Responsibility of the Planning Commission*

The planning commission is responsible for the maintenance and amendment of the plan. The plan automatically expires five years after the date of adoption. Before the plan expires, the planning commission must review and update the information on which the plan is based. Using this information, the planning commission must then decide whether the plan is still applicable or is in need of major change. If the plan is still applicable, the municipality may wish to readopt it rather than develop a new one. The readopted plan needs to include the updated data and must go through the same adoption procedures as a new plan. **24 V.S.A. §4387**.

During the five years that the plan is in effect, the planning commission may decide to make adjustments to the plan in its findings, base data, and implementation strategies. These adjustments are called amendments. Usually, overall policies guiding the future direction of growth in the community should not require amendment during this time. When a plan is amended, the planning commission holds a public hearing on the proposed amendment, not the whole plan. Whether the amendment is



adopted or not, the plan as a whole remains in effect. The expiration date of the plan is not extended with the adoption of an amendment, and the amendment expires with the plan; it does not have its own five-year lifespan. The expiration date is extended another five years only when the whole plan is readopted or a new one is adopted.

Municipal planners should keep in mind that an expired plan cannot be amended. It must either be readopted or a new plan developed and adopted. Although the municipal bylaws continue in effect after the plan expires, they cannot be amended until the plan is readopted or a new one is adopted. **24 V.S.A. §4387.**

### *2.5.2 Amendments Proposed by Other Parties*

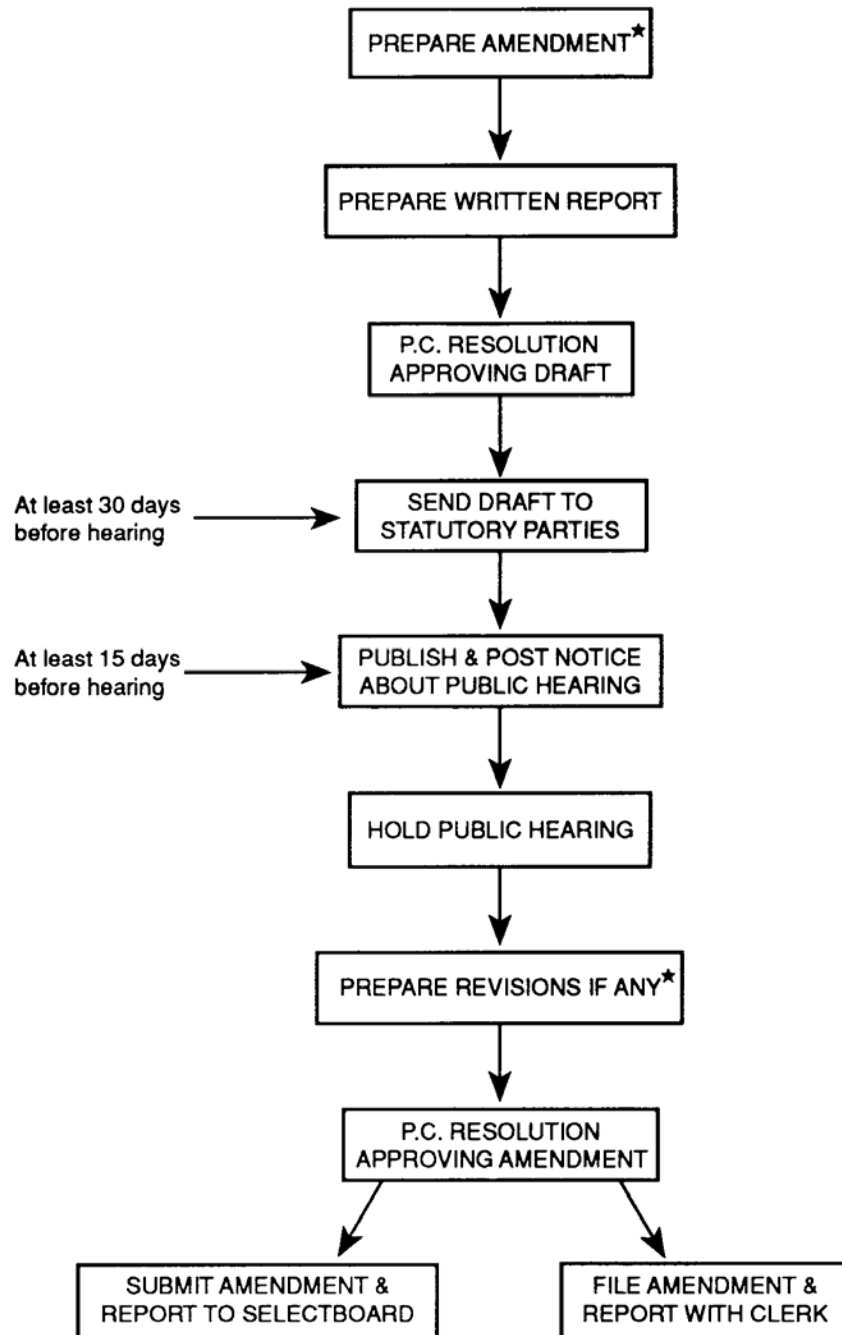
Persons or bodies other than the planning commission may propose amendments to the plan. The planning commission has the option to decide whether to hold a hearing on an amendment and can make changes to the amendment—except when the amendment is supported by a petition signed by 5 percent or more of the registered voters.

In cases where the amendment is supported by such a petition, the planning commission must proceed promptly to hold a hearing on the amendment, to prepare a report on the amendment, to distribute copies of the amendment, and to submit the amendment to the legislative body in accordance with Chapter 117. The planning commission may not alter the amendment except to correct technical deficiencies, such as, grammar, spelling and punctuation. The legislative body must also hold a hearing on the amendment but is under no obligation to adopt the amendment. **24 V.S.A. §§4384, 4385.**

### *2.5.3 Written Reports on Amendments*

Chapter 117 requires the planning commission to prepare a written report on any proposed amendment. This report must address how consistent the amended plan is with the statewide goals found in **24 V.S.A. §4302**. (See figures 1.1 and 1.2 for a copy of the goals.) When a land use change is involved, the report must cover probable impact of the change on the surrounding area, long-term cost or benefit, amount of vacant land available for the proposed purpose, suitability of the area in question, and appropriateness of the size and boundaries of the proposed area. Chapter 117 describes the details of each point the report must cover. **24 V.S.A. §4384.**

Figure 2.4  
AMENDMENT ADOPTION  
RESPONSIBILITIES OF THE PLANNING COMMISSION



★ If proposed Amendment is supported by a petition signed by at least 5% of the voters, the Planning Commission may correct only technical errors.

#### *2.5.4 Readoption and Amendment Procedures*

To readopt or amend a plan, the municipality follows the procedures already outlined in Section 2.4 of this manual for adoption of the plan. (See Figures 2.4, 2.1 and 2.2 and Appendix A.)

#### *2.6.1 Proper Adoption Procedures*

If the plan is to remain in effect and withstand legal challenges, the municipality must follow the adoption procedures for the plan set forth in Chapter 117. Plans have been invalidated by courts because municipalities have failed to follow these procedures. To avoid such challenges, municipalities should carefully review the provisions of **24 V.S.A. §§4384, 4385, and 4387**. To determine how time is to be computed, refer to **§4303a**. Municipalities should utilize the clerk's certification of adoption or amendment in Appendix A to record the steps taken. A good record of adoption actions, including careful minutes of resolutions adopted and actions taken, will minimize the threat of legal challenges.

#### *2.6.2 Foundation for Municipal Regulations and Programs*

To adopt or amend zoning regulations, subdivision regulations, an official map, a capital budget and program, and impact fees, Vermont municipalities must adopt and have in effect a municipal plan. According to Vermont law, the bylaws must be consistent with the plan and must have the purpose of implementing the plan. **24 V.S.A. §4401(a)**.

Because of this requirement, it is important that the plan contain a good foundation for the specific provisions the municipality wants to include in its bylaws. The data in the plan, the analysis of the issues, and the plan goals, objectives, and policies must provide a clear and logical basis for regulatory steps the community will take.

For a community to adopt a capital budget and program, the utilities and facilities element of the plan must describe current facilities, expected needs, and recommendations for meeting future needs. **24 V.S.A. §4404a**.

If a municipality does not have a solid basis in the plan for the regulations it puts into effect, these regulations can be challenged in court. The municipality must be able to demonstrate how its actions relate to an integrated, coordinated, and coherent plan for the community's future.

## **2.6 Legal Considerations**

### *2.6.3 Use of the Plan in Act 250*

Developments and subdivisions required to obtain a permit under Act 250 must conform with a duly adopted municipal or regional plan. The goals and policies in the plan must, therefore, be clear and detailed enough for such conformance to be determined. Although the plan is not a regulatory document and therefore does not need the same level of detail as a zoning regulation, both recommendations and objectives need to be specific and measurable. Not only will specificity be helpful for Act 250, but it will also help ensure local implementation of municipal policies. Several recent environmental board decisions, such as in *re:Molgano*, have further clarified that, if the town plan is found to be confusing on a point in question, the commission or board will turn to the town's zoning regulations to see how the town's intent has been implemented.

To the extent the provisions of a regional and a municipal plan conflict, the regional plan shall be given effect in Act 250 proceedings *if* the project under consideration would have a substantial regional impact. Municipalities should be aware that if they do not have a duly adopted local plan in effect, the project must be found to conform to the regional plan by the district environmental commission.

# 3

## The Municipal Planning Commission

*None of us is as smart as all of us.*  
—Pogo

Most municipalities in Vermont have municipal planning commissions. The volunteer membership on these commissions changes frequently as terms expire or members resign. New members need information on the role of the commission, its powers and duties, its organization, available technical assistance, and finances. This chapter is designed to inform new members, existing members, the legislative body, and the general public about the municipal planning commission.

### 3.1.1 Membership

A planning commission, consisting of three to nine voting members, may be created at any time by the legislative body of the municipality. A majority of the members must be residents of the municipality. There are two ways that members may be selected. Usually, the legislative body (selectboard, city council, aldermen, or trustees) appoints all members and fills all vacancies on the planning commission. The 1990 amendments to Chapter 117 permit the voters in a municipality to choose to elect planning commission members. If the commissioners are elected, the legislative body may still fill a vacancy until the next municipal election, or a special election may be held. By unanimous vote, the legislative body may remove appointed commissioners, but it may not remove elected planning commission members. However members are selected, they should represent all geographic areas of the municipality, should express a variety of interests and bring a range of skills to the commission. The interests of any single group should not be favored. **24 V.S.A. §§4321, 4322 and 4323.**

### 3.1 Designation of the Planning Commission

*3.1.2 Terms of Membership*

Terms of the commission members are established by **24 V.S.A. §4323**. The terms of appointment in a municipal charter prevail over the provisions for appointment set forth in Chapter 117 provided that the charter specifies the precise terms for the planning commission members.

*3.1.3 Ex-officio Members*

The following persons shall be ex-officio and non-voting members of the planning commission:

- members of the selectboard of a rural town
- not more than two elected or appointed officials of an urban municipality chosen by the legislative body

A rural town is one with a population of less than 2,500 persons as of the date of the most recent U.S. Census. An urban municipality is a city, an incorporated village or a town that is not a rural town.

If a municipality has an energy coordinator designated under **subchapter 12 of chapter 33 of title 24**, he or she may be a non-voting, ex-officio member of the planning commission as well. **24 V.S.A. §4322**.

*3.1.4 Joint Zoning Board of Adjustment and Planning Commission*

According to **24 V.S.A. §4461**, the planning commission may serve as the zoning board of adjustment for a rural town or urban municipality. Municipalities that have small populations and little permit activity sometimes choose this option. However, this joint function is not recommended in most communities, because planning commissioners in communities with much development activity may find themselves overburdened if they also serve as the zoning board of adjustment. Hearing zoning appeals may leave little time for the planning commission to carry out its regulatory responsibilities, such as site plan review, and still perform its overall role of guiding the future growth of the community.

*3.1.5 Joint Planning Commissions*

If a town has one or more incorporated villages within its boundaries, the legislative body of each municipality may designate one planning commission to serve the town and village or villages.

The arrangement may be terminated at any time by the legislative body of any participating municipality. **24 V.S.A. §4327.**

### *3.1.6 Planning Department in Urban Municipality*

In an urban municipality (a municipality with a population of 2,500 or more persons, according to the most recent U.S. Census data), the legislative body may create a planning department headed by a planning director instead of a planning commission. Communities that choose this approach will most likely hire professional planners to staff the department. The department may have the full powers of a planning commission. A planning commission also may be appointed by the legislative body or elected to advise the planning department. **24 V.S.A. §§4321 and 4323.**

### *3.1.7 Development Review Board*

A development review board is a single board which can be created to perform all the regulatory review functions for the town. It replaces the zoning board of adjustment and takes over the subdivision and site plan review role of the planning commission. This permits the planning commission to focus on its planning function as a drafter of the town plan and land use regulations. **24 V.S.A. §4461.**

As leaders of the community on planning matters, the members of the planning commission have many important roles.

One significant role is to represent all members and interests of the community. In this capacity, the commission should seek the maximum feasible participation by other public officials, interest groups, civic groups, and citizens to discuss joint and competing interests. The commission must be willing to listen to ideas and to solicit comments. The commission must be cautious in weighing the comments of those who are active in the planning process with the interests of those who do not participate. Above all, members must put the general welfare of the community above any personal interests.

The planning commission is responsible for looking out for the general welfare of the community and for bringing a long-term perspective to short-term strategies and day-to-day decision-making. The planning commission must be careful not to devote

## **3.2 Role of the Planning Commission**

all of its time to regulatory review when long-range planning and broader community interests also require its attention.

The planning commission also has a responsibility to educate the public about the purposes of planning and to publicize and seek comment on specific recommendations to address local planning issues. This educational process occurs through public hearings and informational meetings, through discussions with permit applicants, through coordination with other local officials, through written materials and newspaper articles, and through day-to-day contact with the public. To be effective, commissioners must be well informed about the community, the content of planning documents, and the rationale for plans, implementation strategies, and regulatory decisions.

In addition, the planning commission has a technical role in proposing courses of action, including the comprehensive plan. The commission also must review and recommend actions on specific proposals put forth by public interest groups and the private sector. To carry out this role effectively, commission members need to inform themselves about the planning process, organize themselves, take advantage of training programs offered to them, and seek technical advice to further their understanding.

Finally, the planning commission has a regulatory role in its quasi-judicial review of project applications. Chapter 117 delegates the responsibility of conducting site plan, design, and subdivision review to the planning commission, unless a development review board has been created by the municipality to carry out those regulatory functions. In carrying out this role, the planning commission must be very careful to follow the proper rules of procedure to maintain the integrity of the process and to avoid costly legal challenges. See Section 3.4 of this manual for a discussion of the organization and procedures of the planning commission.

The planning commission's regulatory role includes party status in the Act 250 process as well, and as such may testify on projects under review and may appeal decisions. **10 V.S.A §§6084(a) and 6085.**

### **3.3 Powers and Duties of the Planning Commission**

The powers and duties of the planning commission are set forth in **24 V.S.A. §4325**. These powers include major responsibilities such as of preparing and implementing the municipal plan, as well as the authority necessary to carry out activities related to these responsibilities, including undertaking studies, entering upon land,



and hiring technical assistance. The planning commission is specifically authorized to do the following:

- prepare, maintain, and amend the municipal plan and bylaws
- administer the subdivision regulations
- undertake reviews under the zoning regulations, including site plan review, planned unit and planned residential development plans, design review, and approval of rights-of-way for parcels not having frontage on public roads
- participate in the review of applications under Act 250
- prepare and annually update a capital budget and program
- review adjacent municipal plans, the regional plan, and state agency plans for compatibility with their own municipal plan
- conduct studies and make recommendations on land development, urban renewal, transportation, community development, beautification, design, historic and scenic preservation, conservation of energy, and development of renewable energy resources
- participate in regional planning programs
- retain staff and consultant assistance
- recommend codes and standards, including building, plumbing, fire, electrical and housing codes, and specifications for streets and related public improvements
- recommend fees to the legislative body
- hold public meetings
- enter upon land to make site inspections

### 3.4 Organization and Procedures of the Planning Commission

#### 3.4.1 Officers

The planning commission is required to elect a chairperson and a clerk. The chairperson is responsible for the overall organization and conduct of the commission. The clerk is typically responsible for minutes of meetings, filing of public notices, notification of applicants, and distribution of proposed documents in accordance with the provisions of Chapter 117. **24 V.S.A. §4323(b).**

#### 3.4.2 Rules

The planning commission is required to adopt rules for the performance of its function. These rules are to be adopted at the commission's organizational meeting by a majority vote of the members present. If a commission does not have a set of rules, it

should adopt them as soon as possible. They are necessary to insure the smooth operation of the commission. Model rules are available from the Secretary of State, but each municipality should carefully adapt them to suit local needs. **24 V.S.A. §4323(b).**

Planning commission rules should cover the following:

- powers and duties of the planning commission
- responsibilities of the officers
- procedures for scheduling and conducting regular commission meetings
- procedures for scheduling and conducting public hearings
- public notice for commission meetings and public hearings
- preparation of findings of fact for permit applications
- notification of applicants
- conflicts of interest
- minutes of meetings
- record-keeping
- handling of expenses
- annual reports
- voting procedures

Except for the vote required for adopting rules, planning commissions must follow **1 V.S.A. §172**, which states that a majority of all of the commissioners—rather than a majority of those present—must approve any action.

### *3.4.3 Meetings*

All meetings of the planning commission are open to the public. The commission must inform the public when and where the meetings will occur. A schedule of regular planning commission meetings must be posted in a public place. Any changes to this schedule, or notice of special meetings other than public hearings, require posting in a public place of the time, date, and place of the meeting at least 24 hours in advance. All public hearings must follow the notice requirements of **24 V.S.A. §4447**.

Planning commissions are subject to Vermont's Open Meeting Law, **1 V.S.A. §310-314**. Every planning commission should be familiar with these provisions. It is especially important for a planning commission to understand that it may hold an executive session only to consider specific issues that are set out in **1 V.S.A. §313**. Planning commission members should read that section carefully each time they consider holding an executive session.

Planning commission meetings, like all public meetings, must comply with the *Americans with Disabilities Act* (ADA), as required by both state and federal law. Meetings, as well as written materials, must be accessible upon demand to all persons with disabilities. This means that a handicapped person must be able to enter the building and the meeting room, and have the use of a rest room. On request, people with hearing, speech and visual impairments, as well as mobility difficulties, must not be denied participation in a planning commission meeting or hearing. See Appendix D for a list of guides that are available to help provide for barrier-free meetings.

#### *3.4.4 Records*

The planning commission must keep a record of its business, including all meetings, transactions, and decisions. The records must be on file and available to the public. Most municipalities retain these records in the clerk's office or in the office of the planning department. **24 V.S.A. §§4323 and 4326.**

As a quasi-judicial body that approves and disapproves applications, the planning commission must keep accurate records of evidence presented at hearings, resolutions of the commission, and findings of fact on which the decisions are based. The record must also include any conditions that are required in a decision.

#### *3.4.5 Annual Report*

Every planning commission must make an annual report to the municipality. This report should summarize the commission's activities for the year, including current issues, trends, and needs for future action. These reports are often circulated to the residents through the town, village, or city annual report. The commission should produce a complete and informative statement. **24 V.S.A. §4326.**

Because a municipal planning commission usually is composed of lay people, preparation of a plan and implementation of the bylaws often requires the assistance of others: professional staff, regional planning commission staff, or private consultants who work under the commission's direction. Assistance may also be obtained from federal, state, county, and regional organizations and from educational institutions. Chapter 4 of this manual describes the sources for technical assistance in preparing the plan.

## **3.5 Technical Assistance**

### **3.6 Expenses**

A planning commission may incur costs for the "necessary and reasonable" expenses of its members, for professional assistance, and for meeting notices and mailings. To cover these costs, the municipality is authorized to appropriate funds for the planning commission. Many municipalities use permit application fees to cover costs for processing applications. The planning commission also may accept funds from federal or state governments and from private sources. **24 V.S.A. §§4322 and 4326.**

See Section 6.4 of this manual for information on funding sources.

# 4

## Organization of the Planning Program

*Anything that gets done in Vermont is a result of lots of effort.*  
—Dorothy Canfield Fisher

A planning program provides a systematic way for the planning commission to develop or revise the plan. The program will provide a blueprint for action and will insure that progress is made in an orderly and logical way.

To get started on developing a plan, the municipality must determine whether the plan or a major revision to the plan is needed. This decision is usually made by the planning commission. However, the impetus for the decision sometimes comes from other sources. The selectboard may decide that planning is needed to manage the town better. A group of citizens concerned about the changes occurring in the community may demand an assessment of the town's problems and the development of a plan to remedy them. The municipal planning staff may find the existing plan outdated and an insufficient guide to resolving current issues.

Whatever the source of the demand for the plan, it is the planning commission that must be responsible for its development. This chapter describes how the planning commission can organize itself to develop the plan, discusses how a planning program should be set up, what should be considered in a major revision to an existing plan, and what sources are available for assistance.

Planning commissioners should keep in mind that a plan is never really a finished product, but rather a cut in time, indicating where the town is at within a continuous process. As imperfect as a plan may seem to the commissioners who developed it, it is better than no plan in providing some guidance for community leaders. Since the plan will be updated at least every five years, if not more frequently, there is ample opportunity to refine it.

### 4.1 Getting Started

## 4.2 Designing the Planning Program

### 4.2.1 *Outline the Process*

The first step in designing the program is to outline the process that your community will follow. Each community should develop its own process based on how citizens will be involved, how much information is available, the extent of revisions required, and specific objectives for the new plan. For example, some communities may have an extensive public participation effort—through forums, surveys, media presentation—at the beginning of the process. Others may delay public participation until they have prepared maps and collected background data. A community may decide that the best approach is to divide the town up into planning areas to focus on neighborhood issues. If this were the case, town planners would want to establish the boundaries of these planning areas early in the process.

Regardless of the specific approach of each municipality, there are general steps that every process for the development of a plan should contain:

1. preliminary assessment of community aspirations, issues, and needs
2. collection and analysis of background information
3. establishment of goals and objectives
4. development of the plan
5. preparation of an implementation program
6. public review and comment
7. adoption process

### 4.2.2 *Set the Work Schedule*

The municipality should decide how each step in the process will be accomplished. What are the specific tasks involved? Who will be responsible for them? How much time should be allowed? Chapter 5 will explain the tasks involved in these steps in more detail. The planning commission should review that chapter and then itemize the tasks that will meet their specific needs. Next to each task the commission should list who will be responsible for carrying it out and the estimated time it will take. See Table 4.1.

It is important to be clear about what the planning commission will do and what individual commissioners, special subcommittees, staff, other technical advisors, and consultants will do. Commissioners may be assigned the responsibility for conducting surveys, doing research, holding informal discussions, and drafting sections

of the plan. Before assignments are made, the municipal commission should contact the regional planning commission to discuss what assistance is available. If the municipality has its own planning staff, consider the staff's existing work load and ability to undertake specific tasks. If it appoints subcommittees, the planning commission should make clear what is expected of them and when their work is due. The commission should stay in close contact with the committees by assigning a commission member to the committee or by holding regular joint sessions.

Table 4.1  
SAMPLE WORK SCHEDULE  
FOR TOWN PLAN

STEP	TASK	RESPONSIBILITY	SCHEDULE
<i>Preliminary Assessment</i>	<ol style="list-style-type: none"> <li>1. Prepare for public discussion</li> <li>2. Hold public discussion</li> <li>3. Hold planning commission meeting; identify issues</li> </ol>	PC/RPC PC/RPC PC/RPC	Weeks 1, 2 Week 3 Week 4
<i>Collect and Analyze Data</i>	<ol style="list-style-type: none"> <li>1. Town history</li> <li>2. Population, housing, economy, fiscal conditions</li> <li>3. Base map preparation</li> <li>4. Physical conditions</li> <li>5. Land use and special features</li> <li>6. Community facilities and services</li> <li>7. Summary—needs and options</li> </ol>	Historical Society RPC Tax Map Consultant Intern, RPC Intern, RPC, PC PC/RPC PC/RPC	Weeks 5-8 Weeks 5-8 Weeks 1-4 Weeks 9-12 Weeks 9-12 Weeks 9-12 Weeks 13-16
<i>Goals and Objectives</i>	<ol style="list-style-type: none"> <li>1. Prepare draft goals</li> <li>2. Hold public discussion</li> <li>3. Finalize goals</li> </ol>	PC/RPC PC/RPC PC	Weeks 17,18 Week 20 Week 22
<i>Preparation of Plans</i>	<ol style="list-style-type: none"> <li>1. Prepare land use plan</li> <li>2. Prepare transportation plan</li> <li>3. Prepare community facilities plan</li> </ol>	PC/RPC PC/RPC PC/RPC	Weeks 23-26 Weeks 27-30 Weeks 31-34
<i>Implementation Program</i>	<ol style="list-style-type: none"> <li>4. Identify actions</li> <li>5. Schedule actions and estimate</li> </ol>	PC/RPC PC/RPC	Weeks 35-36 Weeks 37-38
<i>Public Discussion</i>	<ol style="list-style-type: none"> <li>1. Hold neighborhood discussions</li> <li>2. Review comments and amend plan</li> </ol>	PC members PC/RPC	Weeks 35-36 Weeks 42-45
<i>Adoption Process</i>	<ol style="list-style-type: none"> <li>1. Planning commission notice, hearing, and review</li> <li>2. Selectmen's review and hearing</li> <li>3. Selectmen adopt</li> </ol>	PC Selectmen Selectmen	Weeks 46-49 Weeks 54-57 Week 57

This schedule assumes that the town obtains assistance from the regional planning commission and a student intern for data collection, mapping, and plan preparation.

PC—Planning commission      RPC—Regional Planning Commission

The work schedule will clarify what each person or group's responsibility will be and the approximate time the process will take. The community may wish to coordinate the schedule with established community events, such as a town meeting or a major public gathering. The mandatory time requirements for adoption of plans in **24 V.S.A. §§4384 and 4385** should be considered if the community's objective is to have the plan in effect by a certain date. Generally, however, the main purpose of a schedule is to insure that progress is made.

#### *4.2.3 Determine the Planning Period*

It is important to determine what time period the plan will cover. Five years? Ten years? Twenty years? According to **24 V.S.A. chapter 117**, plans expire every five years. This requirement does not limit a plan to a five-year period, however. Most plans cover immediate, short-range needs as well as long-term objectives. Plans should not cover too long a period or they will not be used. Neither should plans be short-sighted or the actions of today could interfere with solutions to long-range needs. The planning period will vary from community to community depending on local and regional conditions and trends in growth and development.

The planning period also varies for different objectives within a community. The parts of a community exist in varying time cycles. Trees can take up to 100 years to mature. Road construction takes a much shorter period of time. The fact that some issues have longer timeframes than others should be taken into consideration when planning.

#### *4.2.4 Prepare a Public Participation Program*

The people in the community will benefit from planning and will shape the community's future. Therefore, it is essential that they be involved in designing the plan. To begin with, the people can articulate the community's values on which the plan is based. They also know most about community needs. They perceive what works well and what doesn't work in the community today. This participation in the exchange of information and ideas will result in more effective actions and broader support. By involving people in the planning process, the commission will make the plan a more pertinent and usable document. The people will also have a greater



sense of involvement and control in the community's future. Their commitment and understanding will help in adopting and implementing the plan.

The planning commission must weigh what it learns from the public participation process with other factors. Stated community needs must be balanced with budget constraints; competing interests must be balanced; and special interest groups and neighborhood issues should be evaluated along with broader municipal interests.

### WHO SHOULD BE INVOLVED?

Who should be involved? Everyone. Changes made to the statute in 1988 significantly increase the focus on citizen participation. In preparing a plan, the planning commission should solicit involvement throughout the process. It is directed to offer informal working sessions that meet the needs of the public, and should otherwise create an environment that offers opportunities for the public to get involved. **24 V.S.A. §4384.**

While not everyone will be interested in contributing to the planning process, the planning commission should be creative in developing methods that will encourage as many people as possible to participate. They should reach out to all residents - to those in the various geographic areas of the town, to those of differing backgrounds, to citizens' groups, to special interest groups, and to local officials.

*Residents:* All residents of the community should be informed about the plan and its progress. Their comments and ideas should be solicited in the process. These people will help to define community values, needs, goals, and objectives. As broad a representation as possible from the resident population is needed to make the plan effective. In addition, most communities find that there is a great variety of skills and expertise represented by their residents and that they are a tremendous resource.

*Local officials:* Local officials will be valuable sources not only for information but also for public goals, policies, and implementation strategies. These officials include the school board, road commissioner, recreation committee, library committee, and, in larger municipalities, department heads. Local officials also will be responsible for implementing certain components of the plan through such means as the expenditure of funds or provision of a new service. Therefore, their involvement in its development is important.

The legislative body, as elected officials, should be closely

involved in the plan. The support of its members can influence the acceptance and successful implementation of the plan. Remember that ultimately it is the legislative body that must adopt the plan, the implementing regulations, and a capital budget and program.

*Citizens' groups:* Consider involving various interest groups in the community including business and civic organizations, environmental groups, garden clubs, the local grange, and the historical society. These groups could collect and study information on a variety of topics and could assist in communicating the purposes and policies of the plan to the larger citizenry.

*People with special interests:* It is a good idea to discuss with different segments of the population the aspects of the plan that affect them. For example, the farmers should help to develop and review the proposals for farmland. Lakeshore property owners should be informed of proposed shoreline uses. Local businesses should participate in discussions of future commercial growth. Low-income groups should be involved in assessing housing needs. A major developer should be consulted as to his or her plans and informed of the community's plan as well. The interests of these people should be weighed with the interests of the community as a whole.

#### AT WHAT POINTS IN THE PROCESS SHOULD THE PUBLIC PARTICIPATE?

There is an opportunity for public participation in all stages of the process—preliminary assessment, collection of background information, goal formulation, development of plans and implementation strategies, and adoption. The planning commission should assimilate and evaluate what it hears from the public at each stage.

#### HOW CAN THE EXCHANGE OF INFORMATION AND IDEAS BE PROMOTED?

The methods of public participation will depend on budgetary considerations; the stages at which public participation is to occur, the ability of the commission, its staff, or consultants to carry out the effort; and the degree to which citizens are already organized in the community. A brief summary of methods of public participation is discussed below:

*Surveys:* A survey is a useful device for gathering public opinion about community values, goals and objectives, and future needs. If a community wants the results to be representative and

statistically valid, then the sampling technique used is important. Professional help may be necessary. Some communities are more informal in their approach; they distribute surveys at town meeting or conduct informal polls. Keep in mind that surveys are useful to

#### **EXAMPLE—SURVEYS**

The Town of Colchester conducted a random sample phone survey of residents. The purpose of the survey was to determine the town's high priority planning issues that the new town plan should address. Volunteers conducted the survey; many respondents expressed appreciation for being included.

inform people as well as to collect opinions.

*Media:* Newspapers, newsletters, radio, commercial television, public television, and cable television are good vehicles for communicating planning information and providing forums for debate. For good public relations it is extremely important that the information presented for publication is accurate. The planning commission may want to prepare its own articles and news releases on the plan for local and state newspapers.

*Committees:* Many communities use a committee approach to collect information, brainstorm issues, and establish goals and objectives. Committees can be selected according to issues or geographical areas of the town. Committees can be effective if their responsibilities and agendas are identified and agreed upon in advance, if the time frame and reporting requirements are clear, if the leadership is carefully chosen, and if coordination with the planning commission is maintained. The planning commission is responsible for integrating the work of the committees and to consider it within a broader community context. When creating committees, it is helpful to try to include members who have differing viewpoints so that the final committee report represents

#### **EXAMPLE—COMMITTEES**

The planning commission of the Town of Charlotte set up eight committees to work on major issues confronting the town. Each committee was given a specific list of tasks, a schedule, background information, and a reporting form. The work of the committees was integrated by the planning commission and used in rewriting the town plan.

the broad range of community interests.

*Workshops and forums:* Workshops or public forums are often used to present information and obtain public feedback on a particular topic or series of topics. They are useful for clarifying

goals, prioritizing issues, exchanging ideas, and resolving conflicts. It is important that the purpose of the workshop is identified in

#### **EXAMPLE—WORKSHOPS**

The planning commission of the Town of Stowe sponsored a series of well-attended planning workshops on community character and growth. The workshops were designed to inform the public of planning issues and provide the planning commission with information to use in the development of a new town plan.

advance and that the session is structured to achieve that purpose.

*Public hearings:* Chapter 117 requires that a minimum of two public hearings be held to provide maximum opportunity for the public to comment on plans before their adoption. However, most communities find that more hearings are necessary because of changes that are made to the plans, conflicts that arise, and strong public interest.

*Existing community events:* Another option for communicating ideas and for public input is to make use of social gatherings that are sponsored by other organizations within the community, such as a chicken pot pie supper or a local fair. The planning commission could set up a major display with questions and surveys. This is particularly good as there is a captive audience. It is important that the planning commission work very closely with the sponsoring organization, such as the school, the church, the fire department.

#### *4.2.5 Plan the Budget*

A planning budget should be established that includes costs for mapping, hiring consultants, conducting special studies, surveying, holding workshops, and printing the plan itself. Funding sources could include municipal budgets, contributions, or grant applications. In addition, the state's Municipal and Regional Planning Fund was specifically created to financially assist municipal planning efforts. Finally, additional technical assistance may be provided by regional planning commissions, nonprofit organizations, and state agencies. Because of municipal budgeting cycles, most planning commissions will have to anticipate their expenses in advance if they wish to use municipal funds.

When contracting for specific technical assistance, the planning commission should put the tasks out to bid. This should ensure that the work is done at a reasonable cost. While it may be difficult

to accurately predict the costs, discussions with potential bidders may help make a reasonable estimate.

#### *4.2.6 Coordinate with Adjacent Towns, the Region and State Agencies*

At this early stage, adjoining and nearby municipalities should be notified that a plan is being developed or revised and asked for information on their own planning and development activities. Many planning issues transcend municipal boundaries, and some municipalities share facilities and services such as sewage treatment facilities and water supplies.

Just as the growth and development trends within a region affect a municipality, the planning decisions of a single community can affect the entire region. Therefore all municipalities developing a plan should contact their regional planning commission. The regional planning commission can also assist with data collection, data analysis, development of goals and policies, implementation strategies, and coordination with other municipalities.

The 1988 changes to the statute create a structure to facilitate coordination between town, regional, and state agency plans. The purpose of this coordination is to identify and resolve differences in land use planning as early as possible, thereby reducing conflict in the permitting process and in decisions on expenditures of public funds.

*Municipal planning:* One of the required elements of the municipal plan requires a "statement indicating how the plan relates to... adjacent municipalities, areas, and the region." **24 V.S.A. §4382(a)**. To coordinate at the local level, a planning commission should begin by obtaining and reviewing the plans of adjacent municipalities as part of the information collection and analysis phase. If conflicts are identified, it is usually best to try to resolve them directly with that municipality. If that fails, the statute encourages municipalities to work with the regional planning commission or the Council of Regional Commissions to resolve the dispute.

*Regional planning:* The municipal planning commission should review the regional plan. If conflicts are identified, the planning commission should try to resolve the issues directly with the regional planning commission. If a conflict cannot be resolved informally, either the regional planning commission or a town may appeal to the Council of Regional Commissions. **24 V.S.A. §4476**.

*State agency planning:* State agencies that have an impact on land use are required to develop land use plans, and these plans are required to be compatible with approved municipal plans.

## 4.3 Keeping the Plan Current

Municipalities should review these agency plans for compatibility with their own plan. Again, conflicts may be resolved directly with the particular agency, or through an appeals process to the Council of Regional Commissions. **24 V.S.A. §4305d.**

### *4.3.1 Evaluations*

Each community will have its own unique circumstances which will determine the extent and type of revisions it will need to make to its plan over time. Some will need to make amendments to the plan long before it expires. Others will find that the plan was adequate over the 5 year period, but needs some changes before it can be readopted for the next 5 years. And some communities will find that a total re-write of the plan will be necessary to meet community needs.

The extent of the changes to be made can be determined from evaluations of the plan that have been done since it was adopted. Evaluations should be conducted regularly, and not just when the plan is due to expire. In these evaluations, municipalities should consider the changes that have occurred in the community, new issues that have arisen, and the effectiveness and adequacy of the existing plan and implementation measures. Based on the evaluation, the municipality may decide whether to amend, readopt, or re-write the plan. Whatever the municipality's course of action, those involved will have to consider their information needs, and the process they will follow to make the necessary changes.

### *4.3.2 Updating Requirements*

All municipalities are required by Chapter 117 to review and update the information on which their plans are based every five years and to consider this information when evaluating their current plan. **24 V.S.A. §4387.**

The information that should be updated includes:

- statistical data on population, housing, the economy, and trends in land development
- data on community facilities and services, including current usage, remaining capacity, identified needs, and planned improvements
- land use maps
- fiscal conditions
- roadway traffic and safety conditions

- identified needs
- planned improvements

#### *4.3.3 Expand the Data Base*

Municipalities may wish to expand their data base to address new issues or to provide better background information on existing issues. For example, strip commercial development may be emerging as a problem requiring recommendations for action in the plan. The town may then decide it needs more restrictions on land use and access along the highway. Data on curb cuts, traffic congestion, accidents, and land use changes should be added to the plan to support land use policy changes and access controls. In another example, a town may have a policy of protecting natural areas, yet the current plan has no information on natural areas. An amendment might include a natural areas inventory.

#### *4.3.4 Reassess Goals and Objectives*

The goals and objectives stated in the plan should also be evaluated every five years. New information, from statistical data or community surveys, may show that the goals and objectives no longer reflect community values or needs. Perhaps the goals are too vague and have not been useful guides for regulatory actions or Act 250 reviews. Or maybe the long-range goals are still appropriate, but the short-range objectives need to be changed to reflect new conditions. Changes may not be required in every case; the goals and objectives may still be suitable.

#### *4.3.5 Revise Implementation Program*

The implementation program sets forth the short-term actions (up to five years) that will carry out long-range goals and objectives. At the end of five years, the program will need to be revised. Certain actions will have been completed. Steps that have not been taken will need to be evaluated. Were they impractical? Were they under-funded? Did they lack community support? To respond to new issues or address unmet needs, new strategies will need to be developed.

#### *4.3.6 Focus on Geographic Areas*

When they have amended their plans, several municipalities in Vermont have divided their communities into planning areas. The boundaries of these areas have been based on neighborhoods, natural boundaries, or built-up versus rural areas. The use of

planning areas may help in examining the special issues of unique geographical areas. One community is proposing to vary its standards for subdivision review from one area to another to reflect differing development characteristics and facilities and service needs.

A plan amendment may focus on a geographical area requiring special treatment. For example, an urban waterfront may need a revitalization strategy; flood plains may need to be redesigned after a severe flood; or an historic village may need a design plan.

#### *4.3.7 Focus on Topics*

Communities may find that their original plan did not adequately address a certain topic, such as housing or public facilities. Or perhaps a new topic has emerged as an important issue that calls for further data collection and analysis and new strategies. If other sections of the plan still seem relevant and up to date, a community may prefer to focus on one or two topics rather than overhaul the entire plan. The community may wish to form a special task force to address the issue in detail.

#### *4.3.8 Revise the Format*

Often a community will find that the organization of its plan makes it difficult to use. The plan may sit on the shelf instead of serving as a constant guide. Perhaps the policies are not easily referenced or an implementation strategy may be difficult to locate. The timing and responsibility for implementation may not be clear. In the amendment process, the suitability of the current format should be evaluated. Some municipalities prefer to organize their plans by topic (housing, transportation, environment, and so on). Others use the order in which the plan was developed (background information, goals and objectives, plans and strategies). Still others put the goals first, plans and strategies second, and supporting data last. Whatever order you select, the format should be understandable and the content carefully indexed to make the plan easy to use.

## **4.4 Sources and Uses of Technical Help**

### *4.4.1 Regional Planning Commissions*

The regional planning commissions are valuable sources for information and technical help. They have statistical data and geographic information systems (GIS) mapping capabilities that can be used in the development of the municipal plan. (See Section



5.8 of this manual for a discussion of GIS.) They can help you prepare the plan, analyze issues, develop policies and strategies, and organize the effort. Each commission provides technical assistance within the limits of its resources.

#### *4.4.2 Staff*

Municipalities with professional planning staff will usually give the staff the responsibility for organizing the development of the plan. The staff's time must be balanced between the plan and other activities, especially application reviews. The commission must set clear priorities to assist the staff in budgeting its time.

#### *4.4.3 Conservation Commissions*

In 1977 Vermont passed legislation enabling towns to establish conservation commissions. **24 V.S.A §4501**. The major mission of a conservation commission is to look after the community's natural resources. In carrying out this charge, these commissions can conduct inventories of the town's resources, identify unique areas, work on natural resource sections of the plan and other similar type projects for the planning commission. They can also assist and make recommendations to the planning commission in the review and evaluation of development proposals. As a means of providing effective communication between the planning and conservation commissions, a joint member can be appointed.

#### *4.4.4 Planning Consultants*

A planning consultant may be hired to provide expertise not available locally at the time it is needed. The planning commission should decide the tasks for which a consultant is needed. It should establish a budget, time frame, and reporting requirements. It should then send a Request for Proposal to qualified consultants, a list of whom can be obtained from the regional planning commission. Finally, the planning commission, in conjunction with planning staff and/or a member of the legislative body, should interview candidates to evaluate their credentials, their compatibility with the commission and staff, and the suitability of their proposals.

#### *4.4.5 Federal and State Agencies*

Federal and state government agencies can provide data as well as technical assistance to municipal planning commissions. As part

of the state agency planning process, many state agencies are developing specific programs and information to assist municipal planning commissions. Some of this information is routinely distributed to the regional planning commissions for use in regional and town planning, and can be requested from them. Contact your regional planning commission to find out what information is available for distribution. Other information can be requested directly from the agencies. Chapter 5 describes the types of information provided by the agencies that are most often used by municipal planning commissions. Appendix B gives the addresses and phone numbers of these agencies.

#### *4.4.6 Colleges and Universities*

Colleges and the University of Vermont are good sources of data and technical assistance. The School of Natural Resources at the University of Vermont has a faculty of planners, foresters, wildlife biologists, and other technical people. Its Geographic Informative Systems laboratory offers computer mapping services for a fee. The Center for Rural Studies at the university offers assistance in data collection and analysis. Fees may be charged there as well, depending on the request. Other faculty at other colleges around the state may have skills in planning and planning-related fields.

#### *4.4.7 Interns*

Interns from colleges or universities can be helpful in performing certain data collection and analysis tasks. Planning commissions should remember, however, that these interns are not professional planners. Whenever possible the commission should help a student earn credit for his or her work or should pay a stipend to provide an incentive for the intern's continued involvement. Some communities have found the work of interns to be very valuable in the development of the plan.

#### *4.4.8 Other*

There are many other local and regional organizations that can provide technical help to the planning commission. Among these are land trusts, regional development corporations, community action agencies, conservation groups, and non-profit housing organizations. See Appendix B of this manual for a list of resource organizations.

# 5

## Collecting and Analyzing Information

*If you don't know where you are going, you will wind up somewhere else.*  
—Casey Stengel

This chapter describes the information a municipality collects and analyzes to develop a plan. Communities may vary the type and amount of information they collect depending on their own particular needs and ideas. However, all the steps and items listed should be considered. Many communities do not appreciate the value of well-developed background data. However, this information is critical to analyze current conditions, make projections for the future, and provide the basis for objectives and implementation strategies. This information provides a profile of what the community—its people, their housing, the economy, the land, and public services—was, is, and will be.

Start with a preliminary assessment. The purpose of the preliminary assessment is to get a sense of the goals and values of the community and to identify issues. This step will help to focus what information is collected and analyzed. This step is not meant to be time-consuming; it is intended to provide a quick overview of the community.

A vision of the future of the community should be discussed. This discussion should be as broad based as possible. It should include local officials, community leaders, interest groups, and residents. The purpose of the discussion is to reach consensus on what the community should be like in five, ten, or twenty years. The discussion should cover physical, social, and economic goals for the community.

The discussion should center next on the community assets that *do* or *will* contribute to the achievement of the vision. For example, for a goal of continued open space, mention programs that exist to advance that goal, such as a local land trust. For the goal of providing equal opportunity for housing, mention special actions that have been taken to provide affordable housing.

### 5.1 Conduct a Preliminary Assessment

Likewise, the discussion should inventory liabilities of the town that might prevent or delay the accomplishment of the vision. Using the two examples above, rapid land subdivision without adequate controls could erode the town's open space. Large minimum lot sizes might prevent the construction of affordable housing. A broad public discussion is a good approach for conducting a quick inventory of assets and liabilities. A map of the town may serve as a good reference and recording device for physical conditions.

The planning commission should assess its own experience with growth and development conditions. Have recent land subdivision applications presented any special problems or opportunities for accomplishing community goals? Does a slowdown in the regional economy indicate any potential problems? Do town highways or schools require improvements to accommodate an influx of new people? An overview of growth trends is useful before defining the planning issues.

As the assets and liabilities of the community are evaluated, identify a set of planning issues. These issues will include the problems and opportunities anticipated in meeting the community's goals. If the ability to address all of these issues is limited—and that usually is the case—prioritize them. The issues selected will be the subject of more detailed analysis in the plan.

**EXAMPLE—PLANNING ISSUES**

- protecting water quality along a lake shoreline
- increasing the industrial and commercial tax base and evaluating the impact of this action on community services and facilities
- encouraging the active local agricultural economy
- preventing strip development and multiple points of access on a major arterial highway
- determining the location and attributes of a new town center
- providing adequate and affordable housing

It is not always possible for a community to have an organized and well-attended public discussion. If this is so in your community, you can try other means of soliciting comments from the public, such as attitude surveys, informal group discussions, a well-advertised meeting of the local officials, or presentations at a community function or gathering place.

## 5.2 Identify Information Required

Early on, identify data to be collected and analyzed. Each community will differ in its data needs and sources. Urban areas, with their more complex problems and needs, may want to collect detailed information on housing, traffic, economic conditions, and facilities and services. Rural towns, with limited housing, little industrial or commercial development, and minimal facilities and services, probably will be most concerned with data on land use and natural resources. While all the information that follows should be considered, each community is not expected to include all the items in preparing its plan. Use your preliminary assessment to identify the data you need to collect and analyze.

### 5.3.1 History

A description of the setting of the community—how it came to be the way it is, and its social, cultural, economic, and political background—gives a perspective to the current trends and conditions of the community. By analyzing these historic patterns, you can define features and characteristics of the community that are valued today and will be of value in the future. Factors that could alter these patterns in the future should also be examined.

#### *Sources:*

Division for Historic Preservation—information of historic and archaeological sites and buildings  
 Vermont Historical Society Library—historical information on Vermont  
 Local Historical Societies—local historical information  
 Local residents—oral history of the area

## 5.3 Make a Community Profile

### 5.3.2 Population

Population refers to the number of people who are living in the community and their characteristics. With information on the people of the community, one can better understand the growth trends in the municipality and the region; the demand for future services, facilities, and economic improvements; and environmental conditions. This information affects planning for schools, housing, recreation facilities, population density, economic development, transportation, police and fire protection, and public utilities.

Table 5.1 lists social and economic characteristics that could be included in a community profile on population. It also shows a

suggested form for the data, possible analyses, and implications that could be drawn. Not all of this information, of course, is available to each municipality. But at a minimum, data on the number of people in the municipality, region, and state; the trends in population growth; and the age of the population should be collected and studied.

To plan for future land use and public services, estimates should be made of future populations. To make estimates, you will make assumptions on the factors influencing population change. Factors to consider include: rate of growth, both historical and recent; land subdivision and zoning permit application trends; economic trends in the municipality and region; the status of municipal facilities and services; and age characteristics of the population. You can project two or three rates of growth based on different assumptions about the future. All assumptions should be clearly stated.

*Sources:*

Vermont Department of Health—annual municipal population estimates

Vermont Department of Libraries—population and economic projections, U.S. Census data

Center for Rural Studies, University of Vermont—U.S. Census data

Vermont Department of Taxation—tax return information on income levels

Vermont Department of Employment Security and Training—employment data

Regional planning commissions—U.S. Census data, data collection and analysis

Survey of residents—to update Census data and get information not available from other sources

### *5.3.3 Housing*

In addition to setting out several housing goals, Chapter 117 calls for the inclusion of a housing element in both municipal and regional plans. The regional plan's housing element is to identify "the need for housing for all economic groups in the region and communities," while the municipal plan housing element is to "include a recommended program for addressing low and moderate income persons' housing needs as identified by the regional planning commission in the regional plan." **24 V.S.A. §§4348a(a)(9), 4382(a)(10)**. Determining affordable housing needs is covered in Section 5.3.4 of this manual.

Housing refers not only to components of a house, such as a living room, kitchen, bedroom, and bath, but also to the yard space a dwelling has, its relation to adjoining properties, its place in the community, and the services it requires. A large proportion of buildings in a municipality are for housing. A major function of planning is to meet two important community objectives—first, safe, adequate, and affordable shelter for present and future populations and second, suitable density and distribution of housing throughout the community.

The growth and development of housing affects the environment of the municipality and the facilities and services it provides (or intends to provide). Housing built in the absence of adequate

Table 5.1  
SOCIAL AND ECONOMIC CHARACTERISTICS

CHARACTERISTIC	DATA FORM AND SOURCE	ANALYSIS	IMPLICATIONS
Number of people in municipality	1900-1990, by decade, U. S. Census 1900-present, Vermont Dept. of Health	percent change; explanation for change; growth trends	impact on land use; ability of municipality to provide facilities and services
Number of people in region	1990-1990, by decade, U.S. Census 1990-present, Vermont Dept. of Health	percent change; reasons for change; growth trends; compare to municipal growth	impact on population growth of municipality
Number of people in state	1900-1990, by decade, U.S. Census 1900-present, Vermont Dept. of Health	percent change; growth trends; compare to municipal and regional growth	impact on population growth of municipality and region
Age and sex of population	pre-school age; school age (elementary and high school); child-bearing age; working age; retirement age/by male and female; present (if available), 1990, 1980, and 1970, U.S. Census	number of dependents (pre-school, school, and retirement age) in relation to working force; family size; number of children of school age; fertility ratio*; trends in age groups (e.g. decline in number of pre-school students)	impact on population growth of municipality; demand for schools, recreational facilities, housing and other facilities and services; potential labor force
Ratio of births to deaths	number of births and number of deaths: present (if available), 1990, 1980, and 1970, Vermont Dept. of Health, municipal reports	compare ratios; compare with age and sex and migration trends	impact on population growth of municipality; services, facilities, land use
Migration, in and out of municipality	number of people moving in and number of people moving out over last five years, (if available), 1980, U.S. Census, Vermont Dept. of Health	compare to regional growth trends; trends in migration into or out of municipality	impact on population growth of municipality; services, facilities, land use
Educational level of residents	number of years of education (elementary, high school, college, vocational) 1990, 1980, 1970, U.S. Census	Increase or decrease in educational attainment; type of education (vocational, etc.)	school facilities needs; demands for services; labor force characteristics
Income level of residents	under \$5,000, \$5,000-\$9,999, \$10,000-\$14,999, \$15,000-24,999, \$25,000 and over (or combinations thereof) U.S. Census, Vermont Dept. of Taxes	number of people below the poverty level; economic conditions of municipality; ability to afford average housing prices	demand for housing and community services; labor force characteristics
Occupations	employment status of residents, male/female employment, type of occupation, skills; present, 1990, 1980, 1970 U.S. Census, Vermont Department of Employment and Training	trends in employment in municipality; actual and potential labor force	trends in demand and supply for different types of jobs; influence on population growth and local economy

\*Fertility ratio: Number of children under 5 years of age per 1,000 women 15 to 49 years old.

planning for public facilities can overburden services. Poorly located housing can pollute a water supply or destroy an important wildlife habitat. Housing that is inadequate to meet the demand in the community or region can strain adjacent municipalities and prevent people from living close to their jobs.

Communities should inventory existing housing conditions. Table 5.2 sets forth housing characteristics that could be studied and suggests a form for the data, possible analyses, and implications that could be examined.

Municipalities should compare trends in housing supply with the population projections and characteristics. Population characteristics that should be examined include average household size, income levels, and age of residents. Based on this information, determine what type and number of housing units are required for future populations. Also, study trends in population growth and housing supply in the region to determine what the municipal share of the region's housing needs should be. Compare the projections on housing units with trends in housing supply, including the type and price of units. Identify any gaps likely to occur in meeting future housing needs.

Another important consideration in a housing analysis is the pattern of residential development. How is housing distributed throughout the municipality? Where are the identifiable neighborhoods? Where are mixed uses? What type and density of unit is there in each area? In smaller municipalities the study of the housing pattern should consider the distance to community and government services, road conditions, and the suitability of the land for development.

Larger, more rapidly growing municipalities will be concerned not only with the appropriateness of sites for residential development but also with the timing and density of these developments. These patterns will affect the municipality's ability to provide facilities and services, the preservation and enhancement of neighborhoods, and compatibility with adjacent land uses.

Vermont's cities will have more complex housing issues. With limited land available for new housing construction, they may be concerned with maintaining the housing stock, improving blighted areas, regulating land uses, preserving neighborhoods, and administering housing programs.

*Sources:*

Vermont Department of Health—annual municipal housing estimates

Zoning Administrator—zoning permit trends

Vermont Department of Libraries—U.S. Census data



Vermont Department of Taxes—housing prices, number of houses sold  
 Vermont Department of Taxes, Division of Property Valuation and Review—tax rates, grand list information, ownership ratios  
 Agency of Commerce and Community Development, Dept. of Housing and Community Affairs—statewide and labor market area housing statistics and projections, Comprehensive Housing Affordability Strategy, community development guidebook  
 Center for Rural Studies, University of Vermont—U.S. Census data  
 Assessor's Office—grand list data (parcels and values)  
 Clerk's Office—property transfer tax returns (sale prices)  
 Aerial photographs—housing types and distribution  
 Windshield surveys—number, type, exterior condition of housing units  
 Regional planning commissions—Census data, data collection, analysis, and regional plans  
 Local realtors—local housing market conditions

Table 5.2  
HOUSING CHARACTERISTICS

CHARACTERISTIC	DATA FORM AND SOURCE	ANALYSIS	IMPLICATIONS
Number of dwelling units	1970, 1980, 1990 U.S. Census 1990-present, Vermont Department of Health, zoning administrator	percent change; explanation for change; growth trends	impact on land use, ability to provide facilities and services
Type of dwelling units	single-family, duplex, multi-family; condominium units; mobile homes in parks, mobile homes outside parks; 1970, 1980, 1990; present; U.S. Census, zoning administrator	percentage of housing by type; trends in type of housing available	availability of a variety of housing types; impact on land use
Year-round and seasonal dwellings	1970, 1980, 1990, present, U.S. Census Vermont Department of Health, zoning administrator	percentage of housing by occupancy; trends in provision of year-round vs. seasonal dwellings	impact on facilities and services; impact on land use; availability of housing by occupancy
Housing conditions	number of rooms, substandard and standard; 1970, 1980, 1990, present; U.S. Census	percentage of housing by size of unit or substandard condition; trends in substandard housing and unit size	extent of substandard units in need of improvement
Owner-occupied versus rental housing	1970, 1980, 1990, present; U.S. Census, zoning administrator	percentage of housing by occupancy; trends in owner-occupied vs. rental housing	availability of rental vs. owner-occupied units
Vacancy Rate	1970, 1980, 1990, present; U. S. Census	percentage of housing that is vacant; trends in number of vacant units	constraints in housing market; availability of units for rent or sale
Average housing prices	Average sale prices of owner-occupied units; average contract rent prices; 1970, 1980, 1990, present; U.S. Census, multiple listing service	percentage of housing available at different prices; trends in housing prices	affordability of housing; availability of housing at a variety of prices; impact on grand list

### *5.3.4 Affordable Housing*

Communities throughout Vermont are grappling with the issue of affordable housing. As land and building values soar and federal housing assistance diminishes, municipalities are finding it difficult to meet the shelter needs of their residents.

What is affordable housing and why is it a problem? According to the U.S. Department of Housing and Urban Development, "affordable housing is appropriate housing that can be purchased by people for a reasonable percentage of their income. A person with an 'average income' ought to be able to buy 'an average price' new house. Generally speaking, housing is considered affordable when monthly shelter costs do not exceed approximately one-third of a person's monthly income." Efforts to provide affordable housing are targeted to people of moderate income (below 95 percent of area median), low income (below 80 percent of area median), very low income (below 50 percent of area median), and very, very low income (below 30 percent of the area median).

Before municipalities can address the issue of affordable housing, they must define the need within their community. Through surveys and discussions, planners can learn the extent of community concern for affordable housing; they can then target specific groups that have unmet housing needs. Data on population and housing in the community will help planners spot the trends in housing supply and demand. To complete the inventory on housing need, planners should consider population and housing projections for the community. Figure 5.1 provides a form and some questions to assist towns in identifying future housing needs.

The data on housing need should be compared to the trends in housing supply. An inventory of the number of housing units by type should be taken that includes:

- single-family, two-family, and multifamily units
- owner-occupied versus renter-occupied units
- mobile homes and manufactured housing
- seasonal, vacant, and year-round units

Historical data on housing type will also help to determine trends. Planners should inventory rental assistance units, mobile homes and mobile home parks, and other units offering affordable housing. They should collect data on rental prices and house prices. This information should be by housing type if possible. For example, rental price data should include different size housing units. Housing price data should be collected for single family, two family, and multifamily units. In rural communities, also consider the size of the housing lot.

Household income is another important piece of information. List the number of households in selected income brackets. Using this data, municipalities can calculate how much residents in different income brackets can afford to pay for housing based on the U.S. Department of Housing and Urban Development guideline.

Next, compare the data on housing needs (population and household data and projections, and household income) to the data on housing supply. What do the trends show about the availability of affordable housing for present and future households? Which housing needs are not likely to be met? Which housing types will be needed? What events may threaten the availability of affordable housing which currently exists?

Figure 5.1  
SAMPLE FORM FOR IDENTIFYING HOUSING NEEDS

	1980	1990	2000	Percent Change Between 1980 & 2000
Total Population .....	_____	_____	_____	_____
Total Number of Household .....	_____	_____	_____	_____
Number of Households without Children .....	_____	_____	_____	_____
Number of Single-Person Households .....	_____	_____	_____	_____
Number of Elderly Households (65+) .....	_____	_____	_____	_____
Number of School-age Children (Ages 5-17) .....	_____	_____	_____	_____
Number of Young Households (Adults Ages 25-34) .....	_____	_____	_____	_____
<p>1. The overall population in the community of _____ is:</p> <p>a) growing      b) leveling off      c) declining</p> <p>2. The number of households is:</p> <p>a) growing      b) leveling off      c) declining</p> <p>3. The school-age population is:</p> <p>a) increasing   b) relatively unchanged   c) decreasing</p> <p>4. Majority of households in the community are:</p> <p>a) Households with school-age children</p> <p>b) Married couples without children</p> <p>c) Single person households</p> <p>d) Elderly households</p> <p>5. Majority of new households are:</p> <p>a) Households with school-age children</p> <p>b) Married couples without children</p> <p>c) Single person households</p> <p>d) Elderly households</p> <p>6. How many households are in the 25-34 age group?</p> <p>_____</p> <p>7. By what percentage have the 25-34 households increased since 1980?</p> <p>_____</p>				

Communities also have a role in providing affordable housing in the region. They should consult their regional planning commission on the distribution of population, households, and affordable housing around the region. They should be aware of the housing needs of the region and should work with neighboring communities to ensure those needs are met.

With this information communities should draw conclusions on the nature and extent of their affordable housing problem.

*Sources:*

Agency of Commerce and Community Development, Dept. of Housing and Community Affairs—statistics and data, Comprehensive Housing Affordability Strategy, guidebooks  
 Vermont Housing Finance Agency—Agency data, statewide housing market data  
 Regional planning commissions—data collection, analysis, and regional plans  
 Community Action Agencies—data, guidelines  
 Community Land Trusts—data, guidelines  
 Local housing agencies and development corporations—data, guidelines

### *5.3.5 Economy*

The term economy, as used in municipal planning, refers to jobs, production, income, resources, and activities in the municipality and in the region. The economy has a direct influence on the well-being of the residents, the community facilities and services, and the environment of the municipality. Economic planning can provide jobs commensurate with the skills and aims of residents; a balanced tax base to meet the needs of the community; protection of economic resources; and necessary services and products. A poorly planned economy can adversely affect the environmental quality of the community; cause overdevelopment and strain municipal facilities; provide excessive or unnecessary services and products; and cause regional dislocations of businesses and industries.

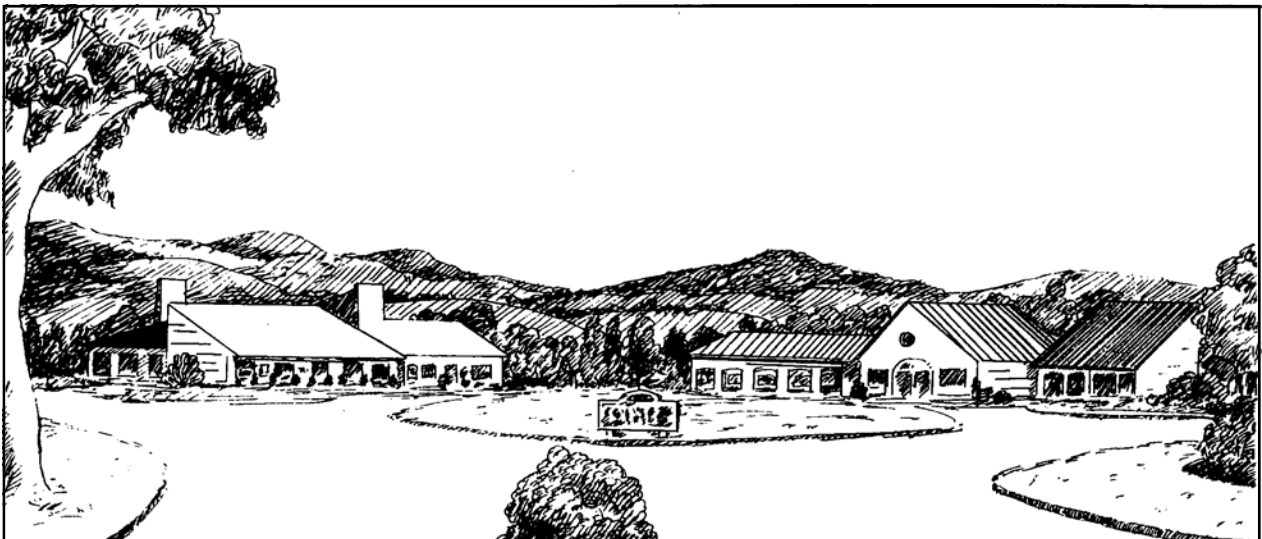
Begin by inventorying the municipality's economic base—its natural resource production, industry, and commerce. Collect information on the number, type, and location of businesses; the number of persons employed in town and the location of their residences; the products created; the taxes contributed; and the facilities and services used.

Analyze the information collected in the inventory by comparison with population trends, labor force characteristics,

regional economic conditions, natural resource production potential, public services, utilities, transportation, and land availability. The analysis should point out problems, opportunities, and needs. These might include the decline of farming, the misuse or contamination of resources, a lack of well-serviced commercial or industrial sites, or an emerging pattern of strip commercial development.

Many small communities will have little or no commercial and industrial activity. Their residents may be occupied in agricultural or forestry production, home occupations, construction, seasonal businesses, or industries outside the community. Economic planning in these communities will focus on protection of natural resources, control of nuisances from home occupations, and farm-related businesses, regional economic trends, off-season activities, and suitability of sites and areas for the introduction of new commerce or industry if desired.

More rapidly growing municipalities may be in the process of developing a commercial or industrial base. They may face declining farm and forest production, growing numbers of commuters to regional employment centers, heavy seasonal activity, rising tax burdens on residents, increasing demands for services, and unsightly strip development. These communities will want to consider the availability of well-serviced and suitably located industrial and commercial sites. They will need to decide the extent to which productive natural resources are to be utilized, what types of industry would be desirable, and how economic growth in the community will affect established businesses and employment centers in the region. They will have to consider the availability of adequate parking facilities and municipal services



for accommodating growth. Finally, they will want to examine how to reinforce existing town centers and what the effect will be on the quality of the environment in the town.

Cities in Vermont face some additional problems. These include competition from shopping centers and industrial parks in nearby towns; incompatible adjacent land uses; nuisances from industries; outdated public facilities; inadequate transportation facilities; poor traffic, parking and circulation; and, in some cases, a deteriorating central business area. These urban areas may need to improve public facilities, streets, and parking facilities; identify areas where design standards are needed; eliminate nuisances; improve blighted areas; and participate in regional planning for economic development.

*Sources:*

- Agency of Administration, Department of Taxes—municipal and county sales and use tax receipts
- Agency of Commerce and Community Development, Department of Economic Development—economic development assistance, Directory of Manufacturers, economic forecasts
- Agency of Commerce and Community Development, Department of Tourism and Marketing—vacation travel indicators reports
- Department of Employment Security and Training—employment and wage information
- Department of Agriculture, Food and Markets—agricultural development information
- Agency of Natural Resources, Department of Forests, Parks and Recreation—information on forestry and wood products industry
- Vermont Department of Libraries—U.S. Census data and economic forecasting
- Center for Rural Studies, University of Vermont—U.S. Census data
- Vermont Yearbook—listing of commercial and industrial operations, professional offices, and institutions for each municipality (in libraries and bookstores)
- Local and regional development corporations—inventories of industrial and commercial buildings and sites, vacancies, potential industrial and commercial expansion
- Regional planning commissions—economic data for municipality and region, analysis of regional economic conditions

### *5.3.6 Fiscal Conditions*

It is important to analyze the fiscal condition of the municipality to understand the effects of growth on expenditures and

revenues, its ability to meet planning needs through public expenditures and other fiscal policies, and tax burdens on local residents. A fiscal analysis also provides a basis for recommended capital expenditures.

Data should be collected for the most recent five-year period on the following:

- grand list by sector (residential, vacation, commercial, industrial, agricultural)
- the tax rate
- total revenues and revenues by source (local property taxes, fees and charges, other local sources, and federal and state sources)
- total expenditures and expenditures by type (operating vs. capital, highways, schools, recreation, etc.)
- the total debt and debt by item

Figure 5.2 is an example of a statement of revenue, expenditures and changes in the general fund balance.

Some communities prefer to put these data in constant dollar terms to discount for the effects of inflation. At this stage municipalities should identify any fiscal policies that are in effect, such as tax abatement for farmland or a fixed rate of growth in the tax rate.

In analyzing the data, consider the trends in revenues, such as increased dependence on the local property tax; patterns of expenditures, such as rapid growth in general administrative costs; and trends in the grand list, such as an increasing amount of industry.

Assess the tax burden on local residents and compare it to that of other communities in the region and state. Relate these analyses to trends in growth and development. Are costs rising due to an increase in population? Is the grand list growing fast enough to cover these costs without raising the tax rate? Are fiscal policies, such as increasing fees and charges or lowering taxes on farmland, having the anticipated effects?

Then make projections of the grand list, of operating expenditures, of revenues, and of fixed payments, such as debt. To make these projections, look at factors that will affect the growth of these items. These factors may include: an acceleration in the rate of population growth, the loss of a revenue source, or the location in town of a major new employer. Factor in the municipality's financial policies on indebtedness, tax rate growth, tax collection, fees for governmental services, and tax stabilization.

Figure 5.2

GENERAL FUND STATEMENT OF REVENUE, EXPENDITURES AND CHANGES IN FUND BALANCE For the Year Ending June 30, 20__		
REVENUE	BUDGET	ACTUAL
Taxes .....	\$105,500.00	\$107,418.71
Green Mountain National Forest .....	6,500.00	6,579.94
State Aid – Highways .....	20,000.00	27,378.76
Town Clerk Fees .....	3,000.00	6,841.00
Interest Income .....	3,000.00	7,705.79
Licenses – Dog and Liquor .....	900.00	1,082.00
Rental Income - Building and Equipment ..	1,800.00	2,775.00
Miscellaneous Income .....	800.00	887.84
Allocation from surplus .....	5,000.00	–0–
<b>TOTAL REVENUE</b>	<b>\$146,500.00</b>	<b>\$160,669.04</b>
EXPENDITURES [See Schedule for Details]		
Highways and Roads		
Construction and Maintenance .....	\$32,500.00	19,979.95
Winter Maintenance .....	15,000.00	19,499.91
Miscellaneous Expenses .....	6,500.00	4,034.43
Buildings and Services .....	22,000.00	18,134.18
Administration .....	25,500.00	27,299.44
Fire Department .....	9,500.00	9,080.23
Appropriations to other funds		
Fire Engine .....	15,000.00	15,000.00
Highway Equipment .....	4,000.00	4,000.00
Highway Resurface Reserve .....	4,000.00	4,000.00
Taxes and Assessments .....	5,000.00	5,833.88
Discretionary Provision .....	7,500.00	4,736.00
<b>TOTAL EXPENDITURES</b>	<b>\$146,500.00</b>	<b>\$131,598.02</b>
<b>EXCESS OVER REVENUE</b>		<b>29,071.02</b>
<b>FUND BALANCE 7/1</b>		<b>27,220.83</b>
<b>FUND BALANCE 6/30</b>		<b>\$ 56,291.85</b>

Next, evaluate the municipality's ability to finance operating and capital expenditures, the impact on local residents of these expenditures, the need for changes in fiscal policies, the opportunities to increase the grand list, and the potential for new funding sources.

*Sources:*

Vermont Agency of Administration, Division of Property Valuation and Review—equalized grand lists, effective tax rates  
Municipal reports—annual revenues and expenditures, grand list, tax rate  
Legislative body—fiscal policies  
Municipal departments, boards, or commissions—revenue and expenditure trends and needs  
Assessor's Office—grand list information  
Regional planning commissions—assistance in fiscal analysis, videotape and workbook on capital budgets and programs



## 5.4 Prepare a Base Map

Land uses and physical characteristics should be inventoried and analyzed. This information is best displayed on maps. Maps will illustrate the patterns of development, the location of resources, and the physical capability of the land to accommodate development.

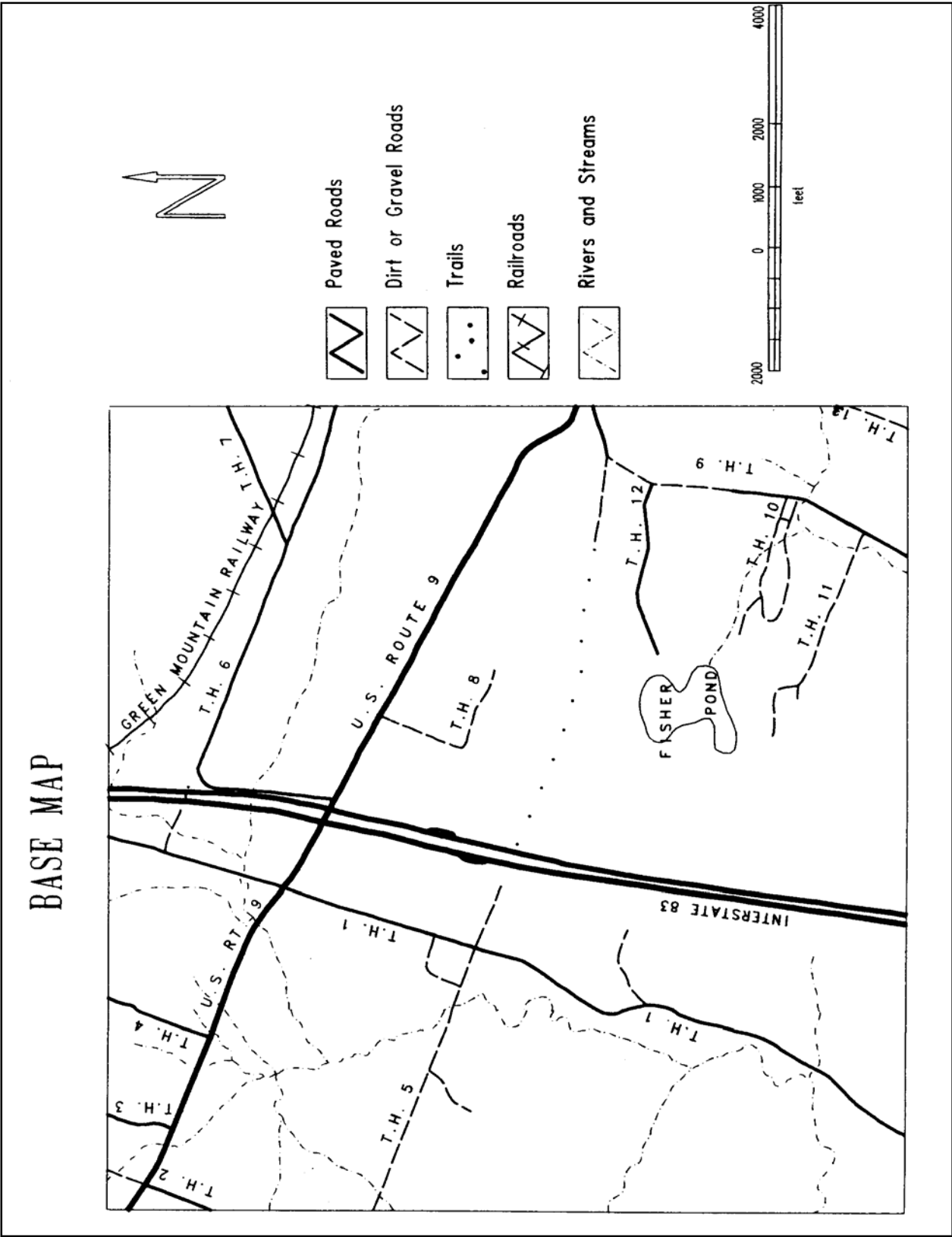
The first step in making a land use inventory is to obtain a community base map. It will provide the scale and physical features that will be common to all planning maps. Base maps in Vermont typically range in scale from 1"=1000' to 1"=2000'. They show municipal boundaries, highways, and water bodies; sometimes they include significant features, such as peaks or wetlands. On the map is the name of the municipality, the title and scale of the map, and a north arrow. The names of adjacent municipalities; rivers, streams and lakes; and highway numbers or names are usually labeled on the map. This map will serve as the basis for recording land use information. See Map 5.1 for an example base map.

An excellent source for a base map is the collection of orthophotos that is available in each municipality. These aerial photos are extremely accurate for taking measurements. Many communities have reduced the photos, or tax maps made from the photos, and made a composite map from them. To be as accurate as possible this work should be professionally done, either manually or through computer mapping. Computers have revolutionized mapping and increased its usefulness as an analytic planning tool. There is software available that makes accurate computer mapping relatively easy for non-professionals. See Section 5.8 of this Manual for a discussion on the statewide geographic information system (GIS).

### *Sources:*

Assessor's Office—orthophoto maps, property tax maps  
 Agency of Administration, Division of Property Valuation and Review, Mapping Division—orthophoto map reproductions  
 Regional planning commissions—mapping assistance

Map 5.1



## 5.5 Analyze Physical Conditions

Physical conditions include soils, water resources, topography, and natural areas. These resources have significant implications for the future growth of the community because they indicate opportunities and constraints for development. In addition, they indicate areas that must be protected to avoid hazards to the public health, safety, and welfare and to maintain valuable educational, scientific, scenic, and productive resources.

### 5.5.1 Soils

The layers of the earth composed of unconsolidated or "surficial" materials are known as *overburden*. The topmost layer of the overburden that supports plant life and that is usually excavated for construction is soil. Soil in many areas is no more than six feet deep, and soil depths of just a few inches are found in many parts of the state.

Soils are classified on the basis of their structure, form, and composition. The most widely known classification system applied to soils is that of the U.S. Soil Conservation Service (SCS). The SCS has produced detailed soil survey maps showing the different soil types on aerial photos for many communities in Vermont (see Map 5.2). For each soil type there is a soil interpretation sheet that describes the properties of the soil and the suitability of the soil for different uses. These maps are very useful for planning purposes, but they do not eliminate the need for onsite investigations of specific locations.

Soils present both opportunities and constraints. Where suitable, they serve as the foundations for structures and highways; they form the natural medium for the growth of plants, and they control runoff and naturally filter and purify wastes. When their physical attributes are unsuitable, they may present severe limitations for land development. To plan for development, one must know where soils are shallow, where the water table is high, and where soils are suitable for onsite sewage disposal.

Following is a list of some analyses of soil conditions that are useful for planning purposes. Each of the analyses can be mapped from the soil surveys and interpretation sheets.

*Depth to Bedrock:* The depth of soil material over bedrock varies with the location and degree of slope. Soil depth is an important determinant in locating many land uses. A shallow soil over bedrock may present severe limitations and higher development costs for many uses, including housing and commercial development. For other uses, such as recreation, open space, wildlife habitat, and selected agriculture, the depth of soil may not be so critical.



*Depth to Seasonal High Water Table:* Depth to water table is the highest level of water measured from the soil surface at given times of the year. Development in high water tables should be severely restricted, particularly if septic tanks are used for onsite sewage disposal; otherwise contamination of ground water or surface water could occur. In addition, foundation problems, water filled basements, and possible frost action are further deterrents to development where these conditions exist. In general, development should avoid these areas.

*Suitability for Onsite Sewage Disposal:* Onsite sewage disposal is a soil absorption system for waste disposal. This system typically consists of two parts, a tank and a distribution system. The characteristics of the soil most important to the functioning of the septic tank system are: permeability, percolation rate, hydraulic conductivity, depth to seasonal high water table, flooding, slope, and depth to bedrock.

The following soil conditions pose severe limitations for onsite sewage disposal:

- slow permeability (percolation rates of less than one inch per hour)
- very rapid permeability, especially near streams, lakes, ponds, or water supplies
- seasonal high water table within two feet below the bottom of a trench
- impervious layers and bedrock within four feet of the bottom of a trench
- slopes greater than 15 percent, especially if impervious layers are within four feet of the bottom of the trench

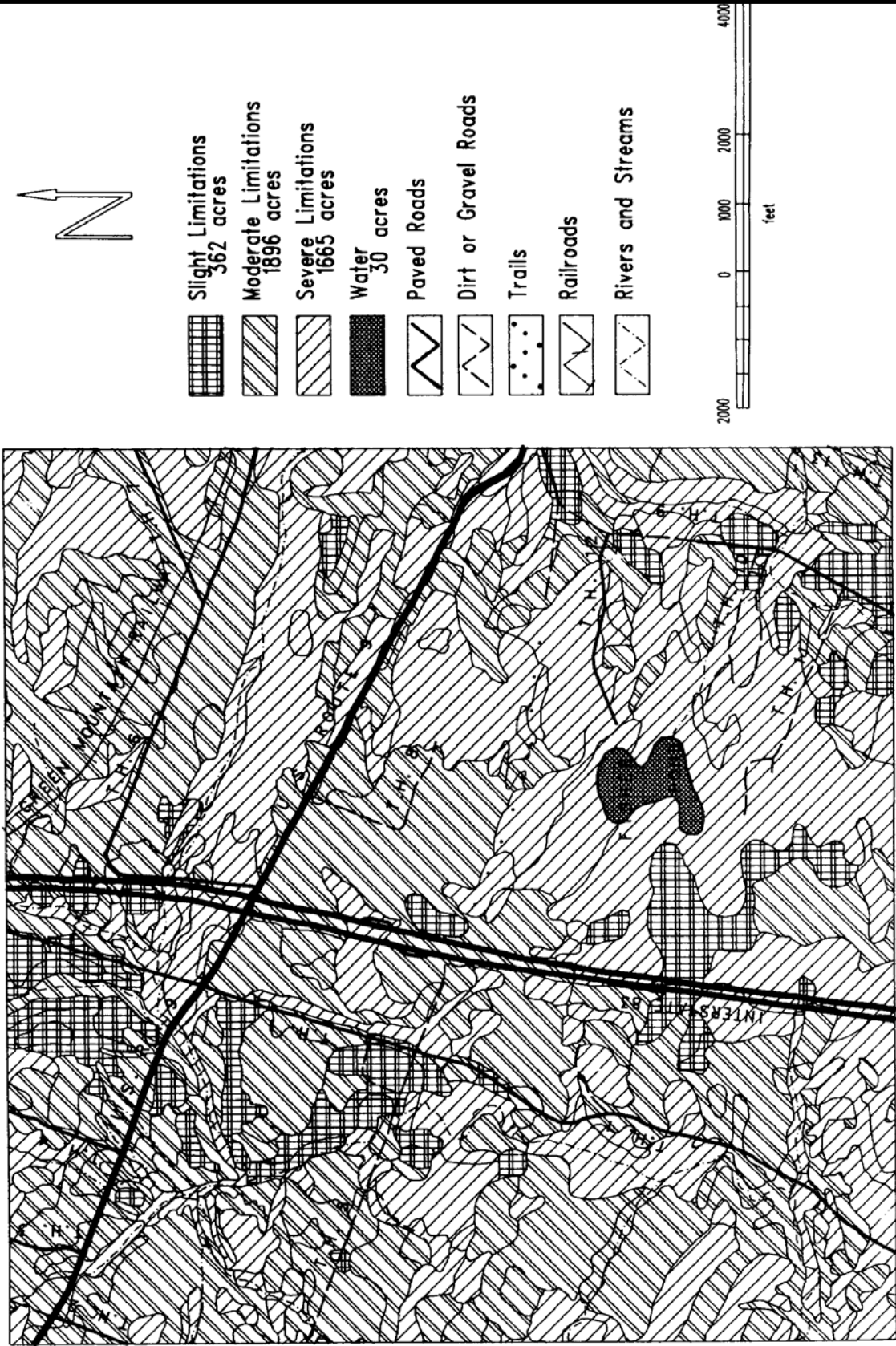
See Map 5.3 for an example of how these limitations can be shown.

*Highest and Good Potential Agricultural Soils:* The SCS has classified Vermont's soils into four categories with respect to their potential for agriculture—highest, good, low, and limited. SCS recommends that the highest and good categories qualify as primary agricultural soils as defined in Act 250. These classifications only consider physical and chemical soil properties. They do not consider size and location of specific areas, accessibility, and current land use. A list of soils classified as highest and good may be obtained from the SCS.

*Forestry Potential:* Vermont's soils with potential for forestry have been classified into four categories: site 1, site 2, site 3, and site 4. The Vermont Department of Forests, Parks, and Recreation recommends that sites 1 and 2 be considered as primary forestry

Map 5.3

ON-SITE SEPTIC SYSTEM LIMITATIONS



soils. As is the case with agricultural soils, these classifications only reflect physical and chemical composition of the soils and do not consider location, current land use, and parcel size.

*Sources:*

Soil Conservation Service Field Offices—soils surveys and technical assistance  
 Vermont Department of Agriculture, Food and Markets—agricultural soils  
 Vermont Agency of Natural Resources, Department of Forests, Parks and Recreation—Guide to Productivity Classes for Forestry Soils  
 Regional planning commissions—data collection and analysis, mapping

### 5.5.2 Topography

Vermont's topography has influenced its pattern of land use, both historically and in the present. A landscape of hills and valleys has shaped transportation routes, provided the settings for villages, and made available lands for natural resource production.

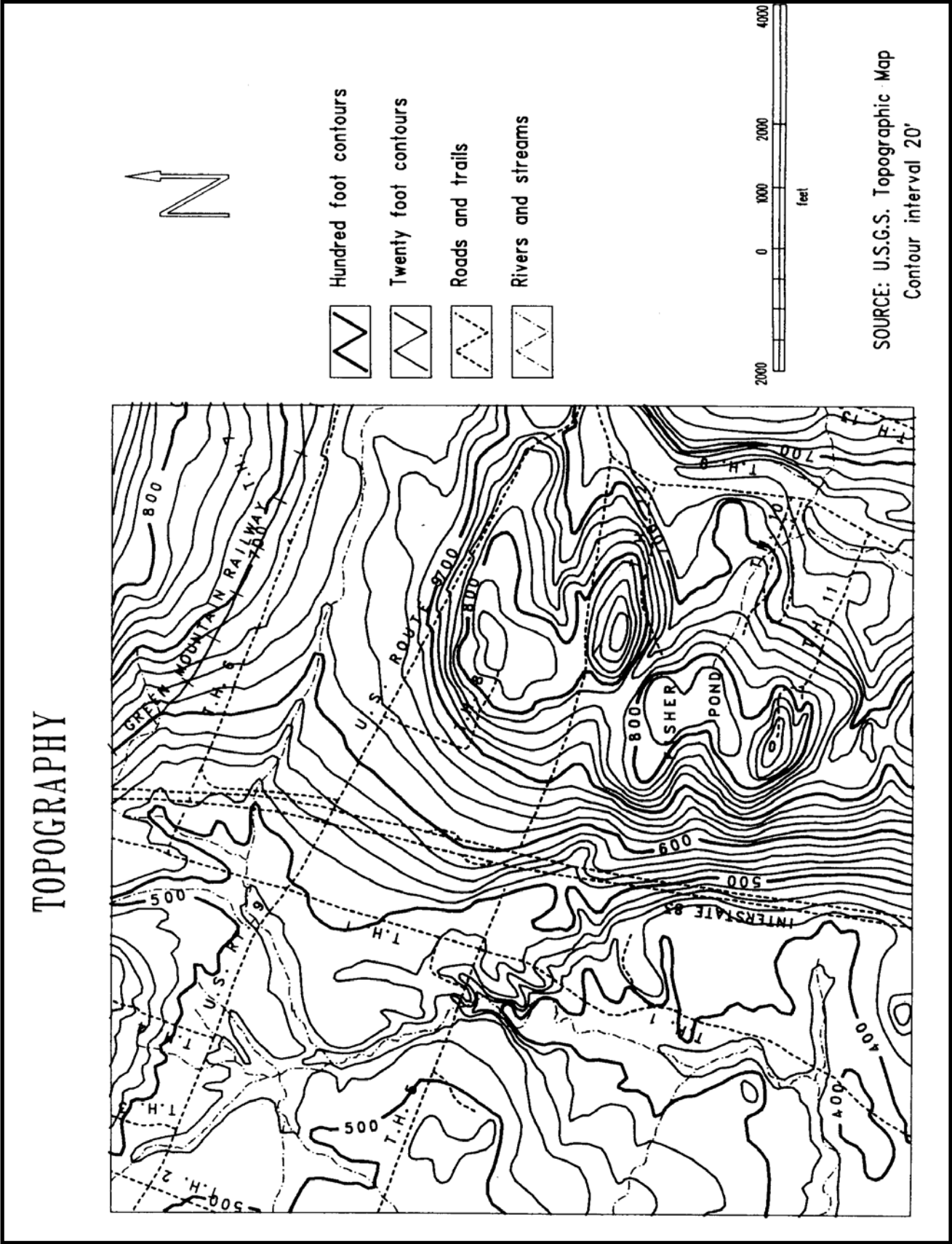
Topographic maps show contour lines, each of which represents a different land elevation. See Map 5.4. The difference between two contour lines is called the contour interval. The size of the contour intervals will vary depending on the purpose of the map. For municipal planning purposes, contour intervals of 10 feet to 20 feet are useful. The United States Geological Survey publishes contour maps at 20 foot contour intervals.

A topographic map shows heights of land (peaks, hilltops, plateaus, and ridgelines), river valleys, streams, low-lying areas, and plains. Steep slopes are also evident where contour lines are close together, indicating a large change in elevation over a small distance.

Topographic information is important for planning future land use, transportation, and public facilities and services. Topography will influence accessibility, will provide natural boundaries between areas, and will often determine land use. For example, steep mountainous areas may only be suitable for recreation, conservation, or forestry management, while valleys and plains may be most appropriate for development, farming, and transportation corridors. Topographic features, such as peaks or gorges, often have symbolic and historic importance to a community and may be highlighted in the plan for special protection.

A topographic map showing contour intervals of 20 feet or less should be prepared at the community base map scale. This map will be a basic reference as the plans for future land use, transportation, and utilities are prepared.

Map 5.4





In addition, a slope map should be prepared, for the slope condition will help determine the feasibility of differing land uses. The slope is the amount of vertical rise over a horizontal distance. The percent of slope is determined from the number of feet of vertical rise over 100 feet of horizontal distance. From topographic maps the following slope categories can be mapped and their suitability for development determined:



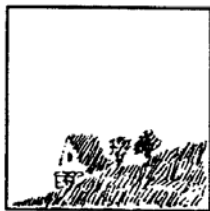
0-3%

Suitable for almost all types of construction, especially larger buildings. Since it is level to nearly level, there may be some drainage problems.



3-8%

Suitable for single family homes on small and medium lots, multifamily housing, secondary and minor roads, and smaller commercial and industrial buildings. These slopes provide a minimum of restrictions.



8-15%

Suitable for single family homes on large lots, as well as low density multifamily housing. Where necessary, terracing, retention ponds, retaining walls and other engineering techniques will be required to prevent runoff and erosion.



15-25%

Construction becomes very costly on these slopes. In addition, rapid runoff and erosion problems are likely. These slopes are unsuitable for some on-site sewage disposal systems; slopes above 20% are especially unsuitable for leachfield systems.



Over 25%

All construction should be avoided on these slopes because of high construction costs and likelihood of environmental damage.

*Sources:*

U.S. Geological Survey—topographic maps: 15 minute and 7 1/2 minute series

Regional planning commissions—mapping

### 5.5.3 *Water Resources*

An understanding of the community's water resources is critical to planning for future land use and community facilities and services. Water resources provide domestic and commercial water supplies and recreation opportunities. They are also unique and fragile areas, which if not properly used, managed, and protected, will cause public harm. For planning purposes, water resources are divided into three categories: (1) surface water, (2) ground water, and (3) wetlands.

#### SURFACE WATERS

Surface waters include lakes, ponds, reservoirs, rivers, streams, and water contained in pores of soil materials. These waters are valuable as sources of water supply; recreation areas; absorption areas for flood waters; habitats for wildlife, waterfowl, and vegetation; and aesthetic enjoyment. The value of surface waters can be diminished through pollution, alteration, and overuse.

Drainage areas and surface waters of the municipality should be inventoried and mapped. The drainage areas, also known as watersheds, can be determined from topographic maps. This information will indicate the pattern and movement of water. Other surface water should also be identified and labeled on the map. See Map 5.5.

Find out the state water quality classification of waters. Every body of water has been classified by the Vermont Water Resources Board. These water quality classifications establish (1) water quality goals to be attained where actual water quality is lower than the standard or (2) the minimum standard to be maintained where actual water quality is higher.

In its *Vermont Rivers Study* the Vermont Agency of Natural Resources has listed other important resource values for surface water and has provided this information for each drainage area in the state. These resource values include: aquifer protection areas, geologic and hydrologic features, fisheries, endangered species habitats, wildlife habitats, natural areas, historic resources, recreational boating and public access, archaeological resources, urban river corridors, undeveloped river corridors, and public lands.

Other surface waters of significance in planning that should be inventoried and mapped are defined in the following paragraphs.

*Flood Hazard Area:* Title **10 V.S.A. chapter 32** defines a flood hazard area as an area that would be statistically likely to be inundated by flood once in every 100 years. If the flood hazard area is improperly used and unprotected, a flood can create a serious threat to the public, private investments can be destroyed, and significant natural resources can be damaged.

Table 5.3  
VERMONT WATER QUALITY CLASSIFICATIONS

<i>Class</i>	<i>Values</i>	<i>Uses</i>
A	high quality waters that have significant ecological value and water quality of a uniformly excellent character	as a source of public water supply with disinfection when necessary and, when compatible, for the enjoyment of water in its natural condition
B	water that consistently exhibits good aesthetic value and provides high quality habitat for aquatic biota, fish, and wildlife	public water supply with filtration and disinfection; irrigation; and other agricultural uses; swimming and recreation
Waste Management Zones	habitat suitable for aquatic biota, fish and wildlife	recreational boating and any recreational or other water uses where contact with the water is minimal and ingestion of the water is not probable; irrigation of crops not used for human consumption without cooking; compatible industrial uses, including sewage treatment discharges

*Source: Vermont Water Resource Board*

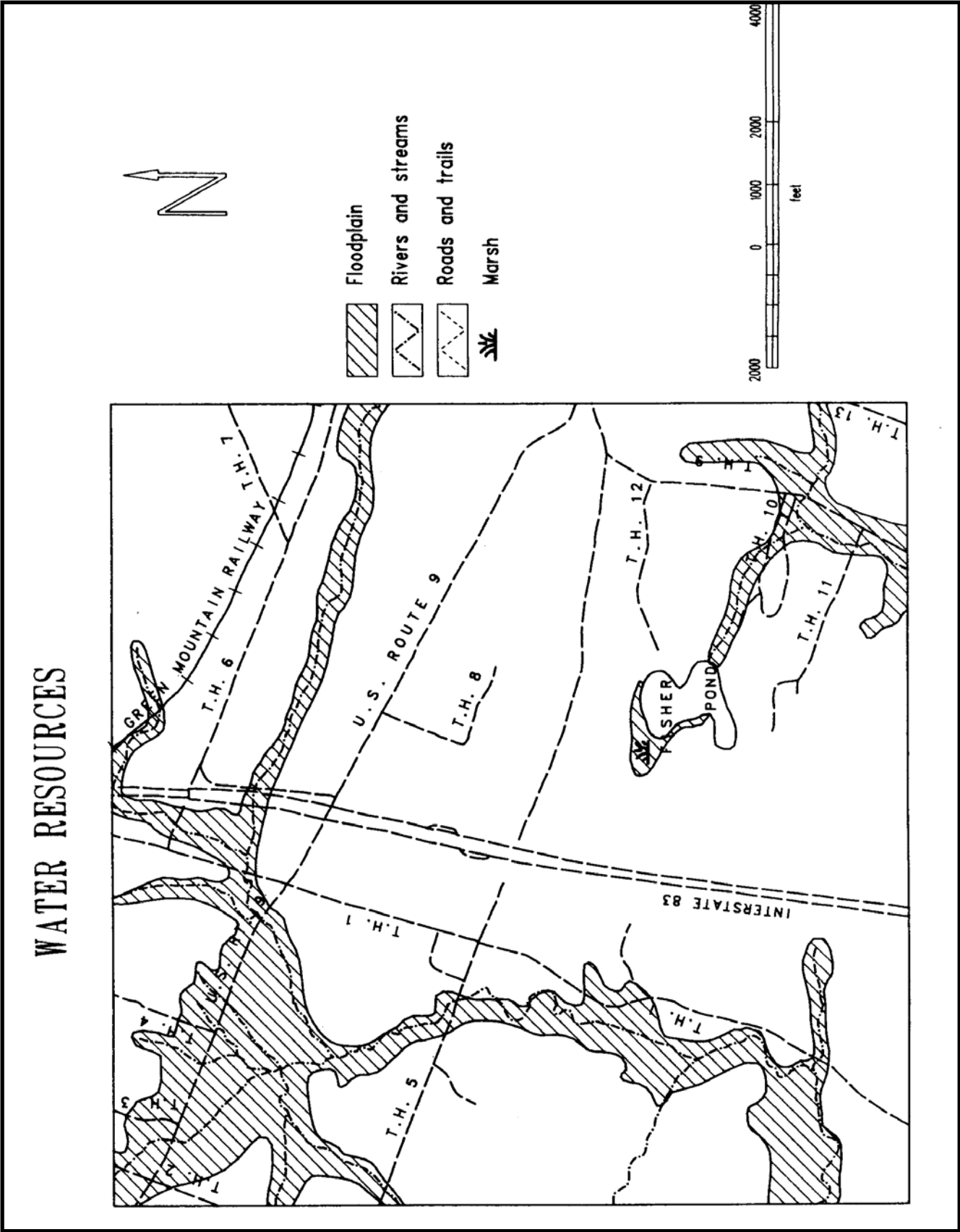
*Floodway:* Title **10 V.S.A. chapter 32** defines a floodway as the channel of a river or other watercourse and the adjacent land area that must be reserved to discharge the 100-year floods without accumulatively increasing the water surface elevation more than one foot. The floodway is the most hazardous section of a flood hazard area. Developments in a floodway could increase the flood height and velocity and most likely would be damaged in the event of a flood. Flood hazard areas have been designated by both federal and state governments and are often updated. Municipalities should compare these designations to both past and more recent flood records, known high water marks and local observations, and recent developments affecting flood height. Particular attention should be given to minor streams, which are frequently omitted from these designations.

Due to the mountainous nature of Vermont topography, many rivers and streams lie outside of the flood hazard areas recognized by federal floodplain mapping for the National Flood Insurance Program. Current flood hazard mapping is based solely on flood stage elevations, rather than taking the dynamic nature of streams into account.

The majority of Vermont's recent flood damage has occurred along these upland streams. Mountainous or hilly areas tend to have narrow, confined channels through which floodwaters move rapidly and travel downstream more quickly than in flat areas. Even though a building is not located in a valley where a rising river could overflow its banks and slowly inundate the structure, it is not necessarily safe from flood damage.

Much of the damage to private property, roads, and bridges occurs when heavy rainfall causes flash flooding in upland areas. Upland streams may appear small and harmless for most of the

Map 5.5



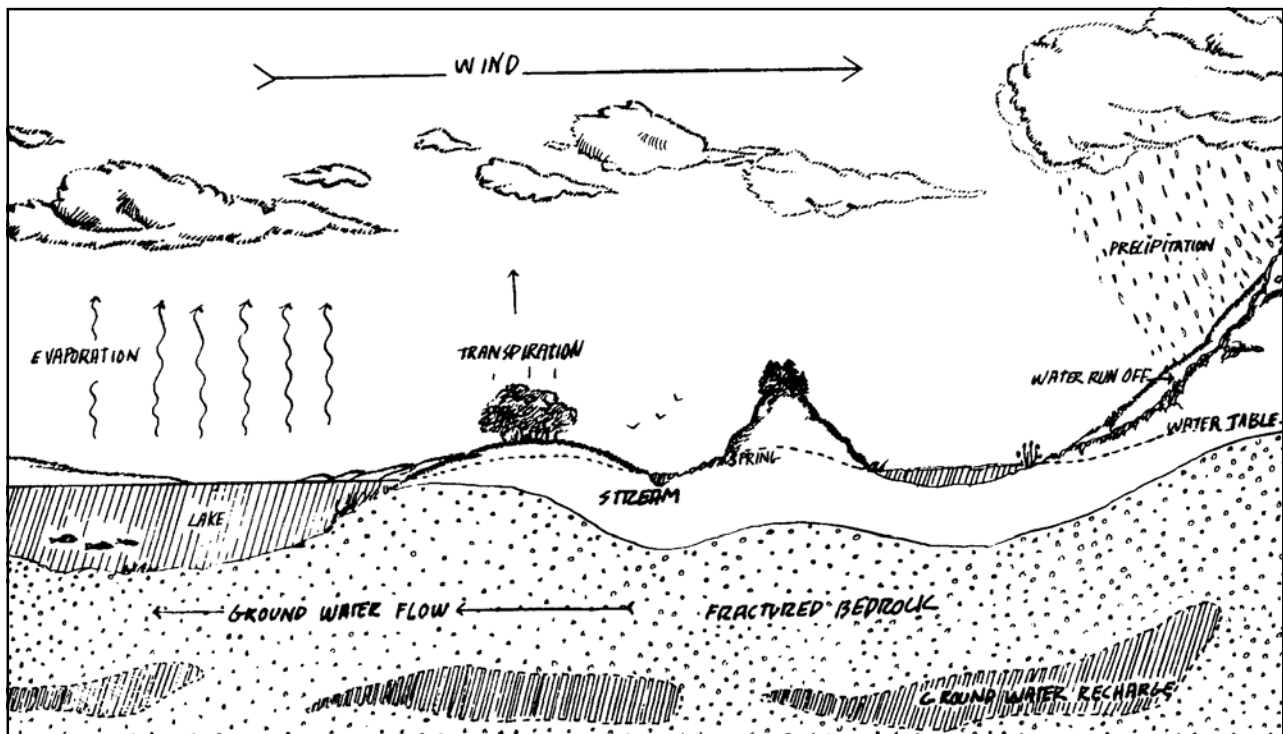
year, but they can become raging torrents when massive amounts of rainfall or snowmelt run down mountainsides. Flash flooding can occur when intense local rains fall on areas with steep slopes or on built-up areas where impervious surfaces, gutters, and storm sewers increase the flow of runoff. (For more information, see: *Community Planning for Flood Hazards*, Published by Vermont Department of Housing & Community Affairs, September 1998).

**Shorelands:** Shorelands are lands surrounding lakes, ponds, reservoirs, rivers, and streams. Title **10 V.S.A. chapter 49**, defines shorelands as "lands being between the normal mean water mark of a lake, pond or impoundment exceeding 20 acres and a line not less than 500 feet nor more than 1,000 feet from such mean water mark." Municipalities may wish to identify shorelands along small lakes, ponds, and streambanks as well. Shorelands are valuable resources. They can prevent water pollution, preserve wetlands and aquatic wildlife habitats, provide open space and scenic beauty, minimize erosion, and provide public access to public waters.

### GROUND WATER

Most ground water is derived from precipitation that has infiltrated and percolated through the soil. After reaching the water table, ground water moves toward points of discharge, such as surface waters, springs, and wells. The pumping of wells changes the natural ground water flow and draws water from all directions, creating recharge areas. Water within the recharge area may come

Figure 5.3



from precipitation on upslope areas, from saturated gravel deposits, or from water-filled bedrock fractures. Every activity within that recharge area can directly affect the quantity and quality of the ground water supply. Landfill leachate, leaking gasoline, road salt, sewage, industrial wastes, and other materials can all contaminate the ground water. The quantity of water that actually reaches the water table may be reduced by an increase in impervious cover, including buildings, roads, and parking lots.

Ground water is a finite and vulnerable resource. It is the source of most Vermonters' drinking water. Population growth and the deterioration in the quality of surface waters will both increase the demand for potable ground water.

The ground water recharge areas—that is, the land surface from which the ground water supply for public systems is coming—should be identified and mapped. These areas, known as Wellhead Protection Areas or Source Protection Areas, can help locate potential threats to water supply and assess what protection is feasible. The mapping of these areas is highly technical and requires the assistance of a hydrogeologist. It involves site-specific investigations of the well or spring and an analysis of the surrounding geology. Wellhead Protection Areas of community water systems have been or are being mapped by the Resource Management Section of the Water Supply Division of the Vermont Department of Environmental Conservation.

## WETLANDS

According to **10 V.S.A. §902**, wetlands are "those areas of the state that are inundated by surface or ground water with a frequency sufficient to support significant vegetation or aquatic life that depend on saturated or seasonally saturated soil conditions for growth and reproduction." Wetlands may include marshes, swamps, sloughs, potholes, fens, river and lake overflows, mud flats, bogs, and ponds, but they do not include areas on which food or crops are grown. Wetlands are important because they:

- provide temporary water storage for flood waters
- contribute to the quality of surface and ground water by chemical action
- control the effects of erosion and runoff
- provide spawning, feeding, and habitat for aquatic life
- provide wildlife, waterfowl, and vegetative habitat
- provide stopover habitat for migratory birds
- provide habitat for threatened and endangered species
- provide resources for education and research in natural sciences
- provide recreation values and
- contribute to community open space and scenic beauty

Important wetlands have been mapped. These areas should be included on the community's water resources map. See Map 5.5. Wetland areas and their characteristics can be obtained by referring to the National Wetlands Inventory Maps. The Vermont Department of Environmental Conservation has also adopted rules to protect wetland values and functions.

*Sources:*

Vermont Water Resources Board—water quality classifications  
 Vermont Agency of Natural Resources, Planning Division—  
*Vermont Rivers Study*  
 Vermont Agency of Natural Resources, Department of Environmental Conservation—river basin plans, lakes and ponds data, rivers and streams information, flood hazard maps and National Flood Insurance Program, wellhead protection areas for community water supplies, state geologist, National Wetlands Inventory Maps, well completion reports, groundwater protection handbook for local officials  
 Vermont Agency of Commerce and Community Development, Department of Housing and Community Affairs—Federal Flood Program information  
 Regional planning commissions—data collection and mapping  
 Municipal Offices—Federal Emergency Management Agency Flood Boundary and Floodway maps under National Flood Insurance Program

#### 5.5.4 *Natural Areas*

In most communities there are places that are quite unusual because of their wildlife, plants, or geological features. Often remote, quiet, or beautiful, such places have been known and frequented for generations by local townspeople and outside visitors alike. Our increasing ecological awareness and the accelerating pace of land development during the last decade have made these natural areas more critical than ever before. The preservation of rare and irreplaceable natural areas must now be addressed in the municipal plan. **24 V.S.A. §4382(a)(5).**

In general, a natural area can be described as an area of land or water that, in contrast to the normally encountered landscape of a region, retains or has reestablished its natural character (although it need not be undisturbed) and retains unusual or significant flora, fauna, geological, or similar features of scientific or educational interest.

There are essentially three types of natural areas:

- *geological features*, such as cliffs, glacial landforms, and mineral or fossil deposits
- *hydrological features*, such as bogs, marshes, swamps, and ponds
- *biological features*, such as rare plants or animals, exemplary natural communities, and critical habitat, including nesting sites

Municipalities should identify natural areas within their boundaries and assess their importance. For each area information should be collected on:

- the location, size, and ownership of the parcel
- the frequency of occurrence of the feature
- its recognized significance, fragility, and diversity
- the potential for recreational, educational, and research uses
- the threat to its integrity both now and in the future
- its management

Municipalities might rank the natural areas by priority for protective action.

*Sources:*

Vermont Agency of Natural Resources, Department of Fish and Wildlife—significant habitat maps, wetlands maps

Vermont Agency of Natural Resources, Nongame and Natural Heritage Program—database of rare plants, animals and exemplary natural communities

Vermont Agency of Natural Resources, Department of Forests, Parks and Recreation—State Natural Areas Registry

The Nature Conservancy, Vermont Field Office—natural areas inventories

Vermont Natural Resources Council—statewide natural areas survey

Regional planning commissions—data collection, analysis, and mapping

Local hunters, trappers, birders, and fishermen—habitat information

Local fish and game clubs—habitat information

### *5.5.5 A Summary of Physical Capability for Development*

The preceding information, summarized on one map, will show the capability of land areas to accommodate development. It is recommended that information on slopes, depth to seasonal high water table, depth to bedrock, flood hazard areas, major wetlands,



Table 5.4  
PHYSICAL CAPABILITY FOR DEVELOPMENT<sup>1</sup>

<i>CONDITION</i>	POTENTIAL FOR DEVELOPMENT	MODERATE LIMITATIONS FOR DEVELOPMENT	SEVERE LIMITATIONS FOR DEVELOPMENT
Slopes			
1-15%	✓		
15-25%		✓	
>25%			✓
Depth to Seasonal High Water			
>47 inches	✓		
12"-48"		✓	
0-20"			✓
Depth to Bedrock			
>48 inches	✓		
21"-48"		✓	
0-20"			✓
Flood Hazard Areas			✓
Major Wetlands			✓
Aquifer Protection Areas			✓
Natural Areas			✓
Shorelines			✓

1. Note: This table is presented for purposes of example. Communities should design their own table based on conditions and features of concern to them.

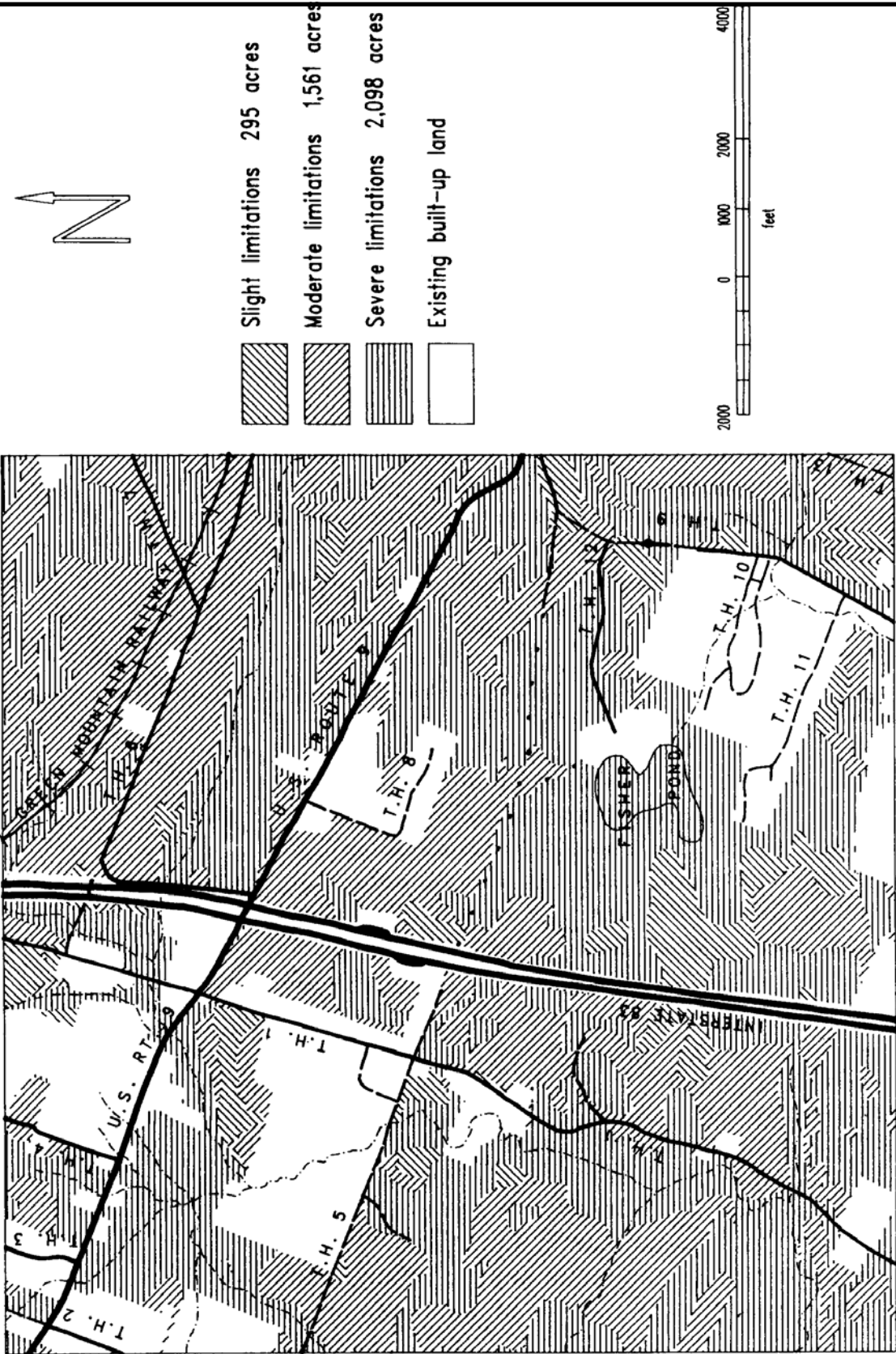
aquifer protection areas, natural areas, and shorelines be included on this map. These are the physical features that will have the greatest significance for future land use.

Table 5.4 provides one way to summarize the physical capability for development. Each community will want to select and categorize the features that, in its view, are important for determining land capability.

Using the table, prepare a map with three categories: (1) potential for development, (2) moderate limitations for development, and (3) severe limitations for development. Each section of the soils, slope, water resources, and natural areas maps that fits under one of the three categories should be colored or depicted in the same way on this summary map. See Map 5.6. The summary map will now be ready to compare with land use information described in the next section.

Map 5.6

SUMMARY OF PHYSICAL CAPABILITY FOR DEVELOPMENT



## 5.6 Analyze Existing Land Use and Special Features

This section describes land conditions in the community that have been brought about by human activity. Decisions to build roads, clear land for farming, to locate community spaces and activities in a town center, and to set aside park land have determined the character of the municipality. To plan for the future it is important to identify and recognize historic land use decisions made by settlers of the community and to understand the importance of these decisions to the community today.

### 5.6.1 Pattern of Development

A survey of existing land uses in the community will illustrate the pattern of development. The survey should locate the different land uses and illustrate their relationship to each other and to the natural environment. This information will be important for planning for the future growth areas of the community. Chapter 117 now requires that a land use plan be included as part of the municipal plan. **24 V.S.A. §4382(a)(2)**.

To start the survey, first determine the types of land uses that you want to show. These land use types may include: permanent residences, seasonal residences, commercial and industrial uses, public buildings, parks and recreation areas, institutions, and agricultural, mining, and forestry operations. These general categories can be further subdivided. For example, residences can be broken down into single family, two family, or multifamily or by the number of units per acre. Commercial uses could include retail, services, office, and recreational. Public buildings could include schools, libraries, town halls, museums, and water and sewer treatment facilities. The extent to which the different land use types are divided will depend on existing land use patterns in the community and the community's particular planning needs.

If available, a property tax map is very useful. These maps portray subdivided lands, large land holdings, and other land ownership patterns. They help one to locate residential, commercial, industrial, institutional, agricultural, forested, and vacant properties.

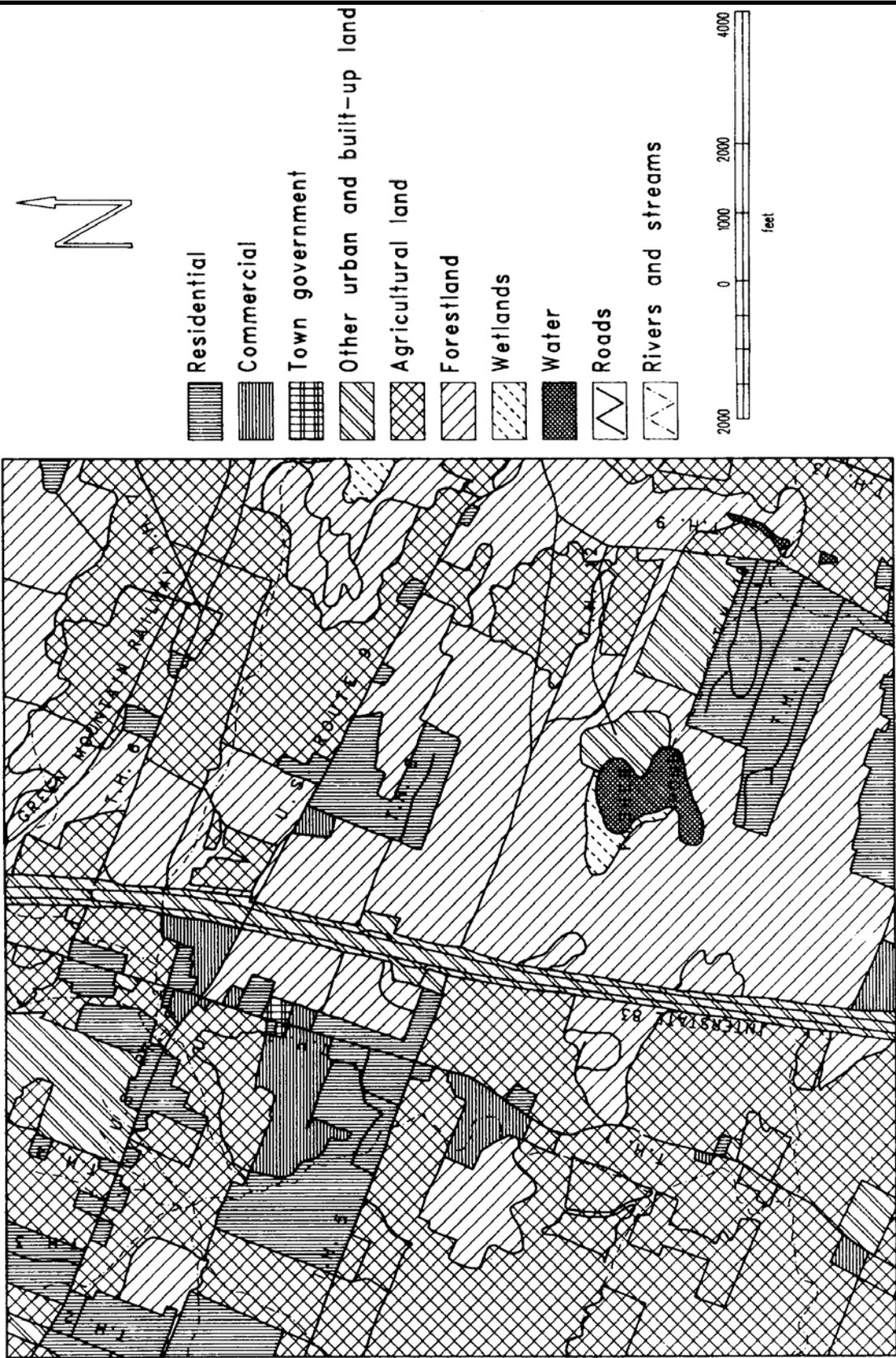
If a property tax map is not available, obtain the most recent aerial photographs of the community. Use the photos in conjunction with local building permit data, subdivision approvals, and surveys taken along town roads ("windshield surveys"). This information should provide a good, up-to-date inventory.

Once the existing land use information is collected and mapped, the community is able to see:

- where land is committed to development
- where further development is likely to occur
- what type of development has taken place and where

Map 5.7

LAND USE



- what land is still undeveloped
- where incompatible land uses are encroaching on each other
- where coherence and order in the land use pattern exists or doesn't exist
- where links or connections need to be made among land uses
- where land use patterns are emerging that are inconsistent with the community's vision of its future
- where regional trends are affecting the community's land use pattern

See Map 5.7 for an example of a land use map.

Communities that have adopted plans and bylaws may wish to study their impact on the pattern of development. This study can determine the effectiveness of the bylaws in carrying out the goals and policies of the plan and meeting changing conditions and needs.

*Sources:*

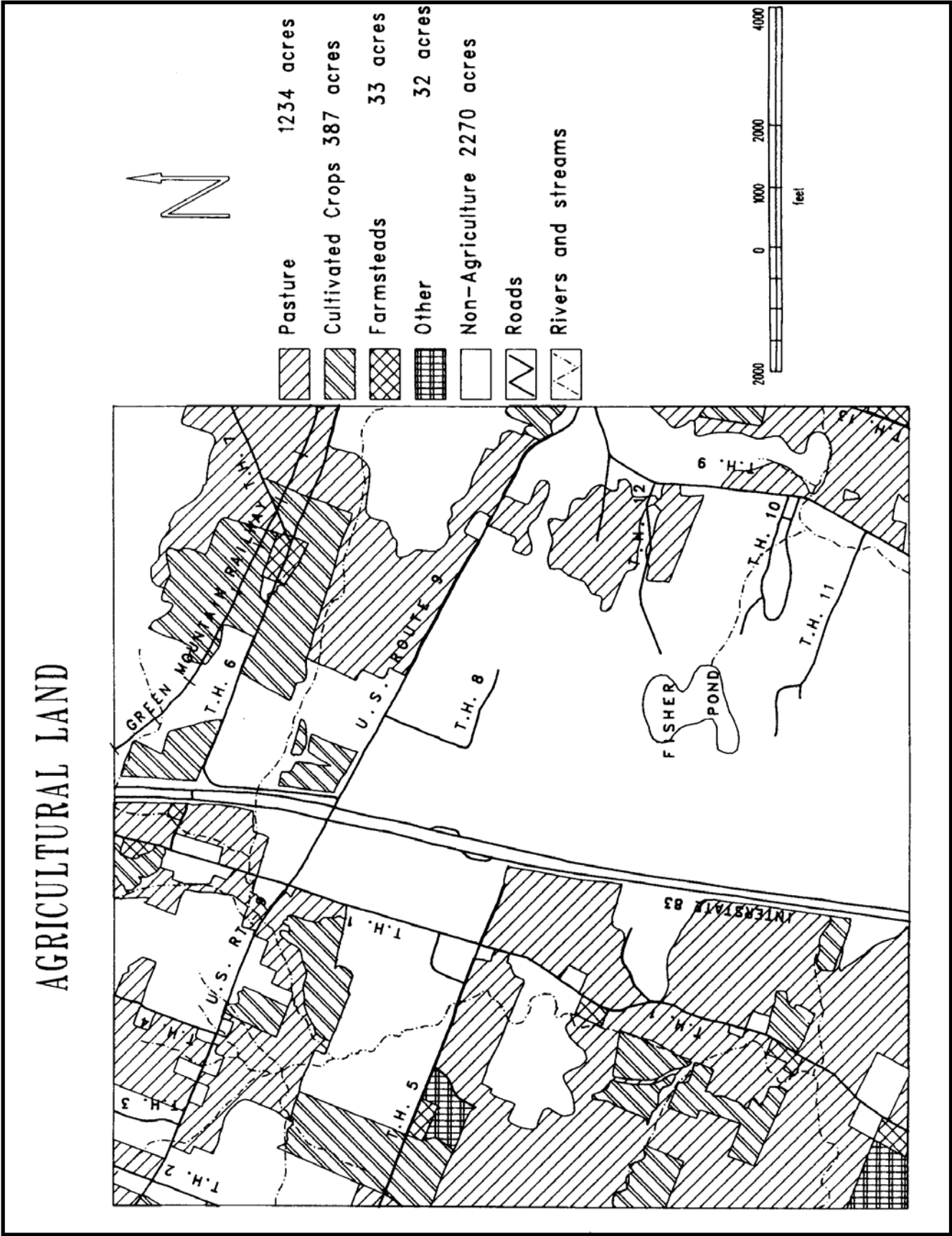
Assessor's Office—orthophoto maps, property tax maps  
 Windshield surveys—land use along roads  
 Soil Conservation Service—color infrared aerial photography  
 Regional planning commissions—surveys and mapping  
 Zoning administrator—zoning permit trends  
 Planning commission—land subdivision trends

### 5.6.2 Resource Production

The future of open land is important to the community, and to the State of Vermont. Open land makes an important contribution to the state's economy. Agriculture and forestry provide many jobs and create products for export to other regions. Tourism and recreation, including hunting and fishing, attract thousands of visitors and millions of dollars to the state annually. Each of these activities relies upon Vermont's open land resource. Indirectly, many businesses and other investors are attracted to Vermont each year by the appeal of open land.

Open land, farmland, and natural areas are essential to Vermont's quality of life. Land-based activities such as logging, farming, hunting, and fishing are central to the state's cultural heritage and tradition. The state's aesthetic or visual image is a function of the patchwork impression conveyed by its diversity of field and forest. Open land provides residents and visitors with an opportunity for quiet and spiritual enrichment. Its open land is what makes Vermont unique.

Map 5.8



The state's open land inventory is threatened by two related economic factors. First, the future of the state's principal land-based activities— forestry and agriculture—is clouded by policy decisions and market conditions, both national and international. The livelihood of farmers and foresters has suffered because of these external forces.

Second, subdivision and incompatible development threaten open land. When farming fails to provide an adequate income, landowners often sell their land to others, who put it to new uses. To the new owner, the productive or resource value of land may not represent its highest economic potential. When a farm field can generate more profit from houses than from corn, then—if the market conditions are right—that field is likely to be converted to a residential neighborhood.

## INVENTORY

How should the community address open land conversion? The community must first reach a consensus around the issue. It must agree on the types of open land to be protected, the uses of those lands, and their priority for protection.

The community must also consider the economic implications of land conservation for landowners, for prospective homebuyers, for other local taxpayers, and for the community at large. Any municipal intervention in the land conversion process will affect one or more of these groups.

Lands used for natural resource production—farmland, productive woodland, and earth resource extraction areas, such as mines and gravel pits—should be inventoried and mapped. These economic activities depend on (1) the productive capability of the land, (2) the availability of enough land to be economical for production and (3) adjoining land uses. These resource lands require special treatment.

Parcels of land used for resource production should be identified. Other parcels with the potential for resource production because of their size, physical qualities, and undeveloped character should also be determined. For agricultural parcels, the land use should indicate cropland, pasture, orchard and bush fruits, confined feeding operations (poultry, rabbits, etc.), and greenhouses. See Map 5.8 for an example agricultural lands map. Forest land can be characterized by broadleaved (deciduous), coniferous, and mixed coniferous/broadleaved. Resource extraction areas may include sand and gravel, granite, marble, limestone, asbestos, slate, copper, talc, and kaolin.

The municipality should evaluate the potential for continued resource use on these parcels. This evaluation should consider the following four factors:

- the viability of the parcel given its productive capabilities and the parcel size
- the stability of the ownership (Is the land proposed for subdivision? Is the property in the state current use taxation program?)
- the location of the parcel (Is it in an area that is highly accessible or served by sewer and water?)
- public policy in effect (How is it zoned?)

A useful process for evaluating farmland potential is the Land Evaluation and Site Assessment (LESA) process, developed by the Soil Conservation Service in the 1970's to evaluate agricultural lands. It was later adapted for evaluating forest lands (the Forest LESA or FLESA) by the Vermont Department of Forests, Parks and Recreation. The LESA is a point system that evaluates the productivity of the land based on its soil type and other non-soil characteristics that influence the potential of the land. For agricultural lands these factors include the location of a field, accessibility to a road, distance to a nearby farm, size and use of a field, or land use on nearby properties. For forest lands, the site assessment criteria focus on economic and social factors which make them important, such as parcel size, proximity to urban centers, adjacent land use and scenic value. The relative importance of each of these factors is rated usually by a LESA committee drawn from community residents. By combining these

Figure 5.4  
LAND EVALUATION AND SITE ASSESSMENT  
OF FARMLAND  
RANKING OF TEST PARCELS

PROPERTY	SITE ASSESSMENT FACTORS									LAND EVALUATION SCORE	SITE ASSESSMENT SCORE	TOTAL SCORE
	1	2	3	4	5	6	7	8	9	MAX=100	MAX=200	MAX=300
<i>Smith-1</i>	12	30	5	20	10	10	21	0	20	57	128	185
<i>Smith-2</i>	8	30	0	20	10	10	21	14	20	63	133	196
<i>Robinson</i>	12	30	5	20	10	5	30	30	30	46	152	198
<i>Kielman</i>	30	30	15	16	10	10	30	14	20	50	175	225
<i>Batten</i>	8	0	0	20	7	10	12	14	0	55	71	126
<i>Squires</i>	12	30	0	20	7	10	0	14	20	64	113	177
<i>Woodlot</i>	12	0	0	0	0	0	0	20	0	5	42	47
<i>Village</i>	4	21	0	20	7	0	12	0	0	57	64	121



site assessment and land evaluation values for each parcel, the municipality can rank the various parcels. See Figure 5.4. Several towns and regions have used this process to identify important agricultural and forest areas. Communities can obtain assistance on this process from the SCS District Conservationist Office or the Vermont Department of Forests, Parks and Recreation.

In 1988 the Vermont legislature called for the Commissioner of Agriculture to develop agricultural land planning guidelines. These guidelines were meant to assist regional and municipal planning commissions in establishing "specific criteria for identifying agricultural lands within that region or municipality." **6 V.S.A. §8.**

*Sources:*

Soil Conservation Service—soils data, farm plans, Land Evaluation and Site Assessment process  
 Vermont Agency of Natural Resources, State Geologist—earth resources data  
 Vermont Agency of Natural Resources, Department of Forests, Parks, and Recreation—information on forestry management and productivity classes, county foresters  
 Vermont Department of Agriculture, Food and Markets—agricultural development potential, Act 250 reviews  
 Vermont Agency of Administration, Property Valuation and Review Division, Current Use Advisory Board—participation in state current use taxation and farmland taxation programs  
 University of Vermont, Extension Service—County Extension Agents—farming conditions  
 Assessor's Office—farm and forestry parcels, participation in state current use taxation and farmland taxation programs  
 Regional planning commissions—data collection, analysis, and mapping  
 Vermont Land Trust, local land trusts, local conservation commissions—assistance in inventorying and prioritizing farmland, protection techniques

### 5.6.3 *Special Features*

Special land use features that reflect the cultural development and character of the municipality include historic sites, buildings, and districts; significant views and vistas; scenic roads, and outdoor recreation areas. Communities need to identify and map these features. See Map 5.9. Chapter 117 now requires that a municipal plan consider the preservation of these resources. **24 V.S.A. §4382(a)(5).**

## HISTORIC RESOURCES

Communities should survey their historic resources. A complete list of criteria for identifying historic resources may be obtained from the Vermont Division for Historic Preservation. They suggest the following categories of historic resources.

- noteworthy examples of architectural styles, periods, or methods of construction
- districts or groups of buildings that physically and spatially create a significant historic environment
- sites that represent historic community or regional development patterns (e.g., county seats or concentrations around transportation facilities)
- commercial structures and sites, business districts of architectural merit
- transportation facilities of historical or architectural merit
- structures that are important in the history of industry, technology, and civil engineering
- buildings by great architects or master builders and important works by minor ones
- architectural curiosities, one-of-a-kind buildings
- sites of prehistoric or historic archaeological importance
- homes of notable persons
- churches that are of outstanding architectural importance, are an important visual component of a village or townscape, or are of outstanding historical significance
- a site that is an area's sole link to a period of its past
- a site that is associated with events that have made a significant contribution to the broad patterns of our history

An analysis of historic resources should take into account the following factors:

- the compatibility of adjacent or nearby land uses with the appearance and use of the historic resource
- the threats to the integrity of the resource, such as: nuisances in the area (odiferous industry, high volume traffic, poor air quality); deterioration of structure, site, or area; poor signage; poor quality of rehabilitation of structures, sites, or areas; proposals to demolish certain structures; proposals for developments on certain sites; inappropriate adaptive use of structures, sites, or areas
- the potential for improvements or use of the resources

If the municipality wants to create a historic district, it should prepare a report analyzing the significance of the structures and the

areas to be designated. According to Chapter 117, **24 V.S.A. §4407(15)**, the following areas may be considered for historic districts:

- areas with distinctive design or landscape characteristics
- areas and structures with a particular relationship to the historic and cultural values of the surrounding area
- structures whose architectural features bear a significant relationship to the remainder of the structures or to the surrounding area

*Sources:*

Agency of Development and Community Affairs, Division for Historic Preservation—state historic sites register, technical assistance Vermont

Historical Society—library for background information

Regional planning commissions—data collection, analysis, and mapping

Local and regional historical societies—inventories, local history

Preservation Trust of Vermont—protection techniques and advice

### SIGNIFICANT VIEWS AND VISTAS

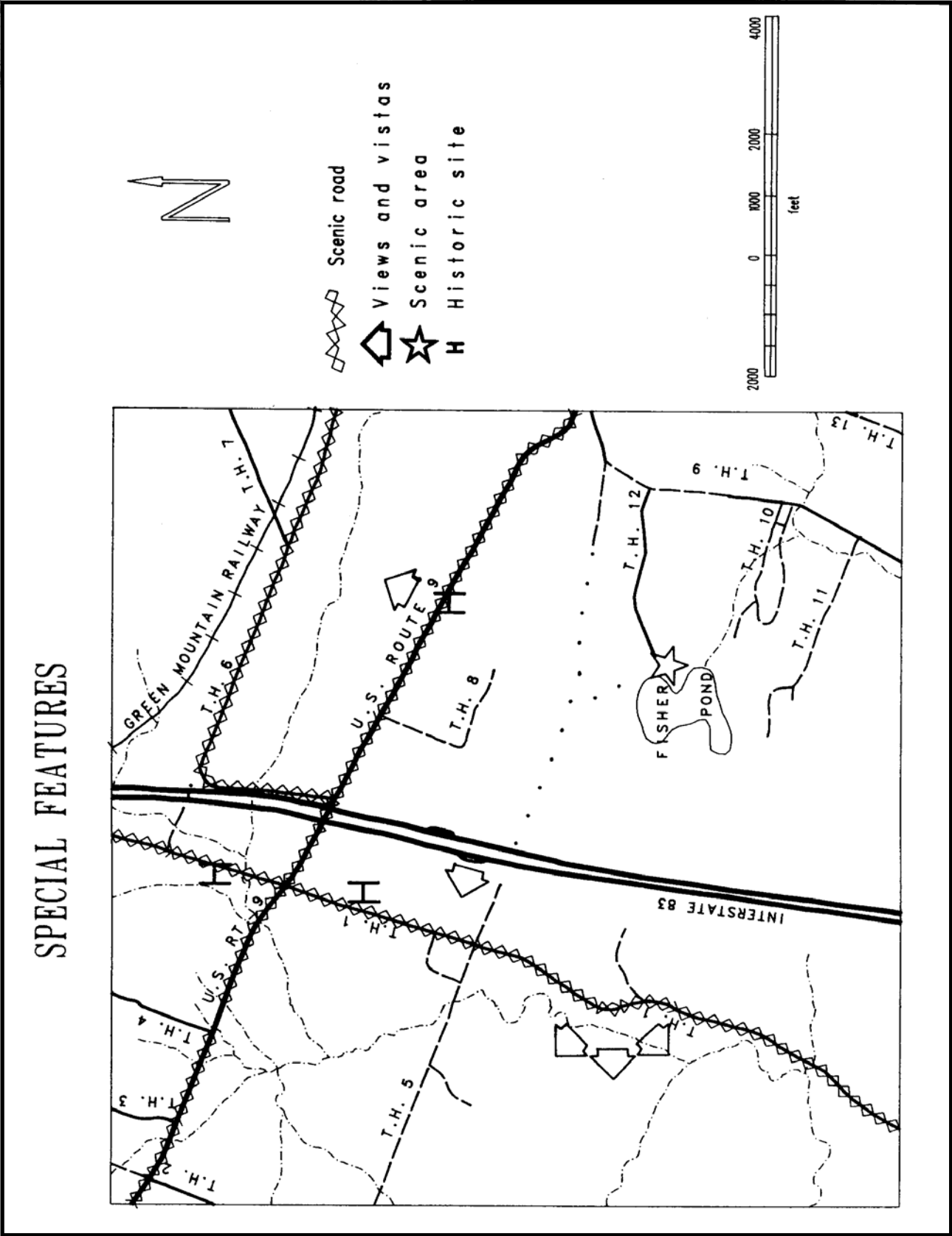
Views and vistas are important features of communities. These features reveal the landscape quality and the setting of the community and are part of the community's identity. They offer aesthetic pleasure to residents and visitors alike. Vermont's scenery is a valuable resource that is integrally linked with the state's economy, as well as our personal well-being.

Communities should take an inventory of significant views and vistas. Identify views and vistas from points along streets and highways, from public recreation areas and trails, from shorelines, and from other areas where public access is available and utilized.

Views and vistas identified during the inventory stage may be ranked according to viewer preference. These criteria for viewer preference may vary from community to community depending on the landscape features of each and the availability of professional help. According to a 1974 Vermont State Planning Office publication, *Vermont Land Capability*, the following components of landscape quality might be considered:

- the diversity or contrast among landscape elements
- the kind and arrangement of man-made structures
- the distance of the view

Map 5.9



The extent of interaction between the land use pattern (farmed areas, villages, etc.) with land form (hills, mountains, valleys, etc.) contributes to the diversity. Generally, a view with more contrast is more pleasing. Some communities rank views by resident preference surveys. Others may wish to use a more complex ranking system such as the one in Table 5.5. This system contains a list of criteria that are divided into five categories—(1) Landform, (2) Water, (3) Vegetation, (4) Land Use, and (5) General. For each of the criteria, high-ranking and low-ranking values are identified.

*Table 5.5*  
CRITERIA FOR RANKING VIEWS AND VISTAS<sup>1</sup>

<i>Criteria</i>	<b>RANGE OF VALUES</b>	
	<i>High Rank</i>	<i>Low Rank</i>
<b>I. Topographic variation</b>	Extreme variation in elevation	Low to no variation in elevation
<b>II. Water</b>		
• Percentage Water Area	High percentage of water	Low percentage to no water
• Water Body Distribution	Distinct water bodies in foreground, middle ground, and background	One or no visually distinct body of water
<b>III. Vegetation</b>		
• Vegetative Diversity	High diversity in size, density, and location of different species	Low diversity in size, density, and location of different species
• Agricultural Activity	Large area of visible farmed land	Abandoned fields
• Wetland Type	Large undisturbed wetland in foreground or middle ground	Small or undisturbed wetland
<b>IV. Land Use</b>		
• Townscape Architectural Compatibility	High compatibility	Low compatibility
• Rural Architectural Compatibility	Structural development is limited and blends with landscape	Obtrusive and poorly sited development
• Townscape Setting	High visual distinction between built-up and surrounding areas	Little or no distinction between built-up and surrounding areas
• Landscaping	Diverse, healthy, well-maintained landscape	Poorly maintained landscape
• Absence of Detractors	No eyesore visible	Highly prominent eyesores
• Signage	Signs not dominant	Signs dominant and obtrusive
<b>V. General</b>		
• Sense of Enclosure and Boundary	High sense of enclosure on at least two sides of view	Low sense of enclosure
• Length of View	View greater than 5 miles	View less than 2 miles Less than 2 miles visible

1. Adapted from John P. Wargo, Stephen Weisman, *Landscape Quality Within the Lake Champlain Basin*, Lake Champlain Basin Study, Burlington, Vermont, June 1978

The Agency of Natural Resources has published a guidebook, called *Vermont's Scenic Landscapes: A Guide for Growth and Protection*. This illustrated book provides a language and methodology for identifying scenic resources, planning methods to help protect them, and creative design solutions to help soften the visual effects of proposed development on the Vermont landscape.

*Sources:*

Vermont Agency of Natural Resources, Planning Division—guide for identifying, evaluating and protecting scenic resources  
 Vermont Council on the Arts—information on design and aesthetic issues  
 Regional planning commissions—data collection, analysis, and mapping  
 Landscape architects—data collection, analysis, and mapping

### SCENIC ROADS

Scenic roads provide enjoyment of the landscape, whether the landscape is rolling farmland, historic townscapes, or a deep forested ravine. Scenic roads are part of our communities' heritage and are worthy of protection. The State of Vermont, concerned that these roads were disappearing due to road construction and land development patterns, enacted in 1977 the Scenic Road Law.

Communities should follow the guidelines adopted under the Scenic Road Law to inventory and analyze their scenic roads. These guidelines, which are voluntary, are incorporated in a field guide entitled, "Designating Scenic Roads." (See bibliography in Appendix E.) According to the guide, a survey is taken by driving each road and inventorying certain elements, including farming patterns, panoramas, leaf tunnel effects, and historic sites. A team decides if a road is "scenic" by the number of scenic elements in each mile. The team then retravels the "scenic" roads to conduct a complete inventory. (Inventory sheets are provided in the guide.) The results of this inventory should be mapped. This process has been designed to be conducted by local planning commissions with the assistance of regional planning commissions.

*Sources:*

Agency of Transportation, District Transportation Offices—scenic roads programs  
 Vermont Scenery Preservation Council—scenic roads and byways program  
 Vermont Local Roads Program, St. Michael's College—local roads programs  
 Regional planning commissions—scenic roads programs

## PUBLIC OUTDOOR RECREATION AREAS

Public outdoor recreation areas are land areas—either publicly or privately owned—where the public can enjoy such outdoor pursuits as hiking, riding, bicycling, boating, swimming, picnicking, and ball games. These areas are considered special features in a community because appropriate sites are limited and because they are open to the public. These areas include trails, fishing, and boat access areas, ski areas, and local, regional, state, and federal recreation areas.

Outdoor recreation areas should be evaluated to determine (1) the potential for continued public access and use and (2) threats to the resource from pollution, overcrowding, incompatible encroachments, economic conditions, or other factors.

### *Sources:*

Vermont Agency of Natural Resources, Recreation Division—  
State Recreation Plan: inventory, projections, needs; Vermont  
Recreation Planning Manual  
Regional planning commissions—data collection, analysis, and  
mapping  
Municipal recreation boards or departments—inventory and  
analysis of conditions

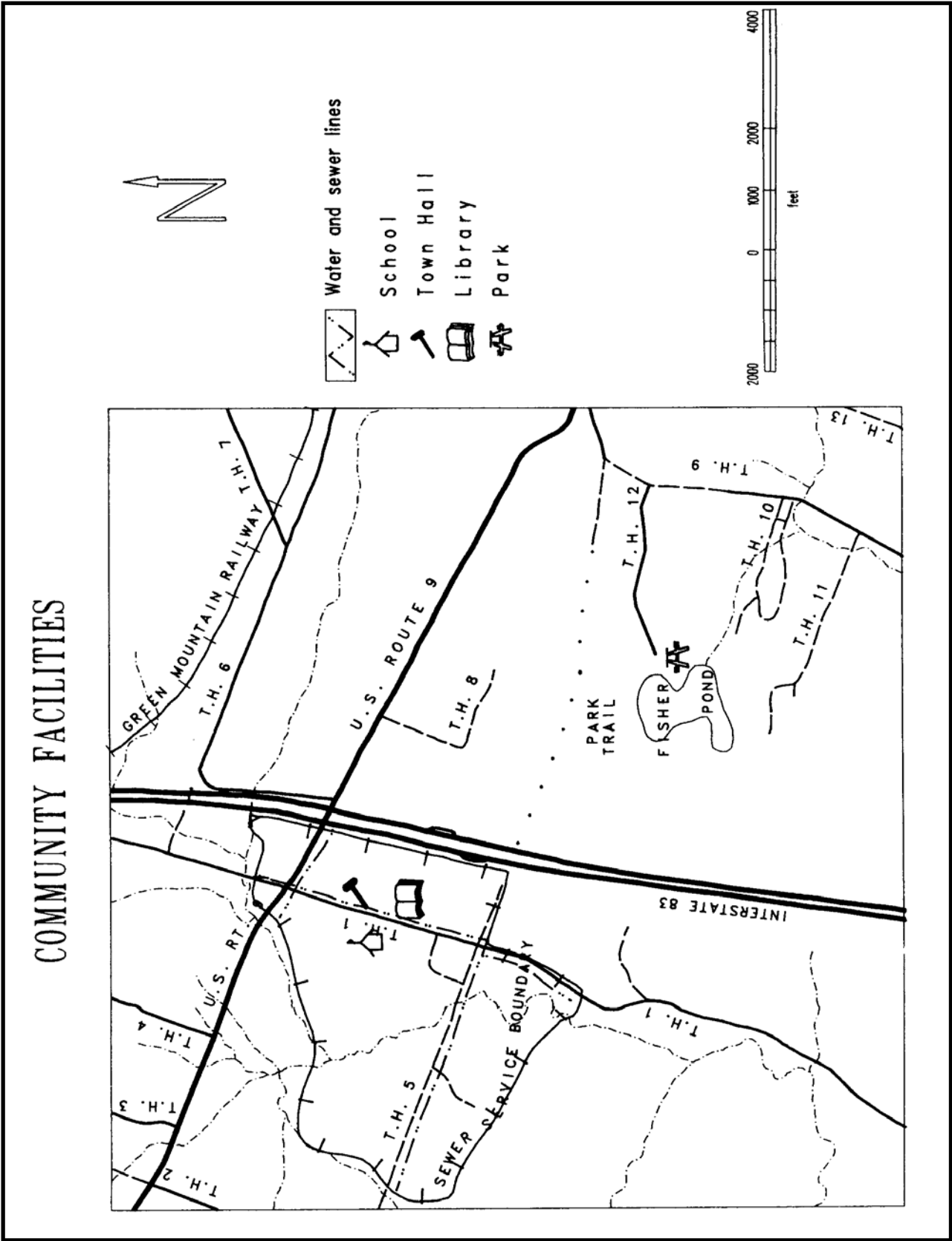
Community facilities and services are provided by the municipality (or available within the municipality) for the health, benefit, safety, and enjoyment of the general public. They include transportation, schools, parks and recreation facilities, libraries, public water supply and waste disposal systems, solid waste management, utilities and energy, police and fire protection, health and human services, and general administrative services. See subsections below on each of these topics.

Chapter 117 now requires that a utility and facility element be included in the municipal plan. **24 V.S.A. §4382(a)(4)**. Several of the above-listed topics are separately addressed under 24 V.S.A. §4382 as specific required elements: transportation, educational facilities and energy. A community may elect to incorporate any or all of them under the utilities and facilities section along with the other public services.

Community facilities and services have a significant effect on the municipality's ability to grow in an orderly and healthy way. Adequate, well-maintained, and efficient services will enable homes, businesses, and public places to be accessible and have safe water supplies, sanitary waste disposal, and necessary governmental services.

## 5.7 Analyze Community Facilities and Services

Map 5.10





Careful planning is essential for community facilities and services if they are to meet local health, safety, and welfare needs and community goals for future growth. If the facilities are at capacity, further development may strain them, causing financial burdens and environmental problems. If facilities are inadequate, they may prevent the municipality from adequately meeting existing needs and accommodating desirable growth. If they are oversized and underutilized, they may encourage unplanned growth.

Facilities and services are major users of land. Consider the land required by schools, transportation corridors, recreation areas, watersheds, reservoirs, treatment plants, hospitals, firehouses, and public buildings. Therefore, communities must consider the space these facilities will need in determining future land use.

Take inventory of all community facilities and services and important facilities and services available to the municipality elsewhere in the region. The inventory should include all community facilities and services owned and operated by public agencies; federal, state, and local bodies; and entities such as town and village school districts, fire precincts and other special-purpose districts. Routes, sites, buildings, and service areas should be accurately located and identified on a map. The map will help to indicate which parts of the town are not as well serviced as others. See Map 5.10 as an example.

Evaluate these facilities and services in terms of their quality; ability to deliver services; capacity to meet future needs based on population, economic, and land use trends; their effect on orderly and efficient municipal and regional development; and other standards the municipality and region may set. An evaluation should consider not only the needs of permanent residents, businesses, and industries, but also, where applicable, the needs of seasonal residents and transients.

### *5.7.1 Transportation*

Transportation planning is vital to a community. Not only is it one of the required elements of a municipal plan (**24 V.S.A. §4382(a)(3)**), transportation systems have a strong impact on land use development. Transportation facilities provide for the movement of people and goods within the community and provide connections between homes, industries, businesses, schools, parks, government offices, and places beyond the municipality. Transportation facilities include highways, railways, bus routes, water transportation, airports, bikeways, and pedestrian routes.

Due to major federal legislation in 1991, the Intermodal Surface Transportation Efficiency Act (known as ISTEA and its next

generation TEA-21), transportation planning is becoming a decentralized process under the Vermont Agency of Transportation Planning Initiative. This Initiative creates a new state-town-regional partnership in transportation planning and policy development. The local role will be much stronger than it has been previously. Regional planning commissions and municipalities will be more directly involved in decisions about transportation planning that concerns project priorities.

In its beginning stages, the Planning Initiative will support the preparation of thorough transportation plans at the regional level. The Vermont Agency of Transportation will also support those towns with special planning needs and capabilities. Each transportation plan will result in a list of projects or actions that should be undertaken to solve transportation problems and carry out the plan.

The Planning Initiative responds to the state planning goal to move decision making as close as possible to the local level. It contains expanded citizen involvement and provides direct connection for local officials to affect transportation planning and programming decisions. Active participation and concurrence of local officials is essential to the success of this effort.

The philosophy behind this new Initiative is that transportation planning is best done within the context of land-use planning. The hope is that the Initiative will result in viable, implementable transportation actions within a region that best reflect town and regional priorities.

To begin the process of selecting transportation alternatives that make sense, communities should inventory all transportation facilities within the municipality and significant transportation facilities elsewhere in the region. All facilities should be accurately located and identified on a map. See Map 5.11.

## HIGHWAYS

Highways should be identified according to both their functional classification (major arterial, minor arterial, collector, local street) and the state's town highway classification system. *The functional classification* illustrates the roles of different highways within the community, whether it is to move people and goods across municipal boundaries on an interstate or to provide access to a residential subdivision. Communities can use these classifications to plan for future land use. The functional classes are shown in Figure 5.5.

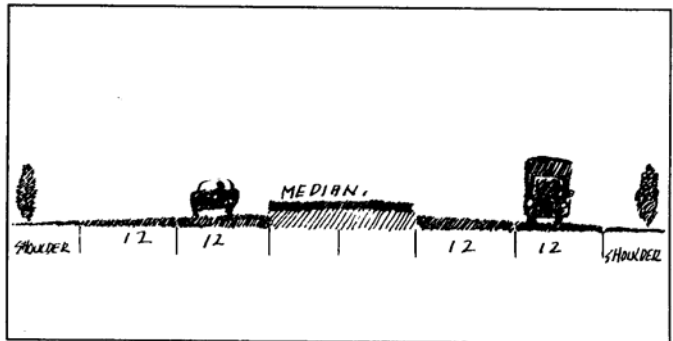
*The state classification system*, defined in **19 V.S.A. §302**, primarily refers to highway conditions. This system is the basis on which the state allocates highway aid for municipalities. The four classes are:

Figure 5.5

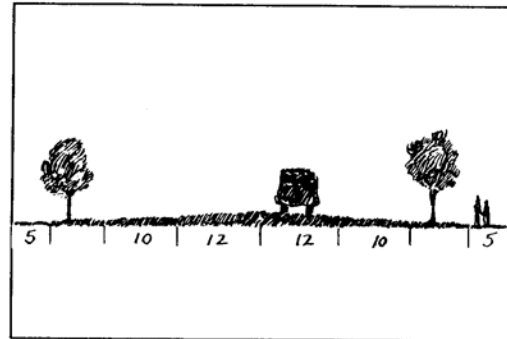
## HIGHWAYS

THE FUNCTIONAL CLASSES<sup>(1)</sup>

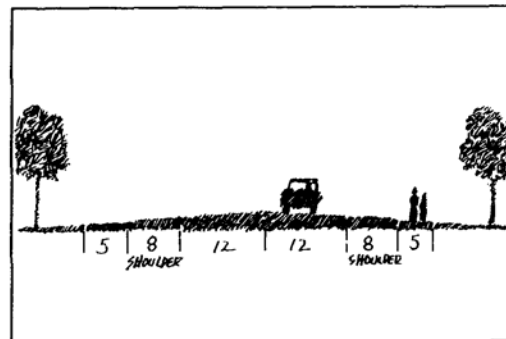
*Major Arterials:* Major arterials are designed primarily to move traffic. They are not designed to service adjacent land, so they are characterized by access control. They serve large volumes of traffic moving at maximum allowable speeds.



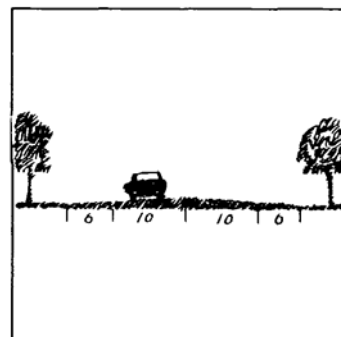
*Minor Arterials:* Minor arterials bring traffic to and from major arterials and move this traffic within or through the community. Minor arterials connect major traffic generators and usually form an integrated system.



*Collectors:* Collector roadways carry the major volume of internal traffic with the community and provide a link from residential, industrial, and commercial areas to arterial highways.

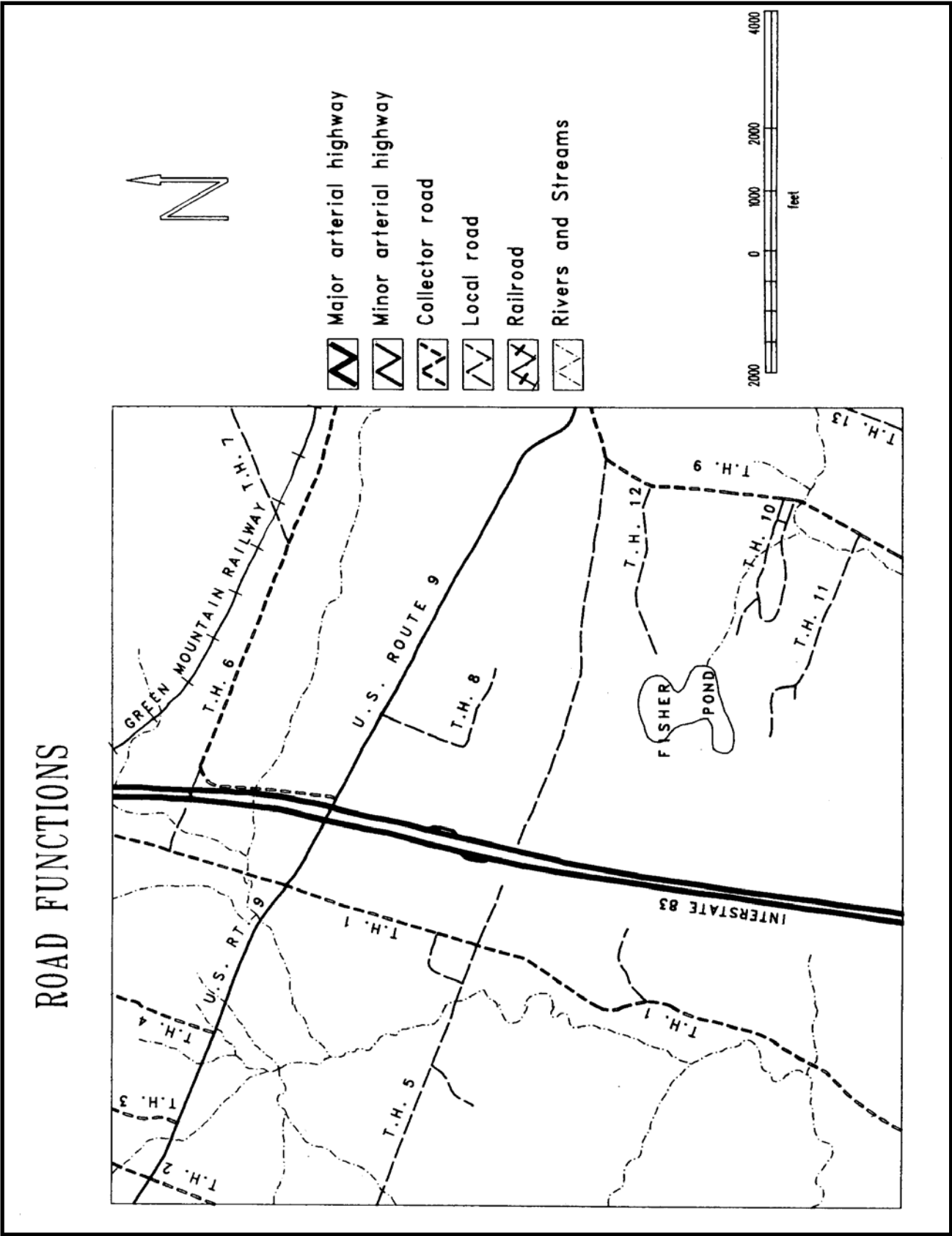


*Local Streets:* Local streets primarily provide access to adjacent land and provide links to the collector system.



(1) The *Vermont Standards* allow for variation on roadway and shoulder widths from these national standards.

Map 5.11



*Class 1:* Highways, designated by the Transportation Board, that are extensions of a state highway route and carry a state highway route number

*Class 2:* Highways, designated by the selectmen and approved by the Transportation Board, that secure trunk lines of improved highways from town to town (formerly a state aid road)

*Class 3:* Highways, designated by the selectmen after consultation with a representative of the Transportation Board, that are:

- a traveled town highway other than Class 1 or 2
- a town highway that is negotiable under normal conditions all seasons of the year by a standard manufactured pleasure car
- a town highway with sufficient surface and base, adequate drainage, and width sufficient to permit winter maintenance

*Class 4:* Highways, designated by the selectmen, that are untraveled town highways, trails and pent roads, town highways with gates denying public access, and all town highways not classified as Class 1, 2, or 3 highways.

Evaluate town highways for their safety conditions, surface conditions, capacity to handle traffic, and their actual traffic volumes on the average and at peak periods. Consider the service they provide to land uses within the municipality and their service to the region. The Vermont Local Roads Program, located at St. Michaels College in Colchester, provides technical assistance to Vermont municipalities on a wide variety of highways-related issues.

## RAIL FACILITIES

Many communities contain active railroad lines and freight yards. These facilities offer opportunities for rail siding use by industry, agriculture, and passenger rail service. Structures, presently or formerly related to rail use, such as railroad stations and warehouses, may have historic or architectural value. They can be adapted to such uses as bus and taxi depots, business offices, warehouses, retail shops, restaurants, community centers, and farmers' markets. Communities with railroad beds that are not being utilized could consider other uses for these facilities, including bikeways and trails. If there is any opportunity for future rail use of these beds, however, they should be protected from incompatible uses. Communities should inventory, map, and study all rail facilities for the opportunities they offer as well

as for their current conditions and functions.

#### BUS SERVICE

Any municipality with bus services should identify the services and map the routes and stops. The available facilities should be compared to the present and potential need for bus service. These needs could include service to senior citizens, the handicapped, and those without auto transportation; commuter service from central points in the community to employment centers; long distance service; transportation to recreation facilities; and delivery service of food, medicine, and other essential commodities for the ill or otherwise homebound. Bus service available elsewhere in the region could be extended or connected to the municipality. In examining the need for bus service, keep in mind opportunities to expand the use of school buses, conserve energy, and economize on fuel costs.

#### WATER TRANSPORTATION

Water transportation may include ferry boats, barges, and excursion boats. Communities located on bodies of water where transportation routes exist should identify these routes and port facilities. Communities should evaluate these facilities for their effect on the traffic volume and circulation in the surrounding area, the opportunities for industrial usage, and their attraction for the vacationing public. Their land requirements for parking, loading and unloading, and maintenance and storage should also be considered.

#### AIR TRANSPORTATION

Airports that serve local residents, businesses, and industries should be identified, whether they are located within the municipality or elsewhere in the region. Air transportation facilities should be evaluated for their current conditions; their impact on the surrounding communities' land use, noise, and air quality; their accessibility to ground transportation; their proximity to regional industrial and commercial centers; their level of service; and the opportunities they provide for recreation. Private airports used primarily by the owners should also be identified because they can affect adjoining land uses. Flight paths for all airports should be identified and mapped. Land use patterns and potential developments within the flight paths could be affected by potential noise and safety problems.

#### PARKING FACILITIES

Many municipalities have municipal or private parking facilities, including on-street parking, lots, and garages, in their

central business districts. These facilities should be identified and mapped. They should be evaluated in terms of their adequacy to meet present and anticipated parking needs, their effect on traffic circulation, the surrounding land uses they service, and the availability of land or highway rights-of-way for additional parking facilities.

#### BIKEWAYS AND WALKING TRAILS

Bikeways and walking trails are important not only for recreation but also for commuting to work, shopping, or visiting. Any existing bikeways should be identified and mapped. For safety, consider potential bikeway routes both within and separate from existing highway rights-of-way. Walking routes used by residents but not necessarily developed should be identified.

#### SIDEWALKS

Sidewalks provide safe routes for pedestrians in neighborhoods, commercial and industrial areas, and community centers. Communities should map all sidewalks and evaluate their conditions. Sidewalks that need improvements or extensions should be identified. Areas not served by sidewalks but needing them should also be identified.

#### TRAFFIC

Traffic circulation and control is an important part of transportation planning. The volume of traffic is directly related to the amount of activity in a municipality and its region; as growth and land development increase, so will traffic volumes. The increase in traffic can have a noticeable effect on day-to-day life in a community; it influences travel patterns, increases maintenance costs and alters real estate values. Severe traffic congestion can seriously diminish the quality of life.

Traffic management is an issue that should be anticipated and addressed in the local planning process. Existing traffic conditions should be identified and analyzed, particularly where congestion or safety problems exist or are projected. Close connection with the Vermont Agency of Transportation Planning Division and your regional planning commission is important to the transportation planning process.

Evaluate traffic conditions by examining the growth in traffic volume—both the average daily traffic volume and peak hour traffic volume. Compare the volume to the capacity of the roadway. This comparison will indicate the severity of the traffic problem. If professional assistance is obtained, the level of service of the roadway or an intersection can be measured. By studying

accident data, you can identify further problems or needs.

Projections of traffic volumes will indicate whether problems may arise in the future. Project future traffic volumes by extending volumes based on the trends of the past five years or by factoring in recent development trends if they are different from the five-year trend. Consider whether land uses are changing as well.

Traffic analysis is useful for identifying existing and projected roadway and intersection improvement needs. However, it is complicated and, for a thorough study, requires the assistance of a traffic engineer. While professional assistance is invaluable, local officials should familiarize themselves with the basic concepts.

Every road segment and intersection has a theoretical maximum capacity, expressed in terms of vehicles per hour. Capacity is a function of many factors, including the roadway's width, slope, pavement type, turning angle, speed limit, and access characteristics. At 100 percent capacity, the roadway does not move traffic.

For any given road segment or intersection, the municipality can obtain a count or estimate of traffic volumes. (See Figure 5.6.) These counts are made manually or, more often, through the use of electronic traffic counting devices, and are expressed in terms of vehicles per hour or average daily traffic. The Vermont Agency of Transportation maintains many permanent traffic counters at key locations around the state, as well as temporary counters that are systematically moved from location to location. On occasion, the agency installs counters in particular locations to make a site-specific study. The data from this comprehensive monitoring program can be used to estimate traffic volumes and to project future traffic volumes.

By knowing the capacity of a road segment or intersection, and by knowing its current or projected traffic volume, the community can evaluate its adequacy and performance. This evaluation is based upon the ratio of traffic volume to roadway capacity ( $v/c$ ). It is expressed in terms of level of service (LOS). In essence, the road segment or intersection is assigned a level of service grade, from LOS A (free flow) to LOS E (failure), based upon the ratio of volume to capacity. In Vermont, a Level of Service C condition is the desired standard for roadway performance at normal high-use periods.

#### *Sources:*

Vermont Agency of Transportation, Planning Division, Montpelier—traffic data, highway sufficiency ratings, state five year plan for capital improvements, accident statistics, bikeways information

Vermont Agency of Transportation, District Transportation Offices—highway classifications, local road and bridge conditions, state aid

Vermont Agency of Transportation, Rail, Air and Public Transportation Office—airport, railroad and public transit



information

Vermont Local Roads Program, St. Michael's College, Colchester—  
maintenance and capital improvements planning information

Vermont Transit—bus routes and stops

Local and regional bus services—bus routes and stops

Regional planning commissions—data collection and analysis,  
regional transportation facilities, regional plans

### TRAFFIC CALMING

There are many ways to handle roadway design, traffic congestion, vehicular speeds, bicycle and pedestrian safety. Understanding and planning for the type of facility desired is important. In addition to traditional roadway design (width, slope, and other geometric characteristics), there is a toolbox of practices and designs commonly referred to as “traffic calming” techniques.

Traffic calming is used to enhance the safety and human experience in neighborhoods, along main streets, country roads, etc.. Traffic calming assumes that speed and “ease of vehicular movement” are not the only design criteria in roadway design. These

- street width reduction through bump-outs, bulb-outs, neckdowns, etc.
- street trees to soften the edge and protect the pedestrian
- landscaped median strips
- roundabouts, mini-roundabouts
- streetside parking
- sidewalks, bike lanes
- rumble strips, elevated speed table
- change in pavement color and texture, signage
- community gateway

#### *Sources:*

Agency of Transportation, Planning Division, Montpelier—design  
and engineering guidelines, transportation planning

Local Roads Program, St. Michael's College, Colchester—  
techniques and maintenance information

Conservation Law Foundation, Montpelier—publication 1998:

*Take Back Your Streets*

Regional planning commissions—design practices, transportation  
and community planning

practices and techniques include the following designs:

#### *5.7.2 Education*

An educational facilities plan is one of the required elements of a municipal plan. **24 V.S.A. §4382(a)(6)**. An inventory of educational

facilities should include the location and size of existing school sites and buildings, school recreation facilities, enrollment trends, capacity of facilities, and school transportation vehicles and routes. Schools located outside the municipality or local school district but attended by residents, such as vocational schools and colleges, should also be inventoried. These facilities should be evaluated. Are the buildings in good physical condition? Is there sufficient space to meet existing needs? How will the population projections affect enrollments? Can the projected number of students be accommodated by existing programs and facilities? The commission should work with the school board on the answers to these questions.

Planning decisions on the location, type, and amount of future growth can have significant implications for educational services. What are the plans for improvements to school facilities and services? Will the improvements meet the projected needs from the anticipated growth? Because schools represent a large portion of local expenditures, many communities have found they have had to closely coordinate planning decisions with the school board to avoid adverse fiscal impacts on the municipality.

*Sources:*

Vermont Department of Education—statistical information, building and site requirements and standards for schools  
 School supervisory districts—enrollment trends, capacity of facilities, staffing, and expenditures  
 Local school boards—school policies, plans, and programs

### *5.7.3 Recreation*

An inventory and survey should be done of all existing park and recreation areas, facilities, programs, and organizations in the community. Other important recreational opportunities available in the region for use by residents should be included as well. Provide a description of how areas and facilities are used, their present condition, and their location on a map. An inventory could include:

- public parks
- recreation facilities and programs (beaches, improved fields, tennis courts, and instructional programs)
- school facilities and programs (playgrounds, auditoriums, craftrooms, athletic fields, and skating rinks)
- private, commercial, and voluntary agencies, facilities, and programs (golf courses, ski areas, bowling alleys, snowmobile trails, and so on)

Committees, agencies, organizations, and individuals

responsible for operating and maintaining recreation facilities and programs could also be identified. Facilities and programs should be evaluated for their present conditions, their ability to meet present and anticipated needs, the opportunities they offer for expansion, and the advantages and disadvantages of their location in the community. In determining future recreation needs, consider the population projections, the adequacy of existing facilities for use by all age groups, the availability of recreational opportunities in the region, the distribution of recreational facilities and programs in the municipality, the users (local, regional, tourist) being planned for, the preferences of the public, and community standards for recreation. Municipalities that require the dedication of recreation land or fees in their subdivision regulations should evaluate the effectiveness of this device. Is it producing the necessary land and improvements? Are the results serving the needs of the new residents who have paid the fee? Does the fee reflect the additional costs of recreation services for the new residents?

*Sources:*

Vermont Agency of Natural Resources, Department of Forests, Parks and Recreation—recreation planning assistance, Vermont Recreation Plan, recreation planning manual  
 Municipal recreation boards and departments—local recreation facilities, programs, and needs  
 Other local or regional groups, (4-H, Little League, Vermont Association of Snowmobile Travelers, Vermont Ski Areas Association, Green Mountain Club)  
 Regional planning commissions—regional recreation facilities, data collection, and analysis

#### 5.7.4 Libraries

All library facilities, including those in schools and museums, should be identified. Librarians should be consulted as to the adequacy of the facilities for book storage, seating, and library-related functions (such as book fairs) and the conditions of the buildings. The location of any library should be evaluated in terms of its accessibility to patrons (including school children, senior citizens, and handicapped people), and the noise and traffic associated with adjacent land uses.

*Sources:*

Vermont Department of Libraries—general information and assistance, standards  
 Local and regional libraries—data on existing facilities, needs

Schools—data on existing school library facilities, needs

#### 5.7.5 *Water Supply*

If a community has an existing public water system, it should identify and map the service area, facilities, and water supply source. It should also inventory privately operated community water systems in the area. The capacity of the systems should be compared to the number of users and the anticipated demands from future users. Conditions of the facilities should be evaluated. Consideration should be given to the present quality of the water supply source and any anticipated threats to its purity. All communities should determine which areas, if any, need a better water supply—where individual wells are contaminated, for example, or where an adequate water supply source is unavailable. These areas could include residential, industrial, commercial, and agricultural centers.

#### *Sources:*

Vermont Agency of Natural Resources, Water Supply Division—information on drinking water standards, public water systems, aquifer protection areas, and well log data

Vermont Agency of Natural Resources, Public Facilities Division—assistance on planning for water system improvements, cost estimates

Local public works department—municipal water supply system information

#### 5.7.6 *Sewage Disposal*

Any publicly owned and operated sewage disposal facilities, including the extent of their service areas, should be identified and mapped. Privately operated community systems should also be inventoried. Compare the capacity of the systems to the present number of users and the anticipated demand for new users.

Evaluate the condition of facilities. There may be problems with the system of treatment for sewage, combined storm water runoff and sewage disposal, or pollution of watersheds. Most rural areas use individual onsite sewage disposal systems. Any problems with this method of disposal, such as contamination of surface or ground water, should be identified. The effectiveness of any local health regulations in ensuring safe and adequate onsite sewage disposal should be evaluated.

Administration procedures for municipal sewage systems should be identified and analyzed. Some communities have adopted policies limiting the extension of sewer lines to sewer service areas and allocating excess sewage treatment capacity to

different land uses. Most communities operating these facilities assess user fees. The effectiveness of these policies and procedures should be evaluated. Is the sewer line extension policy consistent with land use plans? Are the capacity allocations consistent with growth projections? Are some land uses demanding more capacity than anticipated? Are the fees covering the costs of hook-ups and operation and maintenance of the plant? Communities that do not have these policies and procedures should consider them.

*Sources:*

Vermont Agency of Natural Resources, Public Facilities Division, Operations and Management Section—technical assistance, compliance monitoring, financial management, training for public systems; compliance monitoring for private discharges  
 Natural Resource Conservation Districts, Onsite Sewage Program—information on individual onsite disposal systems  
 Local public works department—municipal sewage disposal system information

#### *5.7.7 Solid Waste Management*

Municipalities have the authority and responsibility to manage the solid waste generated within the municipality. **24 V.S.A §2202a.** In Vermont, solid waste is disposed in landfills, but may undergo treatment, such as incineration or composting, before disposal. Open dumping is prohibited, as is landfilling of hazardous materials. Future needs for disposal are based on population, economic and land use trends, and opportunities for regional programs. The solid waste management system includes collection and recycling, as well as treatment and disposal. The present system, including all facets, should be inventoried and characterized.

In 1987, the Vermont Legislature passed Act 78 to address the state's solid waste issues. The Act requires that twenty year solid waste management plans, consistent with the state solid waste plan, be prepared. The State has set a goal to reduce and divert 40% of solid waste currently going to landfills by such means as recycling and waste reduction. The preferred methods of handling solid waste are, in order of priority: reduction in the amount of waste generated; reuse and recycling of materials; processing of waste to reduce volume before disposal; and land disposal of residuals. As of 1992, waste must be disposed in lined landfills.

Siting of facilities for the processing or disposal of waste is a complex process that needs to take into consideration environ-

mental conditions, location in a community, impact on adjacent land uses, and potential for reclamation to other uses. Because of the complexity and because of cost factors, most communities have joined together with other communities, either through a solid waste district or through some other kind of contractual relation, to identify sites and to establish waste management policies. Solid waste management facility siting must take into account state prohibited areas, technical criteria, such as environmental impacts, and social criteria, such as impact on adjacent land uses. Siting processes must include early and sustained public participation.

*Sources:*

Vermont Agency of Natural Resources, Department of Environmental Conservation Waste Management Division—technical assistance on planning, information on existing facilities,  
Regional planning commissions—data collection, analysis, and regional facilities planning  
Solid waste management districts—data collection, analysis, and regional facilities planning

#### *5.7.8 Gas, Electricity, Cable, Telephone Service, and Towers*

A community should be aware of the services now provided within its boundaries by gas, electricity, cable, telephone, and tower companies. The layout of gas, electrical, and telephone service lines, and location of transmission towers should be identified. These services should be evaluated for their effect on land use and aesthetics—both in terms of the land they use (consider substations and electrical transmission lines), the land use patterns that result, and their impact on adjacent land uses. The availability of these services within the municipality can influence the location of an industry (such as tourism), a major commercial development, or a residential subdivision.

*Sources:*

Department of Public Service—identification of utility service areas, transmission and generation facilities  
Gas, electric, cable, and telephone companies—location of facilities, capacity information, future plans  
Regional planning commissions—regional tower locations

#### *5.7.9 Energy*

The energy element of the municipal plan requires that an

analysis be made of energy resources, needs, scarcities, costs and problems within the municipality. This analysis should include an inventory of types of energy currently used in the municipality—fossil fuels and renewable resources—and major providers of each, as well as an inventory of any potential energy resources (especially renewable energy and recovery resources), whose development the town may support in the future. **24 V.S.A. §4382 (a)(9).**

A look at current and future energy needs and uses, also known as "demand," involves focusing on four sectors: municipal uses, residential uses, commercial and industrial uses, and transportation. A general assessment of the municipality's energy profile could include the following:

*Municipal uses:* an inventory of municipal departments or buildings, types of energy used (electricity, oil, natural gas, propane, wood, etc.), and the estimated annual energy use (in units, such as Kwh, gals., Btu's, cords), along with associated annual cost

*Residential uses:* information on the primary kinds of residential housing in the municipality (single family, 2 family, multifamily housing, mobile homes and manufactured units, seasonal/vacation residences) and types of energy uses within these housing units, such as space heating, water heating, lighting, refrigerators

*Commercial and industrial uses:* general information about the major businesses in the town, how they use energy, what types of energy they use, and the provider or source of this energy

*Transportation:* general information about (1) municipal vehicles and school buses, including how many there are, fuel efficiency, use and driving patterns, and (2) commuter and general traffic, including amount and driving patterns

*Sources:*

Department of Public Service—information on developing an energy plan, fuel dealers and suppliers, energy consultants

Local providers of energy services—information about types, supplies, delivery systems, costs.

Vendors, contractors, realtors—information about current standards and practices for energy efficiency

Regional planning—data collection, analysis, regional energy plans

#### *5.7.10 Public Safety and Emergency Services*

Throughout the planning process, municipalities should address public safety issues such as adequate police protection, fire and emergency medical service response and dispatching services. It should be noted that ensuring public safety and the protection of persons and property is a very basic responsibility of all elected officials.

Although public safety is not thought of as a traditional land use issue, the increasing pressures on municipalities caused by population growth, traffic, commercial and residential development all pose significant concerns for local planners as well as police and fire officials.

The trust which the citizens place in municipalities as part of the social compact must be reflected in government agencies' ability to plan for the protection of persons and property as development pressures change the complexion of the state's towns and cities.

An inventory should be made of the number of full or part-time employees or volunteers; the number of cars, trucks, buildings and other facilities; the number of calls, and any regional or state facilities or staff available and utilized for police, rescue, and fire protection within the municipality. These resources should be evaluated for their ability to meet present and anticipated demand for services and the adequacy of the equipment and buildings used. Opportunities for improvements to the present protection system—such as a regional police protection program and expansion of mutual aid for fire companies—should be identified.

For those communities with police departments, adequate protection must be viewed as a significant piece of the growth puzzle. For those municipalities which receive their primary police protection from the state, the Commissioner of Public Safety and the Director of the Vermont State Police are available to provide information, statistics, briefings, and otherwise assist town officials wrestling with growth management issues.

Besides information and expertise which can be provided by the Department of Public Safety, the Vermont State Police currently offers a program called Contractual Outpost Patrols. The program's goal is to improve police protection available to towns covered by troopers through a state /local partnership. Information on this and all other Vermont State Police programs may be obtained by contacting the Department of Public Safety in



Waterbury.

*Sources:*

Department of Public Safety and the Vermont State Police—available services, demand information  
 Local police, fire, and rescue departments—inventory of personnel and equipment, demand, needs  
 Fire insurance underwriting companies—rating of fire protection services and equipment

*5.7.11 Health and Human Services*

A wide range of state and local, public and private, profit and non-profit health and human services may be available to residents in the municipality to help them and their families achieve and maintain as much independence and self-sufficiency as possible.

Identify the resources available for health care (including hospitals, medical and dental offices, mental health clinics, day treatment centers, nursing homes, residential care facilities and homes, visiting nurses, offices of the State Department of Health, etc.).

Identify the resources available for child care (including licensed child care centers and registered child care homes and those programs using space in the public schools).

Identify the resources available for helping people with their financial, social and emotional problems (including community action agencies, youth service bureaus, parent child centers, offices of the State Welfare Department and the State Department of Social and Rehabilitation Services, police, the courts, etc.).

Identify the regional and state resources present in the municipality for serving people with special needs (including group homes and correctional facilities, etc.).

Also consider the present and anticipated needs for all these services in the community and the opportunities, existing and proposed, available to residents in the community and region for expanded care.

*Sources:*

Vermont Department of Health—health care programs and services  
 Vermont Agency of Human Services: Central Office Planning Division, State Department of Social Welfare, State Department of Social and Rehabilitation Services, State Office of Economic Opportunity, State Department of Corrections—child care and social services  
 Local health officer—information on health issues and health regulations  
 Community action agencies and other local agencies—social services

*5.7.12 Administrative Services*

Buildings used for municipal government purposes, including town halls and clerk's offices, and municipal employees, such as clerks and their assistants, zoning administrators, and municipal managers, should be identified. Are these facilities and services adequate to meet present and future needs? Consider also the conditions of the buildings, administrative needs, and new services that may be increasingly required. These may include the addition of full-time assessors, increased inspections by registered engineers of subdivisions, or new sewage treatment plant operators. Opportunities to coordinate facilities and services with adjacent municipalities should also be explored.

*Sources:*

Clerk's or manager's office—existing facilities, employees, conditions, demand, needs  
 Other local departments, committees—existing facilities, employees, conditions, demand, needs  
 Vermont League of Cities and Towns—general municipal data

**5.8 Using GIS**

To help communities better analyze physical conditions, land use, and community facilities and services, the Legislature authorized in 1988 the development of a statewide geographic information system (GIS). **3 V.S.A. §20.**

GIS is a tool which can be used, through the power of computer mapping and information management, to assist in the analysis of a variety of local, regional and statewide issues—issues ranging from the routing of a highway, to developing a greenway system, to finding the best site for an industrial park. The type of data incorporated into the GIS may relate to natural, socio-economic, or man-made characteristics.

The strength of GIS is its ability to create distinct map "layers" for different types of information, and then to combine them in any way desired or needed. Each layer consists of geographic, or "spatial", data linked to descriptive, or "tabular", information. In combining layers, GIS uses known earth coordinates to make sure each layer lines up correctly with the others.

The advantage of using GIS is that local, regional and state agencies can share data relatively easily. GIS can mathematically transform map features from one scale or projection to another to allow map layers from different sources to be used together. GIS can produce maps at any size, depicting an entire community or only a selected area using information from different scales. GIS is

also an efficient way to keep geographic information up to date. Once information is entered into a GIS system, it is simple to change the data on the computer and produce an updated product. Chapter 117 requires that data gathered for municipal planning purposes that is relevant to GIS must be compatible with, useful to, and shared with that system. **24 V.S.A. §4325(4).**

The Vermont Center for Geographic Information coordinates the collection and recording of geographic data, verifies that the data meets certain standards and disseminates it to the regional planning commissions and other users. In their role as "regional service centers", the regional planning commissions (RPCs) are a critical link in the system. In addition to developing GIS applications for their own purposes, the RPCs are available to provide for the needs of communities within their jurisdictions that lack GIS capability. Communities can also contract with private consultants to obtain GIS services. For communities that do want to develop their own GIS capabilities, there is available easy-to-use mapping software, such as the Vermont Town Menu System.

For more information on GIS, contact either your regional planning commission or the Vermont Center for Geographic Information.

## **5.9 Summarize Data Collection and Analysis**

Communities now will have assembled and examined information on their population, housing, local economy, fiscal condition, physical conditions, land use, and community facilities and services. The next step is to consolidate this information according to the issues that will be addressed in the plan.

### *5.9.1 Identify Needs and Options for Land Use*

To identify potential locations for future development, communities will need to look at their population and housing projections, economic conditions and community facilities and services needs and then project future land use. A land use plan and map is required to be included in the municipal plan. Land uses which should be projected include residences, commercial and industrial uses, agricultural and forestry operations, recreation areas, and community buildings. Communities should review the land requirements of these uses and locate potential areas to accommodate them.

The summary map of physical constraints to development and the existing land use maps should be compared and analyzed. This comparison will help to illustrate where problems may emerge

because of land development on areas with severe limitations for this purpose and what the capability of undeveloped areas is to handle future growth. It will also enable the community to locate areas where development will need to be carefully controlled because of the presence of unique and fragile resources, resource production activities, and features of special interest to the community.

In addition to considering the physical capability of the land to accommodate the development, communities will want to consider:

- the availability of adequate community facilities and services in these locations
- the interrelationship and compatibility of the proposed land uses
- the need to prevent overcrowding of land and buildings
- the need to ameliorate undesirable conditions
- the impact on special resources, productive lands, and significant features
- the consistency with the overall goals for the future of the community

For example, a community may identify a site that has excellent physical capabilities for moderate-density residential development. However, the road network may not serve this area and it may be remote from the town center. If the community wishes to encourage moderate density development around the center, perhaps it should find alternative sites that are closer. If it finds an appropriate site that has moderate-to-severe soil limitations for onsite sewage disposal, the community may want to look at the possibility of connecting the site to the municipal sewer system.

Another community may see the need to expand its commercial services but may not wish to create a pattern of strip development along a major artery. After examining the soils, topography, land use maps, and traffic data, it may locate a site contiguous to the highway where a commercial area could be located with minimal curb cuts. Establishing commercial uses in this location may be preferable to a strip commercial pattern spread out up and down the highway.

#### *5.9.2 Identify Needs and Options for Community Facilities and Services*

From the analyses of community facilities and services it will be possible to prepare a list of needs. These needs may include highway improvements, alternate transportation systems, additional

recreation land, new school buses, street lighting, expansion of library facilities, new water filtration plant, new sewer lines, and additional personnel. What options does the community have to meet these needs?

These options may include potential sites, alternative designs, intermunicipal sharing, and financing alternatives. If the community will be unable to meet the needs when they are anticipated due to fiscal constraints or the time required to implement improvements, options which will phase growth could be considered.

### *5.9.3 Identify Needs and Options for Community Development*

From the analysis of housing and economic development trends, land use, and public services, communities will be able to identify community development needs. Examples of these needs include:

- upgrading of local services, such as streets, sidewalks, and lighting in a low-to-moderate income neighborhood
- rehabilitation of structures and infill development in a commercial center
- location and land improvements for a new industrial area
- identification of sites for senior citizen housing

Many of these needs require financial assistance, such as bonding, grants, loans, and general fund allocations. Others can be accomplished through controls and incentives, such as zoning and subdivision regulations. Options for meeting these needs should be identified.

### *5.9.4 Identify Needs for Environmental Resources*

The population and economic trends and the analysis of land use and physical conditions will help to define natural, historical and aesthetic resource needs that must be addressed. These needs might include:

- upgrading water quality within a stream
- protecting a natural area or an aquifer recharge area from encroaching development
- maintaining agricultural districts where farming is the primary land use
- encouraging sound forestry management in productive timber zones
- securing public access along a shoreline
- maintaining the quality of a village historic district
- protecting important scenic vistas

Options to meet these needs should be identified. They will include regulatory, financial, or incentive approaches.

Communities that have completed the steps in this chapter will now be ready to prepare the plan. They will have collected background information, analyzed the information, and identified their needs and options for the future. The next chapter describes how this information will be used to develop goals, plans, and implementation strategies.

# 6

## Developing the Plan

Vision without action is merely a dream; action without vision just passes time; vision with action can change the world.

—Joel Arthur Baker

This chapter describes the main parts of a municipal plan, based on the ten planning elements required by **24 V.S.A. §4382**, and suggests various ways to organize the content of the plan into a logical presentation.

### *6.1.1 Definition of Goals, Objectives, Policies and Programs*

The terms "goal", "objective", "policy" and "program" are invariably confusing to citizen planners. They are often used interchangeably. For developing a plan, however, each term takes on a specific meaning. The terms may be defined as follows:

- Goals - statements of human aspirations that have an attainable end
- Objectives - specific, measurable targets for accomplishment of goals within prescribed time periods
- Policies - definite courses of action adopted and followed by a government, institution, body, or individual for that attainment of desired objectives
- Programs - ongoing activities consistent with courses of action set forth in policy statements and designed to achieve specific objectives

See Figure 6.1 for an example of goals, objectives, policies and programs.

## **6.1 Establishment of Goals and Objectives**

### 6.1.2 *Need For and Use of Goals and Objectives in a Plan*

Goals reflect a vision for the community. They express what residents want their community to be in the future. Goals are therefore essential to give direction to, and provide a context for, planning actions within the community. They serve as a guide for establishment of objectives.

Goals must be internally consistent. Achieving one goal should not prevent or hinder achieving another goal. They should not be too specific. For example, goals may not be tied to a time frame or

Figure 6.1  
EXAMPLE: GOALS AND OBJECTIVES

Topic:	Housing
Goal:	To promote safe, sanitary, and affordable housing of a variety of types for all segments of the population
Objective:	To locate sites where high density housing can be developed in close proximity to community and commercial services and with municipal water and sewer facilities (target date: one year)
	To rezone these sites to permit high density housing and to enable bonuses for planned residential developments that provide affordable housing (target date: two years)
Policy:	The town should not adopt any regulations that would prohibit high density housing within the identified areas
Program:	The town will establish a housing authority within the next year to provide needed housing services for the residents
Topic:	Transportation
Goal:	To provide for safe, convenient, economic and energy efficient transportation systems that respect the integrity of the natural environment, including public transit options and paths for pedestrians and bicyclers
Objective:	To develop a master plan and capital program for a transportation network that encourages rural and village land use patterns (target date: two years)
Policy:	The town should reduce automobile traffic to town functions, such as town board meetings and school-related functions
Program:	The town will establish a local ride-share service between residential and commercial areas



budget considerations, but they should prescribe a definite action. They should not be so vague that their meaning is subject to many interpretations. They should be somewhat idealistic but not unattainable. They should offer flexibility for changes in objectives and policies in the future.

Objectives should provide targets for the accomplishment of goals. They should be specific enough so that the community can determine when they have been met. The time table (long term, intermediate term, and short term) for the objective should be clear.

### *6.1.3 Developing Municipal Goals and Objectives*

A statement of goals must come from the wishes, needs and hopes of the people of the community. Because the goals will express a vision for the community, it is essential that the public have ample opportunity to review and to discuss them. To understand community aspirations requires public participation in whatever goal selection process the planning commission uses. The goals must be developed during the preliminary assessment phase of the planning process (see Section 5.1 of this manual) as a result of the broad discussions about visions of what the community should be in the future.

Goal statements may be derived from surveys, from documents adopted by the municipality such as a recreation plan or capital program, and from adopted goals of local boards or commissions. They should cover broadly the planning issues facing the community. Goal statements must be clear if they are to be effective.

After adopting a set of goals, the planning commission should develop objectives to attain these goals. The objectives should address issues and needs that have been identified through the preliminary assessment, data collection and analysis steps. They should include measurable targets for addressing these needs.

Each community's goals and objectives will be unique, reflecting the special character of the municipality. The wording, phrasing and content of the goals should be locally developed. While communities may wish to look at other municipalities' goals as examples, they are encouraged to create their own statements.

### *6.1.4 Consistency of Municipal Goals and Objectives with State Planning Goals*

While the need for individuality is recognized and encouraged, all communities should be sure their goals are consistent with the general purposes of Chapter 117 found in **24 V.S.A. §4302**. In

addition, municipalities are encouraged, but not required, to make the goals and objectives in their plans consistent with the State Planning Goals found in 24 V.S.A. section 4302 (see Section 1.2.2 of this manual for a discussion of the State Planning Goals).

Because local plans have an important function in Act 250, municipalities are strongly encouraged to make their plans consistent with the ten criteria of Act 250 found in **10 V.S.A. §6086**. To get an Act 250 permit, an applicant must show that the proposed project:

1. will not result in air or water pollution
2. will have sufficient water supplies for reasonably foreseeable needs
3. will not cause an unreasonable burden on existing water supplies
4. will not cause unreasonable soil erosion or reduction of the ability of the soil to hold water
5. will not cause unreasonable congestion or unsafe conditions with respect to traffic
6. will not cause an unreasonable burden on municipal education services
7. will not place an unreasonable burden on other municipal services
8. will not have an undue adverse effect on scenic or natural beauty, aesthetics, historic sites, or rare and irreplaceable natural areas
9. will not significantly reduce the agricultural potential of primary agricultural soils, or the forestry potential of areas suitable for commercial forestry, will not prevent extraction of earth resources, will conserve energy, will not endanger public investments
10. conforms with any municipal and regional plans then in force

For additional information on Act 250 and its administration, contact the District Environmental Coordinator for your region.

## **6.2 Formulation of Plans**

### *6.2.1 The Need for and Use of Municipal Plans*

With the establishment of goals and objectives, the community is ready to develop a specific plan. The plan translates the goals and objectives into policies and recommendations for specific actions on each topic. The plan describes in detail how identified needs and opportunities are to be addressed. The plan also supplies supporting background information for the policies and recommended programs or actions.

It is important to remember that a municipal plan should be more than just a description of what the municipality is like in the present. Many municipal plans have a very thorough inventory of what the present looks like, but they do not address adequately what the municipality should be like in five years, nor do they state specific policies or programs to help residents make their desired future a reality.

### 6.2.2 *The Contents of a Municipal Plan*

A municipal plan must address the ten required elements found in **24 V.S.A. §4382** if it is to be consistent with the law. In some cases one of the elements may be irrelevant to a specific community because of its geography or other natural circumstance. For example, it is possible for a very small rural town with little population not to have any community facilities as described in the law, and it may not plan to acquire any in the future. In that case it could address the utility and facility element by pointing out that it has no facilities and explaining the rationale behind its decision not to acquire any in the future.

The required ten elements are described below.

(1) ***A statement of goals, objectives, policies and programs of the municipality to guide future growth and development of land, public services and facilities, and to protect the environment***

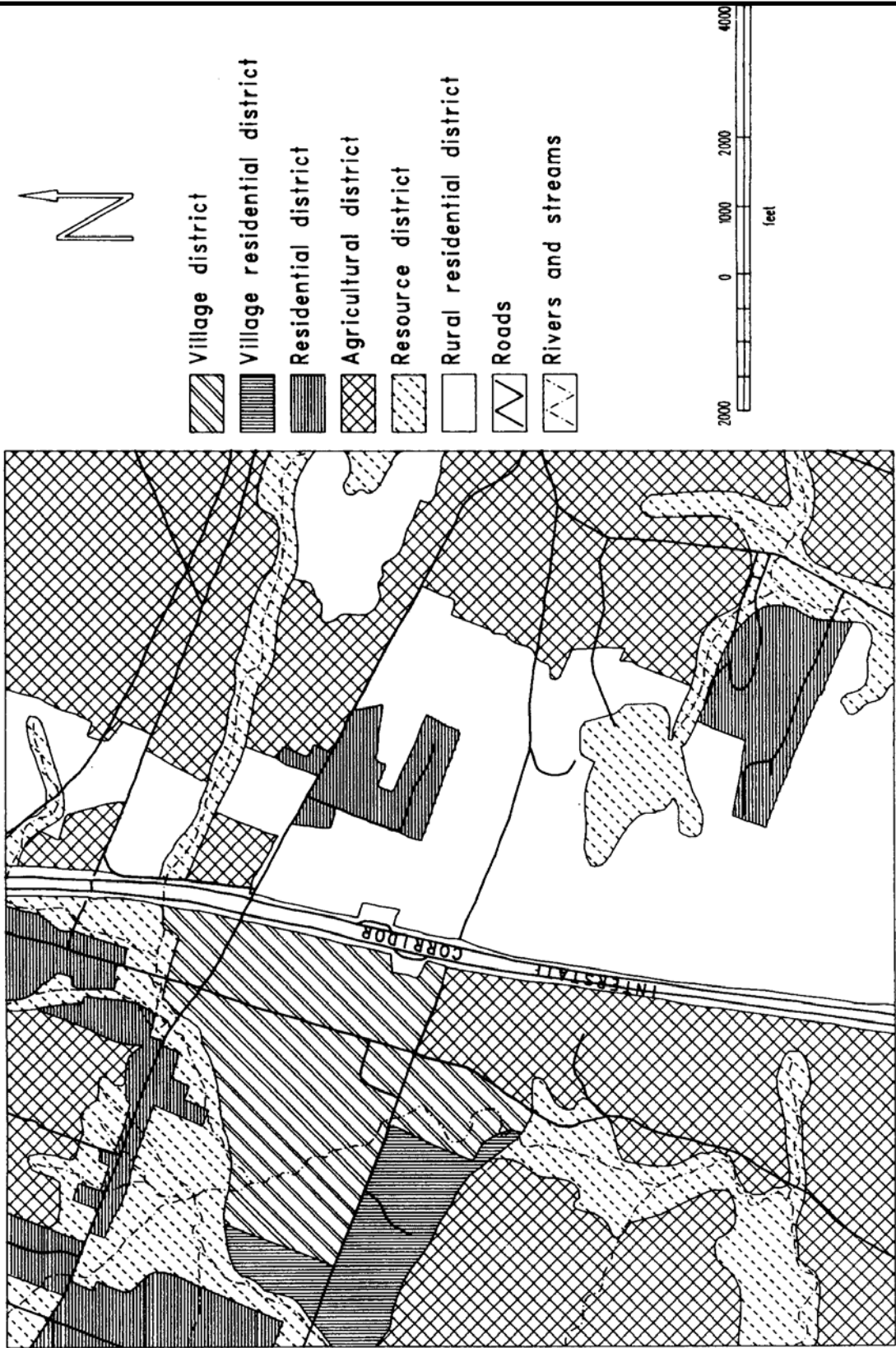
These goals, objectives, policies and programs have been discussed above in Section 6.1.

(2) ***A land use plan consisting of a map and statement of present and prospective land uses, indicating those areas proposed for forests, recreation, agriculture (using the agricultural lands identification process established in 6 V.S.A. §8), residence, commerce, industry, public and semi-public uses and open spaces reserved for flood plain, wetland protection, or other conservation purposes; and setting forth the present and prospective location, amount, intensity and character of such land uses and the appropriate timing or sequence of land development activities in relation to provision of necessary community facilities and service***

Plans and maps should provide locations where future land use needs can be met. See Map 6.1 for an example of a land use map. Land use needs have been identified in the data collection and analysis phase (see Chapter 5 of this manual). Site development and impact review criteria that will make land uses acceptable in particular locations should be described.

Map 6.1

LAND USE PLAN AND ZONING MAP



*Land Use Districts.* Most communities utilize land use districts for allocating where future land uses will occur. Communities should describe the purpose and the desired type and pattern of development for each district. Examples of land use districts are provided. Every municipality will have different districts, of course, based on its own physical, social, and economic characteristics and needs. These examples are for illustration only and are not as specific as most communities will want to be. The districts do contain policies consistent with state guidelines set forth in Section 1.2.1 of this manual.

A first step in defining districts is to review the locations for different land use activities that were arrived at in the data collection and analysis phase (see Chapter 5). From this information the boundaries of the land use districts can be drawn. Because these districts will become the basis for the zoning districts, the boundaries should represent as accurately as possible the areas for which different zoning regulations will apply. To be easily recognizable, boundaries could be based on distances from roads and waterbodies, could follow transportation and utility rights-of-way, or could be marked by significant natural features. District boundaries can also follow property lines as indicated on property tax maps.

*Land Development Criteria.* In their plans, many communities fail to provide any guidance on the form that land development should take. As a result, it is difficult for them to develop the criteria and standards in zoning and subdivision regulations, by which developments will be reviewed. The specific criteria need not be spelled out in the plan. However, the type of criteria that will be needed should be established.

Criteria will differ, of course, depending on the type and location of development. Urban areas and villages will be concerned with height, bulk, density, setbacks, and parking. Their criteria may be based on existing development patterns or on a desired new pattern. In rural areas, especially those with significant agricultural, scenic, and natural resources, development criteria may focus on siting of buildings on the landscape.

The districts and criteria established for future land use should be carefully written up so the people of the municipality are clear as to where growth and development are to occur and in what form. The planning commission should check the land use plan against the goals set for the community to ensure that it carries out those aims.

Figure 6.2

**EXAMPLE: LAND USE DISTRICTS***Conservation District*

The purpose of the conservation district is to protect high elevations that have shallow soils and fragile vegetation and that provide significant recharge to the ground and surface water supplies of the municipality and the region. Because of the fragile resources and limitations to development, no community facilities and services will be provided to these areas. Limited, compatible land uses, such as outdoor recreational activities that do not involve structures and forestry that does not create erosion problems or harm unique and fragile areas, could be permitted in this district.

*Resource District*

The purpose of the resource district is to protect the natural resource value of lands that are essentially undeveloped; lack direct access to arterial and collector roads; are important for wildlife and wildlife habitat; have high potential for commercial forestry use; are unsuitable for land development; or include irreplaceable, limited, or significant natural, recreational, or scenic resources. No public sewer and water facilities are planned for these areas. Existing Class III roads in the district will continue to be maintained; however, no Class IV roads will be upgraded for the next five years. Due to the limited facilities and services proposed for the district and the critical resources located within it, only certain uses will be allowed. These are: low-density residential development, limited outdoor recreation uses, conservation uses, and forestry practices that are compatible with the district purposes and do not require additional facilities and services beyond those planned.

*Flood Hazard District*

The purpose of the flood hazard district is to prevent increases in flooding caused by the excess development of lands in flood hazard areas and to minimize losses due to floods. Uses within these areas will be restricted to agricultural, outdoor recreational, and conservation uses. No structures will be permitted. No public water and sewer service facilities or roads will be extended by the municipality to these areas. No filling will be permitted in this district for any purpose.

*Shoreland District*

*Shoreland District A. Natural and Pristine Lakes and Ponds:* The purpose of the shoreland district for lakes and ponds in a natural and pristine state is to preserve and enhance high quality waters, to protect shorelands of

waters that are unsuitable for development, to maintain a low density of development, and to maintain high standards of quality for permitted development. Shoreland districts will be limited to low density residential development and limited recreation and conservation uses compatible with the purposes of the district. Structures will be set back from the shoreline sufficiently to protect the visual quality of the area, the existing vegetation, and water quality.

*Shoreland District B. Recreational Lakes and Ponds:* The purpose of the shoreland district for lakes and ponds suitable for recreational use is to provide management policies reasonably consistent with existing development and use; to provide for the beneficial use of public waters by the general public; to provide a balance between the lake resource and lake use; to provide for a municipality of lake uses; and to protect areas unsuitable for development.

New residential development within this shoreland district should protect public access to the lakes or ponds, be compatible with the visual quality of the area, protect existing vegetation, and not cause any water pollution problems. Outdoor recreation uses are encouraged. Expansion of or new commercial development should not be permitted.

*Shoreland District C. General Development Lakes and Ponds:* The purpose of the shoreland district for general development of lakes and ponds is to provide minimum regulations for areas presently developed as high-density, multiuse areas, and to guide the future growth of commercial and industrial establishments which require locations on public waters. Standards for setbacks from the lakeshore, spacing between buildings, and landscaping and screening will be established in the zoning regulations to ensure that future development is compatible with the environment.

*Shoreland District D. Endangered Lakes and Ponds:* The purpose of the shoreland district for endangered lakes and ponds is to provide restrictive standards for badly deteriorated lakes. Existing development should be modified and future development should be limited in this district to restore water quality and protect shorelands for the public health, safety, and welfare. Any development not serviced by public water and sewer facilities or for which adequate subsurface sewage disposal and/or water supply is not available should be prohibited. Development should enhance or improve the visual and environmental quality of the area.

Figure 6.2

*Agricultural District*

The purpose of the agricultural district is to protect lands with an economic capability for agriculture that are now predominantly undeveloped except for uses associated with agriculture or forestry. In this district planned residential developments and land uses that do not remove the potential of the land for agricultural production such as open space, conservation, and certain forms of outdoor recreation, are encouraged. Further road development and the extension of public water supply and sewage disposal systems are not planned for this district. Therefore, only low-density residential and recreational development that utilizes existing facilities, that can adequately dispose of its sewage, and that is compatible with the district purposes and guidelines should be permitted.

*Rural Residential District*

The purpose of the rural residential district is to provide for residential and other compatible uses at densities appropriate with the physical capability of the land and the availability of community facilities and services on lands outside of urban-village areas. Planned residential developments, open space preservation, and other techniques for preserving the rural character of these areas are encouraged. Development should take place in such a way that any irreplaceable, unique, scarce resources and natural areas are not harmed.

*Village District*

The purpose of the village district is to support the role of the village as the focus of many social and economic activities in the community and to provide for residential, commercial, and other compatible development that serves the needs of the community. Such development should occur at densities and uses that will maintain the traditional social and physical character of the village including its historic and scenic resources, and that will not exceed the capability of the lands, waters, services, and facilities. Sufficient facilities and services are planned for this area to accommodate moderate-to-high density development.

*Urban District*

The purpose of the urban district is to provide for multifamily residential, commercial, industrial, and institutional uses to serve the municipality and the region. Within the district a choice of housing, employment, shopping, educational, recreational, and cultural opportunities should be provided served by economical and high quality governmental services.

The following districts could be incorporated within an urban or village district.

*High Density Residential District:* The purpose of this district is to provide for high density residential development in areas that are centrally located in urban areas or villages and that are serviced (or proposed to be serviced) by public water and sewer facilities. Residential development should provide for a variety of dwelling types and for the needs of people of all income levels and ages. Development which harms or otherwise prevents the preservation of existing districts will be prohibited.

*Neighborhood Commercial District:* The purpose of this district is to provide for limited commercial uses in areas where there is residential development to serve primarily the needs of those residents. The character of the area will be protected and enhanced by the shopping facilities with necessary parking facilities and suitable landscaping and screening. The scale of development within this district will be compatible with adjacent commercial and residential structures. New commercial uses will not cause further traffic congestion and will be designed to minimize such impacts.

*Central Business District:* The purpose of the central business district is to provide a commercial center in the municipality and the region which will permit a broad range of retail and personal service shops; professional and governmental offices; and supportive, compatible commercial uses. Residential uses, that add interest and vitality to the area and accommodate those who desire high-density housing are encouraged. All uses will be properly located and designed so as to enhance the existing structures in the area and provide for a smooth traffic flow. Events and activities such as art exhibits, musical performances, craft fairs, and farmers' markets are encouraged in the central business district as a further attraction to this area.

*Industrial District:* This district provides for employment opportunities in manufacturing, warehousing, research, and development. It enables commercial uses which specifically serve the industries or their employees. The district will be serviced by good transportation facilities and public utilities. Other uses incompatible with industrial uses, such as residential and certain recreational uses, will not be permitted for the health, safety, and welfare of the community. To serve the industries, the municipality plans to maintain adequate water supply, sewage disposal facilities, and roads for this district.

(3) *A **transportation plan**, consisting of a map and statement of present and prospective transportation and circulation facilities showing existing and proposed highways and streets by type and character of improvement, and where pertinent, parking facilities, transit routes, terminals, bicycle paths and trails, scenic roads, airports, railroads and port facilities, and other similar facilities and uses, with an indication of priority need*

The transportation plan and map should address how vehicles, pedestrians, and bicycles will circulate around the community. It should consider how current and projected transportation needs will be met. Future improvement needs for new or improved roads should be identified. The timing and priorities for the provision of recommended transportation improvements should be clearly stated. Since the amount of traffic a particular street will have to carry at any given time is usually dependent on the nature and intensity of land use in its vicinity, and, conversely, since the transportation network will impact on how the land is developed, the commission should carefully integrate the transportation plan with the land use plan.

Because of the Vermont Transportation Planning Initiative, it is especially important that the community transportation plan key into regional transportation planning. See Section 5.7.1 of this manual for a discussion of this Initiative. A comprehensive regional or town transportation plan under the Initiative should contain an overall description of the current transportation system which includes the existing facilities and the number of travelers. The plan would then describe the community or regional growth expected over the next 20 years and assess the impacts on the transportation system. Problems and proposed solutions, which are supported by the area's citizens and compatible with all parts of the town plan, should be identified. All modes of transportation are considered in plans prepared through the Planning Initiative.

(4) *A **utility and facility plan**, consisting of a map and statement of present and prospective community facilities and public utilities showing existing and proposed educational, recreational and other public sites, buildings, and facilities including hospitals, libraries, power generating and transmission lines, water supply, sewage disposal, refuse disposal, storm drainage and similar facilities and activities, and recommendations to meet future needs for community facilities and services, with indications of need, costs and method of financing*

The community facilities and services plan and map should reflect analyses of existing facilities and services, future needs, proposals for land use and transportation, and regional opportunities and programs. The plan should illustrate and describe the



desirable location, character, and extent of the following public facilities:

- parks, playgrounds, and recreation facilities
- cultural and health facilities
- religious institutions, community centers, and governmental and civic buildings
- water supply and distribution systems
- sewer lines and disposal facilities
- public safety and emergency services
- facilities for the disposal of solid waste
- gas lines and electric transmission lines

The timing and priorities for the provision of facilities should be considered in relation to immediate public health and safety needs, the anticipated population and economic growth, and the financial capability of the community. The location and capacity of facilities should be consistent with land use planning objectives. The plan should also address the provision of needed services that are not necessarily facility dependent, such as assistance from the state police. Contact should be made with the appropriate outside agencies to find out their capacity to fulfill anticipated needs.

*(5) A statement of policies on the preservation of rare and irreplaceable natural areas, scenic and historic features and resources*

An environmental and natural resources plan should address the environmental problems, needs, and opportunities already identified. An historic and scenic features plan must do the same for these special resources (see Section 5.6.3 of this manual). A statement of policies for protection of environmental, historic and aesthetic resources should be developed to guide reviews on permit applications. The proposed land use plan should be consistent with these policies. A set of sample policies is presented in Figure 6.3. Each community will want to design its policies to meet its own particular circumstances.

*(6) An educational facilities plan consisting of a map and statement of present and projected uses and the local public school system*

This section is often developed by the school board, who looks at the projected number of school age children, along with state educational requirements and community desires to come up with facility needs for the future. How these needs are met must take into consideration other community issues, such as land use,

transportation, and so forth. The planning commission should thus work with the school board, as well as the selectboard, in developing the educational facilities plan and map. As the population expands and contracts and education technology develops, town officials should think of creative ways to address the changing needs.

(7) *A recommended program for implementation of the objectives of the development plan*

The selection of appropriate implementation programs is discussed below in Section 6.3.

(8) *A statement indicating how the plan relates to development trends and plans for adjacent municipalities, areas and the region developed under this title*

As the community develops its plan, officials need to look at what is happening in the bordering towns. How do development

Figure 6.3

EXAMPLE: ENVIRONMENTAL AND NATURAL RESOURCE POLICIES<sup>1</sup>

1. Locations Poorly Suited for Development

- All land development will be severely restricted on slopes greater than 25 percent; vegetative cover will be retained in these areas
- Conventional onsite sewage disposal systems will not be allowed on slopes greater than 15 percent. Development should be carefully controlled in these areas to prevent erosion.
- Development will generally avoid areas with shallow soils. Conventional on-site sewage disposal system will not be allowed in areas where depth to bedrock or impervious strata is within four feet of the bottom of the trench or seepage pit.
- No habitation will be permitted in areas where the depth to seasonal high water table is 0 to 1 1/2 feet.

2. Resource Lands and Natural Areas

- Development within agricultural districts may be required to be clustered to protect prime resource land.
- Development within shoreline areas of streams, lakes, or ponds will be compatible with the natural beauty of the area, protect existing

vegetation, and be set back sufficiently to prevent erosion or pollution. Where possible, visual and physical access to the water bodies will be retained.

- Buffer strips around natural areas may be required to preserve their value for education, science, research, aesthetics, and recreation.
- Public capital investments will be directed away from fragile natural resource areas.
- Wildlife habitat designated in the plan will be protected from incompatible uses.

3. Areas Potentially Hazardous to Human Life and Health

- No land alteration that interferes with the natural flow of water to surface waters will be allowed.
- Development in an aquifer protection area which will contaminate a public water supply will not be permitted.
- All development other than uses and structures essential to the operation of agriculture, forestry, outdoor recreation, and wildlife protection will be restricted in floodways.

1. The policies are designed to be consistent with state guidelines in Section 1.2.1. of Chapter 1.

trends and proposals in these neighboring towns affect the community's commercial base, tax base, traffic conditions and so forth? How would the community's proposed development impact on the neighboring towns? Are there conflicting uses proposed along the borders? For example, is a shopping center recommended for one town adjacent to a protected natural area in another? At the same time, the community must look at how its plan and proposals fit into the broader regional picture. One way to do that is to contact the regional planning commission and discuss the community's proposed plan in relation to the regional plan.

*(9) An energy plan including an analysis of energy resources, needs, scarcities, costs and problems within the municipality, a statement of policy on the conservation of energy, including programs such as thermal integrity standards for buildings, to implement that policy, a statement of policy on the development of renewable energy resources, a statement of policy on patterns and densities of land use likely to result in conservation of energy*

Aspects to be considered in developing the energy element are the anticipated areas of growth and change in the municipal, residential, commercial, industrial and transportation sectors, along with the projected energy needs and resources. If the municipality's population is expected to grow, the plan should consider what kinds of housing, business establishments and public facilities are also expected to expand and what are the probable impacts on the town's energy demand and energy supplies. Energy efficiency should be maximized in existing municipal buildings and operations and in new construction in order to avoid or postpone the need for costly sources of additional energy, and land use planning should be utilized to influence development patterns and site design in an energy efficient manner. The plan should also consider energy efficiency in all aspects of transportation planning, including purchases of vehicles for the municipality or school buses, increased pedestrian pathways and other alternatives to the private automobile. The availability of any renewable energy resources, such as solar and wind, for all cost-effective purposes should also be addressed in the plan.

*(10) A housing element that shall include a recommended program for addressing low and moderate income persons' housing needs as defined by the regional planning commission pursuant to §4348a(a)(9) of this title*

Communities will need to identify the affordable housing alternatives that are available to them. These alternatives include both regulatory and financial approaches. Communities may want

to consider applying for rehabilitation funding, attracting rental subsidies, upgrading code enforcement, donating publicly owned land for housing development, making public improvements in targeted neighborhoods, and establishing incentive zoning for affordable housing. The alternatives will vary with the type of community.

All regulatory approaches should be weighed against other planning considerations, including the availability of community facilities and services and the capability of the land to handle development. Regulations can affect land costs, development costs, condition of the existing housing supply and the building of new housing. The financial approaches communities take will depend on the ability of the community to administer programs, the existence of nonprofit housing programs, the availability of grant and loan programs, and the community's own commitment and available funds for this purpose. Many of these approaches may require the community to develop programs that can receive state and federal funding and to contract with nonprofit organizations.

### *6.2.3 Organizing the Plan*

Most communities develop plans by topics such as land use, transportation, housing or natural resources. Some organize their plan according to various geographic areas within the municipality, either by recognizable neighborhoods or by geographically distinct locales, such as river valleys and plateaus. While a municipal plan must address all ten required elements, the planning commission may decide *how* it will address each element. Thus the law allows room for the diversity found among Vermont communities.

There are many ways to organize the components of a municipal plan. Planning commissions should experiment to find the organization that is most appropriate for their towns. It is essential, however, that no matter what organization is used, all ten of the required elements are clearly included in the plan.

## THREE EXAMPLE FORMATS

*Example One:* One logical way for a planning commission to organize these ten elements is to group them into four major plan sections: (1) goals and objectives, (2) seven functional plans, with supporting data, (3) a section describing the impact the plan will have on the region and on neighboring communities, and (4) a section on implementation of the plan:

**Section A:** A statement of goals, objectives, policies and programs (Element #1)

**Section B:** Functional plans with supporting data

- (1) Land Use Plan and Map (Element #2)
- (2) Transportation Plan and Map (Element #3)
- (3) Utility and Facility Plan and Map (Element #4)
- (4) Statement of Preservation Policies (Element #5)
- (5) Educational Facilities Plan and Map (Element #6)
- (6) Energy Plan (Element #9)
- (7) Housing Element (Element #10)

**Section C:** Relationship of plan with plans and trends of region and neighbors (Element #8)

**Section D:** Implementation program and priorities (Element #7)

*Example Two:* An alternative way a municipal plan could be organized is following the structure of the state planning goals, referencing the ten required plan elements. Again, the plan could be divided into four major sections, as follows:

**Section A:** Background information plus a statement of goals, objectives, policies and programs (Element #1)

**Section B:** Functional plans

- (1) Retaining compact settlements and sense of community
- (2) Providing jobs and a strong economy
- (3) Access to educational opportunities (Element #6)
- (4) Improving transportation systems (Element #3)
- (5) Preserving natural and historic features and wildlife habitats (Element #5)
- (6) Protecting quality of air, water, and land resources (Element #5)
- (7) Energy conservation (Element #9)

(8) Enhancing recreational opportunities

(9) Preserving farm, forest & other resources through efficient use (Element #5)

(10) Availability of safe and affordable housing (Element #10)

(11) Public facilities and services (Element #4)

(12) Summary: land use plan (Element #2)

**Section C:** Relationship of plan with plans and trends of region and neighbors (Element #8)

**Section D:** Implementation program and priorities (Element #7)

**Section E:** Maps

*Example Three:* A third way is to incorporate into each of the functional plans the supporting data, goals, objectives, policies and recommended implementation measures for each functional plan. In this scenario, there would be two major sections, with several subsections:

**Section A:** Introduction, overview, relationship of plan with plans and trends of region and neighbors (Element #8)

**Section B:** Functional plans

(1) Land Use Plan and Map, with supporting data, goals, objectives, policies and recommendations (Elements # 1,2 & 7)

(2) Transportation Plan and Map, with supporting data, goals, objectives, policies and recommendations (Elements # 1,3 & 7)

(3) Utility and Facility Plan and Map, with supporting data, goals, objectives, policies and recommendations (Elements # 1,4 & 7)

(4) Preservation of Historic and Natural Resources, with supporting data, goals, objectives, policies and recommendations (Elements # 1,5 & 7)

- (5) Educational Facilities Plan and Map, with supporting data, goals, objectives, policies and recommendations (Elements # 1,6 & 7)
- (6) Energy Plan, with supporting data, goals, objectives, policies and recommendations (Elements # 1,9 & 7)
- (7) Housing Plan, with supporting data, goals, objectives, policies and recommendations (Elements # 1,10 & 7)

Each community must organize its plan in the way that best suits its needs and addresses the important community issues. Whatever order is selected, the format should be understandable and the content carefully indexed to make the plan easy to use. It is important that each of the ten elements is identifiable. Planners should also keep in mind that the maps are an integral part of the plan and should be included in copies of the plan, at least for the four elements that require maps.

The implementation program included as an element in the municipal plan should state specific actions or programs the municipality will undertake to carry out its policies and to achieve its goals and objectives. The implementation program should be arrived at after evaluating the alternatives for meeting a particular objective. To evaluate the alternatives, consider the following criteria:

- the availability of necessary financial resources to accomplish the task
- the need for and availability of staff to carry out the work
- the appropriateness of the action given public values and sentiment
- the timeliness of the action given other priorities in the community
- the compatibility of the action with other proposed actions
- the effectiveness of the action in meeting public goals and objectives

All implementation programs should specify (1) the actions to be taken, (2) their timing, (3) who will be responsible for them, (4) their anticipated cost and (5) a way to evaluate their effectiveness. The following sections describe the actions that could be included in an implementation program.

### **6.3 Selecting an Appropriate Implementation Program**

### 6.3.1 Bylaws

Chapter 117 in **24 V.S.A. §4401** enables five bylaws that can implement a municipal plan. These bylaws are zoning regulations, subdivision regulations, an official map, a shoreland bylaw, and a flood hazard area bylaw.

The bylaws must be consistent with the municipal plan. The administration and enforcement of the bylaws are as important as their content. Municipalities must be prepared for these tasks. Municipalities must have a duly-adopted plan in effect in order to adopt a bylaw. If a plan expires, bylaws remain in effect but cannot be amended until a plan is adopted again.

*Zoning Regulations:* Zoning is a legal process designed to protect the health, safety and welfare of the community by regulating land use. Specifically, zoning may regulate:

- uses of land, water courses, and other water bodies
- the placement of buildings on lots
- the relationship of buildings to open space
- the scale, proportion, and height of buildings
- the provision of parking, signs, landscaping, and open space

Zoning usually involves dividing the community into districts or zones each having a different set of uses, densities, dimensional requirements, and standards for development. The districts must be consistent with the land use plan. (See Map 6.1.) Some communities have considered adopting a set of measurable performance standards for each use, as opposed to dividing the municipality into districts. This technique, known as performance zoning, is designed to be flexible and recognize the uniqueness of each site. This approach will usually require professional administrative skills. **24 V.S.A. §§4401, 4405-4410.**

*Subdivision Regulations:* Subdivision regulations can insure that land development reflects land capability, that developments are served by adequate services and facilities, and that critical open spaces and resources are protected. Unlike zoning regulations, which typically apply to individual lots, subdivision regulations control the process by which lots are created from larger land parcels. Subdivision regulations control the manner in which land may be subdivided by setting forth procedures, requirements, and specifications for submission, processing, and design of plans. They provide standards for lot layout; siting of buildings; improvements of streets, utilities, and open spaces; landscaping and



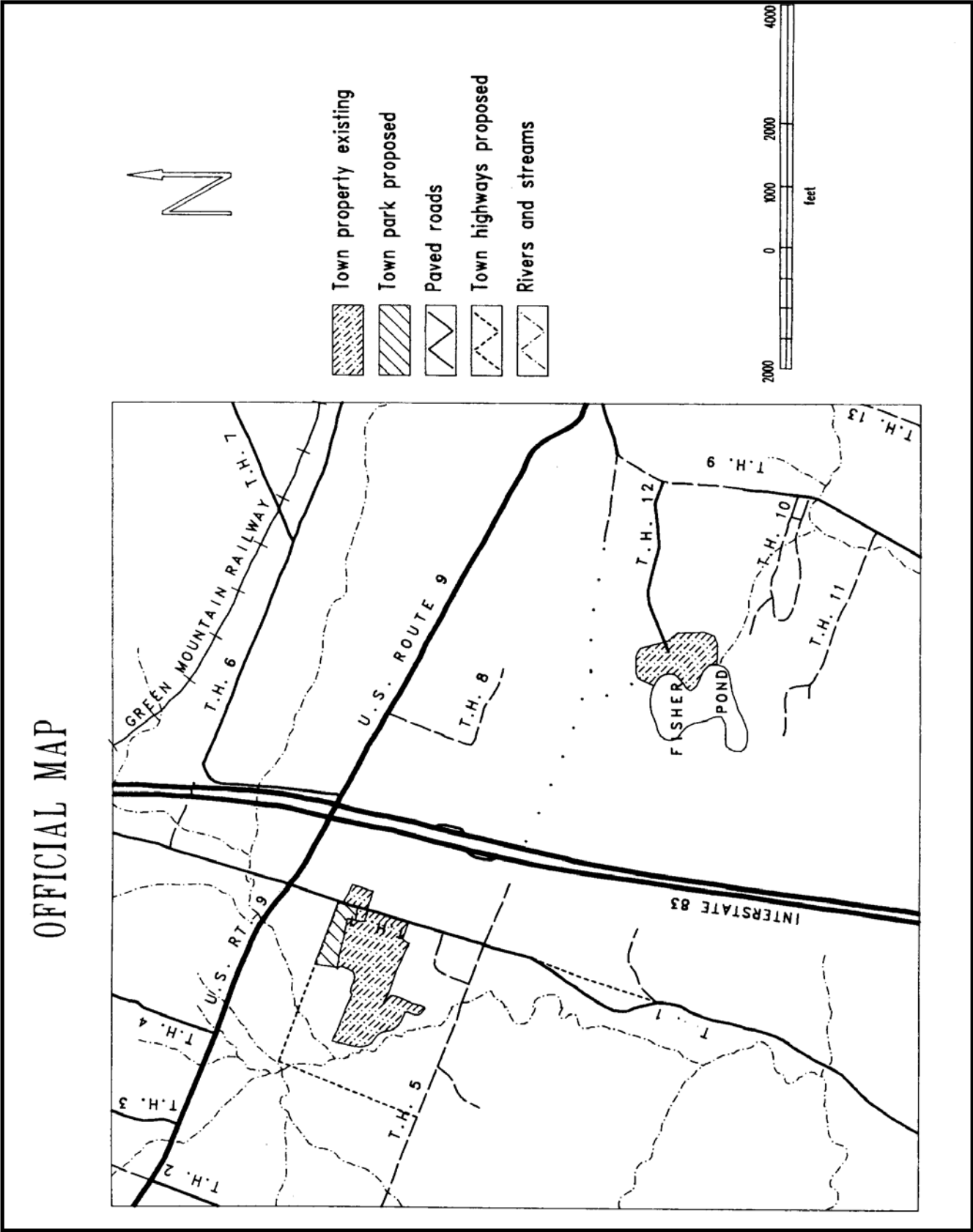
screening; recreation areas; the protection of natural areas and other important features; and allocation of costs for improvements. The subdivision regulations and the projects they govern must be consistent with the municipal plan. **24 V.S.A. §§4413-4421.**

*Official Map:* The official map enables the reservation of lands for drainage, streets, parks, schools and other public facilities for future public acquisition. See Map 6.2 for an example. Through the official map, the municipality may initiate action to acquire land within existing and proposed rights-of-way or boundaries on the map when development is proposed in these areas. The official map offers a creative tool to municipalities to guide growth through public investments. **24 V.S.A. §4422.**

*Shoreland Bylaws:* A municipality may regulate the use of shorelands within its borders in order to: 1) prevent water pollution, 2) protect wetlands and wildlife habitat, 3) conserve the scenic beauty of shorelands, 4) control erosion, 5) preserve public access to public waters, 6) achieve other legitimate municipal, regional or state shoreland conservation or development objectives. If a municipality chooses to regulate the use of shorelands, and it has a zoning bylaw in place, the shoreland regulations should be added to the existing bylaw as an amendment. If no zoning is in place, then the municipality may adopt shoreland regulations as a separate, free-standing bylaw. In either case, the regulations may specify the location of buildings and septic systems, maintenance of vegetation, whether filling is permitted and if so to what degree, and requirements for public access. **24 V.S.A. §4411.**

*Flood Hazard Area Bylaws:* A municipality may regulate the use of land in defined flood hazard areas in order to: 1) minimize the loss of life and property, 2) ensure design and construction of development in flood hazard areas will minimize the potential for flood damage, 3) maintain wise use of agricultural lands in flood-prone areas, 4) encourage municipalities to manage flood hazard areas designated by the Secretary of the Agency of Natural Resources, and 5) make the state and municipalities eligible for federal flood insurance. To accomplish those tasks, the municipal bylaw may prohibit placement of damaging obstructions in the floodway, require flood protection or flood proofing through elevation or other techniques, require adequate provisions for flood drainage, require provision of adequate water and sewer facilities, and establish other restrictions to promote sound use of flood hazard areas. As with shoreland regulations, if a municipality chooses to regulate flood hazard areas, and if it already has a

Map 6.2



zoning bylaw in place, then it should adopt the flood hazard regulations as an amendment to its existing zoning. If the municipality has no zoning regulations, the flood hazard regulations may be adopted as a separate, free-standing bylaw. **24 V.S.A. §4412.**

### *6.3.2 Other Regulations*

*Health Regulations:* Many communities have adopted a separate set of health regulations. These regulations are typically designed to insure adequate onsite sewage disposal. To administer the regulations, the community must designate a health officer and a local board of health. Other communities have sought technical assistance in administering and enforcing their local health regulations from the Natural Resource Conservation districts.

*Building Codes:* Communities may adopt codes that regulate the construction of buildings. Such codes are a way to upgrade substandard buildings and to insure adequate and safe construction of new buildings. A municipal building code must be consistent with the state building code. **24 V.S.A. §3101.** Municipalities must be prepared to underwrite the costs of administering and enforcing a local building code. Staff is required for this undertaking.

*Curb Cuts:* A municipality may regulate private access to municipal roads through "curb cuts", places where a private driveway or road cut through curb (even though there may not be an actual curb in place) to gain access to town roads and highways. The municipality's executive body usually has authority to approve the proposed location of curb cuts. It does so based on safety considerations such as lines of sight, proximity to intersections, etc. This authority is granted under **19 V.S.A. §§304 and 1111(b).**

*Sign Ordinance:* Municipalities may regulate the size, shape, color, and location of signs advertising private businesses.

### *6.3.3 Programs*

*Capital Budget and Program:* The capital budget and program provides an approach for municipalities to select, schedule, and finance their capital projects. The program sets forth the capital projects to be funded each year; it identifies the source of funding for each project. The program makes clear when public facilities will be in place to accommodate projected growth. In conjunction

with the plan and the zoning bylaw, it can provide a useful mechanism for phasing growth. See Figure 6.4 for an example. Chapter 117 requires municipalities to have a community facilities and services element in their duly adopted municipal plan before they adopt a capital budget and program. The capital budget and program must be consistent with the provisions of that municipal plan element. **24 V.S.A. §4426.**

Figure 6.4

EXAMPLE: CAPITAL BUDGET AND PROGRAM, 1996—2001							
DEPARTMENT	ITEM	1996	1997	1998	1999	2000	2001
ROAD	Dump Truck	50,000					
	Loader				80,000		
	Grader					100,000	
FIRE	Van	20,000					
	Breathing Equip					15,000	
WATER	Pump Station						50,000
	Water Main						200,000
RECREATION	Ball Field		90,000				
	Pickup Truck		15,000				
GENERAL GOV'T	Municipal Bldg			70,000			
	Copier		5,000				
SCHOOL	School Bus #1	25,000					
	School Bus #2						25,000
RESERVE FUNDS	Road Equip	15,000	15,000	15,000	15,000	15,000	15,000
	Fire Equip	10,000	10,000	10,000	10,000	10,000	10,000
	School Bus	5,000	5,000	5,000	5,000	5,000	5,000
ANNUAL CAPITAL COMMITMENT		125,000	140,000	100,000	110,000	145,000	305,000
FINANCING:							
	From Reserves	25,000	0	0	10,000	45,000	25,000
	Sub Total	100,000	140,000	100,000	100,000	100,000	280,000
	From Borrowing	0	0	0	0	0	180,000
	Sub Total	100,000	140,000	100,000	100,000	100,000	100,000
	From Grants-in-Aid	0	45,000	0	0	0	0
NET CAPITAL OUTLAY FROM GENERAL FUND		100,000	95,000	100,000	100,000	100,000	100,000

*Community Development Program:* A community development program can be designed to conserve, expand, and improve housing; to create and retain employment; and to improve public facilities in support of housing and economic development. The program consists of short-term (1-2 years) and long-term (2 years or more) strategies to meet identified needs.

*Land Preservation Program:* Land preservation programs may be undertaken through the planning commission, through a local conservation commission, or through a community land trust. Such programs identify and prioritize land for preservation and undertake to protect it through a variety of techniques. These techniques, which are typically voluntary, involve direct work with property owners. They include donation of conservation easements, acquisition of land or conservation easements, bargain sales of land, and limited development schemes. In addition, land trusts—nonprofit organizations dedicated to the protection of land resources—have developed several techniques for helping individuals to conserve their land. Besides being advisors to land owners and recipients of donations, land trusts have become financial packagers, organizing conservation-minded individuals to finance or to pledge their credit to secure an important property.

Adjustments in the local property tax rate and the location or enlargement of public facilities, which could lower costs of nearby land development and thus encourage it, can also have significant effects on the future of open land.

#### 6.3.4 *Coordination of Public Actions*

Coordination of public actions can be an effective way of insuring that goals, objectives, and plans are carried out. How this coordination will take place should be spelled out in the implementation program. For example, a municipal decision to upgrade roads should be consistent with plans for future growth. Sewer line extension approvals through the public works department should adhere to land use policies on where growth is to be encouraged. In rural communities this coordination should be the responsibility of the commission; in larger communities the planning department or manager's office could perform this role.

Communities may need to work with each other on a certain issue, such as transportation improvements or solid waste management. This cooperation may occur through the regional planning commission or by the formation of an intermunicipal district (see Section 1.3.5 of this manual).

Public actions by municipalities and by the state may also need to be coordinated. Opportunities for this coordination occur in the Act 250 process. Through their legislative body and planning commission, municipalities are parties to this process. Because all projects must conform to local plans, municipalities can present their plan as evidence in the proceedings. A clear set of goals, plans, and strategies will greatly assist the district environmental commission in making findings. However, municipalities may participate on their issues as well. Such issues include traffic impact, impact on municipal facilities and services, and environmental concerns, such as water quality, soil erosion, and air and noise quality.

#### *6.3.5 Coordination of Private Actions*

Citizens, government, and private enterprise all have vested interests in the community. The private sector engages in a variety of development and conservation activities, including construction of homes, businesses, and industry; land preservation; and the use of land for recreation and agriculture. Partnerships between the public and private sector can bring together the talents and resources to develop innovative solutions to common problems.

Municipalities may wish to develop cooperative relationships with individuals in the private sector whose lands and plans might have a significant impact on community values. Municipalities can contact these individuals early on to learn their intentions and to inform them about the municipality's goals and objectives. By working together in a cooperative atmosphere, public and private entities can avoid adversarial relations and detrimental development. Examples of individuals who can be contacted include:

- owners of significant resource lands, such as farmland and scenic areas
- major employers
- owners of major recreation facilities, such as a ski area
- landowners in an area targeted for new development
- Developers and subdividers active in the community

Municipalities may also wish to coordinate their implementation programs with various non-profit corporations working in areas such as housing or economic development. For example, most parts of Vermont are served by regional development corporations (RDCs) whose purpose is to assist private sector businesses expand current facilities, access training programs for employees, access financing for business expansion, or to help new

businesses find locations for stores, plants, or warehouses. They can also help municipalities with their own economic development programs, or with other steps to encourage development.

In a similar way, there are numerous non-profit housing corporations that assist with rehabilitation or construction of affordable housing, along with tenants' rights and mobile home park issues.

#### *6.3.6 Special Projects*

Often there are issues that cannot be adequately addressed in the plan and for which special studies are needed. The municipality may wish to organize a special subcommittee, create a community group, call upon the regional planning commission, or hire a private consultant to carry out this effort. Municipalities should identify the tasks that can be carried out through local resources and those that may require outside assistance.

Developing a municipal plan, writing or amending bylaws, project review, carrying out special studies, or acquiring land and capital items all require financial support. There are diverse sources of financial aid municipalities may use for these activities. They include annual state planning funds, the municipal budget, federal community development block grants, as well as other municipal devices such as impact fees, user fees for water and sewer services, and permit fees. Municipalities should seek expert assistance on designing a justifiable and equitable fee system.

## **6.4 Financing**

#### *6.4.1 State Planning Funds*

Since 1988, the State has made funds available to municipalities to help support their planning and implementation activities. Every year the Legislature appropriates an amount drawn from the revenues of the Property Transfer Tax to be distributed by the Department of Housing and Community Affairs to support municipal planning. To qualify for the funds a municipality has to have its planning process confirmed by its regional planning commission. The regional planning commission will use two criteria to decide confirmation: (1) whether the municipality has an adopted plan approved by the regional planning commission as being consistent with the planning goals contained in Chapter 117, and (2) whether the municipality is maintaining its efforts to provide local funds for municipal and regional planning purposes.

Regional planning commissions must review a municipal planning effort for confirmation twice every five years.

A municipality may use state planning funds to support a wide range of planning or implementation activities. They include: paying for special studies done for the municipality by the regional planning commission (but not annual dues to the regional planning commission), research, writing, or amending town plans and bylaws, GIS mapping, supporting municipal land use permit activities. The funds may also be used for implementation activities such as acquiring development rights, conservation easements or titles to land, areas, or structures identified in regional or municipal plans as requiring special consideration to provide needed aquifer protection, affordable housing, open space, farmland protection, or other conservation purposes. **24 V.S.A. §4306.**

#### *6.4.2 Community Development Block Grants*

The federal Community Development Block Grant program has a category of planning grants municipalities may apply for to support activities related to community development planning in such fields as affordable housing, economic development, or community facilities.

Community Development Block Grants may also be used to implement municipal goals and objectives through use of "Implementation Grants." Grants in this category can be used for a wide variety of activities to construct or rehabilitate housing, public facilities or to undertake economic development activities. The program is competitive and is administered by the Vermont Department of Housing and Community Affairs. Applications for grants have to demonstrate that the projects paid for with grant funds will benefit low and moderate income families in the municipality.

#### *6.4.3 Impact Fees*

In 1988 the Vermont Legislature authorized municipalities to levy impact fees on new development. The purpose of impact fees is to require beneficiaries of new development to pay their proportionate share of the cost of municipal and school capital projects which are undertaken because of the new development. Impact fees are in many ways similar to special assessments, which have long been authorized under Vermont law.

The statute, **24 V.S.A. chapter 131** enables a town to levy impact fees if its planning process has been confirmed by the



regional planning commission, and if it has adopted a municipal plan and a capital budget and program. The municipality must be sure to keep the capital budget and program up to date as specified in **24 V.S.A. §4426**, in order to legally assess impact fees.

#### *6.4.4 Taxation*

Municipalities should coordinate their local tax policies with their overall planning objectives. In Vermont municipal taxing powers are limited by state law to one primary source—the property tax. Communities are authorized to abate property taxes on agricultural, forestry, and open land on industrial and commercial land and buildings. They can also use tax increment financing to fund specific public improvements from designated property tax revenues. Municipalities are also authorized to establish special assessment districts within which fees can be assessed by property owners to finance public improvements and programs.

With the establishment of goals and objectives and the development of plans and implementation strategies, the municipal plan is ready for public review and discussion. The process can result in changes to a document over which the planning commission has labored long and hard. However, this phase is critical to insuring a plan for the community that will be useful and acceptable. If, in the process of developing the plan, there has been broad and open public discussion of goals, issues, plans, and strategies, the changes usually will be minimal.

The planning commission members should keep in mind that they will be continually reviewing and evaluating the plan. In the future there will be opportunities to adjust the plan to meet changing conditions, to address issues beyond the scope of the current effort, and to correct the plan's deficiencies. This prospect reinforces that planning is a continual process.

## **6.5 Conclusion**



**APPENDIX A**

**Checklists and  
Certification for Adoption**

The forms in this appendix may be used by the municipality to insure that the adoption procedures for a municipal plan in Chapter 117, §§4384 and 4385 are followed. The forms are designed to be certified by the municipal clerk.

<p>CERTIFICATION OF ADOPTION</p> <p>OF MUNICIPAL PLAN OR AMENDMENT</p> <p>FOR URBAN AND RURAL MUNICIPALITIES</p> <p>I, _____, municipal clerk of the municipality of _____, in the County of _____ State of Vermont, do hereby certify, pursuant to Chapter 117 Title 24 V.S.A. §4474, that the following actions were taken by the designated parties with re- spect to the adoption of the Municipal Development Plan for the municipality of _____, of which the attached is a true copy.</p> <p>NOTE: All actions within their designated sections must be completed before certification is considered valid.</p>
--

CHECKLIST FOR MUNICIPAL PLAN ADOPTION  
PLANNING COMMISSION STAGE

<u>Date</u>	<u>Action</u>
1 _____	Prepare Plan. Throughout process, solicit citizen participation through work sessions. <b>§4384(a)</b>
2 _____	Adopt Planning Commission resolution approving Plan for public hearing, posting, publishing, and mailing.
3 _____	Prepare notice of public hearing. <b>§§4384(d), 4447</b>
	<b>At least 30 days prior to public hearing, the following action must take place:</b>
4 _____	<p>Deliver, with proof of receipt, or send by certified mail, return receipt requested, copies of the proposed Plan to the following and document in records that this was done: <b>§4384(e)</b></p> <ul style="list-style-type: none"> <li>(1) Chairpersons of abutting municipal planning commissions (where there is no p.c. to municipal clerk)</li> <li>(2) Executive Director of Regional Planning Commission</li> <li>(3) The Department of Housing and Community Affairs</li> <li>(4) Community organizations or interest groups that have requested notice in writing</li> </ul> <p><b>At least 15 days prior to public hearing, the following actions (A, B, and possibly C) must take place:</b></p>
5 _____	<p>A. Publish copy of date, place and purpose of hearing, along with full text of proposed Plan, <u>or</u> summary of text, in newspaper of general publication in municipality affected. <b>§4447(a)(1)</b></p> <p>NOTE: A summary of text must include the following:</p> <ul style="list-style-type: none"> <li>(1) A statement of purpose</li> <li>(2) The geographic areas affected</li> <li>(3) A table of contents or a list of section headings</li> <li>(4) A description of a place within the municipality where the full text may be examined. <b>§4447(b)(1)</b></li> </ul> <p>Published in _____</p>
6 _____	<p>B. Post copy of date, place and purpose of hearing, along with full text of proposed Plan, <u>or</u> summary of text, in one or more public places within the municipality (document in records that this was done). <b>§§4447(a)(2), 4447(b)(1)</b></p> <p>Posted at _____</p>

- 7 \_\_\_\_\_ C. (Optional) As an alternative to publishing and posting full text or summary of text, mail or deliver full text or summary, along with copies of notice of the hearing, to each voter and landowner within the municipality (document in records that this was done). **§4447(b)(2)**
- 8 \_\_\_\_\_ Hold Planning Commission hearing. **§4384(d)**
- 9 \_\_\_\_\_ Prepare revisions (if any) to proposed Plan. **§4384(f)**
- 10 \_\_\_\_\_ Adopt Planning Commission resolution approving Plan for submission to Selectboard and filing with municipal clerk.
- 11 \_\_\_\_\_ Submit copy of Plan to Selectboard and document in records. **§4384(f)**
- 12 \_\_\_\_\_ Simultaneously with submission to Selectboard, file a copy of proposed Plan with the municipal clerk for public review (document in records). **§4384(f)**

CHECKLIST FOR MUNICIPAL PLAN AMENDMENT ADOPTION  
PLANNING COMMISSION STAGE

<u>Date</u>	<u>Action</u>
1 _____	<p>Prepare Amendment (by the Planning Commission or any other person or body). <b>§4384(a,b)</b></p> <p>NOTE: If proposed Amendment is supported by a petition signed by at least 5 percent of the municipal voters, the Planning</p>
2 _____	<p>Planning Commission must prepare a written report on the proposed Amendment. <b>§4384(c)</b></p> <p>NOTE: If proposed Amendment alters any land designation, the report should cover the following points: <b>§4384(c)(1)-(5)</b></p> <ol style="list-style-type: none"> <li>(1) Probable impact on the surrounding area, including traffic</li> <li>(2) Long-term cost or benefit to the municipality</li> <li>(3) Amount of vacant land already subject to new designation; need for additional land for that purpose; and amount of land available</li> <li>(4) Suitability of the area in question for proposed purpose</li> <li>(5) Appropriateness of the size and boundaries of the area in question</li> </ol>
3 _____	<p>Adopt Planning Commission resolution approving Amendment and report for public hearing, posting, publishing, and mailing.</p>
4 _____	<p>Prepare notice of public hearing. <b>§§4384(d), 4447</b></p> <p><b>At least 30 days prior to public hearing, the following action must take place:</b></p>
5 _____	<p>Deliver, with proof of receipt, or send by certified mail, return receipt requested, copies of the proposed Amendment and written report to the following, documenting in records that this was done: <b>§4384(e)</b></p> <ol style="list-style-type: none"> <li>(1) Chairpersons of abutting municipal planning commissions (where there is no P.C., send to municipal clerk)</li> <li>(2) Executive Director of Regional Planning Commission</li> <li>(3) The Department of Housing and Community Affairs</li> <li>(4) Community organizations or interest groups that have requested notice in writing</li> </ol>

**At least 15 days prior to public hearing, the following actions (A, B, and possibly C) must take place:**

- 6 \_\_\_\_\_ A. Publish copy of date, place and purpose of hearing, along with full text of proposed Amendment and the written report, or summary of text, in newspaper of general publication in municipality affected. **§4447(a)(1)**

NOTE: A summary of text must include the following:

- (1) A statement of purpose
- (2) The geographic areas affected
- (3) A table of contents or a list of section headings
- (4) A description of a place within the municipality where the full text may be examined.

**§4447(b)(1)**

Published in \_\_\_\_\_

- 7 \_\_\_\_\_ B. Post copy of date, place and purpose of hearing, along with full text of proposed Amendment and the written report, or summary of text, in one or more public places within the municipality (document in records that this was done). **§§4447(a)(2), 4447(b)(1)**

Posted at \_\_\_\_\_

- 8 \_\_\_\_\_ C. (Optional) As an alternative to publishing and posting full text or summary of text, mail or deliver full text or summary, along with copies of notice of the hearing, to each voter and landowner within the municipality (document in records that this was done). **§4447(b)(2)**

- 9 \_\_\_\_\_ Hold Planning Commission hearing. **§4384(d)**

- 10 \_\_\_\_\_ Prepare revisions (if any) to proposed Amendment and written report. **§4384(f)**

NOTE: If a proposed Amendment is supported by a petition signed by at least 5 percent of the municipal voters, the Planning Commission may correct only technical errors.

- 11 \_\_\_\_\_ Adopt Planning Commission resolution approving Amendment and report for submission to Selectboard and filing with municipal clerk.

- 12 \_\_\_\_\_ Submit copy of Amendment and report to Selectboard and document in records. **§4384(f)**

NOTE: If proposed Amendment is supported by a petition signed by at least 5 percent of the municipal voters, the Planning Commission may submit to Selectboard any appropriate recommendation or opinion along with the proposed Amendment.

- 13 \_\_\_\_\_ Simultaneously with submission to Selectboard, file a copy of proposed Amendment and report with the municipal clerk for public review (document in records). **§4384(f)**

CHECKLIST FOR MUNICIPAL PLAN OR AMENDMENT ADOPTION  
SELECTBOARD'S STAGE

<u>Date</u>	<u>Action</u>
	<b>The legislative body must hold the first of one or more public hearings not less than 30 nor more than 120 days after receipt of proposed Plan or Amendment. Municipalities with a population of more than 2,500 must hold at least 2 hearings.</b>
1 _____	Adopt Selectboard's resolution acknowledging receipt of proposed Plan or Amendment from Planning Commission. <b>§4384(f)</b>
	<b>At least 15 days prior to the public hearing the following actions (A through F) must be taken:</b>
2 _____	A. Prepare changes (if any) to proposed Plan or Amendment. <b>§4385(b)</b>
3 _____	Adopt Selectboard's resolution approving Plan or Amendment for public hearing, posting, and publishing. <b>§4385(a)</b>
4 _____	B. File copy of changed Plan or Amendment with the Municipal Clerk, individuals or organizations requesting copy, and Planning Commission. <b>§4385(b)</b>
5 _____	C. Prepare notice of public hearing. <b>§4385(a)</b>
6 _____	D. Publish copy of date, place and purpose of hearing, along with full text of proposed Plan or Amendment and any written report, <u>or</u> summary of text, in newspaper of general publication in municipality affected. <b>§4447(a)(1)</b>
	NOTE: A summary of text must include the following:
	(1) A statement of purpose
	(2) The geographic areas affected
	(3) A table of contents or a list of section headings
	(4) A description of a place within the municipality where the full text may be examined.
	<b>§4447(b)(1)</b>
	Published in _____
7 _____	E. Post copy of date, place and purpose of hearing, along with full text of proposed Plan or Amendment and any written report, <u>or</u> summary of text, in one or more public places within the municipality (document in records that this was done). <b>§§4447(a)(2), 4447(b)(1)</b>
	Posted at _____



- 8 \_\_\_\_\_ F. (Optional) As an alternative to publishing and posting full text or summary of text, mail or deliver full text or summary, along with copies of notice of the hearing, to each voter and landowner within the municipality (document in records that this was done). **§4447(b)(2)**
- 9 \_\_\_\_\_ Planning Commission must submit a written report at or prior to public hearing analyzing extent to which a changed proposal is consistent with the goals in 4302. **§4385(b)**
- 10 \_\_\_\_\_ Hold Selectboard's first public hearing not less than 30 nor more than 120 days after receipt of proposed Plan or Amendment. **§4385(a)**  
NOTE 1: Failure to hold a hearing within the 120 days does not invalidate the adoption of the Plan or Amendment.  
  
NOTE 2: If Selectboard makes substantial changes in concept, meaning or extent of the proposed Plan or Amendment after a public hearing, a new hearing must be warned and held and the procedures 2 through 9 must be followed.
- 11 \_\_\_\_\_ Adoption of Plan or Amendment either by a majority of the Selectboard at a meeting held after the final public hearing or by Australian ballot if a municipality has elected at a duly warned meeting to do so.
- 12 \_\_\_\_\_ Plan or Amendment becomes effective immediately upon adoption. **§4385(c)**  
  
NOTE 1: If proposed Plan or Amendment is not adopted so as to take effect within one year of the final Planning Commission hearing, it shall be considered rejected.  
  
NOTE 2: A Plan expires five years from the date of its adoption, unless it is readopted, even if it has been amended within the five-year period. **§4387(a)**  
  
**Within 30 days of Plan or Amendment adoption the following action must take place:**
- 13 \_\_\_\_\_ Mail or deliver printed copies of the Plan or Amendment, as adopted by the Selectboard, to the following (document in records that this was done): **§4385(c)**
- (1) The Regional Planning Commission
  - (2) The Department of Housing and Community Affairs

**OPTIONAL:**  
**CHECKLIST FOR MUNICIPAL PLAN APPROVAL**

<u>Date</u>	<u>Action</u>
1) _____	Either before or after plan adoption, municipality requests approval from Regional Planning Commission (RPC). If before, the Selectboard should submit plan after final public hearing. <b>§4385</b>
	<b>Within 2 months of receipt, the RPC must approve or conditionally approve the Plan (after 1996 plans can be disapproved). Before a decision is rendered, the RPC must complete the following actions (A and B):</b>
2 _____	A. The RPC must hold a public hearing which is noticed as provided in section 4447 and published in newspaper (s) of general publication in the region. <b>§4350(b)</b>
3 _____	B. To be approved, the RPC must find that the Plan: <ul style="list-style-type: none"> <li>(1) is consistent with the goals in section 4302</li> <li>(2) is compatible with the regional plan</li> <li>(3) is compatible with approved municipal plans of the region</li> <li>(4) contains all 10 required elements. <b>§4350(b)</b></li> </ul>
4 _____	Plan is approved or conditionally approved (or disapproved after 1996) within 2 months of receipt. If plan is not approved, the RPC must provide a written explanation and , if appropriate, suggest acceptable modifications. <b>§4350(c)</b>
5 _____	Plan goes back to municipality's Selectboard for further action if necessary.
6 _____	If Plan has not been adopted and has been approved, it can be adopted either by a majority of the Selectboard or by Australian ballot if a municipality has elected at a duly warned meeting to do so. <b>4385</b>
	<b>If Plan is not approved, municipality's legislative body has 3 choices:</b> <ul style="list-style-type: none"> <li>(1) <b>Modify Plan and resubmit to RPC,</b></li> <li>(2) <b>Adopt Plan despite non-approval, or</b></li> <li>(3) <b>Request review of decision by Council of Regional Commissions (CRC).</b></li> </ul>
7. _____	(1) If municipality resubmits modified plan, the RPC must approve or disapprove the Plan within 45 days. <b>§4350(c)</b>

- 8 \_\_\_\_\_ or
- (2) If municipality adopts non-approved plan:
- (1) the municipality can no longer receive state planning funds
  - (2) the municipality cannot levy impact fees
  - (3) state agency plans need not be consistent with the municipality's Plan
  - (4) DHCA will review municipality's planning process for compliance with affordable housing criteria and shall issue a report to the municipality and RPC. Review includes a public hearing.

- \_\_\_\_\_ or
- (3) If municipality requests review by the CRC, the following actions (A and B) must take place:

9 \_\_\_\_\_ A. The request for review must be filed within 21 days of the RPC decision. **§4476(a)**

10 \_\_\_\_\_ B. The Council review panel must hold a hearing within 45 days of the request, and must issue a decision approving or disapproving the RPC's decision within 20 days after the hearing. **§§4305(e), 4476(c)**

NOTE: Appeal of a CRC review panel decision goes to the Supreme Court. **§4476(f)**

## APPENDIX B Resources

### *I. State Agencies*

#### **Department of Agriculture, Food & Markets**

116 State Street, Drawer 20  
Montpelier, Vermont 05620-2901  
802-828-2500 Fax: 802-828-2361

#### **Agency of Administration**

Department of Taxes  
109 State Street  
Pavilion Office Building  
Montpelier, Vermont 05609-1401

Sales and Use Tax: 802-828-2551

Income Tax Division: 802- 828-2535

#### **Department of Taxes**

Division of Property Valuation and Review  
43 Randall Street  
Waterbury, Vermont 05676  
Main phone number: 802-241-3500

Vermont Mapping Program: 802-241-3507

Current Use Advisory Board: 802-241-3505

#### **Department of Buildings & General Services**

2 Governor Aiken Avenue  
Montpelier, Vermont 05602-5802  
802-828-3314 Fax 802-828-3533

#### **Agency of Commerce and Community Development**

National Life Building, Drawer 20  
Montpelier, Vermont 05620-0501  
802-828-3211 Fax 802-828-3383  
Web Site: [www.state.vt.us/dca](http://www.state.vt.us/dca)

Department of Economic Development  
802-828-3211 Fax 802-828-3258  
Web Site: [www.thinkvermont.com](http://www.thinkvermont.com)

Department of Housing and Community Affairs  
802-828-3211 Fax 802-828-2928  
Web Site: [www.state.vt.us/dca/housing](http://www.state.vt.us/dca/housing)

Division for Historic Preservation  
802-828-3211 Fax 802-828-3206  
Web Site: [www.state.vt.us/dca/historic](http://www.state.vt.us/dca/historic)

Division for Planning  
802-828-3211 Fax: 802-828-2928  
Web Site: [www.state.vt.us/dca/planning](http://www.state.vt.us/dca/planning)

Department of Tourism and Marketing  
6 Baldwin Street, Drawer 33  
Montpelier, Vermont 05633-1301  
802-828-3236 Fax 802-828-3233  
Web Site: [www.travel-vermont.com](http://www.travel-vermont.com)

#### **Department of Education**

120 State Street  
Montpelier, Vermont 05620-2501  
802-828-3121 Fax 802-828-3140

#### **Department of Employment and Training**

5 Green Mountain Drive, PO Box 488  
Montpelier, Vermont 05601-0488  
802-828-4000 Fax 802-828-4022  
Web Site: [www.def.state.vt.us](http://www.def.state.vt.us)

#### **Agency of Human Services**

Health Department  
60 Main Street  
Burlington, Vermont 05401  
Main number: 1-800-642-3323 or 863-7250

Environmental Health: 863-7223

Social and Rehabilitative Services Department  
103 South Main Street  
Waterbury, Vermont 05671-2401  
802-241-2950

#### **Department of Labor and Industry**

National Life Building, Drawer 20  
Montpelier, Vermont 05620-3401  
802-828-2288 Fax: 802-828-2195

#### **Department of Libraries**

109 State Street  
Montpelier, Vermont 05609-0601  
802-828-3261 Fax: 802-828-2199

#### **Department of Liquor Control**

Green Mountain Drive, Drawer 20  
Montpelier, Vermont 05620-4501  
802-828-2345 Fax: 802-828-2803  
1-800-642-3134

#### **Department of Military**

GMA, Camp Johnson  
Colchester, Vermont 05446  
802-654-0124 Fax 802-654-0425

#### **Agency of Natural Resources**

103 South Main Street, Center Bldg.  
Waterbury, Vermont 05671-0301

Environmental Conservation Department  
Facilities Engineering: 802-241-3737  
Fax 802-244-4516

Waste Management: 802-241-3888 Fax 802-241-3296  
Water Quality: Environmental Sciences 802-241-3777  
Planning & Engineering 802-241-3770

Fish and Wildlife Department: 802-241-5700

Forests, Parks, and Recreation Department:  
802-241-3670

Planning Division: 802-241-3620

State Geologist: 802-241-3496

#### **Office of Policy Research**

109 State Street, Pavilion Office Building  
Montpelier, Vermont 05609-0301  
802-828-3326 Fax: 802-828-3339

#### **Department of Public Safety**

103 South Main Street  
Waterbury, Vermont 05671-2101  
State Police: 802-244-7345

#### **Department of Public Service**

112 State Street  
Montpelier, Vermont 05620-2601

Utility information: 802-828-2811

Energy Efficiency: 802-828-2393

Energy information: 1-800-642-3281

#### **Agency of Transportation**

National Life Building  
Montpelier, Vermont 05633-5001

Planning Division: 802-828-2573

Public Transit: 802-828-2828

Project Development Division

Traffic Design: 802-828-2663

Railroad: 802-828-2760

Maintenance & Operations Division

Aviation: 802-828-2833

Transportation Districts:

Bennington: 802-447-2790 Fax 802-447-2793

Dummerston: 802-254-5011 Fax 802-257-2836

Rutland: 802-786-5826 Fax 786-5894

White River Junction: 802-295-8888 Fax 802-295-8882

Colchester: 802-655-1580 Fax 802-655-6642

Berlin: 802-828-2691 Fax 802-828-3530

St. Johnsbury: 802-748-6670 Fax 802-748-6671

St. Albans: 802-524-5926 Fax 802-524-7940

Newport: 802-334-7934 Fax 802-334-3337

#### **Vermont Arts Council**

136 State Street  
Montpelier, Vermont 05633-6001  
802-828-3291 Fax 802-828-3363

#### **Vermont Economic Development Authority**

58 East State Street  
Montpelier, Vermont 05602  
802-828-5627 Fax 802-828-5474  
Web Site: [www.veda.state.vt.us](http://www.veda.state.vt.us)

#### **Vermont Historical Society**

109 State Street  
Pavilion Office Building  
Montpelier, Vermont 05609-0901  
802-828-2291

#### **Vermont Housing and Conservation Board**

149 State Street  
Montpelier, Vermont 05602  
802-828-3250 Fax 802-828-3203

#### **Vermont Housing Finance Agency**

P.O. Box 408  
164 St. Paul Street  
Burlington, Vermont 05402-0408  
802-864-5743 Fax 802-864-5746  
1-800-339-5866

#### **Vermont State Colleges**

103 South Main Street  
Waterbury, Vermont 05676  
802-241-2520

#### **Vermont State Housing Authority**

One Prospect Street  
Box 397  
Montpelier, Vermont 05602  
802-828-3295

## *II. Federal Agencies*

#### **Soil Conservation Service**

69 Union Street  
Winooski, Vermont 05404  
951-6795

District Offices

Bennington: 442-2275

Berlin: 802-828-4493

Brattleboro: 254-5323

(Soils: 257-5782)

Essex Junction: 951-6423

Middlebury: 388-6746

Morrisville: 888-4965

Newport: 334-8325

(Soils: 334-6276)

Randolph: 728-3371

Rutland: 775-7192

St. Albans: 524-6505

St. Johnsbury: 748-3885

White River Jct.: 295-1662

Woodstock: 457-1705 (Soils)

#### **UVM Extension System**

Berlin Office  
R.R. 4, Box 2298  
Comstock Road, Berlin  
Montpelier, Vermont 05602-8927

Brattleboro Office  
PO Box 2430  
West Brattleboro, Vermont 05303  
257-7967

St. Johnsbury Office  
Box 436, HCR-31  
St. Johnsbury, VT 05819  
748-8177

## *III. Regional Planning Commissions*

#### **Addison County Regional Planning and Development Commission**

79 Court Street  
Middlebury, Vermont 05753  
802-388-3141 Fax 802-388-0038  
Email: [kbehm@sover.net](mailto:kbehm@sover.net)

#### **Bennington County Regional Commission**

Box 342  
Arlington, Vermont 05250  
802-375-2576 Fax 802-375-1561  
Email: [BCRCBurk@sover.net](mailto:BCRCBurk@sover.net)

#### **Central Vermont Regional Planning Commission**

26 State Street  
Montpelier, Vermont 05602  
802-229-0389 Fax 802-223-1977  
Email: [CVRPC@together.net](mailto:CVRPC@together.net)  
Web Site: [www.central-vt.com/cvrpc](http://www.central-vt.com/cvrpc)

#### **Chittenden County Regional Planning Commission**

P.O. Box 108  
Essex Junction, Vermont 05453  
802-872-1600 Fax 802-879-3610  
Email: [CCRPC@together.net](mailto:CCRPC@together.net)

## 164 Planning Manual for Vermont Municipalities

### **Lamoille County Planning Commission**

Tegu Building, Portland Street  
P. O. Box 1009  
Morrisville, Vermont 05661-1009  
802-888-4548 Fax 802-802-888-6938  
Email: [LCPC@pshift.com](mailto:LCPC@pshift.com)

### **Northeastern Vermont Development Association**

1207 Main Street, Suite 3  
P. O. Box 630  
St. Johnsbury, Vermont 05819  
802-748-5181 Fax 802-748-1223  
Email: [NVDplain@hcr.net](mailto:NVDplain@hcr.net)

### **Northwest Regional Planning Commission**

7 Lake Street, Suite 201  
St. Albans, Vermont 05478  
802-524-5958 Fax 802-527-2948  
Email: [NRPCVT@together.net](mailto:NRPCVT@together.net)

### **Rutland Regional Planning Commission**

P.O. Box 965  
Rutland, Vermont 05702  
802-775-0871 or 800-464-7900 Fax 802-775-1766  
Email: [Mblucher@sover.net](mailto:Mblucher@sover.net)

### **Southern Windsor County Regional Planning Commission**

P.O. Box 320 Ascutney Professional Bldg.  
Ascutney, Vermont 05030  
802-674-9201 Fax 802-674-5711  
Email: [Tkennedy@sover.net](mailto:Tkennedy@sover.net)

### **Two Rivers-Ottawaquechee Regional Commission**

The King Farm  
Woodstock, Vermont 05091  
802-457-3188 Fax 802-457-4728  
Email: [pgregory@vermontel.com](mailto:pgregory@vermontel.com)

### **Upper Valley-Lake Sunapee Regional Planning Commission**

77 Bank Street  
Lebanon, New Hampshire 03766-1680  
603-448-1680 Fax 448-0170  
Email: [uvisrpc@sover.net](mailto:uvisrpc@sover.net)  
Web Site: [www.UVLSplanningRPC.org](http://www.UVLSplanningRPC.org)

### **Windham Regional Commission**

139 Main Street, P.O. Box 505  
Brattleboro, Vermont 05302  
802-257-4547 Fax 802-254-6383  
Email: [wrc@sover.net](mailto:wrc@sover.net)  
Web Site: [www.sover.net/~wrc](http://www.sover.net/~wrc)

## *IV. Economic Development Corporations*

### **Addison County Economic Development Corporation**

RD 4, Box 1309A  
Middlebury, Vermont 05753  
Phone 802-388-7953 Fax 802-388-0119  
E-Mail: [ACEDC@sover.net](mailto:ACEDC@sover.net)

### **Bennington County Industrial Corporation**

P.O. Box 357  
North Bennington, Vermont 05257  
Phone 802-442-8975 Fax 802-447-1101  
E-Mail: [LANCE@bcic.org](mailto:LANCE@bcic.org)

### **Brattleboro Development Credit Corporation**

76 Cotton Mill Hill  
Brattleboro, Vermont 05301  
Phone 802-257-7731 Fax 802-257-0294  
E-Mail: [BDCC@sover.net](mailto:BDCC@sover.net)

### **Central Vermont Economic Development Corporation**

P.O. Box 1439  
Montpelier, Vermont 05601  
Phone 802-223-4654 Fax 802-223-4655  
E-Mail: [CVEDC@together.net](mailto:CVEDC@together.net)  
Web Site: [www.central-vt.com/CVEDC](http://www.central-vt.com/CVEDC)

### **Connecticut River Development Corporation**

28 River Street, Box 88  
Windsor, Vermont 05089-0088  
674-9202

### **Economic Development Council of Northern Vermont**

155 Lake Street  
St. Albans, Vermont 05478  
524-4546

### **Franklin County Industrial Development Corporation**

Two North Main St. PO Box 1099  
St. Albans, Vermont 05478-1099  
802-524-2194 Fax 802-524-6793  
Email: [FCIDC@together.net](mailto:FCIDC@together.net)

### **Greater Burlington Industrial Corporation**

60 Main Street  
Burlington, Vermont 05401  
802-862-5726 Fax 802-860-1899  
Email: [FcioffiGBIC@vermont.org](mailto:FcioffiGBIC@vermont.org)  
Web Site: [www.vermont.org](http://www.vermont.org)

### **Green Mountain Economic Development Corporation**

PO Box 246, 61 Old River Road  
White River Junction, Vermont 05001  
802-295-3710 Fax 802-295-3779  
Email: [GMEDC@aol.com](mailto:GMEDC@aol.com)

### **Lake Champlain Islands Economic Development Corporation**

PO Box 213  
North Hero, VT 95474  
802-372-5683 Fax 802-372-3205  
Email: [Ilandfun@together.net](mailto:Ilandfun@together.net)  
Web Site: [www.ChamplainIslands.com](http://www.ChamplainIslands.com)

### **Lamoille Economic Development Corporation**

Box 455  
Morrisville, Vermont 05661  
802-888-5640 Fax 802-888-7612  
Email: [LEDC@together.net](mailto:LEDC@together.net)

### **Northeastern Vermont Development Association**

PO Box 630  
St. Johnsbury, Vermont 05819  
802-748-5181 Fax 802-748-1223  
Email: [NVDplain@hcr.net](mailto:NVDplain@hcr.net)

### **Rutland Industrial Development Corporation**

256 North Main Street  
Rutland, Vermont 05701  
802-773-9147 Fax 802-773-2772  
Email: [REDC@rutlandvermont.com](mailto:REDC@rutlandvermont.com)  
Web Site: [www.rutlandvermont.com](http://www.rutlandvermont.com)

## *V. Other Economic Development Resources*

### **Small Business Development Center**

PO Box 422  
Randolph VT 05060  
802-728-9101 Fax 802-728-3026

**Vermont Community Foundation**  
PO Box 406  
Hardwick VT 05843  
802-472-5811 Fax 802-472-9735  
Email: [RTLND@aol.com](mailto:RTLND@aol.com)

**Vermont Economic Development Authority**  
56 East State Street  
Montpelier VT 05602  
802-828-5458 Fax 802-828-5474

**VT Manufacturing Extension Center (VMEC)**  
PO Box 500  
Randolph Center VT 05061  
802-728-1312 Fax 802-728-1456

**Vermont World Trade Office**  
60 Main Street  
Burlington VT 05401  
802-865-0698 Fax 802-864-0493  
E-mail: [VWTO@together.net](mailto:VWTO@together.net)

## *VI. Community Action Agencies*

**Bennington-Rutland Opportunity Council, Inc. (BROC)**  
60 Center Street  
Rutland VT 05701  
802-775-0879 or 0878 Fax 802-775-9949  
Serving Bennington and Rutland Counties (excluding Pittsfield).

**Central Vermont Community Action Council, Inc. (CVCAC)**  
195 US Route 302-Berlin  
Barre VT 05641  
802-479-1053 or 1-800-639-1053  
Fax 802-479-5353  
Serving Washington County.

**Champlain Valley Office of Economic Opportunity, Inc. (CVOEO)**  
191 North Street  
PO Box 1603  
Burlington VT 05402  
802-863-6248 or 1-800-287-7971  
Fax 802-660-3454  
Serving Chittenden, Franklin, Grand Isle, and Addison Counties (except Granville & Hancock).Northeast Kingdom

**Community Action, Inc. (NEKCA)**  
10 Main Street, PO Box 346  
Newport VT 05855  
802-334-7316 or 1-800-639-4065  
Fax 802-334-5249  
Serving Caledonia, Essex, and Orleans Counties.

**Southeastern Vermont Community Action, Inc. (SEVCA)**  
91 Buck Drive  
Westminister VT 05158  
802-722-4575 Fax 802-722-4509  
Serving Windham and Windsor Counties.

## *VII. Community Land Trusts and Housing Development Corporations*

**Addison County Community Action Group, Inc.**  
PO Box 165  
Middlebury VT 05753  
802-388-3608 Fax 802-388-0756  
Serving Addison County

**Addison County Community Trust**  
Municipal Building  
Middlebury VT 05753  
802-388-9080 Fax 802-388-0606  
Serving Addison County

**Brattleboro Affordable Housing Corporation**  
PO Box 1284  
Brattleboro VT 05302  
802-257-4691 or 802-257-5606

**Brattleboro Area Community Land Trust**  
104 Canal Street  
Brattleboro VT 05301  
802-254-4604 Fax 802-254-4656  
Serving Windham County

**Burlington Community Land Trust**  
PO Box 523  
179 S. Winooski Avenue  
Burlington VT 05402  
802-862-6244 Fax 802-862-5054  
Serving Chittenden County

**Cathedral Square Corporation**  
3 Cathedral Square  
Burlington VT 05401  
802-863-3868 Fax 802-863-0385  
Serving Chittenden County

**Central Vermont Community Land Trust**  
107 North Main Street  
Barre VT 05641  
802-476-4493 Fax 802-479-0120  
Serving Washington County and part of Orange County

**Chittenden Housing Corporation**  
83 Barlow Street  
Winooski VT 05404  
802-655-2360 or 802-655-5540  
Serving Winooski and Burlington

**Gilman Housing Trust**  
PO Box 405  
107 Main Street  
Newport VT 05855  
802-334-1541 Fax 802-334-1273  
Serving Caledonia, Essex, and Orleans Counties

**Housing Vermont**  
123 St. Paul Street  
Burlington VT 05401  
802-863-8424 Fax 802-660-9034

**Lake Champlain Housing Development Corporation**  
220 Riverside Avenue  
Burlington VT 05401  
802-865-9648 or 802-863-5248  
Fax 802-864-0734  
Serving Burlington, South Burlington, Colchester, Shelburne, and Winooski

**Lamoille Housing Partnership**  
109 Professional Dr. Suite 1  
Morrisville, VT 05661  
802-888-5714 (property management)  
802-888-4288 (development)  
Fax 802-888-7304  
Serving Lamoille County

**Northern Community Management Corporation**

PO Box 234, 38 Main Street  
St. Johnsbury VT 05819  
802-748-8235 Fax 802-748-6535  
Serving Calendonía, Essex, and Orleans Counties

**Randolph Area Community Development Corp.**

Box 409  
Randolph, VT 05060  
802-728-4305 Fax 802-728-4016  
Serving Randolph, Braintree, and Brookfield

**Regional Affordable Housing Corporation**

226 Union Street  
PO Box 1247  
Bennington VT 05201  
802-442-8139 Fax 802-442-5125  
Serving Bennington County

**Rockingham Area Community Land Trust**

23 Pleasant Street  
Springfield VT 05156  
802-885-3220 Fax 802-885-5811  
Serving Andover, Athens, Baltimore, Cavendish, Chester, Grafton,  
Ludlow, Bellows Falls, Rockingham, Springfield, Weathersfield,  
and Westminster

**Rutland County Community Land Trust**

128 Merchants Row -Suite 301  
Rutland VT 05701  
802-775-3139 Fax 802-775-0434  
Serving Rutland County

**Twin Pines Housing Trust**

106 Rail Road Row  
White River Junction VT 05001  
802-291-7000 Fax 802-291-7273  
Serving Bethel, Bradford, Bridgewater, Fairlee, Hartford, Hart-  
land, Newbury, Norwich, Pomfret, Royalton, Sharon, Stafford,  
Thetford, Topsham, Tunbridge, Vershire, West Fairlee, West Win-  
dsor, Windsor, and Woodstock; and adjacent New Hampshire  
towns

**Upper Valley Land Trust**

19 Buck Road  
Hanover, NH 03755  
603-649-1444

**Vermont Land Trust**

8 Bailey Avenue  
Montpelier, Vermont 05602  
223-5234

**White River Area Housing Development Corporation**

Municipal Bldg., 15 Bridge Street  
White River Junction VT 05001  
802-295-9353 Fax 802-295-6382  
Serving Hartford and surrounding towns

*VIII. Other Organizations*

**American Planning Association**

1313 E. 60th Street  
Chicago, Illinois 60637  
312-955-9100

**Economic Development Council of Northern Vermont**

155 Lake Street  
St. Albans, Vermont 05478  
524-4546

**George D. Aiken Resource Conservation and Development Area**

Route 66, Professional Building  
P.O. Box 411  
Randolph, Vermont 05060  
728-9526

**The Nature Conservancy**

27 State Street  
Montpelier, Vermont 05602  
229-4425

**Northern Community Investment Corp.**

20 Main Street, P.O. Box 904  
St. Johnsbury, Vermont 05819  
748-5101

**Northern Vermont Resource Conservation and Development Area**

Comstock Road, RR 4, Box 2293  
Berlin, Vermont 05602-8927  
802-828-4595

**Rutland West Neighborhood Housing Services, Inc.**

PO Box 541  
West Rutland, VT 0577  
802-438-2302 Fax 802-438-5338  
Email: rwnhs@vermontel.com

**Vermont Center for Geographic Information**

206 Morrill Hall  
University of Vermont  
Burlington, Vermont 05404-0106  
656-4277

**Vermont Community Loan Fund**

PO Box 827  
Montpelier, VT 05601  
802-223-1448 Fax 802-223-1455

**Vermont League of Cities and Towns**

89 Main Street, Suite 4  
Montpelier, Vermont 05602  
229-9111

**Vermont Local Roads Program**

Saint Michaels College  
Winooski, Vermont 05404  
1-800-462-6555 or 654-2652

**Vermont Natural Resources Council**

9 Bailey Avenue  
Montpelier, Vermont 05602  
223-2328

**Vermont Planners Association**

89 Main Street, Suite 4  
Montpelier, Vermont 05602  
229-9111



## APPENDIX C

### Glossary

*Accessory apartment.* An apartment, within or attached to a single family residence, that provides affordable housing for relatives or disabled or elderly persons. See 24 V.S.A. §4302(c)(11)(D).

*Approved plan.* Prior to January 1, 1996, includes a plan that is conditionally approved under the provisions of Chapter 117, unless the law specifically provides otherwise.

*Aquifer.* A geologic formation or structure capable of yielding water in considerable quantity to wells or springs.

*Bedrock.* The solid rock that underlies soils or is exposed at the surface.

*Bylaws.* Zoning regulations, subdivision regulations, or the official map adopted under the authority of 24 V.S.A. chapter 117.

*Capacity study.* An inventory of available natural and human-made resources, based on detailed data collected, which identifies the capacities and limits of those resources to absorb land development. Data gathered, relevant to the geographic information system, shall be compatible with, useful to, and shared with the geographic information system established under 3 V.S.A. §20.

*Contour.* A line drawn on a map connecting points of the same elevation.

*Contour interval.* The difference between two contour lines on a topographic survey map.

*Depth to bedrock.* The depth of soil material over bedrock.

*Depth to seasonal high water table.* The highest level of water measured from the soil surface at given times of the year.

*Element.* A component of a plan as required by 24 V.S.A. §4382(a).

*Flood hazard area.* An area that would be inundated in a flood of such severity that the flood would be statistically likely to occur once every 100 years.

*Floodway.* The channel of a watercourse and adjacent land areas that are required to carry and discharge the 100-year flood within a regulated flood hazard area without substantially increasing the flood heights.

*Ground water.* Water found underground in porous rock strata and soils.

*Hydraulic conductivity.* A measure of soil permeability under saturated conditions.

*Land development.* The division of a parcel into two or more parcels, the construction, reconstruction, conversion, structural alteration, relocation or enlargement of any building or other structure, or of any mining, excavation or landfill, and any change in the use of any building or other structure, or land, or extension of use of land.

*Legislative body.* The selectmen in the case of a town, the trustees in the case of an incorporated village, the mayor and aldermen in the case of a city, and the supervisor in the case of an unorganized town or gore.

*Level of service.* The operating conditions that a driver will experience while travelling on a particular street or highway, including frequency of stops, operating speed, travel time, and traffic density.

*Municipal plan.* A framework and guide for accomplishing community aspirations and intentions that is adopted under the authority of 24 V.S.A. chapter 117.

*Municipality.* A town, a city, or an incorporated village or an unorganized town or gore. An incorporated village shall be deemed to be within the jurisdiction of a town for the purposes of this chapter, except to the extent

that a village adopts its own plan and one or more bylaws either before, concurrently with, or subsequent to such action by the town, in which case the village shall have all authority granted a municipality under this chapter and the plans and bylaws of the town shall not apply during such period of *time* that said village plan and bylaws are in effect.

*Natural area.* An area of land or water that has unusual or significant flora, fauna, geological, or similar features of scientific, ecological, or educational interest.

*Permeability.* The rate at which water passes through the soil or soil layers, expressed in inches per hour.

*Planned residential development.* Zoning regulations, for the purpose of encouraging and enabling flexibility of design and development of land, that permit up to 25% greater density of housing in exchange for land for open space or municipal purposes, as permitted by 24 V.S.A. §4407(3).

*Planned unit development.* An area of land, controlled by a landowner, to be developed as a single entity for a number of dwelling units, and commercial and industrial uses, if any; the plan for which does not correspond in lot size, bulk or type of dwelling, commercial or industrial use, density, lot coverage and required open space to the regulations established in any one or more districts created, from time to time, under the provisions of a municipal zoning ordinance adopted under the authority of this chapter.

\*Alternate definition. Zoning regulations, for the purpose of encouraging new communities, innovation in design and layout, and more efficient use of land, that may include dwelling units, nonresidential use, public and private educational facilities, and industrial uses and buildings, as permitted under 24 V.S.A. §4407 (12).

*Planning commission.* A commission of from three to nine voting members appointed by a municipal legislative body and with the powers and duties specified under 24 V.S.A. Chapter 117.

*Public notice.* The form of notice prescribed by 24 V.S.A. §4447.

*Renewable energy resources.* Energy available for collection or conversion from direct sunlight, wind, running water, organically derived fuels including wood, agricultural sources, waste materials, waste heat, and geothermal sources.

*Rural town.* A town having, as of the date of the most recent United States census, a population of less than 2,500 persons.

*Shorelands.* Lands surrounding lakes, ponds, reservoirs, rivers and streams. As defined for shoreland zoning purposes, lands being between the normal mean water mark of a lake, pond or impoundment exceeding 20 acres and a line not less than 500 feet nor more than 1,000 feet from such mean water mark.

*Should.* A requirement is encouraged but not mandated.

*Site plan approval.* An optional prerequisite to the approval of any use other than one- and two-family dwellings, permitted by 24 V.S.A. §4407(5).

*Slope.* The change in elevation over distance.

*Urban municipality.* A city, incorporated village, or any town that is not a rural town.

*Technical deficiency.* A defect in a proposed plan or bylaw, or an amendment or repeal thereafter which does not involve substantive change to the proposal, including but not limited to corrections to grammar, spelling and punctuation, as well as the numbering of sections.

*Water quality classification.* The classification designated for a specific body of water in accordance with the provisions of 10 V.S.A. §1253.

*Wetland.* An area that is inundated by surface or ground water with a frequency sufficient to support significant vegetation or aquatic life that depend on saturated or seasonally saturated soil conditions for growth and reproduction.

## APPENDIX D

### Selected Bibliography

#### I. State Documents Related to Municipal Planning

##### A. Planning Manual Supplements:

- Vermont Department of Public Service. *Guide to Municipal Energy Planning*. Montpelier, 1993.
- Vermont Department of Environmental Conservation. Water Quality Division. *A Planners Guide to Wetland Protection in Vermont*. Waterbury, 1994.
- Vermont Department of Environmental Conservation. Water Quality Division. *Local Planning and Zoning Options for Water Quality Protection*. Waterbury 1998.
- Department of Environmental Conservation. *Lake Protection Through Town Planning: A Suggested Process*. Waterbury, 1989.
- Vermont Department of Environmental Conservation, Water Supply Division. *An Ounce of Prevention: A Ground Water Protection Handbook for Local Officials*. Waterbury.
- Vermont Department of Environmental Conservation. *Planning for Lake Water Quality Protection*. Waterbury, 1990.
- Vermont Department of Forests, Parks and Recreation; University of Vermont Extension Service. *Planning for the Future Forest*. Burlington, 1991.
- Vermont Department of Forests, Parks and Recreation. *Vermont Recreation Planning Manual*. Waterbury, 1991.
- Vermont Department of Housing and Community Affairs. *Planning for Affordable Housing*. Montpelier, 1990.
- Vermont Department of Housing and Community Affairs. *Community Planning for Flood Hazards*. 1998.
- Vermont Fish and Wildlife Department. *How to Include Fish and Wildlife Resources in Town and Regional Planning*. Waterbury.
- Vermont Department of Agriculture, Food and Markets. *Sustaining Agriculture: A Handbook for Local Action*. Montpelier, 1994.
- Mason, Debra. *Your Town: Implementing Creative Land Use Planning Techniques in A Workbook for Vermont's Planning Commissioners*. George D. Aiken & Northern Vermont Resource Conservation and Development Councils. Randolph, 1995.
- Windham Regional Commission. *Vermont Better Backroads Manual: Clean Water You Can Afford*. George D. Aiken & Northern Vermont Resource Conservation and Development Councils. Randolph, 1995.
- Hehir, Brian P. and Cathy Kashanski. *Local Planning and Zoning Options for Wetland Protection*. Department of Environmental Conservation. Water Quality Division. Waterbury, 1994.
- Humstone, E. and Squires, J. *Capital Budget and Program*. Housing and Community Affairs. Montpelier.

##### B. Other Manuals:

- Applied Economic Research. *Vermont Housing Needs Analysis, Summary Report*. For Vermont Department of Housing and Community Affairs, November 1986.
- Byers, Gail and Wilson, Leonard. *Managing Rural Growth: The Vermont Development Review Process*. For the Vermont Environmental Board, April 1983.
- Fischer, Cheryl K. *Land Use Planning and Management: An Annotated Bibliography*. For Vermont Department of Housing and Community Affairs, December 1985.
- Garland, Peg, for the Vermont Department of Housing and Community Affairs. *Act 250 Handbook for Local Officials*. Montpelier, 1985.

- Greater Burlington Industrial Corporation. *Housing the Workforce; A Planning Guide*. Burlington, 1989.
- Office of Geographic Information Services. *GIS for Vermont Communities: Applications and Concerns*. Montpelier, 1990.
- Office of Geographic Information Services. *Policies, Standards, Guidelines, and Procedures Handbook*. Montpelier, 1991.
- Office of Geographic Information Services. *VGIS Data Catalog*. Montpelier, 1991.
- University of Vermont. *Town Energy Planning: a Framework for Action*. Burlington, 1983.
- Upper Valley Land Trust. *Open Space Lands: How to Inventory Vermont's Undeveloped Places*. Lebanon, NH, 1989.
- Vermont Agency of Development and Community Affairs. *Vermont Business Guide to State Services*. Montpelier, 1990.
- Vermont Agency of Environmental Conservation. *Vermont Rivers Study*. Waterbury, February 1986.
- Vermont Agency of Natural Resources. *Vermont's Scenic Landscapes: a Guide for Growth and Protection*. Waterbury, 1989.
- Vermont Agency of Natural Resources. *Bibliography*. Waterbury, 1989.
- Vermont Agency of Natural Resources. *Field Guide to the Vermont Agency of Natural Resources*. Waterbury, 1991.
- Vermont Department of Agriculture. *Mapping Farmland in Vermont: A Methodology*. Montpelier, April 1983.
- Vermont Department of Environmental Conservation. *Shoreland Zoning Options for Towns*. Waterbury, 1990.
- Vermont Department of Environmental Conservation. *Vermont Streambank Conservation Manual*. Waterbury, 1991.
- Department of Forests, Parks, and Recreation; Agency of Natural Resources. *Guide to Productivity Classes*. (forestry soils) Waterbury.
- Vermont Department of Housing and Community Affairs. *Community Development in Vermont*. Montpelier, 1986.
- Vermont Department of Housing and Community Affairs. *Community Planning for Flood Hazards*. Montpelier, 1998.
- Vermont Division for Historic Preservation. *Rural Preservation: Shaping Vermont's Future*. Montpelier.
- Vermont Division for Historic Preservation. *Vermont Historic Sites and Structures Survey*. Montpelier.
- Vermont Monitor. *Vermont Environmental Services Directory*. Brattleboro, 1991.
- Vermont Scenery Preservation Council and Vermont Transportation Board. *Designating Scenic Roads: A Vermont Field Guide*. Montpelier, June 1979.
- Vermont State Planning Office. *Vermont Land Capability*. Montpelier, September 1974.

## II. Other State Plans and Policies

- Agency of Human Services Prevention Plan (1990-1995). Agency of Human Services. (241-2953)
- Agency of Transportation Capital Program and Project Development Plan. Agency of Transportation. (828-2676)
- Agricultural Development Policy for Vermont. Department of Agriculture. (828-2504)
- Commitment to the Future: The Vermont Forest Resources Plan. Department of Forests, Parks and Recreation. (244-8711)
- Comprehensive Housing Assistance Strategy. Department of Housing and Community Affairs. (828-3217)
- Department of Fish and Wildlife Land Acquisition Policies and Procedures. Department of Fish and Wildlife. (244-7331)
- Directions for the '80's (Plan for Mental Retardation). Agency of Human Services. (241-2636)
- Health Resources Management Plan. Vermont Health Policy Council. (828-2900)
- Housing Policy and Plan for Action. Department of Housing and Community Affairs. (828-3217)
- Implementation Plan for the Protection of Visibility in Vermont. Department of Environmental Conservation. (244-8731)
- Long-term Care Policy/Plan. Agency of Human Services. (241-2227)

Mental Health Directions for the Future, '86-'91. Agency of Human Services. (241-2604)  
 River Basin Management Plan (for each of 17 river basins.) Department of Environmental Conservation. (244-5638)  
 State Waste Management Plan. Department of Environmental Conservation. (244-8702)  
 Studies Contributing to Vermont's Regionalization Project. Department of Mental Health and Mental Retardation. (828-2604)  
 Vermont Agency of Environmental Conservation Land Acquisition Program. Agency of Natural Resources. (244-7347)  
 Vermont Comprehensive Energy Plan. Department of Public Service. (828-2811)  
 Vermont Historic Preservation Plan. Vermont Division for Historic Preservation. (828-3226)  
 Vermont on the Move: Vermont Transportation Policy Plan. Agency of Transportation. (828-2663)  
 Vermont System of Care Plan for Children and Adolescents Experiencing a Severe Emotional Disturbance. Agency of Human Services. (828-2604)  
 Vermont Ten Year Telecommunications Plan. Department of Public Service. (828-2811)  
 Vermont Twenty Year Electric Plan. Department of Public Service. (828-2811)  
 Vermont Recreation Plan. Agency of Natural Resources. (244-7347)  
 Water Pollution Control Priority List. Agency of Natural Resources. 244-8731)  
 Water Supply Priority List. Agency of Natural Resources. (244-8731)

### *III. Information Related to Compliance with the Americans with Disabilities Act:*

*Removing Barriers: A Guide for Including People with Disabilities in the Planning Process*, Burlington, VT Planning & Zoning Department.  
 Guidelines, Office on the ADA, Civil Rights Division, Dept. of Justice, P.O. Box 66228, Washington, D.C. 20035-6228  
 ADA Kit, AIA, Public Affairs Department, 1735 New York Ave., NW, Washington, D.C. 20036  
 Information of Vermont Architectural Compliance statute, rules and standards, Department of Labor and Industry, Montpelier, VT  
 General information on accessibility, Accessibility Consultant, Department of Rehabilitation and Aging, Waterbury VT