

# DRAFT

## Northern Gateway Targeted Area-Wide Plan Swanton, VT



prepared for the Town & Village of Swanton, VT  
through the Northwest Region Brownfields Program of  
the Northwest Regional Planning Commission

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## 1. Introduction

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The Swanton Targeted Area Wide Plan is intended to identify ways in which revitalization of key sites can serve as catalysts for economic growth for the Swanton community. The work has been conducted for the Northwest Regional Planning Commission on behalf of the Town and Village of Swanton by Fairweather Consulting along with Stone Environmental and EDR under the guidance of a Project Steering Committee.

### What is an Area Wide Plan?

According to the Environmental Protection Agency, an area wide plan is a revitalization plan for a Brownfield area within a community that promises potential economic success upon cleanup and redevelopment. An area wide plan is created by collecting data and identifying the priorities of the community regarding the Brownfield cleanup site for long-term revitalization of the area. In order to do so, the community must evaluate and identify:

- Local market potential;
- Existing environmental conditions;
- Necessary infrastructure improvements; and
- Resources and leveraging opportunities (i.e. private and public sector investments).

Outcomes of such evaluation and resource identification will enable favorable improvements to the Swanton community and economy.<sup>1</sup>

### What is a Brownfield?

According to the Vermont Brownfields Redevelopment Handbook, a Brownfield is an area, often multiple properties, for which redevelopment is complicated due to the presence of pollutants, contaminants and other hazardous substances derived from previous property use.<sup>2</sup>

### Relationship with Other Planning Efforts

The Swanton Targeted Area Wide Plan has been created in consultation with previous Swanton development plans. The main tenets of each of these plans are summarize below:

The Swanton Downtown Development Plan of 2001 seeks to:

- Complement the Village's efforts in creating a walkable downtown area<sup>3</sup>

The Swanton Community Visit of May 2015 seeks to:

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<sup>1</sup> EPA Brownfields Area-Wide Planning Program Fact Sheet, July 2012.

<sup>2</sup> Vermont Brownfields Redevelopment Handbook

<sup>3</sup> Town of Swanton, Downtown Development Plan, 2001.



- Improve walkability, downtown parking and traffic
- Expand outdoor recreational opportunities, river access, bike-ability/bike tourism<sup>4</sup>

The Swanton Town & Village Municipal Plan of September 2015 seeks to:

- Promote new business and industry startups within Swanton village, commercial and industrial areas
- Foster a strong and diverse economy while maintaining high environmental and social standards
- To strengthen Swanton tourism<sup>5</sup>

The FDIDC Economic Development Strategic Plan of 2010-2015 seeks to:

- To retain a vibrant base of quality jobs
- Develop strategic recruitment for a vibrant base of quality jobs to diversify the regional economy<sup>6</sup>

The Swanton Targeted Area Wide Plan is created with the intention to build upon previous planning and development efforts. By incorporating the efforts of previous plans, the Swanton Targeted Area Wide Plan will develop a definitive and informed proposal for the Northern Gateway area which may act as a catalyst for the advancement of all other redevelopment initiatives.

The Northern Vermont Economic Development District identified three key goals in their Comprehensive Economic Development Strategy:<sup>7</sup>

1. Support the development of innovation-based industry clusters that create high-wage jobs.
2. Help communities implement economic development strategies that grow existing, locally-owned businesses and attract new companies.
3. Support the formation and growth of export-oriented businesses.

### Project Objectives

The Swanton Area Wide Plan is intended to identify ways in which revitalization of key sites can serve as catalysts for economic growth for the Swanton community.

The Swanton Northern Gateway Area-Wide Plan provides a guide and vision for economic revitalization of vacant and underutilized sites in the Depot/River Street area of Swanton Village.

The plan provides information and analysis on the environmental, infrastructure, and market conditions that is intended to assist economic development partners in identifying opportunities and challenges presented by the conditions in the downtown area. The plan also presents visions of the redevelopment of key parcels in the area.

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<sup>4</sup> Vermont Council on Rural Development, *Swanton Community Visit*, May, 2015.

<sup>5</sup> Town and Village of Swanton, *Town & Village Municipal Plan*, 2015.

<sup>6</sup> Franklin County Industrial Development Corporation, *Franklin County Regional Strategic Economic Development Plan*, October 2005.

<sup>7</sup> Comprehensive Economic Development Strategy, Northern Vermont Economic Development District, 2010-2015.

### Project Oversight

This project was overseen by a steering committee composed of Swanton residents and local officials. The committee members were:

Reg Beliveau Jr, Swanton Village Administrator

Greta Brunswick, Senior Planner, Northwest Regional Planning Commission

David Jescavage, Swanton Town Administrator

Ron Kilburn, Swanton Village President

Neal Speer, Swanton Resident

Suzanne Washburn, Swanton Resident and President, Swanton Chamber of Commerce

During the creation of this draft, five steering committee meetings were held. They are described below:

1. September 27, 2016 - Kick-Off:  
The kick-off meeting consisted of introductions, project expectations and scope of work, the project schedule, and identified key stakeholders to be contacted for the next steps.
2. October 30, 2016 - Existing Conditions:  
The existing conditions meeting was held in October to give an overview of the project and to review the existing conditions of the Brownfield sites. The meeting was primarily focused on the regional and village economic analysis which identified redevelopment opportunities.
3. December 6, 2016 - Selection of Catalytic Sites:  
The selection of catalytic sites meeting was held to select the Brownfield sites to be cleaned up and redeveloped. The meeting was also held to determine the date of a future public meeting and the advertising strategy for such. The December meeting gave an overview of all potential redevelopment sites and after selections were made, gave the next steps in the plan schedule.
4. March 12, 2017 - Review of Results of Visioning Session:  
The meeting was held with to review the favored uses of the Northern Gateway sites identified during the public meeting of Thursday, February 2, 2017.
5. April 20, 2017 - Draft Findings: The results of the market analysis were reviewed along with preliminary renderings of the three catalytic sites.

### Background Information

#### **Swanton History**

The current character of the Northern Gateway area reflects Swanton's rich industrial history, which is summarized below, according to the 2015 Swanton Town and Village Municipal Plan:

Swanton Town and Village are situated on the Missisquoi River and Lake Champlain near the New York and Canadian borders. Swanton has a rich cultural heritage--with evidence of Native Americans camping in the area as early as 6,000 B.C. The Abenakis hunted, fished and camped near the Missisquoi River. The earliest confirmed date for an Abenaki village is 1682. The French were next to settle this area in pursuit of the rich marble deposits and timber resources.

Swanton is a typical early settlement--the town grew around the area of the Taquahunga Falls (site of the current dam in Swanton) on the Missisquoi River. The settlement patterns today are largely attributed to the natural features and the past hunting and gathering practices of early settlers. Until the mid 1800's, water transportation was the primary means of moving goods and services to Burlington, Montreal, and New York City.

Sawmills were established along the waterways to process and transport lumber products. In 1860, a railroad was constructed through Swanton to Maquam Bay and a facility was constructed for the interchange of goods from water to rail. Through the late 1800's several railroad lines provided important links to Canada and other parts of Vermont. These railroads were used to transport freight as well as passengers. Rail continued to be the major form of transportation until Interstate 89 was completed in the early 1970's, but rail travel is still part of Swanton today. The main line of the New England Central Railway follows the Route 7 and 78 corridors. Both passengers and freight are transported on this line. Wood chips also are transported from Swanton to Burlington Electric.

Today, Swanton is a rural community relying heavily on its agricultural and manufacturing heritage, natural features including Lake Champlain, the Missisquoi National Wildlife Refuge, and the Missisquoi River, and increasingly upon tourism. The Town is at the hub for the transport of goods and services to Canada, New York, and other areas of Vermont. Swanton has a variety of business and industry, including cheese production, food products, machine tools, mining, and computerized labeling.

The population of Swanton is diverse. A high proportion of the seasonal population resides in West Swanton. Swanton is the home of the Abenaki Nation of Vermont. The Abenakis continue to play a strong role in community activities. The Abenaki Tribal Council and the Abenaki Self Help Association have established a Learning Center and a Housing Project.<sup>8</sup>

### **Population Trends**

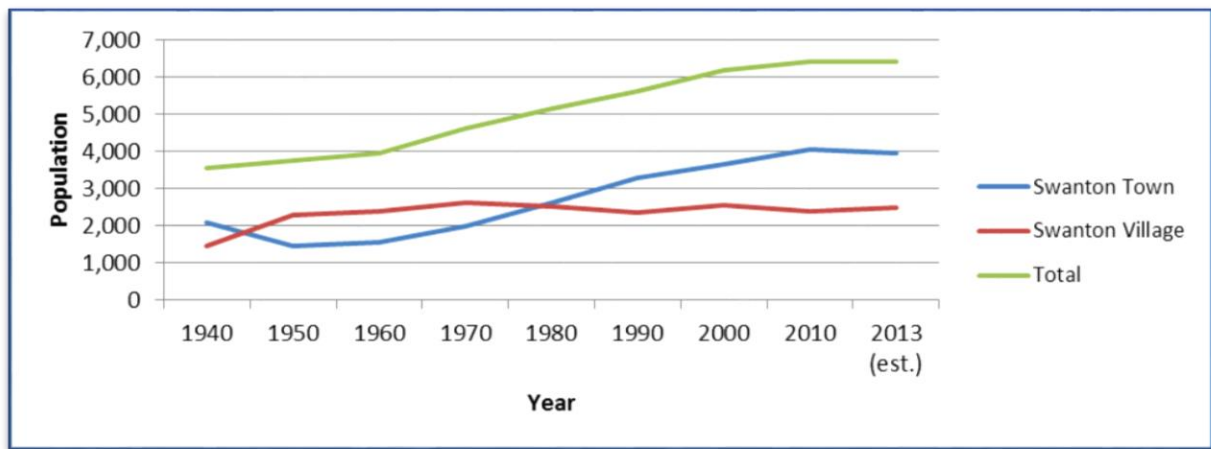
Successful economic growth in Swanton both depends on and determines current and future population trends in the village and town. According to the 2015 Swanton Town and Village Municipal Plan, the population of Swanton has increased by over 3% between the years 2000 and 2010. This slowing of growth is representative of a statewide trend. Overall, the population of Swanton has doubled between 1940 and 2010.

The Vermont Agency of Commerce and Community Development population projection indicates that Swanton population will increase by about 5% in the following two decades to 2030.<sup>5</sup>

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<sup>8</sup> Swanton Town and Village Municipal Plan, September 2015.

**FIGURE 1.1: Population Trends in the Town and Village of Swanton.**



Source: Swanton Town and Village Municipal Plan, September 2015.

**Table 1.1 - Population Trends for Swanton Town and Village, Franklin County and Vermont (1940 - 2030)**

Year	Swanton Town	Swanton Village	Total Town and Village	Swanton Total % Change	Franklin County	% of County Population	Vermont
1940	2,082	1,461	3,543	x	29,601		359,231
1950	1,465	2,275	3,740	5.6%	29,824	12.5%	377,747
1960	1,556	2,390	3,946	5.5%	29,474	13.4%	389,811
1970	1,992	2,620	4,622	16.9%	31,282	14.8%	444,732
1980	2,621	2,520	5,141	11.5%	34,788	14.8%	511,456
1990	3,276	2,360	5,636	9.6%	39,980	14.1%	562,758
2000	3,655	2,548	6,203	10.1%	45,417	13.7%	608,827
2010	4,041	2,386	6,427	3.6%	47,746	13.5%	625,741
2013(est.)	3,943	2,480	6,423	-0.1%	48,019	13.4%	625,904
2020.(proj.)	x	x	6,773	5.4%	51,810	13.1%	653,575
2030 (proj.)	x	x	7,101	4.8%	55,647	12.8%	670,073

Source: 1940, 1950, 1960, 1970, 1980, 1990, 2000, 2010 U.S. Census. 2009-2013 American Community Survey (ACS). Vermont Population Projections 2010-2030 (Vermont Agency of Commerce and Community Development - Scenario A)

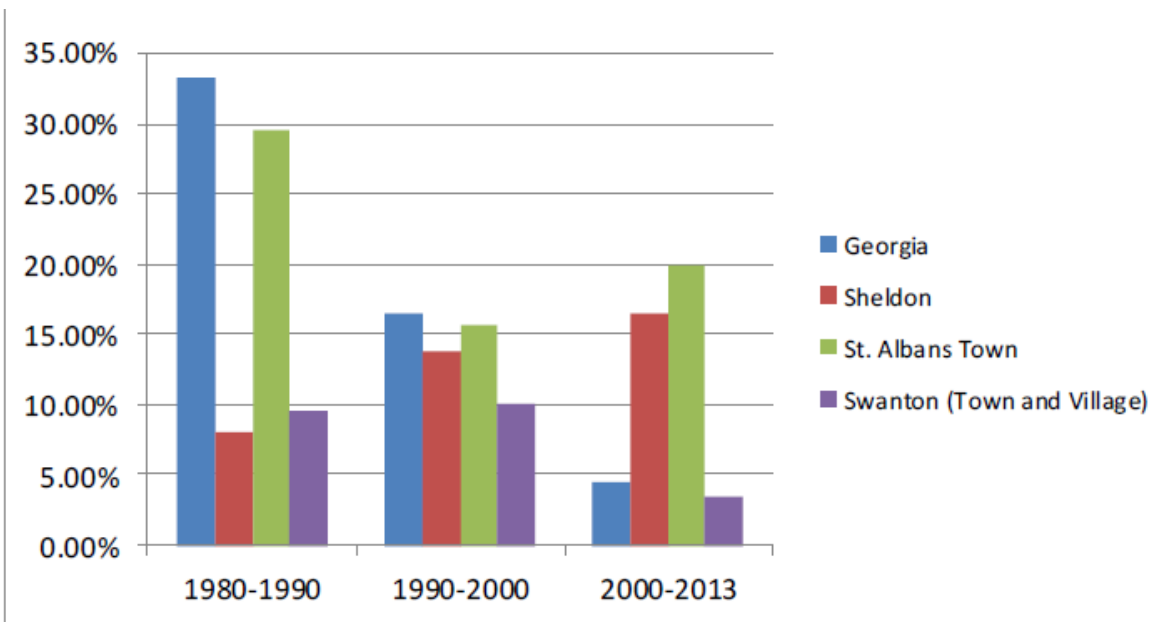
Figure 1.1 is taken from the Swanton Town and Village Municipal Plan of September 2015. The graph indicates population growth of the town of Swanton versus the Village of Swanton, and then gives the overall population growth of the two combined.

Swanton sees fluctuations in population during the summer months as there are seasonal residents in both the Town and Village. Census data (2010) determines that there are about 250 housing units which

are for seasonal, occasional and recreational use. This influx of seasonal residents greatly impacts the local economy of Swanton.<sup>5</sup>

The surrounding towns within Franklin County experienced higher population growth rates than Swanton town and village between 1990 and 2010. The nearby towns of Georgia and St. Albans experienced the highest population growth between 1890 and 2000, while Swanton and Sheldon experienced little growth. However, between 2000 and 2013, the populations of Swanton, St. Albans, Georgia and Sheldon all slowed.<sup>9</sup>

Figure 1.2. Population Growth, 1980-2013, Swanton & Adjacent Communities



Source: Swanton Town and Village Municipal Plan, September 2015.

As seen in Table 1.2, the age distribution of Swanton reflects that of Franklin County and the state of Vermont. As population growth has slowed, there has been a decline in school enrollment numbers due to a decrease in the population of children 14 years and younger. Meanwhile, there has been a growth in the population of 20 to 24 year olds and those over 45 years old.<sup>10</sup>

<sup>9</sup> Swanton Town and Village Municipal Plan, September 2015.

<sup>10</sup> Swanton Town and Village Municipal Plan, September 2015.

**Table 1.2: Population by Age Group as a Percentage of Total Population in Swanton and Franklin County (2000 to 2013)**

Age Group	Swanton		Franklin County	
	2000	2013	2000	2013
Under 5 years	7.20%	6.20%	7.10%	6.20%
5 - 9 years	8.40%	5.60%	8.20%	6.50%
10 - 14 years	7.20%	7.00%	9.20%	6.90%
15 - 19 years	7.20%	7.30%	7.00%	6.90%
20 - 24 years	5.00%	5.60%	4.80%	5.10%
25 - 29 years	5.70%	4.40%	6.00%	5.60%
30 - 34 years	6.60%	5.80%	7.60%	6.30%
35 - 39 years	8.70%	7.80%	9.10%	6.90%
40 - 44 years	8.10%	7.20%	8.70%	7.30%
45 - 49 years	7.10%	8.10%	7.70%	8.20%
50 - 54 years	7.40%	7.50%	6.40%	8.30%
55 - 59 years	5.80%	8.10%	5.10%	7.40%
60 - 64 years	3.50%	4.90%	3.40%	5.90%
65+ years	12.20%	14.30%	10.90%	12.70%
Median Age	35.7	40.2	36.7	39.7

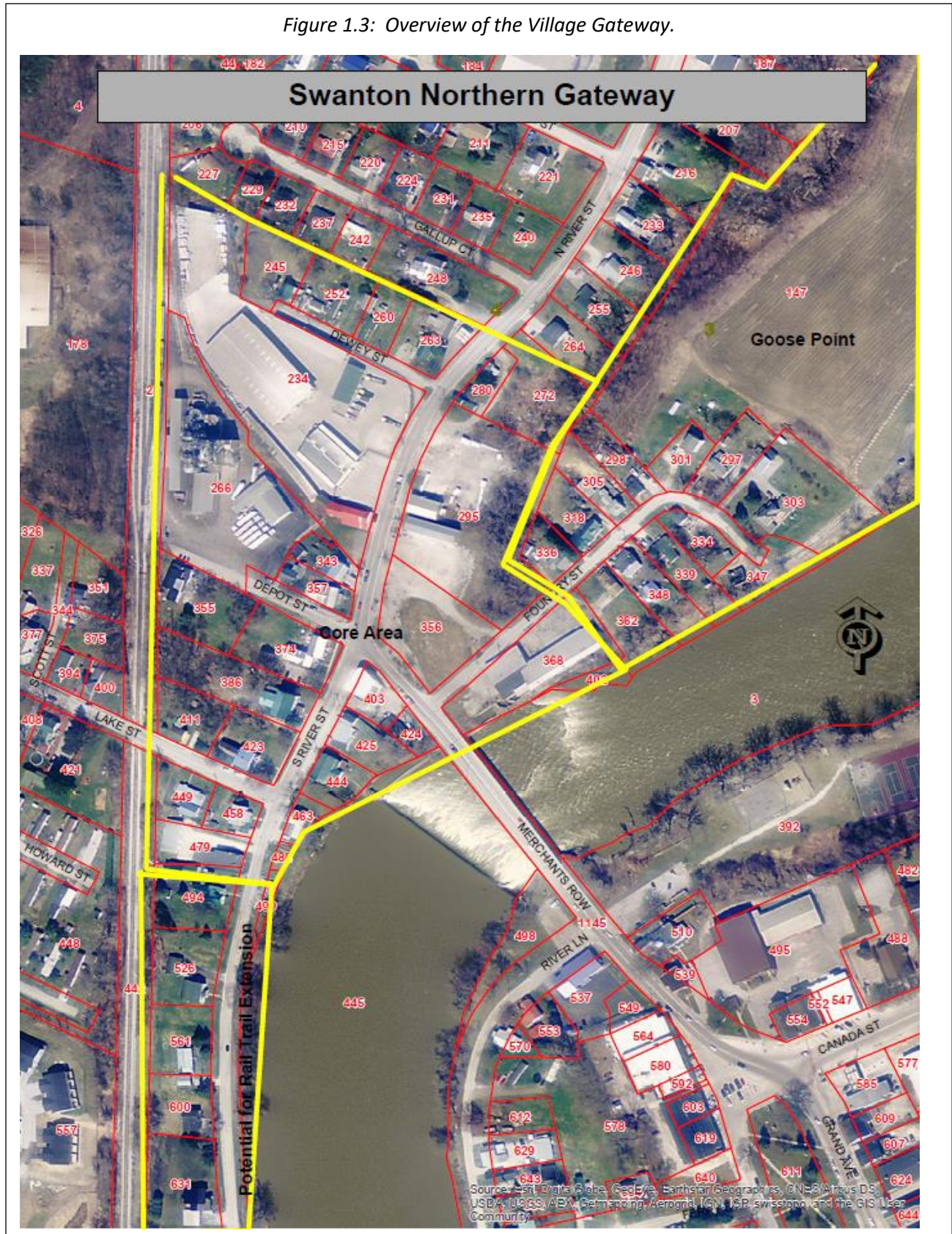
Source: Swanton Town and Village Municipal Plan, September 2015.

### Project Area Description

As its name suggests, the Northern Gateway of Swanton serves as a transition between the downtown area of the Village and western portion of the Town. Due to its proximity to the Missisquoi River, the area has been the site of a variety of industrial uses over the decades, from sawmills to munitions manufacturing and grain mill operations. (See Figure 1.3).



Figure 1.3: Overview of the Village Gateway.



## 2. Existing Conditions

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An Existing Conditions Inventory and Analysis assessment was performed of all properties within the Project Area with specific focus of historic land use on the targeted properties.

Information was gathered, retained and managed within a project informational geodatabase and geographic information system (GIS). The intent is that the GIS and geodatabase will serve the Stakeholders for years to come by allowing a central repository for and easy retrieval of parcel attributes. The design of the database provides the user with the ability to refer to all current and historic land use data and supporting files to every historic and existing structure found to be of interest. The database was designed with these principles:

- Facilitate data collection and entry
- Provide easy access to all data
- Be expandable to allow for Stakeholders to import additional datasets
- Store use related data from multiple sources (such as Manning's Directory and the Sanborn Fire Insurance maps)
- Provide the ability to spatially display data
- Enable use and contamination analysis and summaries
- To be a relational database
- All data whether created by Stone or gathered from another source have associated FGDC metadata.

The following sections summarizes components of the existing conditions assessment.

### Land Uses

Zoning within the Northern Gateway study area is predominantly comprised of Neighborhood Commercial Light, Industrial, and a small, isolated pocket of Residential in the northern half of the study area and Moderate Density Residential in the southern half.

As defined, Neighborhood Commercial Light consists of the following permitted uses: accessory use/structure, child care home, group home, home occupation, public facilities, single family dwelling. Conditional uses include automotive service/repair, mixed use, outdoor market, recreation, community center, and restaurant, among others. Restrictions for properties within this zone include a minimum of a 1/4 acre lot, maximum height of 35 feet (2.5 stories), and a maximum building coverage on the lot of 30%.

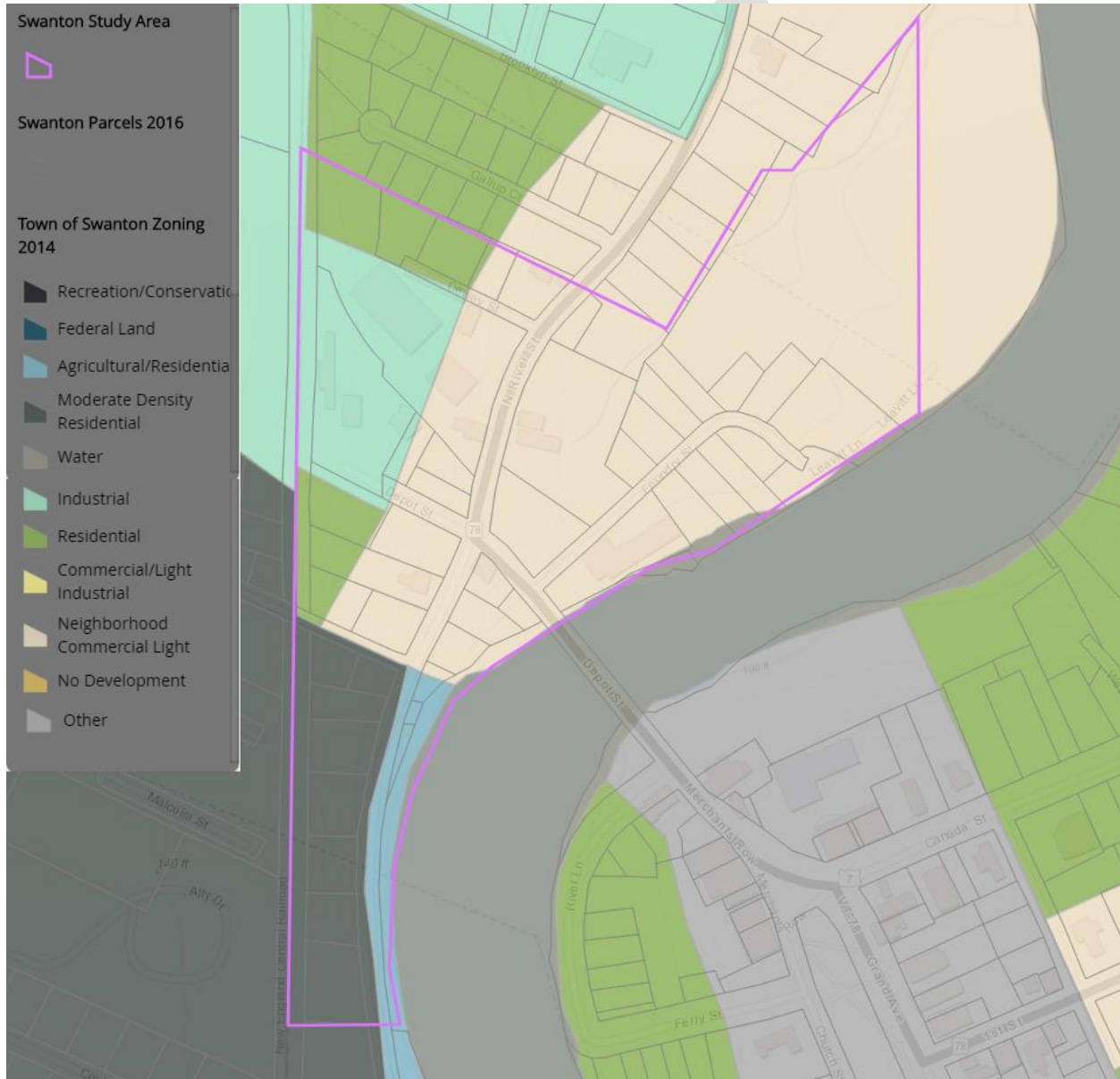
Within the Industrial zone, permitted uses include accessory use/structure, adult continuing educational facility, contractor's yard, earth resource extraction, grain elevator, industrial retail sales, manufacturing, office, public facilities, salvage yard, solid waste transfer station, storage facility, trucking & rail terminal, warehouse. Conditional uses include: adaptive reuse of an historic building, lodging, value-added



agricultural among others. Restrictions for properties within this zone include a minimum of a 1/4 acre lot, a 75 feet maximum building height, and 60% maximum building coverage.

R5 residential permitted uses include accessory use/structure, child care home, group home, home occupation, public facilities, and single family dwellings. Restrictions (within study area) include a minimum 1/2 acre lot, maximum height of 35 feet (2.5 stories)

Moderate Density Residential (R3) includes the following permitted uses: accessory use/structure, child care home, group home, home occupation, public facilities. Restrictions include a minimum 1 acre lot with a maximum structure height of 35 feet (2.5 stories).



*Figure 2.1: Zoning in Swanton's Northern Gateway. Green: R5 Residential; Tan: Neighborhood Commercial Light; Dark Grey: R3 Residential; Teal: Industrial*



erosion. Giving rivers room to move is critical in avoiding the stream armoring and berming measures used to protect within-corridor development that so often leads to increases in erosion upstream and downstream and adversely affects public safety, riparian landowners, and river ecosystems.

A flood zone refers to inundation flooding with the 100 Year Flood Zone being the portion of the watershed that is inundated during a 100 Year Flood (1% chance of occurring annually).

#### Infrastructure

Swanton Village relies on Lake Champlain as its municipal water source. The water treatment plant, located on Maquam Shore Road and produces approximately 400,000 gallons per day.

The Swanton Wastewater Treatment Plan is capable of treating up to 900,000 gallons of wastewater per day; current demands are approximately 450,000 gallons per day. With the Lake Champlain Total Maximum Daily Load of phosphorus, it is expected that by the end of 2016 the allowable effluent concentrations of phosphorus will be dropped to 20% of their current levels - plant upgrades required to meet this new level will be costly.

Stormwater within the study area largely consists of a closed drainage system - a system that captures runoff in drop inlets or catch basins which uses a storm sewer to convey water to surface water outfalls. Such a system has limited opportunity for treatment.

While combined sewer overflows exist in Swanton, none are located within the Study Area.



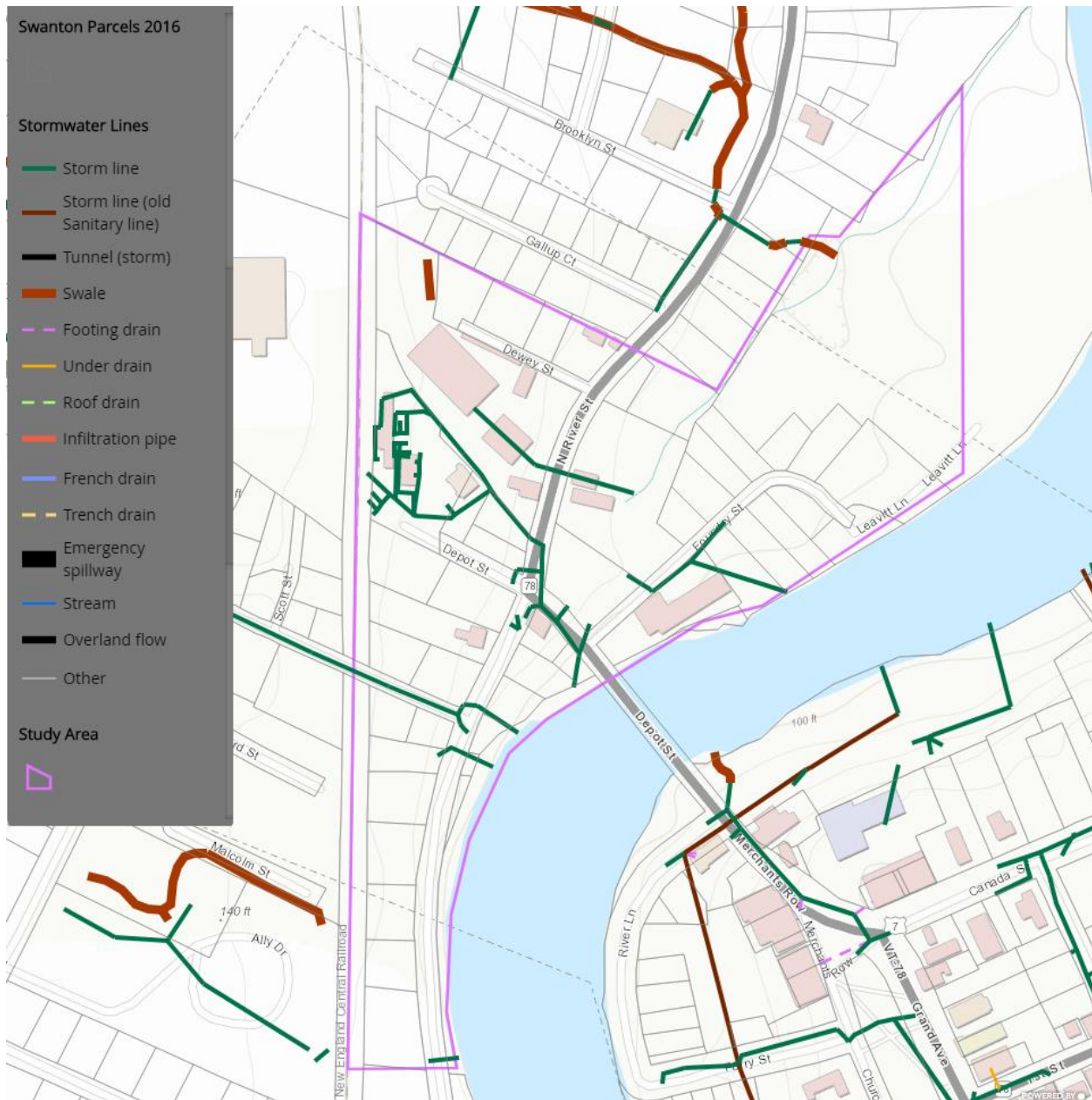


Figure 2.3: Stormwater Sewers and Infrastructure

### Environmental Conditions

To evaluate environmental conditions that may inhibit redevelopment within or adjacent to the Project Area, Stone performed a thorough assessment of past and current use and regulatory status through review of multiple sources, including:

- Historic Maps, including Sanborn Fire Insurance Maps and other available historic resources
- VT DEC Site Management Section (SMS) Hazardous Site, Underground Storage Tank, and Brownfield Site Files



- State and Federal Environmental Databases, including VT DEC's hazardous waste sites, Brownfield sites, and permitted UST facilities and Federal Comprehensive Environmental Response Compensation Limitation Act (CERCLA) and Resource Conservation and Recovery Act (RCRA) facilities.

Findings from review of these sources were contained, managed, and merged within the Project GIS for each property within the Project Area

#### *Historic Land Use*

Like many villages across Vermont, Swanton's history and development pattern is closely linked to the Missisquoi River and the power it provided early mills. In addition, Swanton Village was nearby quarries, including the quarry known for the famous Swanton pink marble.

Early industries in the Study Area included stone cutting, black smithing, saw mills, hotels, grocers, grain processing, foundering, shotgun shell and rifle cartridge manufacturing.

Growth of industries in Swanton was assisted when rail transport became possible in 1849. The map presented as Figure #, below, is an 1877 Beers Atlas. Note the historical routing of river water to a mill pond located between Foundry Street and North River Street.

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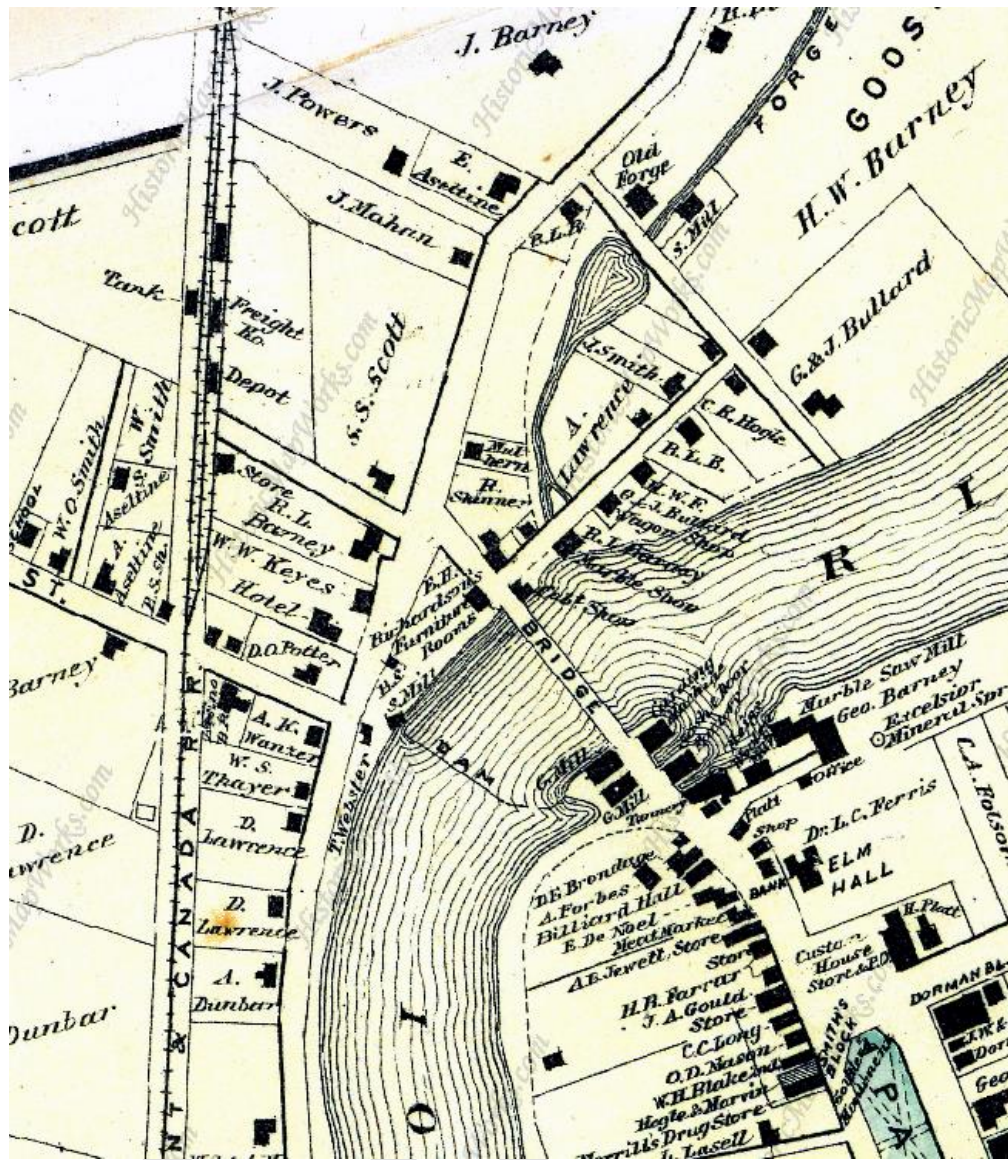


Figure 2.4: 1877 Beers Atlas showing historical land use of the Northern Gateway area circa 1877.

The following figures present historical land uses by industry type over the past 100 years of settlement in the Northern Gateway area.



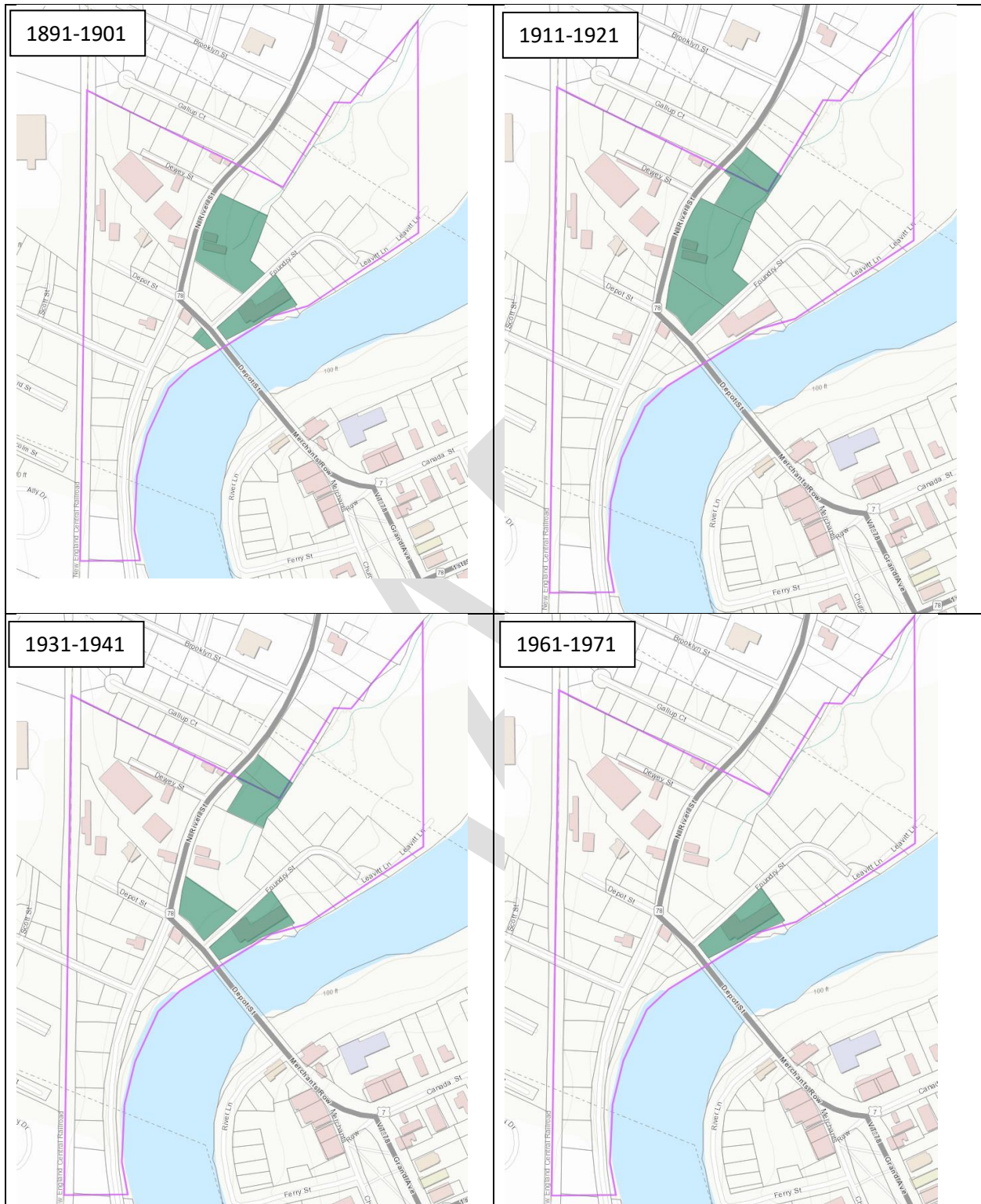


Figure 2.5: Historical manufacturing in the Northern Gateway area. Green highlighted parcels are those that included historical manufacturing for the given period.



Figure 2.6: Historical automotive service facilities in the Northern Gateway area. Orange highlighted parcels are those that included historical manufacturing for the given period.





Figure 2.7: Properties with past land use for blacksmithing or coal storage in the Northern Gateway area. Grey highlighted parcels are those that included historical manufacturing for the given period.

Railroad use within the Northern Gateway area has been prominent since the middle of the nineteenth century. Access to rail spurred growth in many of Swanton's industries. Figure #, below presents properties that have had rail conveyance in the past.



*Figure 2.8: Properties that have had railroad conveyance between 1891 and present.*

#### *Managed Environmental Sites*

A total of six properties within the Northern Gateway area are listed as either a Vermont Department of Environmental Conservation (VT DEC) hazardous waste site or a permitted underground storage tank (UST) facility. One property, Swanton Bait and Tackle, appears on both lists. VTDEC managed Hazardous Waste Sites within or adjacent to the Northern Gateway Area include:

- Swanton Bait and Tackle (SMS# 870054)
- 12 Lake Street (SMS# 972131)
- Lucille Farm Products (SMS# 972305)
- Vermont Precision Tools (SMS# 20012901)

A review of VTDEC managed files on the above listed properties indicated that, without exception, all listed sites were the result of leaks from USTs or fuel dispensing systems. While the relatively low number



of listed sites should be seen as a positive, assessments of impacts of historical land use on environmental condition of properties has not been assessed.

In June of 2016, a spill of unidentified petroleum was reported within the Missisquoi River adjacent to 5 Foundry Street. The source of this release was not identified.

Figure 2.9, below, presents the location of managed environmental sites within or immediately adjacent to the study area.

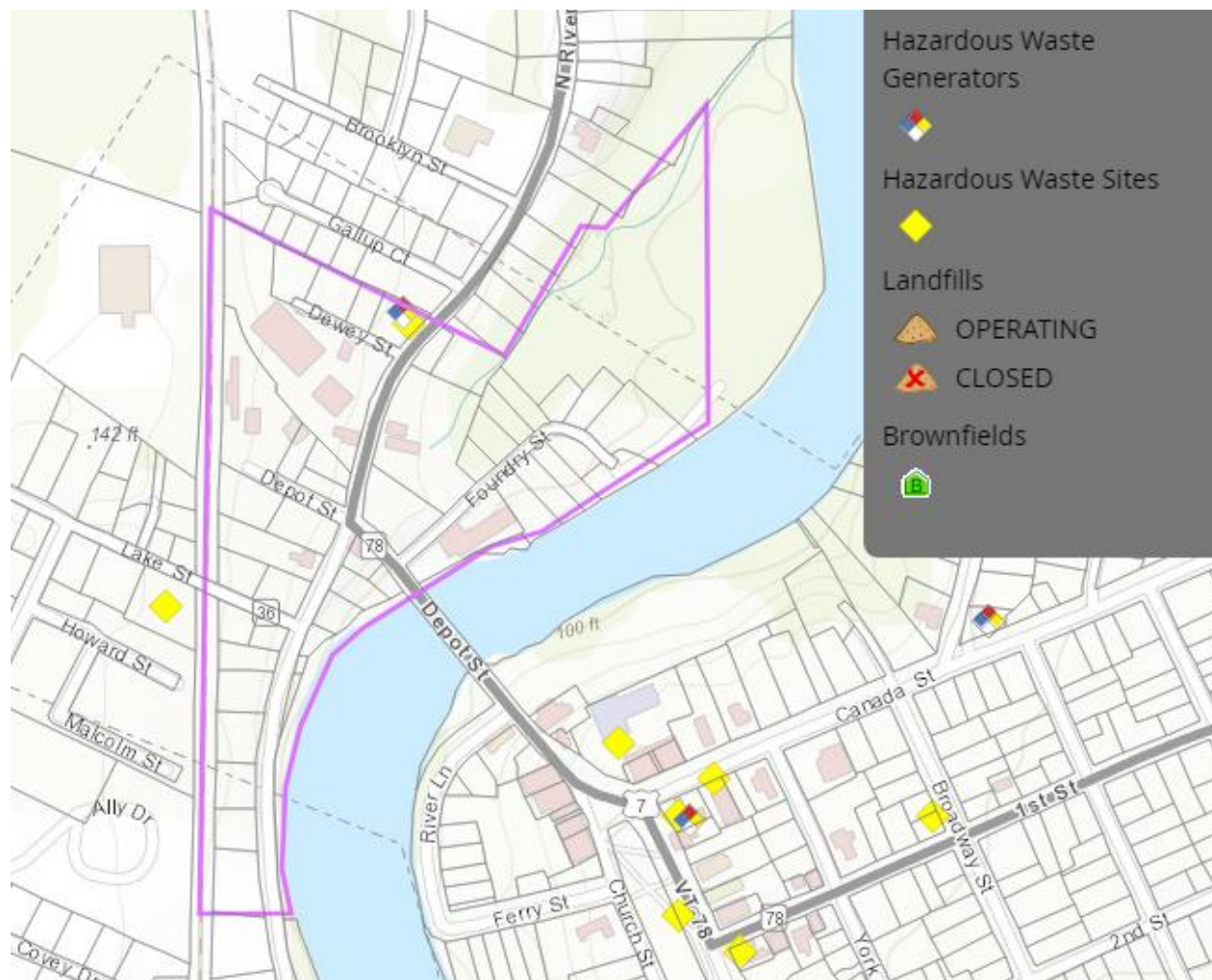


Figure 2.9: Managed Environmental Sites, Northern Gateway area.

### Potential Brownfield Sites

As defined by US EPA, brownfields are “real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties protects the environment, reduces blight, and takes development pressures off green spaces and working lands.”

Using professional knowledge and US EPA Industry Sector Notebooks, Stone has assigned potential contaminants of concern for historic land uses in Table 2, below. Several of the properties identified to have had historic land uses of environmental concern have experienced documented releases of

petroleum materials to the environment. For those without a documented release, follow up assessment should consider the likelihood for these materials to be present on the specific site that had the associated historic use through a Phase II ESA.

*Table 2.1: Potential Contaminants of Concern by Industry Type*

Industry Type	Petroleum	Chlorinated Solvents	PCBs	Metals	PAHs	Herbicides/Pesticides
Automotive Service	✓	✓	✓	✓	✓	
Fuel Storage	✓			✓	✓	
Blacksmith / Coal				✓	✓	
Dry Cleaning	✓	✓				
Machining	✓	✓	✓	✓	✓	
Manufacturing	✓	✓	✓	✓	✓	
Painting / Printing	✓	✓	✓	✓	✓	
Railroad	✓	✓	✓	✓	✓	✓
Other	✓	✓	✓	✓	✓	

Due to the age of many of the buildings within the Project Area, there is potential for hazardous building materials such as asbestos containing materials, lead based paint, or polychlorinated biphenyl (PCB) contaminated caulks and glazes to be present. In addition, universal wastes, such as fluorescent light bulbs containing or thermometers containing mercury, may also be present. These materials should be managed properly prior to any redevelopment or renovations of these buildings to prevent an accidental release of contaminants to the environment.

### Key Brownfield Sites

Properties within the Study Area were each evaluated for continuing onward with further redevelopment planning work. Property specific details are included on cue sheets, which are provided in Appendix A. Each property was considered against the following criteria:

- Environmental Condition, specifically,
  - Level of assessment needed
  - Level/severity of potential remediation required
  - Uncertainty
- Size of the parcel
- Location (proximity to Depot / River Streets intersection)
- Concurrence with Town Plans
- Potential to catalyze additional improvements

Sites were also evaluated as to whether they could be combined with other nearby properties to make a larger redevelopment project.

After evaluation and scoring by the Area Wide Brownfield Plan Steering Committee, the following properties were selected for further consideration:

Site 1: 6 South River Street

Site 2: 3 Depot Street

Site 3: 5 Foundry Street in conjunction with 1 North River Street

See Figure 2.10 for locations of the sites within the Gateway district.



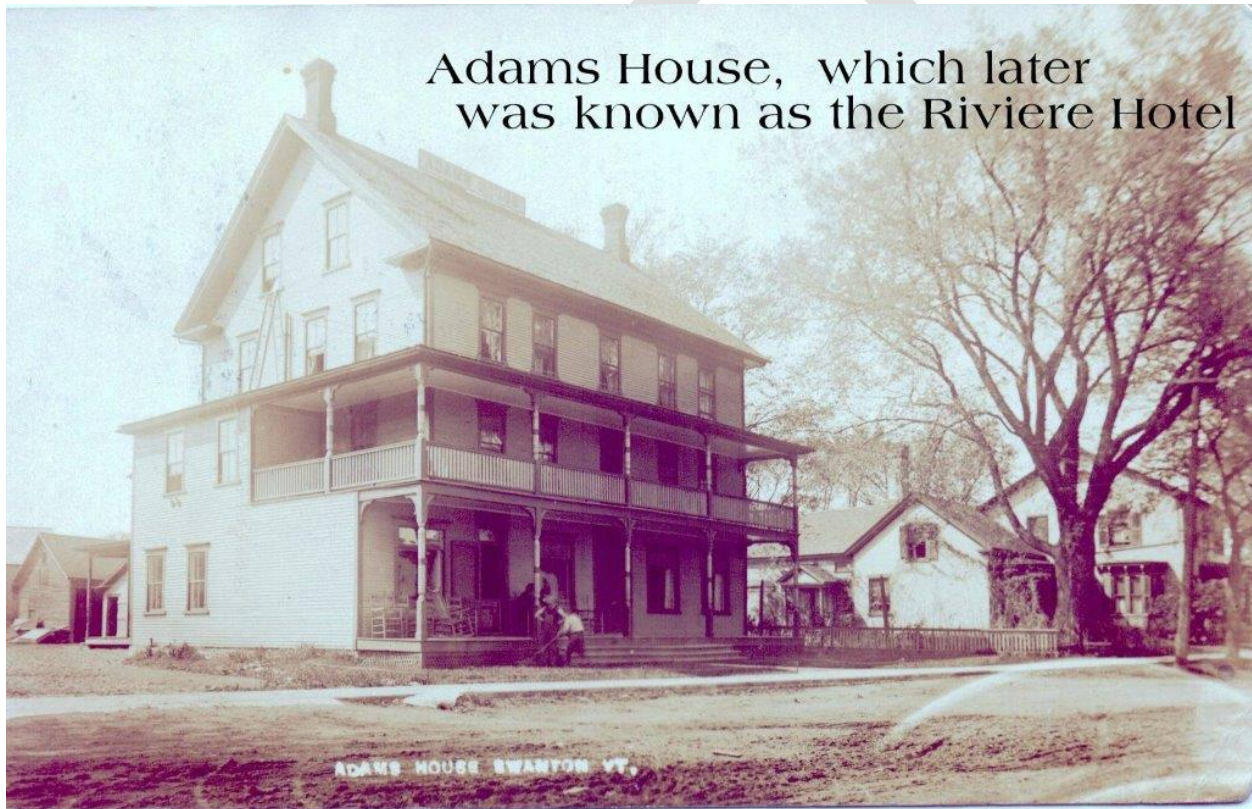
Figure 2.10: Catalytic Sites



SITE 1: 6 South River Street

The 6 South River Street property consists of a 0.64-acre mixed use property (residential/neighborhood commercial light) located immediately south of the intersection of Depot Street and South River Road. The property includes a dilapidated 3.5 story building that is largely vacant. The building has served as a hotel under various names – chiefly the Riviere Hotel or Adams House – since before the turn of the twentieth century.

Based on the age of the property and past use of the Site building as a hotel, potential areas of concern at the 6 South River Street property are limited to potential presence of hazardous building materials. Due to the degradation of the building, surface soils surrounding the building may be adversely impacted by lead paint or other hazardous building materials.



*Figure 2.11: 6 South River Street (e.g., Riviere Hotel, Adams House), circa 1904.*

Figure 2-12: Site Details

Location Map

Photo of Site



Property Details			
<b>Current Use:</b>	Residential	<b>Structures:</b>	2950 sq. ft.
<b>Owner:</b>	Martel	<b>Parcel Size (acres):</b>	0.64 ac.
<b>Zoning:</b>	Residential / Neighborhood Comm. Light	<b>Distance to center of study area (feet):</b>	135 ft.

**SITE 2: 3 Depot Street**

The 3 Depot Street property, known locally as the H.N. Moreau Building, is situated on 0.16 acres at the intersection of Depot Street with North and South River Roads. The property includes a two-story structure totaling 2,200 square feet. The First floor is currently vacant. Residential apartments comprise the second floor.

Past land use has included light manufacturing and various retailers, including a grocer and butcher.





*Figure 2.13: H.N. Moreau Building circa 1905.*

Based on the age of the structure past use of the site, potential areas of concern include:

- Presence of hazardous building materials
- Possible present of contamination related to past use of the site for manufacturing.



Figure 2-14: Site Details

Photo of Site



Location Map



Property Details			
<b>Current Use:</b>	Vacant & Residential	<b>Structures:</b>	2200 sq. ft.
<b>Owner:</b>	TR Striping & Prop. Maint.	<b>Parcel Size (acres):</b>	0.16 ac.
<b>Zoning:</b>	Neighborhood Comm. Light	<b>Distance to center of study area (feet):</b>	0 ft.

**Brownfield Conditions / Environmental Status**

Former manufacturing, former retail, possible hazardous building materials.

**SITE 3: 5 Foundry Street**

The 5 Foundry Street property, consists of a 0.9 acre lot owned by David Fosgate. The property is within the neighborhood commercial light zone and contains a 15,500 square foot structure that is currently used for automotive repair and storage.

Exterior areas of the site are predominantly paved with asphalt with limited areas of grass along Depot Street. The Missisquoi River abuts the property to the south. Remnants of a sluiceway are present along the riverbank and extend upstream to the mill pond above the Swanton Dam.

Past uses of the property have included various types of manufacturing, including stone processing, a foundry, and manufacturing of ammunition. Historical reports have indicated that a prior structure experienced a catastrophic explosion while the property was in ammunition manufacturing use by the Robin Hood Powder Company in September of 1905.

Based on the past land use for automotive service and manufacturing and a known release of petroleum to the adjacent Missisquoi River, potential areas of concern include:

- Presence of hazardous building materials (e.g., asbestos, lead based paint)

- Spills of automotive fluids or solvents in the service area resulting in contaminated soil, soil gas, or groundwater.
- Potential for impact to indoor air quality through vapor intrusion.
- Possible residual petroleum contamination on or upgradient of the Site related to the 2016 discovery of petroleum in the Missisquoi River.
- Possible presence of contamination related to historical site uses.

*Figure 2-15: Site Details*

Photo of Site



Location Map



Property Details			
<b>Current Use:</b>	Automotive Repair, storage	<b>Structures:</b>	15,500 sq. ft.
<b>Owner:</b>	Fosgate	<b>Parcel Size (acres):</b>	0.9 ac.
<b>Zoning:</b>	Neighborhood Comm. Light	<b>Distance to center of study area (feet):</b>	218 ft.

**Brownfield Conditions / Environmental Status**

Former manufacturing (stone, foundry, ammunition), possible hazardous building materials, unidentified release of petroleum to Missisquoi in 2016.

Photo of Site



Location Map



Property Details			
<b>Current Use:</b>	Vacant	<b>Structures:</b>	None
<b>Owner:</b>	GAW Real Estate, LLC	<b>Parcel Size (acres):</b>	0.76 ac.
<b>Zoning:</b>	Neighborhood Comm. Light	<b>Distance to center of study area (feet):</b>	0 ft.

**Brownfield Conditions / Environmental Status**

Former manufacturing including granary. No assessment performed of property to date.

DRAFT



### 3. Public Visioning Session & Stakeholder Outreach

This planning process involved two types of outreach: a public visioning session and outreach to particular stakeholders involved in economic development in the Swanton area. Each of these types of outreach are described below.

#### Public Visioning Session

Once the three sites were identified, a public meeting was held to gain insight into community preferences for uses at these sites. A community visioning session was held for the Northern Gateway area planning process on Thursday, February 2, 2017, 7PM at the Swanton Village Complex.

The Community Visioning Session was conducted for Swanton, Vermont business owners, property owners, and residents to help identify and define a redevelopment vision for the catalyst/high priority sites in the Northern Gateway study area. The session was attended by 19 participants who were residents, local office holders and/or business people or property owners. They are listed in Table 3.1.

The session began with an overview of the project purpose and timelines. From there, Dan Voisin of Stone Environmental provided a summary of site conditions in the Northern Gateway, essentially indicating that, while there appear to be issues related to environmental contamination in the study area, these appear to be typical for historically industrial areas and, at first glance, do not appear to create any insurmountable obstacles to future development.

Peter Fairweather of Fairweather Consulting then provided an overview of Fairweather Consulting's market analysis aimed at identifying economically viable uses for sites in the North Gateway area. Based upon a variety of analyses and sources, five commercial and industrial activities were identified as potentially viable in the Gateway area. These included:

- **Distribution:** given its proximity to the Canadian border and its location along major truck routes, Swanton is an attractive location for Canadian companies seeking to establish a distribution presence in northern Vermont. However, interviews with economic developers indicate that firms in this sector prefer sites that they can occupy quickly, particularly existing modern distribution facilities or "greenfield" spaces that can quickly and easily be developed. While this is a viable economic activity for Swanton as a whole, it would be difficult for the Northern Gateway to accommodate such uses.
- **Business-related services:** According to the US EDA Cluster Mapping project, business services (e.g., accounting, attorneys, and other business support services) are a relatively strong presence in Franklin

Table 3.1: Visioning Session Participants

Susanne Washburn
Anthony Rune
Ron Kilburn
James E LaRoque
Andy LaRoque
Mary Metayer
Chad Metayer
Hank Lambert
Molly Lambert
Neal Speer
Marie L Speer
Joel A. Clark
Eugene LaBombard
Shawn Cheney
Nicole Gadouas
Andrew Judge
Nicole Draper
Tori Benton
Scott Rheume

County. Further analysis by Fairweather Consulting suggests that Swanton can be a competitive location for such businesses.

- **Advanced Manufacturing:** Swanton is the home to several successful advanced manufacturing firms, including Vermont Precision Tools and Leader Evaporator. The area has demonstrated the potential to support such enterprises. (Note that Leader Evaporator can also be classified as an agri-business operation similar to LaPierre Equipment.)
- **Agri-businesses:** This sector includes food processors and firms that supply agricultural operations with machinery and equipment. Maple City Candy and LaPierre Equipment are two examples of successful local agri-businesses.
- **Niche Retail, Hospitality & Tourism:** The analysis of retail and tourism indicates that Swanton has potential to grow these sectors. The presence of the Missisquoi River and nearby outdoor recreation opportunities such as the Missisquoi Valley Rail Trail present significant opportunities for tourism-based development in the area. The major constraint facing Swanton with regard to these sectors is the Town's proximity to the Burlington metropolitan area. Businesses in retail and hospitality located in Swanton are not likely to be able to compete against larger firms in the Burlington area unless they identify a specialty niche in terms of product line or customer service that will distinguish them from larger enterprises in the Burlington area that can carry a more extensive inventory and/or undersell smaller enterprises in outlying areas such as Swanton. Although focused on wholesale sales, Swanton Lumber is a good example of such a specialty operation, able to serve the local market and avoid directly competing with larger operations in the Burlington area.

In addition to assessing the market for commercial enterprises, Fairweather Consulting also completed an overview of the housing market in Franklin County and Swanton. This analysis concluded that there are opportunities to develop housing for seniors and for young families and entry-level workers. The ability of sites in the Northern Gateway to meet these demands is constrained by the heavy truck traffic in the district which may make some sites undesirable from a housing perspective.

### The Visioning Exercises

These potential development opportunities set the context for developing a community vision for the Northern Gateway. This was the subject of the visioning exercises described below. Peter Fairweather of Fairweather Consulting and Dan Voisin of Stone Environmental led community members through three exercises:

**Part 1. Individual Exercise:** The individual exercise required individual community members to indicate the level of importance of various factors in the redevelopment of the Northern Gateway Area on a survey form handed out to participants. The form identified five different outcomes that could accompany development in the Northern Gateway. Participants were asked to rate each aspect of Northern Gateway development on a scale from 1 to 4: Most Important, Important, Not Important, and Least Important. The five different aspects in question were:

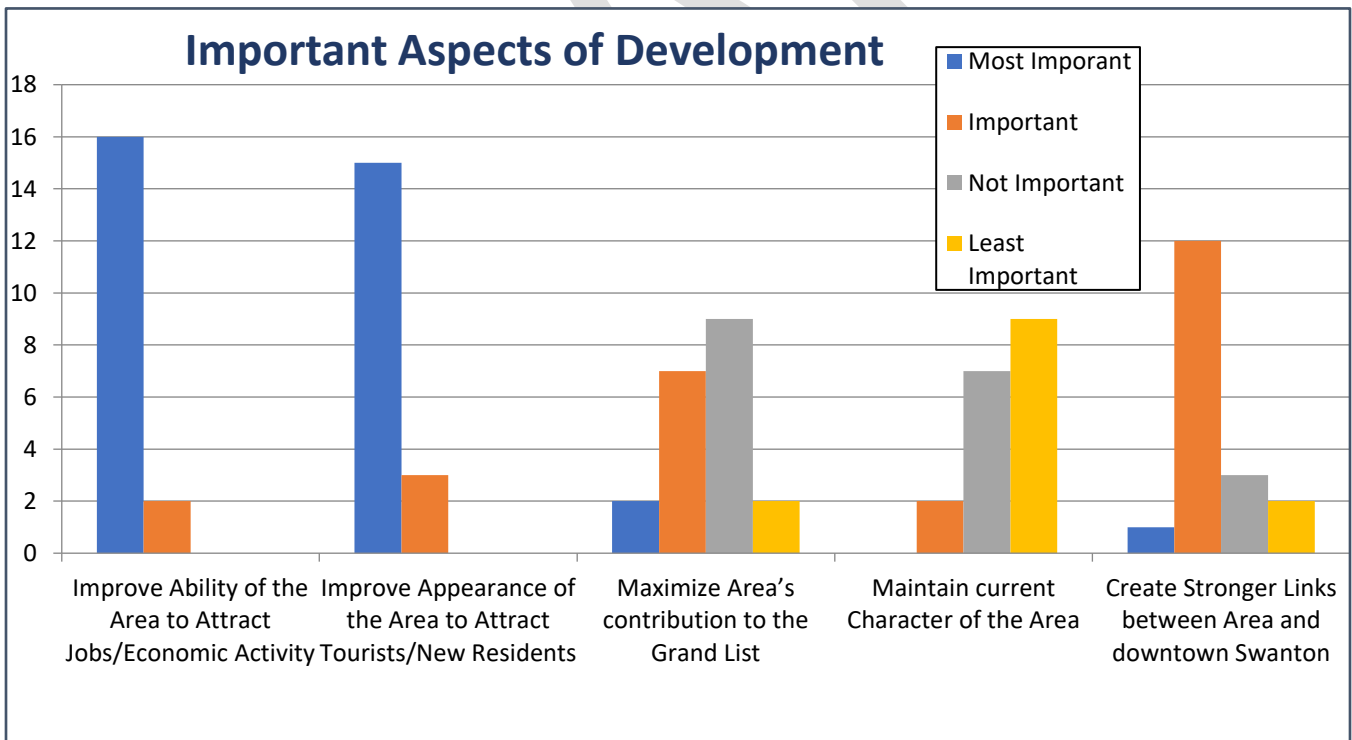
- Improve the Ability of the Area to Attract Jobs/Economic Activity;
- Improve the Appearance of the Area to Attract Tourists/New Residents;

- Maximize the area’s contribution to the Grand List;
- Maintain current Character of the Area; and
- Create stronger links between the Area and downtown Swanton.

The survey responses of participants are summarized in Figure 3.1 below. Participants identified the most important aspect of development in the Northern Gateway Area is to improve the ability of the area to attract jobs and economic activity. Following this is the need to improve the appearance of the area in order to attract tourists/new residents and to create stronger links between the area and downtown Swanton. The potential for development to maximize the area’s contribution to the grand list and its ability to create stronger links to the Gateway and the downtown received mixed support. The potential for development to maintain the current character of the area was seen as the least important among these five potential contributions of Gateway development.

Table 3.2 provides participants’ comments about why each aspect was rated as it was. Clearly, participants were concerned about using development in the Northern Gateway to foster jobs, new businesses and to enhance the appearance of the area. This was closely linked with the importance given to improving the appearance of the area to attract tourists and new residents.

*Figure 3.1: Participant’s Perceptions of the Potential Role for Development of the Northern Gateway Targeted Area*





**Table 3.2: Important Aspects of Development**

<p><b>Improve the Ability of the Area to Attract Jobs/Economic Activity</b></p>	<p>Need to keep workers in the community, not traveling.                  More businesses, more jobs, more money comes in.                  Bring in small businesses or senior housing.                  Economic growth: new jobs, new markets.                  Impacts from some Brownfield/catalyst sites are certainly spilled over (e.g. River).                  The first area you see upon entering Swanton; perception.                  Bring employment and commercial growth to Downtown.                  More diversity for employment to keep people local.                  Plus housing &amp; offices; interdependent upon appearance.</p>
<p><b>Improve the Appearance of the Area to Attract Tourists/New Residents</b></p>	<p>Present housing on main roads leading into town need to be more inviting; tourists see messy yards and housing in disrepair.                  Area needs jobs to keep youth in town.                  Neat, clean, well-lit area is definitely more attractive.                  Clean up area to create buildings for businesses/housing.                  Improve access/visibility of river; take advantage of this resource!                  The traffic from NY is heavy in this area.                  This is the first impression of the town when people enter.                  Attractive appearance will draw people in.                  Most important, it draws all - tourists, economy - into area.                  Area is the first impression; needs to be more welcoming.                  Appealing appearance will successfully result in growth.</p>
<p><b>Maximize the area's contribution to the Grand List</b></p>	<p>Any improvements will eventually help Grand List.                  Keep taxes in check.                  The Grand List goes up when all else comes in.                  If economy improves, Grand List goes up.                  This will tremendously help with reducing taxes.</p>
<p><b>Maintain current character of the area</b></p>	<p>Character is important, but we need change to improve                  Current character needs major improvement.                  Keep what is important to current residents.                  Modernization wouldn't hurt.                  Swanton push "dictates the charm of the community"                  Current character could use some TLC.                  It is time for a change in this area. Needs to be rebuilt.                  Current character is not what we want to keep!                  Looks abandoned now, uncared for; need new character.</p>
<p><b>Create stronger links between the Area and downtown Swanton</b></p>	<p>One feeds the other; they will interact at any rate.                  People (especially youth) leave the area for recreation.                  Bridge connects the two but we want to bond them.                  Essentially, this is the front door for many people that come from NY &amp; Canada, and the front door to our town, which currently looks rundown and unwelcoming.                  Walkability; vibrancy for residents.</p>
<p><b>Other Aspects: Tie development into the natural resources/beauty of the area.</b></p>	<p>The river, the farms, and the park across the river need to be part of the equation.</p>

## Part 2. Group Exercise

For the group exercise, participants were divided into four groups and then each group was given large-scale maps of the Northern Gateway with the three catalytic sites highlighted and worksheets with five alternate images for each of the potential uses identified in the market analysis: Restaurant, Retail, Housing, Services, or Manufacturing. Each group was instructed to choose which of these potential uses was what they, as a group, felt was the best development option for the site. Once a use was agreed upon, the group then selected the image it felt best captured their vision for that use. The group then placed their choices – with noted reasoning – onto each of the three highlighted locations on the map. Table 3.3 summarizes the results of this exercise, with some common themes emerging from the groups' deliberations.

The primary choice for redevelopment of Site 1 (6 South River Street) is housing. Two groups chose the same image for the housing option and three out of four would like to see a multi-purpose building that includes housing/lodging and a restaurant or offices (See Table 3).

As shown in Table 3.3, all four groups chose the retail option for Site 2 (1 Depot Street & 3 Depot Street). Two groups chose a market-style retail complex and noted that the upper space could be used for offices. The other two groups chose a country-style or recreational-oriented retail image; one of these groups also suggested office space.

As the largest parcel as well as a river-front property, Site 3 (2 North Street & 5 Foundry Street) received a variety of responses. However, regardless of the particular images chosen, participants noted the desirability of an open-space restaurant with outdoor seating. Participants also noted that the smaller parcel of the two on Site 3 could be used as a park/green space. Two groups suggested a micro-brewery and one suggested a recreational retail store offering canoes, kayaks and bikes.

Table 3.3: Group Exercise Visioning Results




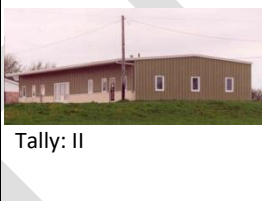








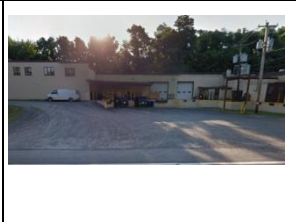


	Group/Map 1	Group/Map 2	Group/Map 3	Group/Map 4
<b>Site 1</b>		Housing: No image chosen		
Comments	Combination of housing and restaurant	More classic/ in character with surroundings. Consider senior housing; must be pedestrian friendly area	Looks like historic restored property. Lodging/Restaurant: B&B, restaurant, bar; Rebuild what is there to restore original look.	Possible office 1 <sup>st</sup> floor, limited residential above
<b>Site 2</b>				
	Retail	Retail	Retail	Retail
Comments	Café, sandwich/soup shop with offices on the second floor?	Country store mystique	Specialty retail, recreation oriented – canoes, bikes, etc. Perhaps office spaces too	Color, modern looking, mixed use, restaurant-retail use or office
<b>Site 3</b>			Restaurants: No image chosen	
	Retail	Restaurant		Restaurant
Comments	Combine outdoor space with retail; canoe, kayaks, bikes  Restaurant The outdoor effect; overlooking the river	Outdoor space/patio overlooking river; Landscaping toward River Road Services/Offices Park Village green (empty lot) possibly combined with parking. River recreation, see rentals	Waterworks in Winooski The Marina in Brattleboro Micro-brewery or mixed use - specialty shops	Micro-brewery, BBQ  Park: No image chosen Mini-park; rotary



Part 3. The Concluding Exercise: Identifying Undesirable Development

As is noted in Table 2 by multiple participants, the appearance of the Northern Gateway in need of a cleaner, more attractive appearance in order to draw tourists, new businesses, residents, and overall economic activity. In the final exercise of the evening, participants were requested to review any unused images from the previous exercise to indicate the type of appearance was least preferred for each potential use. These results are summarized in Table 3.4. As indicated in these results, participants of the visioning session did not want development that incapable of improving the overall appearance of the Northern Gateway Area. Participants do not want redevelopment featuring inexpensive façade treatments and/or materials. The results also suggest opposition to generic design that makes no attempt to contribute to an inviting sense of place in the Northern Gateway.

**Table 3.4: Undesired Development**

Housing	Retail	Restaurants	Services/Offices	Light Manufacturing
 <p>Tally: III</p>	 <p>Tally: II</p>	 <p>Tally: III</p>	 <p>Tally: II</p>	 <p>Tally: II</p>
 <p>Tally: II</p>				
 <p>Tally: II</p>				
				

Conclusions

Based upon the vision exercise, the preferred redevelopment choices for the three Northern Gateway catalytic sites are housing, retail, restaurants, office space, and green space. The retail uses identified

during the visioning session also include tourism and hospitality venues such as microbreweries and distilleries.

The primary concerns, which community members overwhelmingly defined as “Most Important,” are improved economic activity and improved appearance of the Northern Gateway area. As was noted by several participants within the exercises, these two factors, economic growth and improved overall appearance are interrelated. A welcoming appearance will enhance economic activity in the Northern Gateway area of Swanton. Meanwhile economic growth may trigger additional development in the area for a further improved appearance.

In that way, the quality of design of the area is important to participants. Exercise responses indicate that development should strengthen and promote a distinct, high-quality sense of place. Regardless of the desired uses, participants did not favor of development that uses inexpensive materials and poor generic designs given that such redevelopment choices do not contribute to the sense of place for the Northern Gateway area.

### Stakeholder Outreach

In addition to the community meeting, the project also include outreach to the owners of the three catalytic sites. This included the following individuals:

- Site 1: 6 South River Street—William Riley
- Site 2: 3 Depot Street—Tyler Stanislaus
- Site 3: 3 North River Street—Gordon & Debbie Winters
- 5 Foundry Street—David Fosgate

In addition, several economic development officials were interviewed to gain their perspectives on the market potential for the catalytic sites. They included:

- Tim Smith, Executive Director, Franklin County Economic Development Corporation
- David Snedekker, Executive Director, Northern Vermont Economic Development District
- Paul Costello, Executive Director, Vermont Council on Rural Development

During the process, two area developers were also interviewed. They included private developer Erik Hoekstra of Redstone Development and not-for-profit developer Amy Demetrowitz of the Champlain Housing Trust

## 4. Market Assessment

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### Executive Summary

As detailed below, this analysis indicates there are modest opportunities for development in the Gateway area. Virtually all opportunities are for smaller scale enterprises whose footprint matches the types of space available in the three catalytic sites. The analysis identified the following potential uses for the catalytic sites in the Gateway area:

- **Manufacturing:** the Swanton area has strengths in food processing and metal fabrication. The analysis suggests that it may be possible to attract small-scale enterprises in these sectors to the Gateway area, particularly the 5 Foundry Street site (particularly given the history of such uses at the site). While manufacturing was not a use identified in the community visioning process, there may be ways to accommodate small scale manufacturing at that location in ways that are compatible with other uses.
- **Retail Trade:** The analysis indicates that there are opportunities for retail development, particularly with regard to small scale specialty retail in such areas as specialty foods, personal care products, and sporting goods and hobby stores. The retail opportunities also include restaurants, with special focus on family dining establishments and take-out restaurants. All three catalytic sites have the potential to host retail activities, with 5 Foundry Street and 1 Depot Street being particularly well suited.
- **Various Services:** Swanton has the potential to house services ranging from Professional and Business Services to Leisure and Hospitality Services and Personal Services such as hairstyling, etc. 5 Foundry Street and 6 South River Street are well-suited to host such activities. The 6 South River Street site could mix service businesses on the first floor with apartments on the upper floors.
- **Housing:** The analysis of housing trends in the Swanton area suggest that the Gateway could accommodate a modest number of housing units serving seniors and younger households entering the workforce in need of lower-cost units. Swanton has a particularly tight rental market, suggesting that there may be opportunities to develop apartments in the Gateway area. 6 South River Street has the potential to include apartments in its redevelopment. It may be possible to have apartments on the upper floor of 3 Depot Street as well. Particularly in the case of the Depot Street site, it is important to consider the effect truck traffic may have on the desirability of apartments developed there.

The analysis also suggests that for the 5 Foundry Street site, the eventual re-use of the site is likely to combine a variety of businesses (and nonresidential uses). Bringing these together in one project will



require careful coordination of the redevelopment efforts including assembling various forms of financing to move the project forward.

### Introduction:

The Swanton Targeted Area Wide Plan has identified three catalytic sites for redevelopment. Based upon initial market analysis aimed at identifying economically viable uses for sites in the Northern Gateway area, five key commercial and industrial activities were identified as potentially viable in the Gateway area: distribution, business-related activities, advanced manufacturing, agri-business, and niche retail, hospitality and tourism. Further consultation with business owners, residents, and officials of Swanton during a Visioning Session on February 2<sup>nd</sup> identified the preferred redevelopment choices for the three Northern Gateway catalytic sites: housing, retail, restaurants, office space, and green space. This study aims to determine the most economically viable uses within the five industry choices per these catalytic sites; such as types of restaurants, types of businesses for office space, types of retail uses, and types of housing.

This analysis uses market data from various sources and compares multiple scopes, including town, county, and state, to determine the most viable uses of each of the five categories for the three Swanton catalytic sites.

### Regional Opportunities: Cluster Analysis

The first analysis of market potential for Swanton began with a review of data from the US Clusters Project, a web-based application developed by the Harvard Business School for the US Economic Development Administration. The US Clusters Project has been constituted as a set of tools for examining long-term structural conditions in a local economy to better understand the groupings of businesses that are particular catalysts for economic activity in that area. According to the project website:

The U.S. Cluster Mapping Project is a national economic initiative that provides over 50 million open data records on industry clusters and regional business environments in the United States to promote economic growth and national competitiveness. The project is led by Harvard Business School's Institute for Strategy and Competitiveness in partnership with the U.S. Department of Commerce and U.S. Economic Development Administration. . . .

. . . . Researchers from Harvard Business School, MIT Sloan School of Management, and Temple University's Fox School of Business generated cluster definitions based on a novel algorithm that allows for the systematic generation and comparison of clusters across the United States. The paper that explains this methodology is "Defining Clusters of Related Industries" (Delgado, Porter and Stern 2014), which revisits and extends "The Economic Performance of Regions" (Porter 2003).<sup>11</sup>

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<sup>11</sup> Source: <http://www.clustermapping.us>

The Importance of Traded Clusters

**Table 4.1: FRANKLIN COUNTY, STRONG REGIONAL TRADED CLUSTERS, 2014 Ranked by Employment in 2014.**

<b>CLUSTER</b>	<b>Employment 2009</b>	<b>Employment 2014</b>	<b>% Change, 2009-14</b>
Food Processing & Manufacturing	1,454	1,069	-26.5%
Distribution & Electronic Commerce*	704	866	23.0%
Biopharmaceuticals	375	750	100.0%
Transportation & Logistics	375	460	22.7%
Printing Services	80	185	131.3%
Vulcanized & Fired Materials	195	185	-5.1%
Metalworking Technology	245	175	-28.6%
Paper and Packaging	175	175	0.0%
Plastics*	120	120	0.0%
Downstream Metal Products*	40	80	100.0%
Nonmetal Mining	80	80	0.0%
Livestock Processing	70	70	0.0%
Upstream Metal Manufacturing		60	NEW
Apparel*	10	20	100.0%
Electric Power Gen. and Transmission*	10	20	100.0%
Leather and Related Products		10	NEW
Music and Sound Recording	10	10	0.0%
*Not a strong cluster in 2009. Source: <a href="http://www.clustermapping.us/">http://www.clustermapping.us/</a>			

The US Cluster Mapping Project seeks to identify those portions of the local economy that are exporters of goods and services and importers of income and wealth. This is a very important distinction for economic development purposes:

Industries are first classified as "traded" or "local." Traded industries are industries that are concentrated in a subset of geographic areas and sell to other regions and nations. Local industries are industries present in most (if not all) geographic areas, and primarily sell locally. Within the two large groups, sets of traded industries are then organized into traded clusters based on an overall measure of relatedness between individual industries across a range of linkages, including input-output measures, use of labor occupations, and co-location patterns of employment and

establishments. Local industries are grouped primarily based on similarities in activities reflected in aggregated U.S. industry categories<sup>12</sup>. . . .

. . . . The main underlying data source for the generation of benchmark cluster definitions is the U.S. Census Bureau's County Business Patterns dataset on employment, establishments, and wages by six-digit NAICS code (North American Industry Classification System), collected at the regional level of states, economic areas, metropolitan and micropolitan statistical areas, and counties.<sup>13</sup>

Tables 1 and 2 identify the strong clusters that the US Clusters project identified in Franklin County. Table 1 identifies "traded clusters" in Franklin County's economy (i.e., those groups of businesses that bring money into the economy by serving markets outside of it) as defined by the US Cluster Analysis project.

The Clusters Mapping Project identified a total of 17 strong traded clusters in Franklin County. Many of these are not appropriate uses for the catalytic sites defined for the Gateway area. These include Distribution and E-commerce, Transportation and Logistics, and most of the manufacturing clusters. These activities would require larger footprint sites than is available at the three sites. However, such uses and metal working technology and downstream metal products (e.g., tool and die making) would be possible at the 5 Foundry Street site. Food Processing and Manufacturing is also a possibility, if the operation was a small-scale artisan operation.

#### The Value of Local Clusters

Table 4.2 shows the "local clusters" in the County (i.e., those groups of businesses that primarily sell to customers within the County). While traded clusters are important for the income they attract into an area (in this case Franklin County), local clusters can be an important source of economic vitality for a village-scale revitalization effort. These are businesses that are primarily supported by customers within the County. Thus, the Swanton Gateway may be able to grow or attract such businesses that are serving a customer base within Franklin County. Since locally-oriented businesses are likely to require a smaller footprint, these would be an even better fit for the catalytic sites than firms from the traded clusters.

There are a number of local clusters that would be suitable for the catalytic sites. Indeed, the only clusters that probably would not be a potential use for these sites would be Motor Vehicle Products and Services (that is, auto sales—a repair operation could be accommodated at 5 Foundry Street), Utilities and Logistical Services. Virtually all of the other local clusters could be accommodated in at least one of the three catalytic sites.

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<sup>12</sup> Author's note: The traded category is an important component of an economic base. These are industries whose customers primarily come from outside the County. These traded clusters thus constitute the primary means by which a local economic generates new income, jobs and wealth.

<sup>13</sup> Source: <http://www.clustermapping.us>

*Table 4.2: FRANKLIN COUNTY, LOCAL CLUSTERS, 2014  
Ranked by Employment in 2014.*

LOCAL CLUSTER	Employment 2009	Employment 2014	% Change, 2009-14
Health Services	2,473	2,893	17.0%
Hospitality Establishments	916	1,207	31.8%
Food and Beverage Processing and Distribution	813	933	14.8%
Commercial Services	571	905	58.5%
Real Estate, Construction, and Development	702	811	15.5%
Motor Vehicle Products and Services	737	806	9.4%
Education and Training	205	415	102.4%
Community and Civic Organizations	273	364	33.3%
Financial Services	309	301	-2.6%
Utilities	240	270	12.5%
Personal Services (Non-Medical)	220	235	6.8%
Household Goods and Services	165	196	18.8%
Logistical Services	261	196	-24.9%
Retailing of Clothing and General Merchandise	201	182	-9.5%
Entertainment and Media	140	100	-28.6%
Industrial Products and Services	50	35	-30.0%

Source: <http://www.clustermapping.us/>

The question now turns to which of these county-wide clusters are most likely to expand in or to be attracted to Swanton. The Cluster Mapping data is only available at the County level. However, other data series can be used to provide an assessment of which industries are most likely to locate in Swanton. The next step in this analysis is to use local employment data to determine how these county-wide trends may translate into opportunities for Swanton. This will be done using data from the Quarterly Census of Employment and Wages available from Vermont Department of Labor to conduct a “shift-share” analysis of employment trends in Swanton.



## Defining Local Opportunities

### Identifying Opportunities in Swanton through Shift-Share Analysis

Figure 4.1 presents an illustration of shift-share analysis. A “shift-share analysis” compares changes in job growth in a local area with changes in a larger economy in which the area is located to isolate the factors driving the local changes.

Figure 1 shows provides a hypothetical example of what is learned through shift-share analysis. In this example employment has increased in manufacturing in a

local economy from 2000 to 2005. As Figure 1, illustrates, this growth can be disaggregated to estimate the share of overall growth in the Town that can be attributed to the overall growth in the Vermont economy (the “Regional Share” or the blue wedge in Figure 1). Next, the analysis isolates the share of overall growth in the County due to growth in manufacturing in particular in the Vermont economy (“Industry Mix” or the red wedge). Finally, the analysis identifies the share of overall growth due to a particular strength in the Town’s economy itself (“Local Shift” or the green wedge).

The shift/share analysis has been used to compare growth in Swanton to growth in Vermont. The results of the shift/share analysis are provided in tables 4.3 and 4.4. Table 4.3 shows results for a shift-share analysis conducted on changes in employment from 2009 to 2015 in the manufacturing sectors (also known as the “goods producing domain”). While much of the data for Swanton has been suppressed to prevent disclosure of information about the one or two firms in the smaller sectors, the analysis does show that, for the construction and manufacturing supersectors, Swanton has a positive local shift. It appears to be a relatively advantageous location for construction and manufacturing operations. Swanton appears to be most favorable for durable goods manufacturers. While little detail is available for the sectors within durable goods manufacturing, the one sector for which data is available (fabricated metal product manufacturing) has a negative local shift, suggesting that Swanton may not be a strong location for that sector. Note also that, under non-durable goods manufacturing, food manufacturing has a fairly strong negative local shift. This may be due to the fact that—unlike the US Cluster Mapping Project—these are unable to distinguish “traded” sectors from “local sectors. Thus, food processing may still represent an opportunity for Swanton.

Figure 4.1: Conceptual Illustration of a Shift-Share Analysis

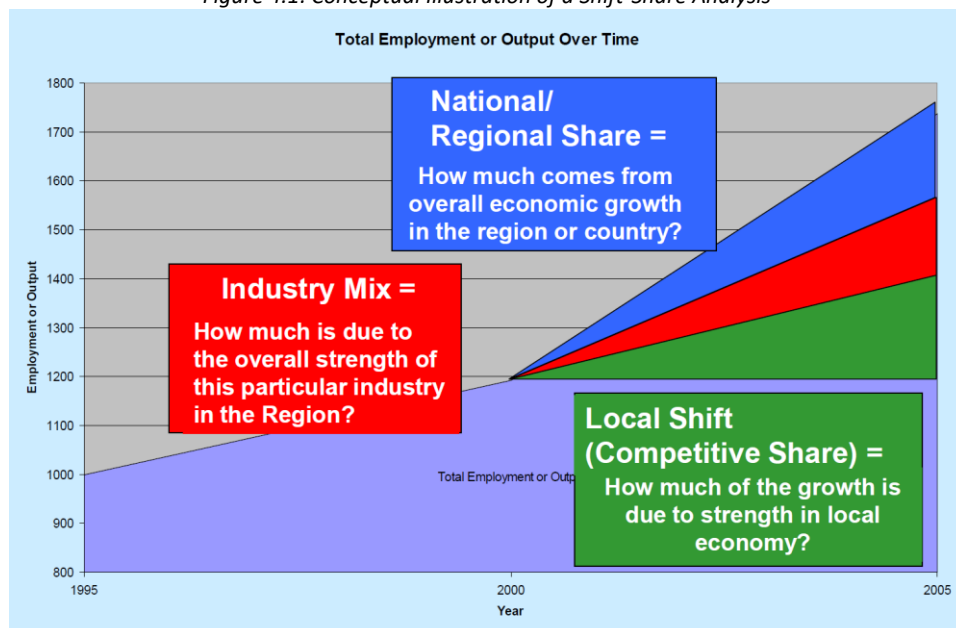


Table 4.3: Manufacturing Shift-Share Analysis, Swanton compared to the State of Vermont.

ANALYING EMPLOYMENT CHANGES IN SWANTON, 2009-15	Employment, 2009	Vermont's Overall Effect	The Industry's Overall Effect	Swanton's Effect	Employment, 2015	Change, 2009-14	% Change, 2009-14
<b>Goods Producing domain</b>	555	583	-7	43	619	64	11.0%
<i>Natural Resources and Mining supersector</i>	38	40	6	13	59	21	52.6%
Agriculture, forestry, fishing and hunting	(c)	D	D	D	D	D	D
<i>Construction supersector</i>	51	54	3	19	75	24	44.8%
<i>Manufacturing supersector</i>	467	491	-28	22	485	18	3.7%
Manufacturing	467	491	-28	22	485	18	3.7%
Durable Goods manufacturing	230	242	-38	123	326	96	39.7%
Wood product manufacturing	(c)	D	D	D	D	D	D
Nonmetallic mineral product manufacturing	(c)	D	D	D	D	D	D
Fabricated metal product manufacturing	171	180	-24	D	D	D	D
Machinery manufacturing	(c)	D	D	D	D	D	D
Non-Durable Goods manufacturing	237	249	49	-138	159	-78	-31.3%
Food manufacturing	167	175	58	-139	95	-72	-41.0%
Beverage and tobacco product manufacturing	-	D	D	D	D	D	D
Printing and related support activities manufacturing	(c)	D	D	D	D	D	D
Petroleum and coal products manufacturing	(c)	D	D	D	D	D	D
Plastics and rubber products manufacturing	(c)	D	D	D	D	D	D

Source: compiled by Fairweather Consulting from Census of Employment & Wages ([www.vtlmi.info](http://www.vtlmi.info)) (c) & D: data suppressed to avoid disclosure. NEW: business not present in 2009.

Table 4.4: Services Shift-Share Analysis, Swanton compared to the State of Vermont.

ANALYING EMPLOYMENT CHANGES IN SWANTON, 2009-15	Employment, 2009	Vermont's Overall Effect	The Industry's Overall Effect	Swanton's Effect	Employment, 2015	Change, 2009-14	% Change, 2009-14
<b>Industry</b>	1704						
<b>Service Providing domain</b>	625	656	9	101	767	142	21.6%
<i>Trade, Transportation, and Utilities supersector</i>	351	369	-22	101	447	96	26.0%
Wholesale trade	39	41	-4	13	50	11	26.9%
Retail trade	202	212	-12	67	268	66	31.1%
Transportation and warehousing	110	116	-3	17	129	19	16.4%
<i>Financial Activities supersector</i>	31	33	-3	3	33	2	6.1%
<i>Professional and Business Services supersector</i>	41	43	8	10	61	20	46.4%
<i>Education and Health Services supersector</i>	60	63	2	10	75	15	23.8%
Health care and social assistance	60	63	2	10	75	15	23.8%
Ambulatory health care services	51	54	0	13	67	16	29.9%
<i>Leisure and Hospitality supersector</i>	104	109	9	-19	99	-5	-4.6%
Arts, entertainment, and recreation	-	NEW	NEW	NEW	(c)	NA	NA
Performing arts and spectator sports	-	NEW	NEW	NEW	(c)	NA	NA
Accommodation and food services	(c)	D	D	D	D	NA	NA
Food services and drinking places	83	87	7	-11	84	1	1.1%
Other services, except public administration supersector	38	40	0	13	53	15	37.6%

Source: compiled by Fairweather Consulting from Census of Employment & Wages ([www.vtلمي.info](http://www.vtلمي.info)) (c) & D: data suppressed to avoid disclosure. NEW: business not present in 2009.

Table 4.4 contains the results of the shift-share analysis for the services sectors. For these industries, there are a number of sectors for which Swanton has a positive local shift. These include the supersectors for professional and business services and education and health services as well as retail trade. Food services and drinking places shows a negative local shift for Swanton. The market study will be taking a more in depth look at the local demand for restaurants to provide a more fine-grained assessment for the potential for restaurants in the Gateway area.

In sum, the shift-share analysis suggests that Swanton has the potential to support growth in manufacturing,

retail trade and various services sectors. For the most part, this is consistent with the findings from the local clusters of the US Cluster Mapping project.

Identifying Retail Opportunities in Swanton through Leakage/Surplus Analysis  
*Leakage/Surplus* analysis quantifies the potential market opportunities by retail sector for a particular geographic area and highlights potential opportunities for new establishments. For a given geographic area, the analysis compares spending by households in that

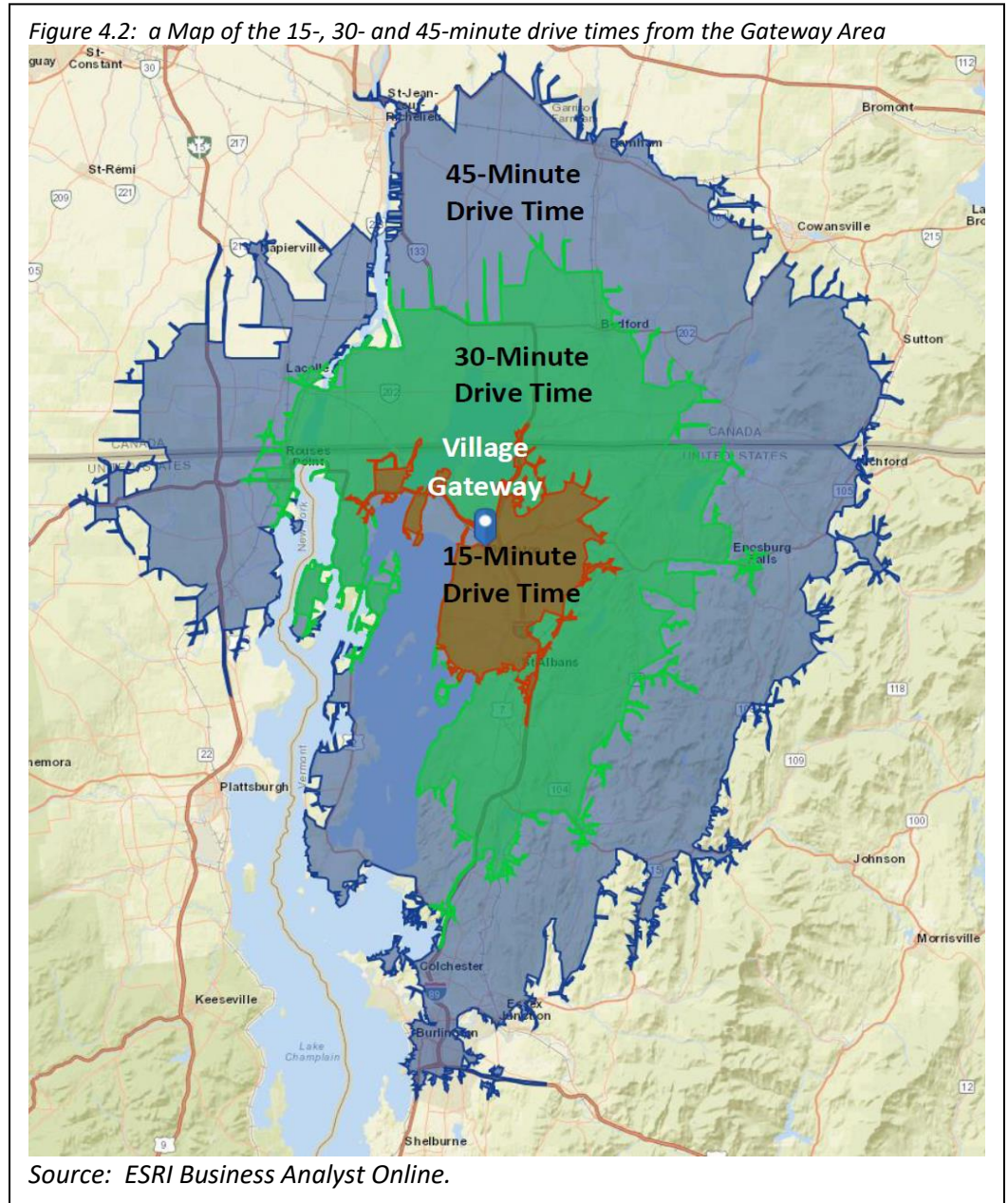




Table 4.5: Surplus/Leakage Analysis for Selected Retail Sectors by Drive Time from the Village Gateway						
Drive Time:	15 Minutes		30 Minutes		45 Minutes	
2016 Population	13,793		43,040		137,596	
2016 Households	5,516		17,110		54,310	
2016 Median Disposable Income	\$41,455		\$45,614		\$43,893	
2016 Per Capita Income	\$25,921		\$28,307		\$28,317	
<b>INDUSTRY SUMMARY</b>	<b>Leakage/Surplus</b>		<b>Leakage/Surplus</b>		<b>Leakage/Surplus</b>	
Total Retail Trade and Food & Drink	-		\$82,784,497		-\$557,268,629	
Total Retail Trade	\$107,320,058		\$53,805,687		-\$549,577,529	
Total Food & Drink	-\$1,050,558		\$28,978,810		-\$7,691,100	
		<b>Potential New Establishments</b>		<b>Potential New Establishments</b>		<b>Potential New Establishments</b>
<b>SECTORS:</b>						
Motor Vehicle & Parts Dealers	-\$85,889,289	(47.2)	-\$10,606,429	(2.7)	\$58,343,180	14.5
Furniture & Home Furnishings Stores	-\$5,626,102	(6.6)	\$6,405,119	3.4	\$11,003,821	9.0
Electronics & Appliance Stores	-\$3,595,862	(4.1)	\$11,112,543	6.5	-\$7,330,744	(5.5)
Bldg Materials, Garden Equip. & Supply Stores	\$209,446	0.3	\$11,014,270	10.7	-\$4,331,638	(4.1)
Grocery Stores	\$11,699,991	3.2	\$35,558,116	6.1	-\$113,616,512	(24.0)
Specialty Food Stores	-\$76,264	(0.1)	\$4,891,987	3.7	-\$3,423,157	(4.0)
Beer, Wine & Liquor Stores	-\$2,513,307	(2.3)	\$704,268	0.5	-\$20,251,877	(14.0)
Health & Personal Care Stores	\$151,394	0.1	\$8,077,753	4.8	-\$18,813,001	(16.1)
Gasoline Stations	-\$34,040,887	(32.1)	-\$93,794,479	(75.6)	-\$117,429,797	(72.5)
Clothing Stores	\$6,342,192	4.8	\$26,828,495	9.7	-\$3,523,416	(3.5)
Shoe Stores	-\$223,846	(0.3)	\$3,753,618	2.3	\$9,743,202	7.5

*Table 4.5: Surplus/Leakage Analysis for Selected Retail Sectors by Drive Time from the Village Gateway*

Drive Time:	15 Minutes		30 Minutes		45 Minutes	
Jewelry, Luggage & Leather Goods Stores	-\$70,537	(0.1)	\$2,278,376	1.2	-\$6,709,105	(15.0)
Sporting Goods/Hobby/Musical Instr Stores	\$1,181,332	2.0	\$10,017,300	12.4	-\$59,665,943	(77.8)
Book, Periodical & Music Stores	-\$197,444	(1.2)	\$92,438	0.3	-\$10,775,141	(34.0)
Department Stores Excluding Leased Depts.	-\$3,058,080	(0.5)	\$4,159,011	0.6	-\$84,932,358	(10.7)
Other General Merchandise Stores	\$2,751,820	1.6	\$10,500,989	6.2	-\$102,762,106	(47.0)
Miscellaneous Store Retailers	-\$57,332	(0.2)	\$10,381,932	20.7	-\$8,494,989	(20.4)
Florists	\$16,098	0.2	\$702,340	3.4	-\$678,402	(3.1)
Office Supplies, Stationery & Gift Stores	-\$1,652,437	(4.8)	\$1,129,463	2.2	-\$5,919,946	(15.9)
Used Merchandise Stores	\$166,471	0.9	\$836,569	4.7	-\$2,250,443	(11.2)
Other Miscellaneous Store Retailers	\$1,412,536	2.8	\$7,713,560	8.7	\$353,802	0.6
Nonstore Retailers	\$6,743,275	0.9	\$12,430,379	3.9	-\$66,607,950	(25.8)
Full-Service Restaurants	\$1,019,442	1.9	\$18,672,912	22.6	\$23,662,004	42.8
Limited-Service Eating Places	-\$2,354,338	(5.7)	\$8,410,690	10.0	\$2,793,055	4.8
Special Food Services	\$190,819	0.9	\$1,017,993	1.4	-\$31,924,872	(129.7)
Drinking Places - Alcoholic Beverages	\$93,519	0.5	\$877,214	2.7	-\$2,221,288	(11.4)

Source: Compiled by Fairweather Consulting from ESRI Business Analyst Online.

area with the selling by retail establishments in that same sectors for that geographic area. A surplus occurs when retailers are selling more than consumers are spending in the region, indicating that retailers are selling to non-local consumers and money is coming into the area. Conversely, leakage occurs when sales are lower than consumer spending within an area, indicating that consumers are shopping outside of the local area and money is leaking out.

Using data from ESRI's Business Analyst On-line, the following analysis compared retail surpluses and leakages within 15, 30, and 45-minute drive times from center of the Village Gateway area (see Figure 2). The results of this analysis can be found in Table 5. For each type of retail operation, the table identifies the surplus (in red) or leakage (in green) at each of the three drive times. If there is leakage in a sector, the table also shows how many potential new establishments can be supported by that leakage, given the average sales per store in that sector. In those cases where there is surplus, the data in the "potential new establishments" column shows how many additional establishments are likely being supported by that inflow of spending, given the average sales per establishment for that sector.

A general consideration to keep in mind is that leakage at a 15- or 30-minute drive time may not automatically constitute an opportunity for a new business *IF* there is a surplus at the 45-minute drive time. This is because the 45-minute drive time includes the Burlington area which hosts a variety of larger chain stores, which can typically support prices lower than what can be profitable at a smaller store. The situation of the Building Materials, Garden Equipment and Supply Stores illustrates this point. The data in Table 3 indicate that this sector has leakage at the 15- and 30-minute drive times. However, at the 45-minute drive time, that sector has a surplus, meaning people are coming into the area to shop in such stores.

Here's what this could mean for a person considering opening such a store in Swanton. If the store offers no special services and provides the same merchandise as a Lowe's or Home Depot, it will probably have to charge more for its merchandise than these larger chains. Faced with the choice of two equivalent stores, with the local one featuring higher prices, many shoppers will choose to make the trip to the big chain store to save money. However, if the store that opens up locally offers either specialty products or services not available at a typical chain, then it is much more likely to successfully capture the leakage that exists at the 15-minute drive time and even beyond, which would be enough to support a new store.

Virtually all of the potential opportunities found in the data in Table 3 fit into this situation. For example, there is enough leakage of spending for Grocery Stores at the 15-minute drive time to support 3 stores (at the average sales per establishment). But in order to turn that leakage into an opportunity, the potential grocer must be able to offer something that will attract shoppers who could easily find grocery stores with greater variety and lower cost in St. Albans and even Burlington. In these types of situations, the store operator must be able to identify a local niche within that category (e.g., specialty items or services like local delivery) in order to realize the potential found in that local leakage.

There are several sectors that appear to offer such opportunities, with local leakage constrained by surpluses at either the 30- or 45-minute drive time. These include the following sectors:

- Building Materials, Garden Equipment & Supply Stores
- Specialty Food Stores (which has a surplus at the 15-minute drive time but leakage in the larger 30-minute drive time)

- Health and Personal Care Stores
- Sporting Goods/Hobby/Musical Instrument Stores
- Full Service Restaurants
- Special Food Services
- Drinking Places

In most cases, the size of the leakage is relatively modest (e.g., less than the equivalent of ten stores). Therefore, the analysis strongly suggests that the opportunities in retail will be specialty stores with relatively small footprints, similar in size to those already in the downtown area of Swanton. This suggests that it may be possible to find opportunities that can be accommodated in the relatively modest space available through the three catalytic sites.

There are also several other sectors worth noting. Clothing stores show substantial leakage at the 15- and 30-minute drive times. Despite that, it may be difficult to establish any new clothing stores in the area, given the increasing trend for consumers to purchase clothing on line. Restaurants are a bit of an exception in that a local surplus coupled with leakages at the 30- and 45-minute drive times may indicate an opportunity. Places can become centers for people seeking options for dining. Thus, the fact that Swanton has a surplus at the 15-minute drive time for Limited-Service Eating Places may indicate a potential opportunity if Swanton can serve as a local hub for those types of establishments.

**Restaurant Analysis:** Restaurants are a sector where it is important to understand the particulars of local demand for such an establishment. This section contains an analysis of local demand for various types of restaurants. This analysis is conducted using a “Market Potential Index (MPI)” used to determine the probability of economic success of specific retail, restaurants, and businesses within a specific region. MPI “measures the relative likelihood of the adults in the specified trade area to exhibit certain consumer behavior or purchasing patterns compared to the U.S. An MPI of 100 represents the U.S. average. (ESRI, 2016)” An MPI over 100 signifies that the population in the area under study (e.g., the Town of Swanton) is more likely to spend money on this product or service than is the US as a whole. For restaurants, ESRI reports data for specified chain restaurants which can be construed as representative of the type of food and local restaurant residents are likely to support. An MPI under 100 signifies that residents of the area (e.g., the Town of Swanton) are less likely to spend money on this type of restaurant than residents of the US as a whole. This analysis looked at the MPI for various types of restaurants for the Town of Swanton as well as for the 15-minute, 30-minute and 45-minute drive times. The results remained consistent across all of these geographies. (See the appendices to this report for data for all of the drive times.)

According to Table 4, Family Restaurants or Steakhouses are the most popular option for restaurants in the Swanton Area. The MPI data show that the types of family restaurants or steakhouses that are most likely to succeed in this region are American Cuisine restaurants, which typically service dishes which include: steaks, ribs, chicken, chicken wings, and seafood. The national chain restaurant examples which exemplify this trend are Olive Garden, LongHorn Steakhouse, Texas Roadhouse, Old Country Buffet, T.G.I. Friday's. These are casual family dining restaurants, often representative of a western style and/or sports bar experience. The most common spending range at these family restaurants and/or steakhouses is \$31 - \$51.



The data in Table 4.6 indicate that the second most popular restaurant option for in the Swanton Area is Fast Food/Drive-In restaurants. Data analysis determines that the following types of fast food/drive-in organizations are most likely to succeed in this region:

- Donut and coffeehouse chains, which serve donuts, coffee, breakfast sandwiches, smoothies, etc.
- Take and Bake Pizza, which is a specific pizza chain that sells pre-cooked pizzas to-go
- Hamburger fast food and sandwich chains
- Soft serve ice cream and fast food that serve milkshakes, burgers, etc.

The national chain restaurants which most exemplify these trends are Dunkin' Donuts, Papa Murphy's, Burger King, McDonald's, Dairy Queen, and Arby's. The typical spending range at the fast food and/or drive-in restaurants is \$41 - \$50. Customers most commonly use the Take Out/Drive-Thru option at these restaurants.

The data also indicate that Fine-Dining restaurants are the least viable restaurant option for the Swanton Area, with Market Potential Indices for the category falling below the national average.

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Table 4.6: Market Potential Index, Family Restaurants & Fast Food Restaurants, the Town of Swanton Residents

Product/Consumer Behavior	Expected Number of Adults	Percent of Adult Population	MPI
<b>Family Restaurants/Steak Houses</b>			
Went to family restaurant/steak house in last 6 mo	3,950	76.7%	103
Spent at family restaurant/steak house last 6 months: \$31-50	478	9.3%	113
Spent at family restaurant/steak house last 6 months: \$51-100	794	15.4%	102
Fam restaurant/steak house/6 months: LongHorn Steakhouse	321	6.2%	131
Fam restaurant/steak house/6 months: Texas Roadhouse	504	9.8%	129
Fam restaurant/steak house/6 months: Old Country Buffet	113	2.2%	127
Fam restaurant/steak house/6 months: T.G.I. Friday`s	463	9.0%	119
Fam restaurant/steak house/6 months: Ruby Tuesday	362	7.0%	116
Fam restaurant/steak house/6 months: Applebee`s	1,377	26.7%	113
Fam restaurant/steak house/6 months: Olive Garden	1,001	19.4%	112
Family restaurant/steak house last 6 months: dinner	2,590	50.3%	108
Family restaurant/steak house last 6 months: weekend	2,274	44.2%	107
Family restaurant/steak house last 6 months: weekday	1,659	32.2%	106
<b>Fast Food Establishments</b>			
Fast food/drive-in last 6 months: take-out/drive-thru	2,490	48.4%	104
Fast food/drive-in last 6 months: Dunkin` Donuts	762	14.8%	125
Fast food/drive-in last 6 months: Papa Murphy`s	270	5.2%	124
Fast food/drive-in last 6 months: A & W	164	3.2%	115
Fast food/drive-in last 6 months: Dairy Queen	831	16.1%	114
Fast food/drive-in last 6 months: Burger King	1,719	33.4%	110
Fast food/drive-in last 6 months: Arby`s	902	17.5%	110
Fast food/drive-in last 6 months: Wendy`s	1,538	29.9%	108
Fast food/drive-in last 6 months: dinner	2,416	46.9%	106
Fast food/drive-in last 6 months: McDonald`s	2,900	56.3%	102
Fast food/drive-in last 6 months: weekday	3,081	59.8%	103
Fast food/drive-in last 6 months: weekend	2,374	46.1%	101
Fast food/drive-in last 6 months: Subway	1,646	32.0%	99
Fast food/drive-in last 6 months: Taco Bell	1,568	30.5%	99
Fast food/drive-in last 6 months: Pizza Hut	1,025	19.9%	99
Fast food/drive-in last 6 months: eat in	1,864	36.2%	100
Fast food/drive-in last 6 months: lunch	2,544	49.4%	99

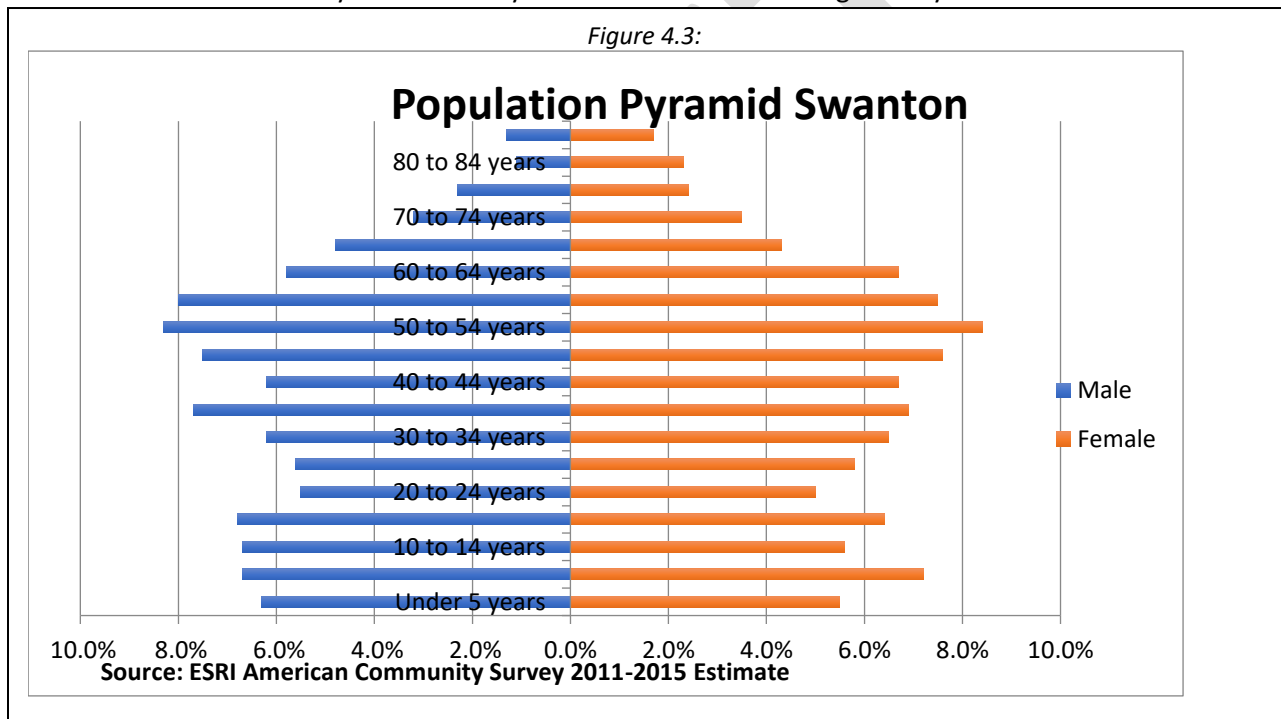
Source: compiled by Fairweather Consulting from ESRI Business Analyst Online.

## Opportunities for Housing Development

In addition to analyzing the potential for manufacturing, services and retail, this report also provides an overview of the opportunities for housing in the Swanton area based upon some recent housing studies supplemented by additional demographic analysis conducted for this study.

### Potential Demand

As shown in Figure 4.3, the demographics of Swanton indicate the potential to develop senior housing. As of 2015, the largest population cohort in the Town is 50-54 years, a group on the cusp of retiring and having to consider options to downsize their housing to minimize cost and maintenance tasks. There are also sizeable cohorts in both the 55 to 60 and 45 to 49. Consistent with State and national trends, this indicates that there is likely to be a steady demand for senior housing in the years ahead.



As shown in Figure 4.4, the supply of housing units has slowed during the Great Recession in the Northwest Region of Vermont, Franklin County and in Swanton itself. This may lead to opportunities to build new housing in response to the aging population and other needs. This is also reflected in the vacancy rate for rental housing. As shown in Figure 4.5, Swanton in particular has a very low vacancy rate for rental housing, again, suggesting there may be a need for additional rental units in the Town.

Figure 4.4:

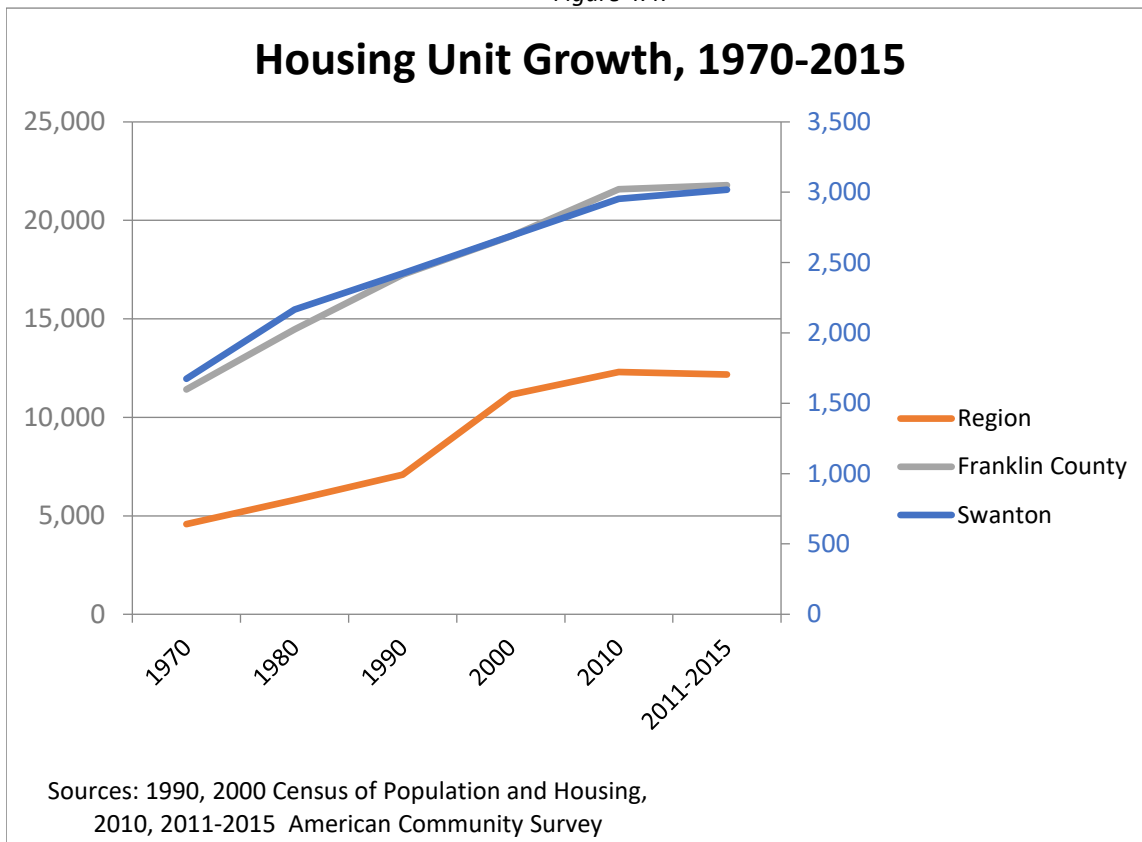
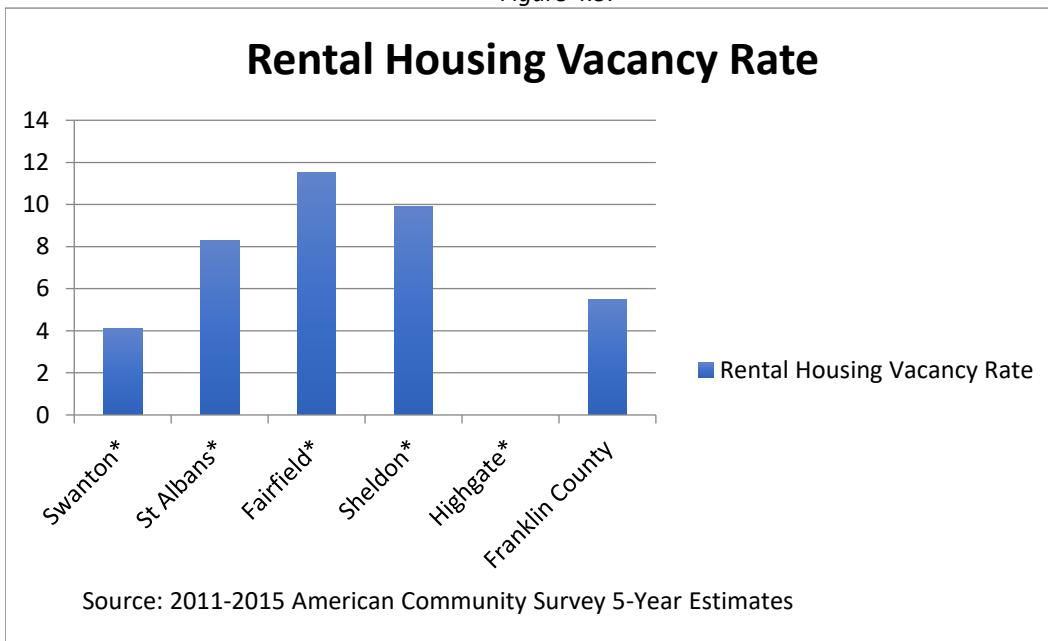


Figure 4.5:





### Housing Supply

An examination of the supply of housing suggests there may be some opportunities for the development of additional housing. For example, Table 4.7 provides an overview of housing affordability in the Burlington MSA, the Northwest Region, Franklin County and Swanton Town. In all of these geographies is shows that there is a gap between the money lower-income households have available to pay rent and the rents available in the market place, with the gaps being much larger for low-income households in Swanton than in the Region or Franklin County.

**Table 4.7.**  
Rental Housing Affordability Analysis

Percent of Median Income	Median Income	30% of Income/ Year	30% of Income/ Month	Income Available for Rent/ Month	Swanton Median Rent	Affordability Gap
<b>MSA Median Household Income</b>						
100%	\$49,322	\$14,797	\$1,233	\$1,233	\$802	\$431
80%	\$39,458	\$11,837	\$986	\$986	\$802	\$184
50%	\$24,661	\$7,398	\$617	\$617	\$802	-\$185
30%	\$14,797	\$4,439	\$370	\$370	\$802	-\$432
<b>Region Median Household Income</b>						
100%	\$58,485	\$17,546	\$1,462	\$1,462	\$802	\$660
80%	\$46,788	\$14,036	\$1,170	\$1,170	\$802	\$368
50%	\$29,243	\$8,773	\$731	\$731	\$802	-\$71
30%	\$17,546	\$5,264	\$439	\$439	\$802	-\$363
<b>Franklin County Median Household Income</b>						
100%	\$58,199	\$17,460	\$1,455	\$1,455	\$802	\$653
80%	\$46,559	\$13,968	\$1,164	\$1,164	\$802	\$362
50%	\$29,100	\$8,730	\$727	\$727	\$802	-\$75
30%	\$17,460	\$5,238	\$436	\$436	\$802	-\$366
<b>Swanton Median Household Income</b>						
100%	\$55,138	\$16,541	\$1,378	\$1,378	\$802	\$576
80%	\$44,110	\$13,233	\$1,103	\$1,103	\$802	\$301
50%	\$27,569	\$8,271	\$689	\$689	\$802	-\$113
30%	\$16,541	\$4,962	\$414	\$414	\$802	-\$388

Source: American Community Survey 2010-2014, 2011-2015 Estimates, US Dept. of Housing and Urban Development, all other numbers calculated by Fairweather Consulting

Tables 4.8 and 4.9 show the years in which both rental and owner-occupied housing was built in Swanton, indicating that the Town has a relatively high proportion of units built after 1990, particularly for a more rural area. Tables 4.10 and 4.11 show that Swanton has relatively little subsidized housing compared to its neighbors. This could help account for some of the affordability gap seen in Table 7.

### The Opportunities: Senior and Starter Housing

These data suggest that there are modest opportunities for the development of housing in Swanton, particularly units that are available for seniors or that could serve “starter” households, young families just entering the workplace whose lower earnings makes it difficult for them to find suitable housing in the community. Given the low rental vacancy rates for apartments in the Town, much of this demand could be met through one- and two-bedroom apartments priced in the \$500 to \$700 range for monthly rentals.

Table 4.8: Rental Units by Year Structure Built- Swanton

	Number	Percent
1990- Present	264	33.72%
1970-1989	195	24.90%
1950- 1969	84	10.73%
Pre 1950	240	30.65%
Total	783	100.00%

Source: 2011-2015 American Community Survey 5-Year Estimate

Table 4.9: Owner Occupied Units by Year Structure Built- Swanton

	Number	Percent
1990- Present	522	28.29%
1970-1989	474	25.69%
1950- 1969	340	18.43%
Pre 1950	509	27.59%
Total	1845	100.00%

Source: 2011-2015 American Community Survey 5-Year Estimate

Table 4.10: Senior Subsidized Housing

Jurisdiction	Elderly/ Disabled	Renter Occupied Housing Units	Percent of Renter Occupied Units
Swanton	74	783	9.45%
St. Albans Town	66	495	13.33%
St. Albans City	181	1362	13.29%
Richford	39	204	19.12%
Enosburg Falls	66	303	21.78%
Franklin County	426	4,828	8.82%

Source: Vermont Directory. of Affordable Rental Housing / ACS 2015

Table 4.11: Subsidized Housing Comparison

Jurisdiction	% of Renter Occupied Housing Units in Subsidized Projects	% of Renter Occupied Housing Units Using Section 8 Vouchers	Renter Occupied Housing Units
Swanton	12.80%	8.70%	749
St. Albans City	22.80%	18.10%	1,296
Richford	20.90%	6.90%	244
Enosburg Falls	42.50%	7.70%	273
Franklin County	17.30%	12.80%	4,446

Source: City of St Albans Housing Study and Needs Analysis NRPC

**Table 4.12: Rental Affordability Analysis Based on Occupation Wage**

	Jobs	Mean Wage 2015 Franklin County	30% of Income/ Year	30% of Income/ Month	Income Available for Rent/ Month	Swanton Median Rent	Afford- ability Gap
Manufacturing	455	59,621	17,886	1,490	1,490	802	688.5
Retail Trade	234	27,294	8,188	682	682	802	-119.6
Educational Services	215	26,760	8,028	669	669	802	-133
Transportation & Warehousing	168	37,944	11,383	949	949	802	146.6

*Jobs numbers from OntheMap.census.gov, Mean Wage from Vermont Department of Labor, Median Rent from ACS 2011-2015, All other numbers calculated by Fairweather Consulting*

According to the official population projections for Vermont compiled by the Agency of Commerce and Community Development, between 2020 and 2030, Swanton’s population is projected to increase by between approximately 35 and 330 persons.<sup>14</sup> Even the “fast growth” scenario suggests a modest growth rate of less than one percent per year. Consequently, the demand for housing is also likely to be modest, with a rough estimate of the market being able to absorb between five and ten new units per year.

Finally, Table 4.12 shows how rental affordability related to typical wages available in various occupations. Clearly, the extent to which Swanton can increase the employment of residents in manufacturing or transportation & warehousing occupations, the more likely the Town will see demand for units capable of commanding higher rents that currently. However, this will not change the immediate situation in Swanton where the modest demand for new housing is likely to be for affordable senior housing as well as for “entry level” affordable apartments for young families.

<sup>14</sup> Ken Jones, Ph.D., Economic Research Analyst & Lilly Schwarz, “Vermont Population Projections, 2010-2030” Agency of Commerce and Community Development, August, 2013. Scenario A (faster growth) indicates an increase of 328 people between 2020 and 2030. Scenario B (modest growth) projects a population of 33 persons for the Town between 2020 and 2030.,

## 5. Conceptual Plan

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The conceptual plan for the Northern Gateway is intended to illustrate how the catalytic sites can foster in improve appearance and enhanced investment climate in the area. In total, these three projects are intended to reinforce the following design principles in the Gateway:

**Mixed Use:** while much of the Gateway has traditionally been devoted to industrial uses, the market analysis indicates there are opportunities to introduce commercial and residential uses to the area, consistent with the 2015 Town and Village plan.

**Pedestrian Friendliness:** streetscape improvements and the design of the redevelopment are intended to promote increased pedestrian traffic in the Gateway area.

**Preserving/Reviving the Historical Character of Swanton:** The designs recommended for the catalytic projects have drawn upon historic development patterns in Swanton in general and in the Gateway in particular to help improve and revive the community character of the Gateway.

**Reconnecting to Community Assets:** The economic value the Gateway area will be enhanced if it takes advantage of two nearby community assets: Swanton' downtown and the Missisquoi River. The conceptual plan for 5 Foundry Street reconnects Swanton to the River via the riverside promenade and the promotion of commercial use overlooking the River. The streetscape improvements included throughout the project are intended to strengthen the pedestrian connection between the Gateway and the downtown. In addition, the design approach for all three catalytic projects is intended to create a consistent appearance in the built environment that strengthens the link between the Gateway and downtown Swanton.

See Figure 5.1 for an overview of the conceptual plan for the Northern Gateway.

### Site 1: 6 North River Street

The former Riviere Hotel is currently in substantial need of revitalization. The conceptual plan calls for redevelopment of the building in a manner that recalls its past as the Adams House Hotel. The restoration of the porch and the architectural details involved with the soffit and windows along with the recreation of the historical signage greatly enhance its ability to serve as a location for apartments and possibly professional offices on the first floor. The improvements in parking, landscaping and sidewalks create a strong connection to surrounding properties and to the downtown. See Figure 5.2. Estimated costs of the exterior improvements are included in Appendix B.



Figure 5.1. Northern Gateway: Projected Improvements.





*Figure 5.2. 6 South River Street: Existing Conditions & Projected Improvements.*

*Existing Conditions*



*Projected Improvements*





Site 2: 3 Depot Street

Over the years, this former dry goods store has become a nondescript presence at the Gateway entrance, with renovations over the decades covering windows, removing entrances and weakening its orientation to River Street. The conceptual plan restores the building's historical character and positions it to serve as a site for a restaurant or other food-related enterprise. Sidewalks and crosswalks are intended to strengthen the pedestrian realm. See Figure 5.3. Appendix B has estimates of the exterior improvements included in the conceptual plan.

*Figure 5.3. 3 Depot Street: Existing Conditions & Projected Improvements.*

*Existing Conditions*



*Projected Improvements*





Site 3: 5 Foundry Street

*Figure 5.4. 5 Foundry Street: Existing Conditions & Projected Improvements.*

*Existing Conditions*



*Projected Improvements*





Given the importance of this site to the redevelopment of the Gateway area, it has the most ambitious program in the conceptual plan. (See Figure 5.4.) The concrete decking is redeveloped as a pedestrian promenade. Large windows are added to the riverside of the building to take advantage of its proximity to the Missisquoi. Redeveloped in this way, 5 Foundry Street would serve as an anchor for the Gateway and as the major link to draw pedestrian traffic from downtown to the Gateway. Given the extensive work required to create this transformation and the unknown nature of the environmental conditions associated with this long-time industrial site, it is difficult to provide precise estimates of the associated costs. This should be the focus of further environmental assessments of this site.

### Feasibility Assessment of the Conceptual Plans

The Swanton Northern Gateway AWP contains three individual catalytic projects:

1. Redevelopment of 6 North River Street into apartments and professional office space;
2. Redevelopment of 3 Depot Street into a restaurant;
3. Redevelopment of 5 Foundry Street into mixed use commercial/light industrial space.

While these projects represent major steps forward for the Northern Gateway, they are all relatively modest in scale, from 2,950 square feet of space on a half-acre at 6 North River Street, to 2,200 square feet on a sixth of acre at 3 Depot Street to 15,500 square feet of space on just under an acre at the largest of the three sites, 5 Foundry Street.

The conceptual plans for 6 North River Street and 3 Depot Street involve adaptive reuse of existing space to uses very similar to those currently occupying the locations. In both cases, the site and building improvements should position these properties to serve as effective locations for the planned uses and should improve the ability of the Northern Gateway to support other commercial and residential uses.

As mentioned above, the 5 Foundry Street present significantly greater potential for catalyzing redevelopment in the Northern Gateway. That potential is accompanied by much greater uncertainty and much more extensive improvement required to complete the conceptual plan. On the other hand, if the redevelopment moves forward, this riverside site is well-positioned to capture some of the modest demand for retail, restaurants, services and light manufacturing in the Swanton area.

### Market Feasibility: Focus on 5 Foundry Street

As indicated in the market analysis in section 3 of this report, the demand for the types of uses identified in this conceptual plan is modest. On the other hand, the spaces slated for redevelopment are also relatively modest. This indicates that, if positioned properly, each of these projects should be able to capture existing demand for space. It also suggests that the relatively small projects slated for 6 North River Street and 3 Depot Street may be able to establish themselves in the market fairly readily.

The project likely to require the most attention from a market perspective will be 5 Foundry Street. Since it is by far the largest site and the one capable of hosting the greatest mix of uses, it will require the most attention in terms of its development and marketing. Indeed, the timing of the implementation of this plan is likely to see development take place at 6 North River Street and 3 Depot Street in a matter of 2 to 3 years. Given its complexity, redevelopment of 5 Foundry Street could take up to a decade. It is important that the Town and Village are able to sustain a long-term focus on this site, given the unparalleled opportunity it holds for fostering revitalization of the Northern Gateway.

## 6. Implementation

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This planning process has identified several opportunities for revitalizing brownfield sites in the Village Gateway area. In order to fully realize these opportunities, a concerted plan of action must be implemented. This portion of the report outlines the steps involved in implementation. These steps are offered as a guide to action, with the understanding that as circumstances change or unexpected opportunities arise, it may be advisable to depart from the precise actions and timing indicated here. Nonetheless, it is important to remember that it may take many years, even more than a decade before the plans outlined here come into full fruition. Thus, the implementation steps described here can serve as a long-term guide to maintain ongoing focused attention on these opportunities. It is that kind of sustained stewardship that is most likely to produce success in the years ahead.

### Partnerships for Implementation

In addition to Town and Village cooperation, redevelopment in the Village Gateway area will require the formation of partnerships with a variety of organizations and agencies. This includes the following key stakeholders:

*The Northwest Regional Planning Commission (NWRPC)*- NWRPC can be an important resource for both technical assistance with planning and zoning as well as guidance in identifying and securing funding for implementation.

*The Vermont Department of Environmental Conservation (VTDEC)* – NWRPC operates the regional brownfield remediation programs in cooperation with the VTDEC. In addition, VTDEC has other programs (e.g., water quality improvements and green infrastructure) which could be useful in addressing issues involved in the Gateway area.

*The Vermont Agency of Transportation (VTRANS)* – The intersection of River and Depot streets has benefited from past efforts by VTRANS to improve traffic flow. As implementation moves forward, VTRANS may be able to assist with further upgrades to the right of way, including enhanced pedestrian infrastructure to link the Gateway more strongly to Swanton's downtown.

*The Vermont Agency for Commerce and Community Development (VTACCD)* – through the Community Development Block Grant (CDBG) program and other sources, VTACCD is an important source of funding available to the Town and Village as well as private property owners and developers.

*The Vermont Economic Development Authority (VEDA)* - VEDA operates low-interest loan programs for commercial start-up or expansion projects, provided either directly with to business, or in partnership with a commercial lender. They also provide loans to nonprofit local and regional development corporations for land for industrial parks, industrial park planning and development, construction or improvement of "spec" buildings or small business incubator facilities, and, as appropriate, make various tax incentives available to projects.

*The Northern Border Regional Commission (NBRC)* – Patterned after the Appalachian Regional Commission, the NBRC was established through a partnership between the US Government and four states bordering Canada (Maine, New Hampshire, Vermont, and New York). The purpose of the NBRC is to catalyze regional, collaborative, and transformative community economic development approaches among the most distressed counties along the Canadian border through a variety of grants for planning and infrastructure.

*The Northern Vermont Economic Development District (NVEDD)* - NVEDD will be a valuable partner in identifying prospective users for the catalytic sites as well as assembling funding to help move particular projects forward.

*The Franklin County Industrial Development Corporation (FCIDC)* – FCIDC can assist the Town and Village is identify prospects as well as providing technical assistance and advice on funding sources.

*Local businesses/property owners* – The success of redevelopment in the Gateway area depends largely on private property owners and businesses to make the investments in properties. Maintaining close working relationships among the local governments, property owners and local businesses will be an important part of implementing this plan.

### Major Steps in Project Implementation

As the plan is implemented, development of public facilities or private construction will go through the following major steps:

**Nurture and Strengthen Partnerships.** The first critical step is to nurture partnerships between the Town and Village and the partners identified in the previous section. A regular on-going dialogue on topics of mutual interest is critical.

**Planning and Feasibility.** The first step involves conceptual design and cost estimation for a particular project. There are many factors that are a part of this phase of a project, including site and market investigations, engineering and other technical considerations that will influence the project and its cost. During this phase, a project conceptual design is developed in enough detail to allow reliable cost estimates. Depending on the cost a design may be modified to address concerns or a project may also be found to be infeasible. Part of the feasibility phase includes identification and securing sources of funding for a project.

**Design, Engineering and Permitting.** Once a project is designed to a level that impacts can be identified, a project sponsor must obtain necessary permits from regulatory agencies. This typically involves local and state level permits, but projects using federal funding must also comply with NEPA (National Environmental Policy Act) requirements. Once permits are in hand, final project design and engineering may be completed.

**Construction.** Final plans are issued for bids by contractors and construction may commence. If project bids come in over budget the project design must be modified to conform to available funding.

**Brownfield Assessment and Cleanup.** Steps for identifying, developing a plan and remediating brownfield site issues occur in tandem with each phase of project design and development, depending on the

conditions of the site. The brownfield process is detailed in the following Environmental Due Diligence and Remediation Section.

#### The Process of Environmental Due Diligence and Remediation

As part of the standard due diligence in preparation for a commercial real estate transaction, to avoid potential future environmental liability related to past land use, the developer should undergo “all appropriate inquiry” (AAI) as to the environmental status of the property. The Phase I Environmental Site Assessment (Phase I ESA), when performed in accordance with the current American Society of Testing and Materials (ASTM) standard practice (e.g., ASTM 13-1527), satisfies the AAI obligations under the Small Business Liability Relief and Brownfields Revitalization Act (SBLR&BRA) amendment to the Comprehensive Environmental Response Compensation and Liability Act (CERCLA; 42 U.S.C. 103) and is designed to satisfy certain components required for the Innocent Landowner Defense under CERCLA.

The objective of the Phase I ESA is to identify, by performing a review of relevant environmental databases, interviews with the landowner and managers, a review of historical land use documentation, and site inspection, any indications of a past or ongoing release or threat of release of hazardous or petroleum materials to the environment. As part of the Phase I ESA, it may be prudent to perform a visual inspection of the site buildings for suspected asbestos containing materials (ACM). Expected costs for a Phase I ESA for a collection of properties such as this can range between \$4,500 and \$8,000 and will typically be completed within one month to six weeks. Funding for performing a Phase I ESA is available through a competitive application process with CVRPC.

Depending on the findings of the Phase I ESA, further environmental assessment may be needed to evaluate whether any recognized environmental conditions (RECs) constitute an actual release of contaminants to the environment. If the Phase I ESA has identified RECs, the following steps should be undertaken to satisfy ongoing obligations for liability protection:

- Enroll the project in the VT DEC Brownfield Reuse Economic Liability Limitation Act (BRELLA) Program. The BRELLA Program allows for State liability relief in exchange for site cleanup. In doing so, participants have access to low interest or free loans for cleanup.
- Apply for funding for a Phase II ESA to the VT DEC Brownfield Response Program through a VT DEC Brownfield Program Technical Assistant Grant or a Regional Planning Commission hazardous assessment grant. The timing for the application and required public comment period is one month.
- Perform the Phase II ESA to identify whether recognized environmental conditions from the Phase I ESA constitute a release of petroleum or hazardous materials to the environment.

To better to adhere to development timelines, consider collecting additional data to begin remedial cost estimation process during the Phase II ESA. For example, as spoiling of excess soils generated during the development of a site within a historic growth center will likely require management as solid wastes, characterization sampling can be performed as part of the Phase II ESA. Similarly, if volatile organic compounds are identified in site media during the Phase II ESA, pilot testing can be performed that would be sufficient for designing a vapor intrusion mitigation system for the new or existing buildings.

The expected costs for the Phase II ESA vary greatly depending on site conditions and how many RECs need to be assessed. Typically, a Phase II ESA for a moderately sized parcel or group of parcels can be



expected to range between \$30,000 and \$75,000 and can require three to six months to complete if using a dynamic work strategy; slower (6-12 months) if using a traditional approach. If a release of contamination is identified during the Phase II ESA, remediation may be necessary to achieve the redevelopment objectives for the property. If remediation is warranted, we recommend the following steps:

Contact potential sources of funding for remedial work as soon as it is known that remediation may be necessary to inform them of the project.

Retain a consultant to prepare Corrective Action Feasibility Investigation (CAFI) and Corrective Action Plan (CAP) remedial planning documents, as necessary. Costs for preparing these remedial planning documents are eligible under either EPA Brownfield Assessment funds or a Remediation Grant.

To better leverage any cleanup grants or low-interest loans, remedial planning should occur thoughtfully and concurrently with site design; oftentimes, remedial installations can serve as final site improvements and are eligible expenses under these grant/loan programs. Furthermore, the consultant should engage with architects to ensure CAFI/CAP is compatible with proposed redevelopment and vice – versa. The typical costs for the CAFI/ CAP can range between \$5,000 and \$12,000 depending on the severity of the contamination and will require two to four months the preparation of draft documents, regulatory review, public comment, and final documents.

Once a CAP has been finalized, the owner can apply to US EPA for a site-specific Clean-up Grant or to one of the State Revolving Loan Funds (RLF). The Vermont Agency of Commerce and Community Development and the Northwest Regional Planning Commission each have active RLFs. The application to a holder of an RLF, which are received on a rolling basis, usually is turned around within one to two months, subject to funds being available. Applications for US EPA Cleanup Grants are due in December of each year and are typically available to awardees within ten months of the application.

Once remedial funding is secured, remedial implementation should be staged to occur concurrently with other project demolition or construction activities. Requests for bids should include requisite contracting language as stipulated within the grant or loan guidelines. It is also important that, as projects are concluded, arrangements be made for filing the necessary reports with funding agencies. The municipality may wish to include this in the scope of services for any consultants overseeing project financing and/or construction.

### [Actions for Plan Implementation](#)

This section describes the specific actions recommended to begin revitalization of the Gateway area. Each recommendation includes the following information:

**Timing:** the actions are classified in three categories. Short-term actions should be undertaken within 2 years (e.g., by 2019). Mid-term actions should be undertaken within three to five years (e.g., after 2019, with completion by 2021). Long-term actions should be undertaken within five to ten years (i.e., between 2021 and 2027).

**Leader:** each action should have one agency or organization that is responsible for initiating and guiding the action through to completion.

**Partners:** As indicated earlier, virtually every step in this process will be completed through interagency/intergovernmental partnerships. The recommendations include who those partners should be for each step.

**Funding:** Implementation of this plan will involve a variety of funding sources. These include (but are not necessarily limited to State Historic Preservation Grants, Federal Rehabilitation Investment Tax Credits, Community Development Block Grants (CDBG), Brownfield Assessment (assessment), Brownfield Cleanup / Revolving Loan Fund (RLF) (if necessary). A more complete description of funding sources can be found below.

### 1. Building Partnerships

As indicated above, the plan depends upon close coordination among a variety of agencies. Therefore it is critical to establish partnerships among those agencies as soon as possible during implementation.

#### **Action 1.1: Create Regular Meeting of Key Partners**

**Timing:** Short term

**Leader:** Town and Village of Swanton

**Partners:** All organizations listed above in the “Partnerships for Implementation” section.

**Funding:** N/A

**Discussion:** It is important that dialogue is established and maintained among all of the partners for this project. The Town and/or Village may wish to establish a regular meeting of partners to keep everyone informed of the status of the plan implementation. Meetings could be held every 3 to 6 months, depending upon the pace of implementation.

### 2. Planning and Regulatory Changes

The three catalytic sites for this project are all in the Neighborhood Commercial/Light zone. According to the 2015 Town Plan, uses defined for this zone include professional offices, clinics, neighborhood parks, and small retail shops to serve the nearby neighborhoods as well as denser residential development. Thus, it appears that the uses identified for the catalytic sites are consistent with current zoning. It may be advisable to adapt development guidelines to ensure the built environment resulting from this project serve to enhance the quality of development throughout the Town. Consequently, the Town and Village may wish to consider adopting design guidelines for the commercial areas of both jurisdictions. Samples of such guidelines are included in the appendices to this report.

#### **Action 2.1: Review status of current zoning for consistency with uses recommended in this plan.**

**Timing:** Short term

**Leader:** Town of Swanton

**Partners:** Village of Swanton, NWRPC

**Funding:** N/A

**Discussion:** The Town Zoning Administrator and Planning & Review Board should review the findings of this report to ensure that the proposed land uses are consistent with current zoning and related regulations. A preliminary review suggests the proposed uses are consistent with current zoning.

**Action 2.2: Consider adoption of development guidelines**

**Timing:** Short term

**Leader:** Town and Village of Swanton

**Partners:** NWRPC, VTACCD

**Funding:** CDBG, Municipal Planning Grant

**Discussion:** This planning project has been undertaken to stimulate development in the Northern Gateway area linking the Town and Village. As development goes forward it is important that it does so in a manner that builds upon the character of the community and sets a standard for high quality development throughout the community. The implementation of design guidelines can play an important role in the process. Even if the guidelines are suggestive, rather than mandatory, they can establish clear expectations for applicants, reducing the time and costs involved in securing local approvals. Sample design guidelines are included in Appendix C.

### 3. Re-development of Catalytic Sites

Redevelopment of underutilized sites will be successful through the combined efforts of the public and private sectors. Initially there may be some market feasibility work that should be undertaken, such as consideration of a makerspace at 5 Foundry Street and a more detailed analysis of the market for housing. The Town, NRPC and possibly FCIDC should act as intermediaries to reach out to developers regarding potential projects and public agencies that may be able to provide funding for capital improvements that would provide an incentive for development.

**The Importance of 5 Foundry Street:** The 5 Foundry Street sites is the most important and most challenging of the three catalytic sites. It represents the largest parcel and largest building included in the sites. Its long history of industrial use and its proximity to the river suggest that it is likely face the most complex environmental issues. However, it is also the most visible of the three sites, with enough room to accommodate a mix of commercial and even light industrial uses. Thus, successful redevelopment of this site is likely to have a transformative effect on the entire Gateway area. Consequently, a central requirement for successful implementation of this plan is for the Town and Village to make a long-term commitment (e.g., at least 5 years) to the successful revitalization of this key site.

**Action 3-1. Reach out to developers and landowners regarding development options and potential resources.**

**Timing:** Short-term to Long-term

**Leader:** NVEDD, FCIDC, Town & Village of Swanton

**Partners:** ACCD, NWRPC, DEC

**Funding:** N/A

**Discussion:** The essence of the redevelopment process is brokering relationships that bring developers and landowners together in a shared vision for producing an attractive, profitable project. In this case, it will mean working with partners to identify opportunities to encourage uses targeted by the plan for the catalytic sites (housing and possible office space within 6 South River Street, restaurant within 3 Depot Street, and commercial and light industry—e.g., makerspace—within 5 Foundry Street). NVEDD has extensive experience in such work and can be expected to work diligently on behalf of Swanton in this regard. On the other hand, it is important for the Town and Village to maintain a close working relationship with NVEDD and NWRPC throughout the life of this redevelopment effort to keep them abreast of new information regarding the status of the properties and any expressions of interest in the properties coming from developers and/or land owners. As mentioned above, long-term stewardship of the 5 Foundry Street site is an important component of this effort.

**Action 3-2. Prepare market studies if applicable.**

**Timing:** Short-term to Long-term

**Leader:** NVEDD, FCIDC, Town & Village of Swanton

**Partners:** ACCD, NBRC, NWRPC, DEC

**Funding:** CDBG planning grant

**Discussion:** In order to secure firm commitments from developers and/or funders, more detailed market feasibility studies may be required for the targeted uses identified for the catalytic sites.

**Action 3-5. Develop Streetscape Improvements for Northern Gateway**

**Timing:** Mid-term

**Leader:** Town of Swanton

**Partners:** NWRPC, VTrans, VTACCD, NBRC

**Funding:** Bicycle and Pedestrian Program or Transportation Alternatives (design and construction)

**Discussion:** Improving the configuration of sidewalks, crosswalks and street side plantings can encourage greater pedestrian traffic between the downtown and the Gateway area. In addition, such investments can provide encouragement for private sector investment in the catalytic sites and other areas in the Gateway.

**Action 3-4. Consider acquisition of key properties.**

**Timing:** Short-term to Long-term

**Leader:** NVEDD, FCIDC, Town & Village of Swanton

**Partners:** VEDA, ACCD, NWRPC, NBRC, DEC

**Funding:** CDBG Implementation Grant, VEDA loans



**Discussion:** It is occasionally necessary for a third party to acquire a site or an option to purchase in order to facilitate redevelopment. This can be done to enable the property to be eligible for certain loan or grant programs, to ensure that it will be developed in accord with the purposes outlined in this plan or to provide incentives for development by enabling the former owner to realize a faster return than what would be possible if he or she were to wait for a private transaction.

**Action 3-5. Perform due diligence (Phase I ESA) and enter BRELLA prior to purchase.**

**Timing:** Short-term to Long-term

**Leader:** NVEDD, Town & Village of Swanton

**Partners:** ACCD, NWRPC, DEC

**Funding:** NWRPC Revolving Loan Fund, Brownfield Revitalization Fund Loan Program

**Discussion:** As outlined in the beginning of the Implementation section, securing a Phase I Environmental Site Assessment identifies the extent and nature of the environmental liabilities found at a particular site. Should that assessment identify any recognized environmental conditions, it would be important to enroll the site in the State's Brownfield Reuse Economic Liability Limitation Act (BRELLA) program to manage the environmental liabilities so that redevelopment can take place.

**Action 3-6. Complete ongoing obligations (Phase II ESA and site clean up) as appropriate.**

**Timing:** Short-term to Long-term

**Leader:** NVEDD, Town & Village of Swanton

**Partners:** ACCD, NWRPC, DEC

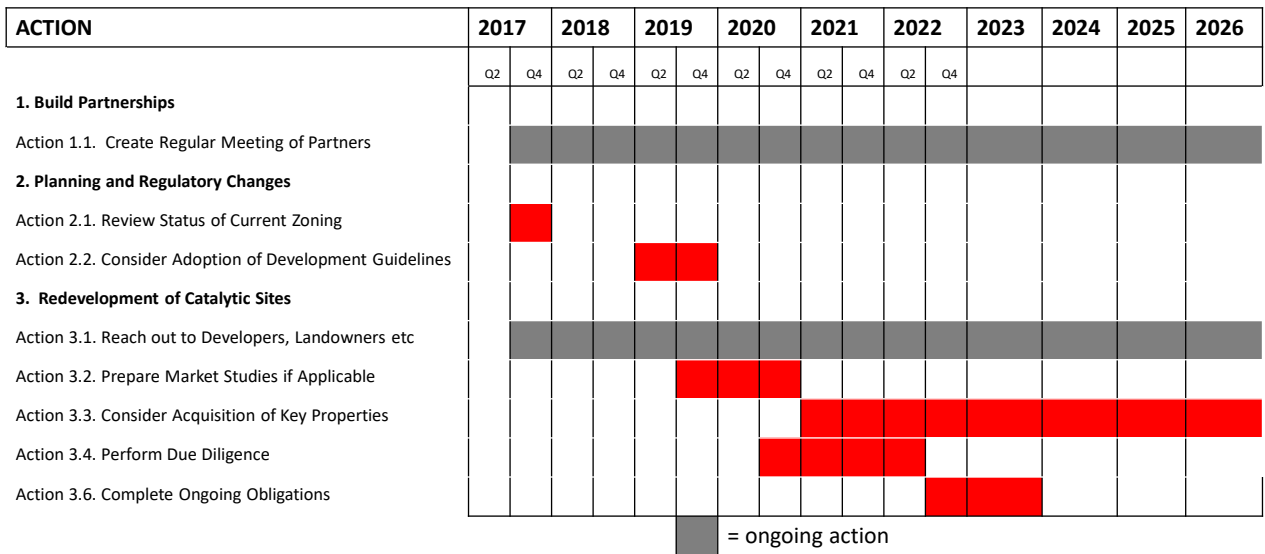
**Funding:** EPA Clean Up Grants, Brownfield Revitalization Fund Loan Program

**Discussion:** Should any recognized environmental conditions be found on any of the sites, it will be required to undertake a Phase II Environmental Site Assessment and complete requisite cleanup activities prior to enabling redevelopment to take place.

Timeline for Redevelopment

Figure 6.1 provides a conceptual timeline for redevelopment. It is intended as a guide. The time required for particular actions may vary depending upon changes in the circumstances (e.g., the availability of funding, intensity of interest on the part of developers, etc.).

Figure 6.1. Redevelopment Timeline.



## Potential Funding Sources

### Town of Swanton Programs

The following lists tools that the Town of Swanton has available, or has potentially available, to encourage economic investment in town. It is important for the Town to provide leadership with respect to encouraging investment in Swanton.

#### *Revolving Loan Fund (RLF)*

The Franklin County Industrial Development Corporation (FCIDC) operates a Revolving Loan Fund (RLF) to provide assistance to small, value-added businesses. Revolving Loan funds are available to start-up and established value-added businesses located in Franklin and Grand Isle Counties. The FCIDC RLF is unique in that the program can fund financially sound projects that cannot obtain all of the credit needed from a bank.

**Range:** \$25,000 to \$250,000

**Contact:** Tim Smith, Executive Director,  
Tim@fcidc.com, 802-524-2194

**Website:** [http://www.fcidc.com/web\\_documents/application.pdf](http://www.fcidc.com/web_documents/application.pdf)

#### *Tax Stabilization*

The Town of Swanton has offered tax stabilization to large employers in town in the past, but is unable to do so currently. Tax stabilization is intended to encourage private owners to invest in their properties and expand the Town's tax base and level of employment. Tax stabilization is typically applied to new investment and would not affect taxes on existing buildings or properties. Stabilization has been recognized in the Swanton Town Plan to be an important tool to help business that are committed to Swanton grow their workforce and expand their business.

### Brownfield Remediation and Cleanup

#### *EPA Assessment Grants*

Hazardous and Petroleum Assessment Grants are available to the Vermont Department of Environmental Conservation (VT DEC) and either municipal or regional planning organizations/commissions through an application process from the US EPA Region I Brownfield Program. As of May 31, 2016 there are six regional planning commissions that hold active Brownfield Assessment Grants, including NRPC. Assessment Grants provide funds for site assessment to discern the presence, degree, nature and extent of contamination at sites and to perform remedial planning, as necessary. As part of the grant co-operative agreement, each grantee will form a Brownfield Steering Committee that review applications from interested property owners on a rolling enrollment basis. Specific Targeted Brownfield Assessment grants are also available directly from US EPA to assess individual properties that may require a higher level of assessment.

**Range:** Up to \$200,000 per parcel

**Deadline:** Open for sub-grantees. Regional Planning Commission Applications for grant cycle begins each fall with a due date for applications in mid-December. Awards typically are announced around June 1st.

*VT DEC Technical Assistance Grant Program*

**Contact:** Patricia Coppolino, Program Manager VT DEC Brownfield Response Program

**Email:** patricia.coppolino@state.vt.us

**Contact:** Greta Brunswick, Senior Planner, NRPC

**Email:** GBrunswick@nrpcvt.com

**EPA Website:** <https://www.epa.gov/brownfields/epa-targetedbrownfields-assessment-program-brownfields-andland-revitalization-new>

**VT DEC Website:** <http://dec.vermont.gov/waste-management/contaminated-sites/brownfields>

**NRPC Website:** <http://www.nrpcvt.com/Brownfields.html>

*US EPA Revolving Loan Fund Program*

Revolving Loan Fund (RLF) grants enable states or political subdivisions (counties or regional commissions) to make low interest loans to carryout cleanup activities at brownfield properties. RLF funds are provided as low interest loans to private entities with access or control of a brownfield or as a sub grant to state, municipal or nonprofit landowners. RLF sub-grants are available up to \$200,000 per site and require a 20% match in money spent, labor, materials, or services for eligible costs. A select property can receive multiple RLF sub-grants from different RLFs. RLFs can also be paired with cleanup grants (also available up to \$200,000). The recipient may request a waiver on the cost share based on hardship. Vermont currently has four active RLFs: ACCD, Windham Regional Commission, Northwest Regional Planning Commission, and Southern Windsor County Regional Planning Commission.

**Range:** Up to \$1,000,000 per parcel

**Deadline:** Open for sub-grantees.

**Contact:** Brett Long, Agency of Commerce and Community Development

**Email:** brett.long@vermont.gov

**Website:** <https://www.epa.gov/brownfields/types-brownfields-grant-funding#tab-2>

*Cleanup Grants*

Cleanup grants provide funding for a grant recipient to carry out cleanup activities at brownfield sites. An eligible entity may apply for up to \$200,000 per parcel. Due to budget limitations, no entity can apply for funding cleanup activities at more than three sites. These funds may be used to address sites contaminated by petroleum and hazardous substances, pollutants, or contaminants (including hazardous substances co-mingled with petroleum). Cleanup grants require a 20 percent cost share, which may be in



the form of contribution of money, labor, materials, or services, and must be for eligible and allowable costs (the match must equal 20 percent of the amount of funding provided by EPA and cannot include administrative costs). A cleanup grant applicant may request a waiver of the 20 percent cost share requirement based on hardship. An applicant must own the site for which it is requesting funding at time of application. The performance period for these grants is three years.

**Range:** Grants are capped at \$200,000 per parcel  
**Eligibility:** Municipalities, non-profit organizations, and private developers  
**Deadline:** Mid-January  
**Contact:** Frank Gardner  
**Email:** gardner.frank@epa.gov  
**Website:** <http://www.epa.gov/brownfields/types-brownfieldsgrant-funding>

*Brownfield Revitalization Fund Loan Program*

Loans for remediation of brownfield sites. The funds are made available to Vermont by the EPA and eligible applicants can be private developers, non-profits, and municipalities. Funds are primarily to be used for cleanup, however they can be used to perform site assessment or characterization.

**Range:** Loans are capped at \$200,000  
**Eligibility:** Municipalities, non-profit organizations and private developers.  
**Deadline:** Rolling  
**Contact:** Brett Long  
**Email:** brett.long@vermont.gov  
**Website:** [http://www.accd.vermont.gov/business/relocate\\_expand/capital/brownfields](http://www.accd.vermont.gov/business/relocate_expand/capital/brownfields)  
<http://www.veda.org/financing-options/other-financingoption/brownfields-revitalization-fund/>

*Community Development Block Grant Program –  
Planning Grants*

Federal grants for community development planning, downtown planning studies, project development planning for individual buildings. Projects must potentially benefit people with low to moderate incomes and/or eliminate slums and blight.

**Range:** \$3,000 minimum – \$30,000 or \$40,000 maximum; \$30,000 maximum for single municipality planning grants; \$40,000 maximum allowed for regional applications. A 25% match of cash or cash in-kind goods or services is required for all Planning Grants.

**Eligibility:** Municipalities for eligible municipal projects and/ or may apply on behalf of organizations and private owners for projects with community benefit.

**Deadlines:** Open application with funding decisions made throughout the year

**Contact:** Department of Economic, Housing & Community Development

**E-mail:** [josh.hanford@vermont.gov](mailto:josh.hanford@vermont.gov)

**Website:** <http://accd.vermont.gov/community-development/funding-incentives/vcdp>

*Community Development Block Grant Program – Implementation Grants*

Federal grants for projects that involve economic development, housing, public facilities, and public services that will have direct benefit for persons of low and moderate income, eliminate slums or blight, or address an urgent need. Projects supporting normal municipal functions are not eligible. Projects in municipal facilities are eligible if they meet the benefit requirement.

**Range:** \$50,000 minimum - \$300,000 or \$1,000,000 maximum; \$300,000 maximum for community public facility projects (i.e. community centers, senior centers, day care centers, etc.) and public services projects.

**Eligibility:** Municipalities for eligible municipal projects and/or may apply on behalf of organizations and private owners for projects with community benefit.

**Deadlines:** Open application with funding decisions made throughout the year

**Contact:** Department of Economic, Housing & Community Development

**E-mail:** [josh.hanford@vermont.gov](mailto:josh.hanford@vermont.gov)

**Website:** <http://www.accd.vermont.gov>

*State Historic Preservation Grants*

State 50:50 matching grants for the repair and restoration of historic buildings listed or eligible for listing in the National Register of Historic Places in Vermont.

**Range:** \$1,000 - \$20,000

**Eligibility:** Municipalities and non-profit organizations

**Deadline:** Annually in October

**Contact:** Caitlin Corkins

**Email:** [caitlin.corkins@vermont.gov](mailto:caitlin.corkins@vermont.gov)

**Website:**

[http://www.accd.vermont.gov/strong\\_communities/preservation/grants/historic\\_preservation](http://www.accd.vermont.gov/strong_communities/preservation/grants/historic_preservation)

#### Northern Border Regional Commission.

The Northern Border Regional Commission (NBRC) invests in economic and infrastructure projects counties located along the northeastern US's northern border. In Vermont, those counties include: Caledonia, Essex, Franklin, Grand Isle, Lamoille, and Orleans. Among its several programs, the NBRC manages the Economic & Infrastructure Development Investment Program. The EID Investment Program provides Federal grants to employment generating projects. These projects have helped reduced poverty, lower unemployment, and reduce outmigration. Prioritized grant projects include those that:

- Revitalize and modernize essential infrastructure in Northern Border region communities,
- Increase access, affordability, and use of high speed telecommunications by Northern Border residents and businesses,
- Stabilize and reduce electric and thermal energy costs,
- Retain, expand and diversify business enterprise that capitalizes on the region's natural, cultural, and economic assets,
- Position the Northern Border region as an attractive and supportive place for creative and entrepreneurial people,
- Support and expand a highly productive workforce with skills suited to existing and future business needs,
- Foster entrepreneurial leadership and capacity for community economic development, and
- Inform and align local, state, and regional economic development decision making with regional data and perspectives.

**Range:** \$500,000 maximum award to eligible infrastructure projects, up to a \$250,000 maximum award for all other types of eligible projects

**Eligibility:** Public bodies, non-profits (501(c)), and state governments. Awards in Franklin County require a 50% match. Funds can be used as match for leveraging other Federal grants, up to 80% of the total project.

**Deadline:** Annually in June (June 2, 2017)

**Contact:** Katie Corrigan, NBRC Program Manager at VT ACCD

**Email:** [Katie.corrigan@vermont.gov](mailto:Katie.corrigan@vermont.gov)

**Website:** <http://www.nbrc.gov/content/vermont>

#### Transportation Infrastructure

##### *Bicycle and Pedestrian Program Grants*

The Bicycle and Pedestrian Program is administered by VTrans and provides funding for scoping, design and construction of bicycle and pedestrian facilities, including sidewalks, improved pedestrian crossings, lighting, shared use paths, etc.

**Range:** No minimum or maximum cost. Local match of 50% for scoping and 20% for construction is required.

**Eligibility:** Municipalities, RPCs, schools districts, transit agencies

**Deadline:** Annually in July

**Contact:** Jon Kaplan

**Email:** jon.kaplan@vermont.gov

**Website:** <http://vtrans.vermont.gov/highway/local-projects/bike-ped>

*Transportation Alternatives Program*

The TAP provides grant funding for scoping, design and construction of on and off-road facilities for pedestrians, bicyclists and other non-motorized forms of transportation, including sidewalks, bicycle infrastructure, pedestrian and bicycle signals, lighting and other safety and accessibility related infrastructure, environmental remediation related to transportation, community improvement related to transportation, Safe Routes to School programs.

**Range:** Up to \$300,000

**Eligibility:** Municipalities, RPCs, school districts

**Deadline:** Annually in October

**Contact:** Scott Robertson

**Email:** scott.robertson@vermont.gov

**Website:** <http://vtrans.vermont.gov/highway/local-projects/transport-alt>

*Conservation and Recreation Improvements*

*Ecosystem Restoration Grant Program*

These grants are enabled under Vermont's Clean Water Initiative and fund scoping, planning, feasibility and design, project implementation, and river corridor easements. Projects that are identified in previous scoping projects, Tactical Basin Plans, associated river corridor plans or stormwater master plans and employ green infrastructure are favored.

**Range:** Up to \$400,000 (FY 2017)

**Eligibility:** Municipalities, regional organizations, nonprofits, state agencies

**Deadline:** Annually in October

**Contact:** David Pasco

**Email:** david.pasco@vermont.gov



**Website:** <http://dec.vermont.gov/watershed/cwi/grants>

*Land and Water Conservation Fund*

LWC funds are administered by the Department of Forests, Parks and Recreation (FPR) for the acquisition of land for parks and public outdoor recreation, or development of new facilities and/or renovation of existing facilities for outdoor recreation. The

**Range:** Not specified. A 50% local match is required

**Eligibility:** Municipalities and state agencies

**Deadline:** Pre-Application in October; Full application in December

**Contact:** Jessica Savage

**Email:** [jessica.savage@vermont.gov](mailto:jessica.savage@vermont.gov)

**Website:** <http://fpr.vermont.gov/recreation/grants/lwcf>

*Recreational Trails Program Grants*

The Recreational Trails Program (RTP) is a federally funded program of the Department of Transportation's Federal Highway Administration (FHWA), administered at the State level to help states develop and maintain recreational trails, trail-related facilities and trailheads. Both motorized and non-motorized trail projects may qualify for RTP funds.

**Range:** up to \$50,000

**Eligibility:** Municipalities, other governmental entities, and non-profit organizations

**Deadline:** Pre-applications are due December 1; Full applications due February 1

**Contact:** Sherry Smecker Winnie, Vermont Forests, Park and Recreation

**Email:** [sherry.winnie@vermont.gov](mailto:sherry.winnie@vermont.gov)

**Website:** <http://fpr.vermont.gov/recreation/grants/rtp>

*Community Facility Loans and Grants*

Federal USDA Rural Development loans and grants to assist rural communities develop or improve essential community facilities, including theaters, community centers, museums, libraries, adult and childcare centers, and municipal buildings. Funds may be used for acquisition, construction or improvements to buildings and equipment.

**Range:** Grants up to \$50,000 or 75% of the project cost, whichever is less. Grant applicants must show financial need. A larger than 25 percent match for grants may be required based on the applicant's service

area population and income level (see list on website). Loans have no \$ limit and 100% financing can be provided. Interest rates are long term and fixed rates based on municipal bond rates.

**Eligibility:** Non-profit corporations and public bodies serving communities of less than 20,000 population (see list on website).

**Deadlines:** Ongoing, but contact appropriate Rural Development office early in project development.

**Contact:** USDA Rural Development

**Website:** [http://www.rurdev.usda.gov/HAD-CF\\_Grants.html](http://www.rurdev.usda.gov/HAD-CF_Grants.html)

#### *Cultural Facilities Grant Program*

The cultural facilities grant program is administered by the Vermont Arts Council in conjunction with the Vermont Historical Society, and the Vermont Division for Historic Preservation. The purpose of the program is to enhance or expand the capacity of an existing building to provide cultural programming. The program awards grants on a competitive basis to nonprofit organizations and municipalities to make improvements to community facilities that provide cultural activities for the public.

**Range:** \$1,000 - \$30,000 and require a 1:1 match. The matching funds must be either cash, or 50% cash and 50% in-kind.

**Contact:** Sonia Rae, Artist and Community Services Manager, Vermont Arts Council

**Email:** [srae@vermontartscouncil.org](mailto:srae@vermontartscouncil.org)

**Website:** <http://www.vermontartscouncil.org>

## Appendices

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Appendix A. Site Cut Sheets

Appendix B. Estimated Cost of Exterior Improvements

Appendix C. Sample Design Guidelines

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## Appendix A. Site Cut Sheets

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Address: 2 North Street

Parcel ID: NROO02

Photo of Site



Location Map



Property Details			
Current Use:	Vacant	Structures:	None
Owner:	GAW Real Estate, LLC	Parcel Size (acres):	0.76 ac.
Zoning:	Neighborhood Comm. Light	Distance to center of study area (feet):	0 ft.

**Brownfield Conditions / Environmental Status**

Former manufacturing including granary. No assessment performed of property to date.

Criteria	Assigned Score
Level of Environmental Assessment Needed (1 to 5)	4
Severity of Potential Environmental Remediation (1 to 5)	3
Uncertainty Multiplier (1 to 3)	2
<b>Total Environmental Score:</b>	<b>14</b>

**Site Selection Ranking**

*Instructions: Steering Committee members are to provide a ranking of the property for each criteria below from the given range. Lower scores indicate the site is more favorable for redevelopment for the given criteria.*

Criteria	Score
Concurrence with Town Plan (1 to 10)	
Potential to combine with other parcels (1 to 10)	
Additional Resource Availability (1 to 5)	
Potential to serve as a catalyst for other improvements (1 to 5)	

**Notes / Comments:**

**Address: 11 North Street**

**Parcel ID: NRO011**

**Photo of Site**



**Location Map**



Property Details			
<b>Current Use:</b>	Storage	<b>Structures:</b>	2,450 sq. ft. 3,050 sq. ft.
<b>Owner:</b>	Swanton Lumber Co.	<b>Parcel Size (acres):</b>	2.03 ac.
<b>Zoning:</b>	Neighborhood Comm. Light	<b>Distance to center of study area (feet):</b>	185 ft.

**Brownfield Conditions / Environmental Status**

Former manufacturing (sawmill), hardware, blacksmith, railroad, possible hazardous building materials. No assessment performed of property to date.

Criteria	Assigned Score
Level of Environmental Assessment Needed (1 to 5)	4
Severity of Potential Environmental Remediation (1 to 5)	3
Uncertainty Multiplier (1 to 3)	2
<b>Total Environmental Score:</b>	<b>14</b>

**Site Selection Ranking**

*Instructions: Steering Committee members are to provide a ranking of the property for each criteria below from the given range. Lower scores indicate the site is more favorable for redevelopment for the given criteria.*

Criteria	Score
Concurrence with Town Plan (1 to 10)	
Potential to combine with other parcels (1 to 10)	
Additional Resource Availability (1 to 5)	
Potential to serve as a catalyst for other improvements (1 to 5)	

**Notes / Comments**

**Address: 22/24 North Street**

Photo of Site



**Parcel ID: NR0022 & NW0024**

Location Map



Property Details			
<b>Current Use:</b>	Residential	<b>Structures:</b>	900 sq. ft. 600 sq. ft.
<b>Owner:</b>	Bruyette	<b>Parcel Size (acres):</b>	0.81 ac.
<b>Zoning:</b>	Neighborhood Comm. Light	<b>Distance to center of study area (feet):</b>	507 ft.

**Brownfield Conditions / Environmental Status**

Back lot included former sawmill with gasoline engine and associated underground storage tank. Possible hazardous building materials.

Criteria	Assigned Score
Level of Environmental Assessment Needed (1 to 5)	3
Severity of Potential Environmental Remediation (1 to 5)	2
Uncertainty Multiplier (1 to 3)	2
<b>Total Environmental Score:</b>	<b>10</b>

**Site Selection Ranking**

*Instructions: Steering Committee members are to provide a ranking of the property for each criteria below from the given range. Lower scores indicate the site is more favorable for redevelopment for the given criteria.*

Criteria	Score
Concurrence with Town Plan (1 to 10)	
Potential to combine with other parcels (1 to 10)	
Additional Resource Availability (1 to 5)	
Potential to serve as a catalyst for other improvements (1 to 5)	

**Notes / Comments**

Address: 3 Depot Street

Parcel ID: DP0003

Photo of Site



Location Map



Property Details			
<b>Current Use:</b>	Vacant & Residential	<b>Structures:</b>	2200 sq. ft.
<b>Owner:</b>	TR Striping & Prop. Maint.	<b>Parcel Size (acres):</b>	0.16 ac.
<b>Zoning:</b>	Neighborhood Comm. Light	<b>Distance to center of study area (feet):</b>	0 ft.

**Brownfield Conditions / Environmental Status**

Former manufacturing, former retail, possible hazardous building materials.

Criteria	Assigned Score
Level of Environmental Assessment Needed (1 to 5)	3
Severity of Potential Environmental Remediation (1 to 5)	3
Uncertainty Multiplier (1 to 3)	2
<b>Total Environmental Score:</b>	<b>12</b>

**Site Selection Ranking**

*Instructions: Steering Committee members are to provide a ranking of the property for each criteria below from the given range. Lower scores indicate the site is more favorable for redevelopment for the given criteria.*

Criteria	Score
Concurrence with Town Plan (1 to 10)	
Potential to combine with other parcels (1 to 10)	
Additional Resource Availability (1 to 5)	
Potential to serve as a catalyst for other improvements (1 to 5)	

**Notes / Comments**



**Address: 1 Depot Street**

**Parcel ID: DP0001**

Photo of Site



Location Map



Property Details			
<b>Current Use:</b>	Residential	<b>Structures:</b>	1500 sq ft.
<b>Owner:</b>	Howard RT	<b>Parcel Size (acres):</b>	0.11 ac.
<b>Zoning:</b>	Neighborhood Comm. Light	<b>Distance to center of study area (feet):</b>	165 ft.

**Brownfield Conditions / Environmental Status**

Former automotive repair, gasoline storage, possible hazardous building materials

Criteria	Assigned Score
Level of Environmental Assessment Needed (1 to 5)	3
Severity of Potential Environmental Remediation (1 to 5)	3
Uncertainty Multiplier (1 to 3)	2
<b>Total Environmental Score:</b>	<b>12</b>

**Site Selection Ranking**

*Instructions: Steering Committee members are to provide a ranking of the property for each criteria below from the given range. Lower scores indicate the site is more favorable for redevelopment for the given criteria.*

Criteria	Score
Concurrence with Town Plan (1 to 10)	
Potential to combine with other parcels (1 to 10)	
Additional Resource Availability (1 to 5)	
Potential to serve as a catalyst for other improvements (1 to 5)	

**Notes / Comments**

Address: 23 Depot Street

Parcel ID: DP0023

Photo of Site



Location Map



Property Details			
<b>Current Use:</b>	Residential	<b>Structures:</b>	1950 sq. ft.
<b>Owner:</b>	Bouthillette	<b>Parcel Size (acres):</b>	0.56 ac.
<b>Zoning:</b>	Residential	<b>Distance to center of study area (feet):</b>	205 ft.

**Brownfield Conditions / Environmental Status**

Former hotel, possible hazardous building materials.

Criteria	Assigned Score
Level of Environmental Assessment Needed (1 to 5)	2
Severity of Potential Environmental Remediation (1 to 5)	2
Uncertainty Multiplier (1 to 3)	1
<b>Total Environmental Score:</b>	<b>4</b>

**Site Selection Ranking**

*Instructions: Steering Committee members are to provide a ranking of the property for each criteria below from the given range. Lower scores indicate the site is more favorable for redevelopment for the given criteria.*

Criteria	Score
Concurrence with Town Plan (1 to 10)	
Potential to combine with other parcels (1 to 10)	
Additional Resource Availability (1 to 5)	
Potential to serve as a catalyst for other improvements (1 to 5)	

**Notes / Comments**

Address: 6 South Street

Parcel ID: SO0006

Photo of Site



Location Map



Property Details			
<b>Current Use:</b>	Residential	<b>Structures:</b>	2950 sq. ft.
<b>Owner:</b>	Martel	<b>Parcel Size (acres):</b>	0.64 ac.
<b>Zoning:</b>	Residential / Neighborhood Comm. Light	<b>Distance to center of study area (feet):</b>	135 ft.

**Brownfield Conditions / Environmental Status**

Former hotel, possible hazardous building materials.

Criteria	Assigned Score
Level of Environmental Assessment Needed (1 to 5)	2
Severity of Potential Environmental Remediation (1 to 5)	2
Uncertainty Multiplier (1 to 3)	1
<b>Total Environmental Score:</b>	<b>4</b>

**Site Selection Ranking**

*Instructions: Steering Committee members are to provide a ranking of the property for each criteria below from the given range. Lower scores indicate the site is more favorable for redevelopment for the given criteria.*

Criteria	Score
Concurrence with Town Plan (1 to 10)	
Potential to combine with other parcels (1 to 10)	
Additional Resource Availability (1 to 5)	
Potential to serve as a catalyst for other improvements (1 to 5)	

**Notes / Comments**



**Address: 2 South Street**

**Parcel ID: SO0002**

**Photo of Site**



**Location Map**



Property Details			
<b>Current Use:</b>	Residential	<b>Structures:</b>	3,100 sq. ft.
<b>Owner:</b>	Rice	<b>Parcel Size (acres):</b>	0.28 ac.
<b>Zoning:</b>	Neighborhood Comm. Light	<b>Distance to center of study area (feet):</b>	131 ft.

**Brownfield Conditions / Environmental Status**

Former manufacturing (carriage maker), possible hazardous building materials.

Criteria	Assigned Score
Level of Environmental Assessment Needed (1 to 5)	3
Severity of Potential Environmental Remediation (1 to 5)	2
Uncertainty Multiplier (1 to 3)	2
<b>Total Environmental Score:</b>	<b>10</b>

**Site Selection Ranking**

*Instructions: Steering Committee members are to provide a ranking of the property for each criteria below from the given range. Lower scores indicate the site is more favorable for redevelopment for the given criteria.*

Criteria	Score
Concurrence with Town Plan (1 to 10)	
Potential to combine with other parcels (1 to 10)	
Additional Resource Availability (1 to 5)	
Potential to serve as a catalyst for other improvements (1 to 5)	

**Notes / Comments**



**Address: 5 South Street**

**Parcel ID: S00001**

Photo of Site



Location Map



Property Details			
<b>Current Use:</b>	Residential	<b>Structures:</b>	~2,100 sq. ft.
<b>Owner:</b>	Rice	<b>Parcel Size (acres):</b>	0.28 ac.
<b>Zoning:</b>	Neighborhood Comm. Light	<b>Distance to center of study area (feet):</b>	101 ft.

**Brownfield Conditions / Environmental Status**  
Former blacksmith.

Criteria	Assigned Score
Level of Environmental Assessment Needed (1 to 5)	3
Severity of Potential Environmental Remediation (1 to 5)	2
Uncertainty Multiplier (1 to 3)	2
<b>Total Environmental Score:</b>	<b>10</b>

**Site Selection Ranking**

*Instructions: Steering Committee members are to provide a ranking of the property for each criteria below from the given range. Lower scores indicate the site is more favorable for redevelopment for the given criteria.*

Criteria	Score
Concurrence with Town Plan (1 to 10)	
Potential to combine with other parcels (1 to 10)	
Additional Resource Availability (1 to 5)	
Potential to serve as a catalyst for other improvements (1 to 5)	

**Notes / Comments**

Address: 5 Foundry Street

Parcel ID: FO0005

Photo of Site



Location Map



Property Details			
<b>Current Use:</b>	Automotive Repair, storage	<b>Structures:</b>	15,500 sq. ft.
<b>Owner:</b>	Fosgate	<b>Parcel Size (acres):</b>	0.9 ac.
<b>Zoning:</b>	Neighborhood Comm. Light	<b>Distance to center of study area (feet):</b>	218 ft.

**Brownfield Conditions / Environmental Status**

Former manufacturing (stone, foundry, ammunition), possible hazardous building materials, unidentified release of petroleum to Missisquoi in 2016.

Criteria	Assigned Score
Level of Environmental Assessment Needed (1 to 5)	5
Severity of Potential Environmental Remediation (1 to 5)	5
Uncertainty Multiplier (1 to 3)	3
<b>Total Environmental Score:</b>	<b>30</b>

**Site Selection Ranking**

*Instructions: Steering Committee members are to provide a ranking of the property for each criteria below from the given range. Lower scores indicate the site is more favorable for redevelopment for the given criteria.*

Criteria	Score
Concurrence with Town Plan (1 to 10)	
Potential to combine with other parcels (1 to 10)	
Additional Resource Availability (1 to 5)	
Potential to serve as a catalyst for other improvements (1 to 5)	

**Notes / Comments**

**Address: 45 Foundry Street**

**Parcel ID: FO0045**

Photo of Site



Location Map



Property Details			
<b>Current Use:</b>	Agricultural	<b>Structures:</b>	None
<b>Owner:</b>	Swanton Village	<b>Parcel Size (acres):</b>	13.6 ac.
<b>Zoning:</b>	Neighborhood Comm. Light	<b>Distance to center of study area (feet):</b>	640 ft.

**Brownfield Conditions / Environmental Status**

Text.

Criteria	Assigned Score
Level of Environmental Assessment Needed (1 to 5)	2
Severity of Potential Environmental Remediation (1 to 5)	1
Uncertainty Multiplier (1 to 3)	1
<b>Total Environmental Score:</b>	<b>3</b>

**Site Selection Ranking**

*Instructions: Steering Committee members are to provide a ranking of the property for each criteria below from the given range. Lower scores indicate the site is more favorable for redevelopment for the given criteria.*

Criteria	Score
Concurrence with Town Plan (1 to 10)	
Potential to combine with other parcels (1 to 10)	
Additional Resource Availability (1 to 5)	
Potential to serve as a catalyst for other improvements (1 to 5)	

**Notes / Comments**

## Appendix B. Estimated Costs of Exterior Improvements

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Proposed Adams Hotel Exterior Improvements Preliminary Cost Estimate

Windows	Quantity	Cost	Total	Say
Demo	52	30	\$1,560	\$2,000
Construction	50	510	\$25,500	\$26,000
Shutters	100	175	\$17,500	\$18,000

**Brick Work**

Construction	32	150	\$4,800	\$5,000
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**Wood Siding**

Removal	5580	0.75	\$4,185	\$5,000
Construction	5580	6	\$33,480	\$33,000
Paint	5580	0.7	\$3,906	\$4,000

**Roof**

Demo	2670	1.2	\$3,204	\$4,000
Construction	2670	2	\$5,340	\$6,000

**Fence**

Construction	35	40	\$1,400	\$2,000
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**Paving**

Construction	22	100	\$2,200	\$3,000
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**Porches**

Construction	1000	50	\$50,000	\$50,000
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**Total** \$153,075    \$158,000

**Contingency** 30%    \$198,998    \$205,400

Estimated Building Dimensions		
53	30	3180
40	30	2400
Total Square Feet		5580
<b>Porches</b>		
50	10	500
Total Square Feet		1000

- \* When possible cost estimating based on 2017 RS Means Data
- \*\* Estimate is based on conceptual plan with hypothetical information
- \*\*\* Estimate does not consider interior structural improvements
- \*\*\*\* Estimate is subject to change and must be verified by project architect
- \*\*\*\*\* Estimate is for conceptual planning purposes only



Proposed 3 Depot Street Exterior Improvements Preliminary Cost Estimate

Windows (2x4)	Quantity	Cost	Total	Say
Demo	18	30	\$540	\$1,000
Construction	18	510	\$9,180	\$9,500
Trim	32	175	\$5,600	\$5,750

Trim linear ft

Construction	196	150	\$29,400	\$30,000
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Siding (8 sides)

Removal	5142	0.75	\$3,857	\$4,200
Construction	5142	6	\$30,852	\$31,000
Paint	5142	0.7	\$3,599	\$4,000

Side Entry (3x8)

Demo	24	20	\$480	\$500
Construction	24	50	\$1,200	\$1,250

Railing

Construction	5	40	\$200	\$200
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Signage 2x15

Construction	25	100	\$2,500	\$3,000
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Front Entrance

Construction	600	50	\$30,000	\$35,000
Decorative Trim	30			
Windows 5x10	3			
<b>Total</b>			<b>\$117,408</b>	<b>\$125,400</b>

Contingency

		30%	\$152,630	\$163,020
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Estimated Building Dimensions		
44	34	2992
44	14	1232
Total Square Feet		4224
Porches		
0	0	0
Total Square Feet		0

- \* When possible cost estimating based on 2017 RS Means Data
- \*\* Estimate is based on conceptual plan with hypothetical information
- \*\*\* Estimate does not consider interior structural improvements
- \*\*\*\* Estimate is subject to change and must be verified by project architect
- \*\*\*\*\* Estimate is for conceptual planning purposes only



## Appendix C. Sample Design Guidelines

DRAFT





# Design Tool Kit

Vermont Designated Downtowns and Village Centers



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Arts festival in downtown Waterbury.



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# 1

## The Importance of Vermont's Downtowns and Village Centers

Whether they are vibrant city centers, small downtowns, or village crossroads, Vermont's downtowns and village centers provide a distinct contribution to Vermont's brand and identity. These districts are generally mixed use areas that serve the surrounding population with goods and services, visitor attractions, governmental entities, and jobs. Not a mere museum or quaint relic of bygone days, Vermont downtowns and village centers are an essential cultural and economic center.

Vermont's downtowns and village centers define Vermont's identity and brand and play a key role in our economy. These centers have been the heart and soul of Vermont for generations. This why the state created designation programs to recognize and strengthen these areas. The state targets incentives and aligns its policies and programs to both revitalize and attract new development to designated downtowns and village centers.

By designating these areas for increased public and private investment, the state reinforces Vermont's traditional development pattern and creates places where businesses can thrive and families can live close to jobs, schools, shops and transportation options. By advancing these policies, we're not only building our economy and brand - but also protecting our working landscape and important natural resources.





## 1.1 A Community Gathering Place

Downtowns and village centers have always been a place for people to come together. In fact, it was the reason most downtowns and village centers were formed. Some serve as the home to government, as market centers, as manufacturing hubs, and as visitor attractions - most serve multiple roles. Today, gatherings in downtowns and village centers range from the informal exchange of neighbors at the Post Office or a lunch among coworkers at a local restaurant to larger community festivals. It is downtown where Vermont communities celebrate. Each year downtowns and village centers play host to small gatherings, large festivals, parades, and a wide array of special events. Downtowns and village centers serve as the economic, cultural and social center of our communities.



*Chandler Center for the Arts in Randolph.*

## **1.2 A Cultural and Civic Hub**

Vermont downtowns and village centers are the clear center of culture for the community. Vermont downtowns and village centers are often the home to Town Halls, Meeting Houses, the community libraries, theaters, creative performance venues, galleries, and museums. Downtown and village centers are also a place to learn about the architecture of a community's past, the history of what made the place grow, and the people who made it special. Downtowns and Village Centers should remain the center of civic and cultural life. The presence of cultural and public facilities contributes to the economic vitality of downtowns and village centers across the state. Vermont's town halls, libraries, community theaters, art galleries and museums add creative energy, public discourse and economic vibrancy to the community.

## **1.3 A Center of Commerce**

Vermont downtowns and village centers are the community's central concentration of independent retail shops, restaurants, services, and offices unrivaled in other parts of town. In fact, nearly all Vermont downtowns and village centers are the home of the largest collection of locally owned businesses in a community. Local businesses reinvest their profits in their community. As industries across the country are looking at the health of downtown's as a barometer of a community's commitment to itself, Vermont is poised to see continued growth as properties needing investment undergo renovation, vacant parcels are redeveloped, and existing properties improved.





*Commercial District of Downtown Bennington.*



*An independent merchant in downtown Waitsfield .*

#### **1.4 An Engine for Fiscal Activity**

Unlike other states where downtown evaporated during the 60's and 70's, Vermont's downtowns and village centers remained largely intact. While some communities have seen some degree of investment relocate out of downtown a simple examination of most community's grand list will reveal that the downtown district itself represents a significant portion of the property value in the community. The health of a downtown district is an imperative to the health of a governmental jurisdiction. Vermont is fortunate that the public infrastructure in downtown remains intact and worth maintaining. But maintenance is not enough; public amenities, attractive streets and sidewalks, and creative solutions to parking should not be viewed merely as expenditures, but investments in downtown that will pay dividends in the revenues generated by the private sector.

#### **1.5 An Economic Incubator**

Small businesses and microenterprises are a main source of economic vitality and employment in Vermont. Small businesses employ over 150,000 Vermonters and make up 96 percent of the businesses in the private sector. These businesses return a larger share of their investment back into the local economy and their owners are frequently highly engaged in their communities. Downtowns and village centers are ideal locations for small businesses and micro enterprise because the spaces in downtowns are highly varied in size and rental structure. Small businesses rely on interpersonal and close business connections with fellow business owners. Downtowns and village centers offer a mixture of business types ranging from retail to office to small manufacturing allowing for a synergy of activity. A farmer's market, business incubator, community supported enterprise, art studio, and independent retailer are examples of how micro-enterprise is thriving in downtowns and village centers across the state.





A retail storefront in Brattleboro with residential above.





*Vermont Country Store in Weston.*

## **1.6 A Residential Alternative**

New and renovated housing located in downtowns has become a huge national trend—not only in big cities but also in small towns. Vermont downtowns and village centers are no exception. Many downtowns and village centers have seen new or renovated residential units locate in the community center. Nearby neighborhoods also enjoy the benefit of reinvestment because of their proximity to a downtown. Frequently, renovated and new downtown housing units are particularly appealing to young professionals and empty nesters where residents are looking for an active lifestyle in a dynamic location.

## **1.7 A Visitor Attraction**

Tourism is a critical industry for Vermont. Shopping and dining are one of the key activities that visitors partake in when they travel. Downtowns and village centers are frequently the most often sought out destinations for these activities. Special events, markets, destination restaurants and specialty stores play host to many visitors each year whose impact on the economy is very real. Visitors to Vermont spend almost \$2.5 billion per a year and employ more than 30,000 Vermonters annually.





*State and local downtown professionals on a tour of downtown Waterbury.*

## **1.8 An Essential Partnership**

The success of our downtowns and village centers doesn't happen by accident. It is the result of a collaborative effort among many partners including town leadership and volunteer boards, local chamber of commerce, downtown organizations, and regional and state entities. Many Vermont downtowns benefit from a dedicated downtown organization led by a collaboration of volunteers and in some cases a professional director wholly dedicated to making downtown successful.

The State of Vermont is committed to its downtowns and village centers. A small but highly professional staff supports economic vitality in downtowns and village centers at the state level. Dedicated funding has been allocated for downtown and village center vitality. Partner groups exist to provide additional support to the Vermont communities. These include but are certainly not limited to the Preservation Trust of Vermont, the Vermont Natural Resource Council, the center for Rural Studies at the University of Vermont, the Regional Planning Commissions and the Regional Development Corporations.





Brandon Inn in Brandon.

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# 2

## The Vermont Vernacular

The state's traditional community centers range in size from tiny hamlets with a cluster of homes and a storefront or meeting house, to villages with small downtowns and residential neighborhoods, to larger urban centers such as Burlington, Montpelier, Rutland, and St. Johnsbury with vibrant downtowns.

The Vermont State statute describes a downtown as "the traditional central business district of a community that serves as the center for socioeconomic interaction, and is characterized by a cohesive core of commercial and mixed use buildings, often interspersed with civic, religious, and residential buildings and public spaces." A village center is defined as "the core of a traditional settlement, typically comprised of a cohesive mix of residential, civic, religious, commercial, and mixed use buildings, arranged along a main street and intersecting streets that are within walking distance for residents who live within and surrounding the core."

Most of Vermont's downtowns and village centers date from the mid-nineteenth century to the early twentieth century in an era where walking was a principal form of transportation and incremental growth through self-reliance was the norm. Many of the buildings constructed during this time were designed to last while others were more humble. Vermont's village centers and downtowns are cherished treasures that reflect the culture and heritage of the state.





*Center Street in downtown Rutland.*

## **2.1** Downtowns

Vermont downtowns take many different forms. Some like Barre and Burlington have a linear principal street that is gridline straight or running along a waterway like Montpelier and Brattleboro, others such as Bristol and Middlebury, and have several principal streets arranged around a green space. Downtowns are typically larger in scale than village centers and are characterized by a traditional development pattern and creates places where businesses can thrive and families can live close to jobs, schools, shops and transportation options.



*Village Center in Danville.*

## **2.2 Village Centers**

Vermont village centers typically have a more rural character that is more spread out or smaller in concentration. The scale and size of village centers varies across the state. Some village centers have only a handful of shops and public buildings while others have a more pronounced center that quickly blends into the surrounding rural landscape. While others, such as Hardwick and Woodstock, have a larger critical mass of buildings either arranged along a principal main street or organized around a central community space, such as a village green or common.





### 2.3 Two Story Commercial

Two story commercial buildings in Vermont predominate both in smaller downtowns and village centers. Frequently, these buildings were retail on the ground floor with living space upstairs. Many two-story frame buildings remain in communities across the state but others are made of brick or stone. Well preserved two-story commercial buildings have a distinct storefront on the ground floor and smaller windows on the upper floors. These buildings provide opportunities for small business owners, artists, and other creatives to live above their business, foster entrepreneurship and ignite creativity.



## 2.4 Multi Story Commercial

In many larger Vermont downtowns and village centers multi-story buildings predominate though they frequently never exceed four stories in height. Communities like Brattleboro, Barre, and Montpelier have significant blocks of multi-story buildings usually constructed around the turn of the century and frequently featuring multiple bays and brick facades. Studies show that downtown, mixed-use, multi-story buildings have high value, providing up to five times the property tax revenue as conventional single-use commercial establishments on the outskirts of town.





*Townshend Common.*

## **2.5 Village Greens, Town Commons and Squares**

Vermont's village greens (commons and squares) serve as the physical, historic, and cultural heart of many communities - hosting concerts, fairs, parades, seasonal festivals, and farmers markets. They provide residents and visitors a place to gather, exercise, recreate, celebrate, and engage in commerce and community. Integral to the Vermont brand, village greens and commons anchor and strengthen our communities, and make our cities and towns more attractive places to live and work. Vermont downtowns and village centers are the site of iconic green spaces like Taylor Park in St. Albans, the Common in Northfield, the village green in Woodstock and Court Square in Middlebury.

A new partnership, the Vermont Village Greens Initiative, is working to document, showcase, and revitalize these shared public spaces to assure that future generations enjoy the economic, cultural, and social benefits Vermont's village greens provide. The Village Green Initiative is reviving awareness about Vermont's village greens and the important cultural and economic role they play. For more information, about village greens and commons in Vermont, visit [http://accd.vermont.gov/strong\\_communities/opportunities/revitalization/village\\_greens](http://accd.vermont.gov/strong_communities/opportunities/revitalization/village_greens)





*Terminating Vista along Stowe Street in Waterbury.*

## 2.6 Terminating Vistas

One remarkable feature of many Vermont downtowns and village centers are the terminating vista at the end of a principal street. Whether it is the iconic First Unitarian Universalist Church in Burlington, the Federal Style Reservoir building at the end of Stowe Street in Waterbury, or the Youth Triumphant Statue in Barre terminating vistas create a unique feature of downtowns and village centers across the state.





City Hall in Montpelier.





## 2.7 Civic Buildings

Most Vermont downtowns and village centers have iconic civic buildings dating from as early as the late 18th century to the early 20th century. These buildings were constructed to reflect the prosperity and pride that each community had. Consequently, they range from modest meeting houses in small village centers to grand city halls and public libraries in prominent downtown locations.





*Village Green Market in New Haven.*

## **2.8 The Country Store**

For many villages in Vermont, the country store is the single most important building in the community. It can serve as a meeting place, a post office, a place to buy day-to-day necessities, and the source of news about the community. Country stores are the cornerstone of many communities, offering a place of commerce and community in Vermont's small downtowns and village centers.



*Stone Wall in Warren.*



*Sculpted granite bike rack in Barre.*

## 2.9 Stonework

Stonework is very common in Vermont's village centers and downtowns. Whether it is stacked stone on a bridge abutment in Warren, stone buildings in many downtowns and village centers, or carved granite and marble in statuary, curbing, and bridges stone is a very frequent feature of downtowns and village centers across the state. Vermont's stonework is a cultural legacy of the granite, marble, and stone industry across the state.





BRISTOL  
Bakery  
&  
Café

  
CONNER & BUCK  
DESIGN-BUILD CONTRACTORS

Downtown Bristol.

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# 3

## Education and Outreach

One of the most important roles a community can do to make good design happen is by encouraging and promoting quality design in their downtown and village center. A local town's planning commission or development review board, the regional planning commission, the downtown organization's design committee or the local design community are great resources to provide educational and outreach opportunities. Education can take many forms and provides a way to engage the public, property owners, investors, and shopkeepers about the importance of design in making a vibrant downtown and village center.





Downtown Springfield street scene.



### 3.1 The Main Street Approach

The National Main Street Center has developed the Main Street Four Point Approach® as a grass roots approach to downtown revitalization that provides a framework to build community pride, foster investment in downtown, and encourage partnerships for ongoing success. The Main Street Four Point Approach® uses the following:

- **Organization** - Establishing and maintaining a non-profit organization or appointed municipal commission that works in partnership with the public and private sectors to plan and implement a comprehensive downtown revitalization strategy.
- **Economic Restructuring** - Strengthening and improving a downtown's economic assets and fulfilling its broadest market potential.
- **Design** - Enhancing and improving the physical appearance of a downtown by addressing all design elements to create an appealing environment.
- **Promotion** - Creating and marketing a positive image of the downtown district and attracting people to socialize, shop at local businesses and restaurants, and enjoy local history and culture.

Ideally each of the points will have a committee of volunteers from a cross section of the community to champion the initiatives.





*Committee discussion in Brattleboro.*

### **3.2 The Design Committee**

Vermont Designated Downtowns are required to have an organization or municipal commission that supports the Main Street Four Point Approach. These downtown organizations and commissions create a design committee to support the community revitalization efforts. The Design Committee plays a pivotal role in community appearance. The committee, working hand-in-hand with partner committees, the local government, private investors, and other partners can have a critical influence on quality of downtown improvements. Many design committees work on beautification projects, others manage façade improvement programs, still others commission design studies and champion overall plans. A well-organized design committee should have a program of work that looks at short, medium, and long-term steps to overall design quality in a community.





*Downtown Northfield.*

### **3.3 The Importance of Design**

The importance of urban design cannot be underestimated and the examples are too numerous to mention. In sum, good design adds value to a downtown by creating a place where people want to be. High design quality emphasizes making places people love, and includes connecting to and embracing assets in your downtown or village center for public use and public life. The quality of the public environment can make the pedestrian experience memorable, creating a positive image, a sense of community pride, a desire to linger and a desire to return.

Design is the craft of making sure that deliberate decisions are made in the built form that contributes to the quality of a community and adds lasting value. In Vermont, the earliest builders of communities contemplated design: whether it was the location of a church on a town green, the sturdy craftsmanship of a covered bridge, or even the humble store front in a village, design played a role in making sure that each building, public park, sidewalk, and street contributed in some way to the improvement of the place people called home.

In communities, design reinforces the history of a place, facilitates community interaction, supports economic development, and encourages quality investment that will last for generations.





Resource team on a walkabout in Barre.

### 3.4 Walkabouts

One of the most effective ways of learning about design is to move out of the conference room and into the street. Just walking through an area can provide volunteers and citizens an opportunity to slow down and really study their community. Pointing out architectural details, streetscape features, public gathering places, signs, and art provide a way to see the community in a new light. A good look at the community should reveal both the design assets and challenges in a place.

### 3.5 Awards

Recognizing property owners, businesses, volunteers, and public agencies who work on good design through awards is a time tested way to educate the community, bring attention to good design, and encourage others to follow the lead of those implementing good design in the community.

### 3.6 Training

Training programs can provide a great resource for a community. From learning how to clean brick to what kind of trees are suitable in a downtown or village center setting provide opportunities to engage and educate the community. These programs can be informal gatherings and meetings or more organized events that welcome the public. Some training ideas include:

- Design Committee Training
- Principles of Infill Design
- Creating Great Public Spaces (Parks, Plazas, Trails, Open Spaces, etc.)
- Design as an Agent for Community Change
- Making a Great Façade - Grants and Tools

For more information about training opportunities, contact Richard Amore, [richard.amore@state.vt.us](mailto:richard.amore@state.vt.us) with the Vermont Department of Housing and Community Development.





Public meeting in Wilmington.

### **3.7 Public Events Scavenger Hunts**

Public events can take on a more fun and dynamic approach. Scavenger hunts to find architectural details and public art to historic walking tours provide a way for people from the community to see it in a new light.

### **3.8 Building and Photo Inventories**

Building inventories and photo collections of a community are another way to collect and understand the design details of a place. These photos can be categorized by locale or by topic: windows, storefronts, awnings, signs, green space. Building photo inventories are also a great method to document changes over time and raise design awareness in your downtown and village center.





City Hall Park in Downtown Barre.

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# 4

## Public and Private Properties

Principals of good design are easy to understand and should be implemented on public properties such as streets, sidewalks, open spaces, and parks; on private properties whether they are improved storefronts, façades, or new development; and where downtowns and village centers connect to nearby neighborhoods. This section will provide a broad overview of good design principles for each area.





*Bridge Street Butchery in Waitsfield.*

#### **4.1 Existing Buildings**

Attractive building facades are one of the most important components of a downtown or village center. Facades welcome customers, provide for display of merchandise, and denote that a commercial district exists. Some simple design principals should be followed:

- Whenever possible have an active storefront with display windows and doors.
- Pay attention to the color of adjacent buildings. Often, downtowns and village centers look their best when buildings follow a color scheme that takes complementary colors and places them next to one another.
- Use different colors to accent architectural details of a building.
- Signs should fit within existing signboards. Many commercial buildings were designed to incorporate signage. These spaces should be respected when new signs are installed. Creative and well crafted signs will have a strong impact on the community.
- Awnings should fit within existing openings.
- Pay attention to the building from top to bottom. Most commercial buildings follow a classical design pattern with a base, a middle, and a top (called the cornice).





## 4.2 New Development

Some key design elements of infill and new development in a downtown or village center are:

- Orient the building to the street edge. Buildings should respond directly to the street in most downtowns and many village centers. In some cases (especially in more rural areas) a front yard may be a component of the building.
- Have your main entrance open onto the public sidewalk.
- Place parking to the rear of a building when possible.
- Buildings should create active street frontages with doors and windows oriented towards the sidewalk. Long blank walls, without windows and doors interrupt the flow of a commercial district.
- In the case of multiple buildings, new development should respect and create a relationship among them. Sometimes this is simply respecting the adjacent buildings design, other times buildings can be connected together with open spaces, plazas, and gathering spots.
- New development should follow appropriate scale and rhythm within the district. New development should be sensitive to the historic architecture and surrounding context. This can be done even with a contemporary style infill building.





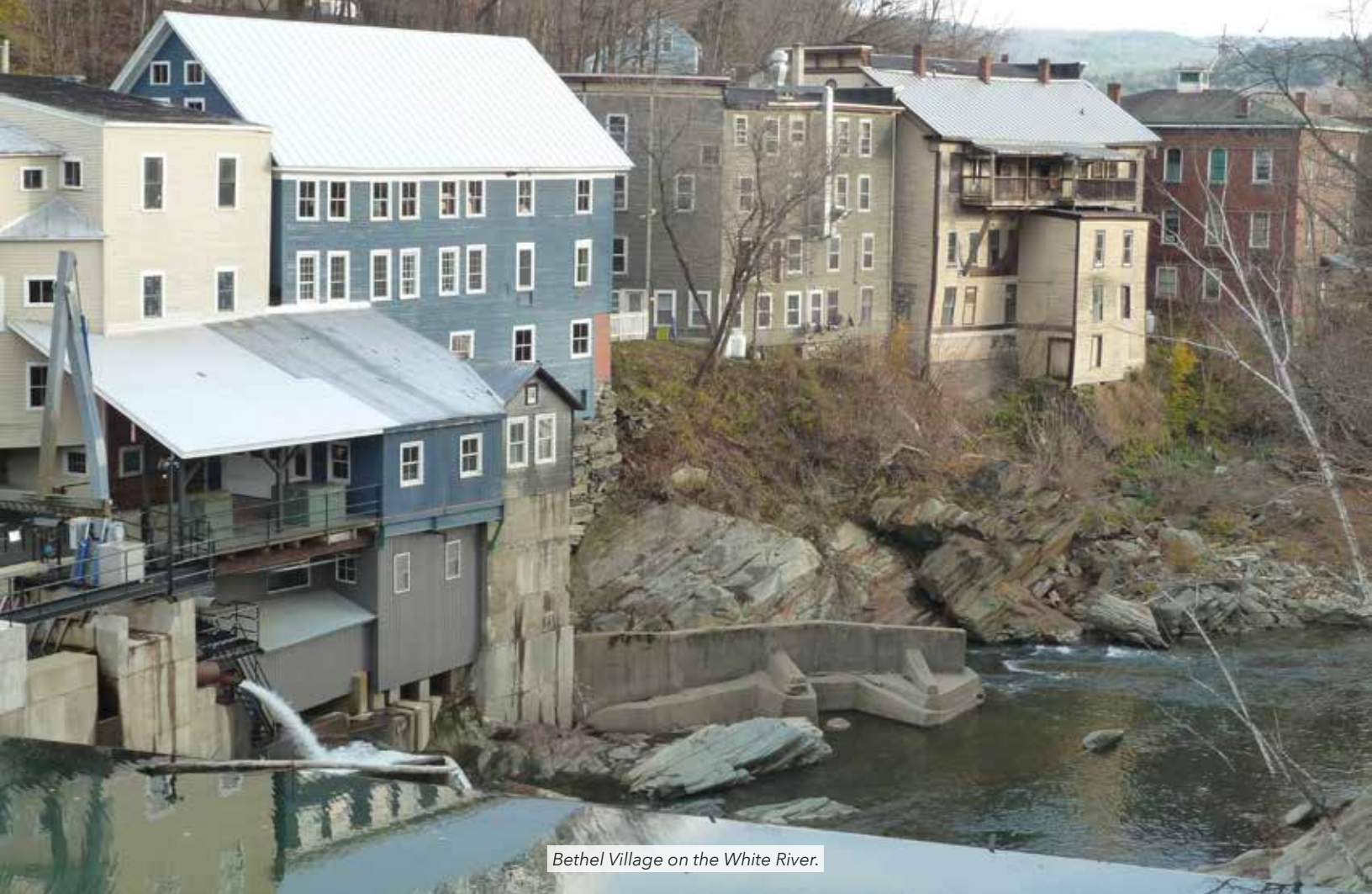
Master plan drawing of St. Albans showing appropriate infill buildings.

### 4.3 Public Realm

The public realm is the space between the structures in a community. It is the street, the parks, the open spaces, the sidewalks, and the plazas. The public realm should consider the following design elements:

- Improvements like plantings, street trees, and public art greatly enhance the public realm. These can range from modest impromptu art installations to grand statues and from detailed gardens to simple flower boxes.
- Streets should focus primarily on the pedestrian in the Vermont downtown and village center. Crosswalks, sidewalks, and a comfortable walking environment are critical to the success of a vibrant commercial center.
- Sidewalks can incorporate details such as brick or granite but that isn't a requirement for a quality street - simple concrete that clearly identifies where the pedestrian can feel comfortable is enough in many communities.
- Street furniture should be of high quality and designed to last. These investments should thoughtfully consider community character.





*Bethel Village on the White River.*

#### 4.4 Resilient Downtowns and Villages

Vermont downtowns, by and large, were built near water. It was the life source for early settlement and an important feature of many communities. Consequently, floods have been a factor in downtowns for hundreds of years. Tropical Storm Irene and the spring floods of 2012 highlighted the vulnerability of Vermont's downtowns and village centers to flooding.

While it is impractical and unthinkable to relocate Vermont's communities away from the water that defines them, incorporating flood resilience strategies can ameliorate future damage. Items such as rain gardens, pervious pavement, and thoughtful retrofitting of buildings to withstand a flood event all contribute to a more resilient and environmentally sensitive downtown. In addition, a critical tool in making our downtowns and village centers more resilient is by protecting and restoring existing floodplains and wetlands up stream. For more information, about how to reduce flood risk to downtowns and village centers, visit Vermont's Flood Ready website, [http://floodready.vermont.gov/improve\\_infrastructure/adapt\\_infrastructure](http://floodready.vermont.gov/improve_infrastructure/adapt_infrastructure)

Some steps to floodproof buildings by:

- Relocating major furnace and water heating systems above flood level.
- Installing water resistant electrical cables.
- Floodproofing and sealing holes.
- Installing backflow valves into sewer and septic lines.
- Floors resistant to hydrostatic pressure to resist buckling during a flood event.
- High perimeter walls of the foundation that rise above the floor slab.
- Impact protection on vulnerable building faces and corners that prevent debris from damaging the building.
- Water resistant construction material that acknowledges that water may penetrate a space but can minimize damage to the building such as replacing gypsum wallboard with cement board.
- Floodgates and door dams at doorways and windows that can be raised in the event of a storm.
- Installing a discharge pump to help remove water during a flood.





*Bioswales at the Brattleboro Co-op.*

#### **4.5 Green Stormwater Infrastructure**

Many of Vermont historic downtowns and village centers are located along rivers and in floodplains. Typically, these sites relate to a town or region's economy and contribute to the attractive character of these historic commercial centers. However, the result is an urgent need to address stormwater, improve water quality and mitigate flooding through Green Stormwater Infrastructure and other flood mitigation strategies. Green Stormwater Infrastructure (GSI) relies on natural and semi-natural systems to infiltrate, treat and store water in dispersed locations throughout the landscape, and can make our communities more resilient. Green infrastructure helps retain and/or reuse stormwater and is often less costly and more environmentally friendly than traditional stormwater treatment. Green stormwater infrastructure can be incorporated into downtowns and village centers to improve water quality, reduce the risk of flooding and add vibrancy to the streetscape. Some GSI solutions include:

- Permeable pavement, sidewalks, and parking lots.
- Rain gardens, bioswales, and planter boxes in streetscapes and in parking lots.
- Street trees (and perhaps Silva Cells) that provide on-site stormwater management.
- Green roofs can reduce volume and velocity of stormwater runoff.
- Rain Barrels or Cisterns.





*Downtown Neighborhood in Brandon.*

#### **4.6 Neighborhood Design and Revitalization**

Neighborhoods are critical to the success of downtowns and village centers. Fortunately, Vermont's communities have preserved surrounding neighborhoods and reintroduced housing (both affordable and market rate) into vacant upper floors in downtowns and village centers.

Vermont offers a Neighborhood Development Area designation that encourages municipalities and/or developers to plan for new and infill housing in the area within walking distance of its designated downtown and village center. The goal is that "rooftops" and the people that inhabit these homes are the economic engines of the downtown and village center. For more information about the Neighborhood Development Area designation, visit: [http://accd.vermont.gov/strong\\_communities/opportunities/revitalization/vermont\\_neighborhoods](http://accd.vermont.gov/strong_communities/opportunities/revitalization/vermont_neighborhoods).



*A variety of Vermont community brands.*

#### **4.7 Community Branding and Marketing**

Often overlooked, consistent marketing and branding can go a long way in reinforcing the design of a community. Community branding is an essential part of fostering the sense of place that keeps residents interested in downtown and that makes the community an attractive destination for visitors, potential residents and investors. Good community branding can have a number of positive impacts: it can increase exposure for existing businesses and be a recruitment tool in building a more complimentary business mix. It can also boost retail traffic and attract residents to the downtown area. Successful branding can aid downtown and community organizations, increasing both volunteerism and giving, by increasing the credibility of revitalization efforts.

A well-crafted community branding system can promote a downtown/village center and support its vitality. Community branding could create logos, taglines and environmental graphics such as wayfinding signs and gateways that are consistent with the community brand, and be informative to residents and visitors alike. Individual businesses can cultivate their own brand with thoughtful storefronts, well-crafted signs, and inviting places to welcome customers.





#### 4.8 Visual Audits

A visual audit is a way for a downtown or village center to take stock not only of what the storefronts look like from the exterior but also to examine the merchandising “behind the display window.” While a storefront may look nice on the exterior, the interior merchandising drives consumer sales and creates stronger browsing atmosphere for a downtown or village center. Frequently, visual audits are done by visual merchandising professionals who can provide advice to shopkeepers. A visual audit could also happen through an “exchange” program between two experienced merchants in different communities to avoid the awkwardness of a “self assessment” of a storefront. The result of the visual audit would be guidance on merchandising, visual displays, and decor to create a more inviting environment to shop and dine.





*Examples of maintenance issues.*





#### 4.9 The Importance of Maintenance

Regular maintenance helps to preserve buildings and property, protect real estate values and investments and keeps downtowns and village centers attractive places to live, work and visit. Maintaining and repairing historic buildings are essential parts of downtown revitalization.

A community only gets one chance to make a first impression. Those impressions are very important to a visitor when entering a downtown. The appearance of the buildings, the streets, sidewalks, the streetscape all are factors in the decision making process of whether a visitor will stop and visit or just keep driving on to the next community.

Maintaining and repairing downtown buildings and streetscapes are essential parts of downtown revitalization. It's what keeps downtown vibrant. A building is typically an owner's largest single investment. One of the best ways to help a building retain its value in the community is to implement a regular and preventive maintenance schedule. The cost of maintaining a building is substantially less than having to rehabilitate a building due to lack of maintenance. Maintenance is preservation.

Simple maintenance tasks quickly become large renovation problems if left unattended. Lack of regular upkeep can result in accelerated deterioration of building elements and features. Buildings that are not maintained do not contribute to the Buildings that are poorly maintained project a negative image of your community and can slow down your revitalization efforts.

Many communities have developed creative ways to help maintain buildings whether through facade grants (mentioned separately in this toolkit), events like "A Quart and a Pint" that get volunteers out to do improvements and celebrate with local craft beer, or before and after renderings to show what a building could look like with improvement.





*Parklet in Montpelier.*

#### **4.10 Placemaking**

Placemaking is a way to make your village or downtown a better place to live and work by transforming underutilized public spaces into vibrant community places. As a place becomes more desirable and welcoming, property values increase, businesses thrive and vitality returns. Turning a parking lot into a farmer's market or food truck rally. Attracting people to a little-used park to gather, play or listen to music. Brightening up a vacant lot or underutilized space. Envisioning how a block can be revitalized or how a parking space can become a parklet. This is Placemaking.

Placemaking is a community and economic development strategy that capitalizes on local assets to create appealing and unique places where people want to live, work and play. Many of Vermont's downtowns and village centers are undertaking placemaking initiatives from a parklet in Montpelier, to a pop-up park in Middlebury, or food truck rallies in Burlington and art installations in Brattleboro.



Aldrich Building in Barre.

**CORNERSTONE**  
PUB & KITCHEN

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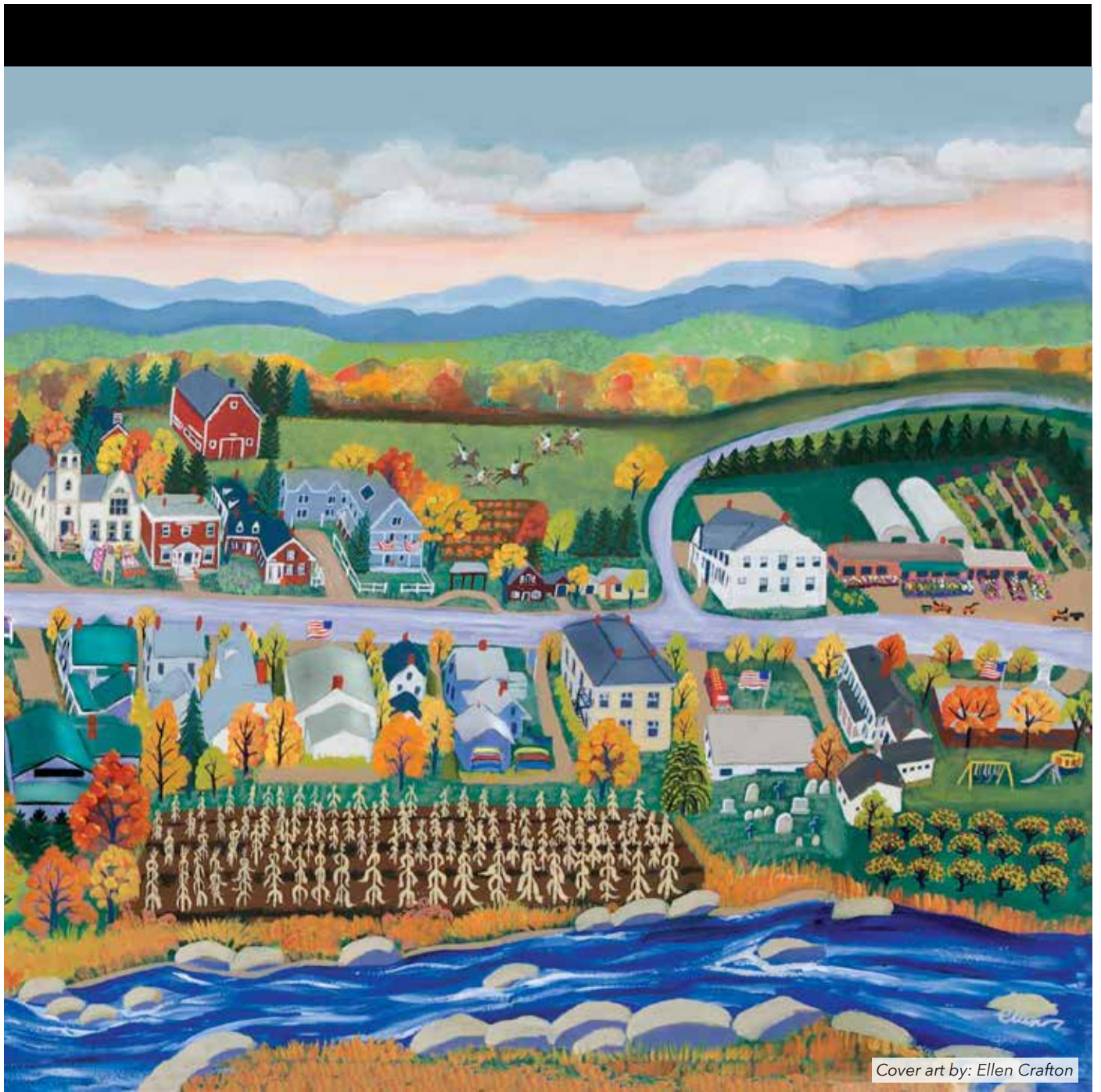
# 5

## Planning

Planning play a significant role in whether or not communities create well-designed villages and downtowns that attract residents, businesses, and visitors. Both people and businesses are attracted to vibrant downtowns and village centers that are committed to developing quality places that are designed and planned well.

Vermont's primary land use goal is "To plan development so as to maintain the historic settlement pattern of compact village and urban centers separated by rural countryside." Vermont's landscape of compact centers surrounded by rural land is integral to our economy, community spirit and what makes our state distinctive.





Cover art by: Ellen Crafton

# Waitsfield Town Plan

Adopted October 22, 2012

Waitsfield Town Plan cover.





## 5.1 Planning Tools

**The Municipal Plan** - If there is any single document that is essential to defining and implementing a community's roadmap for the future, it is the municipal plan. The plan is a guide for accomplishing community aspirations and intentions through public investments, land use regulations and other implementation programs, such as village center master plans, zoning bylaws and downtown improvement districts. The municipal plan can set the stage for future downtown/village center improvements and strengthen the connection between town planning and community revitalization. The municipal plan serves as a long term guide, a basis for community programs and tax payer investment, a basis for municipal regulatory action, a source of information about the community, and a source for community standards in regulatory proceedings at the state and regional levels.

**Downtown and Village Center Master Plans** - These present a community-driven vision of the built environment for a downtown/village center for the next 10 years. Frequently, these plans are illustrative in nature and address detailed improvement strategies for both the public realm and the private sector. A successful master plan will also include an extensive public engagement process. Frequently, these plans can range from the highly visionary long-term plans to an immediate master plan for a highly specific geography.

**Neighborhood Plans** - These can impact downtowns and village centers as well because healthy downtown neighborhoods contribute to a strong central business district. Neighborhood plans engage neighbors in a process to evaluate ways to enhance their community through improved connectivity, rehabilitation of ageing housing stock, or additional housing, and the introduction or improvement of parks and open spaces.





*Sensitive Infill Development on Main Street in Burlington.*





## 5.2 Regulatory Tools

Regulatory tools are one of the key methods to implement the municipal plan. Traditional zoning bylaws is the most common way that communities have regulated land and property development in the community. Zoning, by and large, dictates the use of property as well as the placement of structures on land. More recently, form-based codes has replaced or been used along with traditional zoning as a regulatory tool. Rather than concentrating on use, form-based code examines the design qualities of development to ensure compatibility with the surrounding areas. Some communities have created a hybrid of traditional and form based codes.

While zoning regulates the use of property, communities can enact maintenance ordinances that regulate the condition of properties. Building codes are nearly universally used to ensure life and safety issues in newly constructed or renovated public or commercial buildings.



### 5.3 State Designation Programs

Vermont's landscape of compact centers surrounded by rural land is integral to our economy, community spirit and brand. Vermont has established a unique framework of "designations" that recognize these centers and provides incentives to encourage communities to maintain and augment them. Vermont has five designation programs, downtown, village center, new town center, neighborhood development area, and growth center designation. These programs also help align our environmental, housing, and transportation policies, programs, regulations, and public investments to maintain and enhance the landscape cherished by Vermonters and visitors alike. State designation employs two powerful concepts for improving communities:

- Targeting our limited resources to invest in places where it can do the most good.
- Aligning those resources in places where state, regional and local policies agree that investment should occur.

This harnesses efforts of government at all levels, pooling resources to help restore historic buildings, create safe and pleasant pedestrian streets, revive local businesses, strengthens the economy, and build neighborhoods that meet community needs.



*Existing design in Waitsfield.*



*Design Concept.*

## 5.4 Design Guidance

Many communities provide some degree of design guidance within designated areas (typically but not exclusively historic areas). Some communities use design review boards, design control district or local historic districts overseen by a reviewing body that will ensure that the design of renovations or new construction is in keeping with the community's desired appearance.

Some communities opt to prepare a design guidelines or a "pattern book" that provides guidance for development without regulatory power. Design Guidelines and pattern books offer a way for smaller communities to influence quality investment without creating a regulatory body.





Morrisville.

---

# 6

## Motivating Good Design – Incentives

There are many ways to encourage good design for Vermont's downtowns and village centers. These range from local initiatives to state grants and loans to federal programs. The following list is designed to provide an overview of incentives and opportunities that can assist village center and downtown revitalization efforts. The list is not exhaustive, but provides guidance on opportunities for Vermont communities.



Community presentation Barre.

## 6.1 Key partners

Many of the state grant programs provide dedicated staff that provide technical assistance to downtowns and village centers seeking to make improvements to their communities. The State Designation Program provides even more access to training, one-on-one consultation, and advanced assistance with funding to help revitalize your downtown or village center. Local municipalities and regional planning commissions are key partners for the success of your downtown and village center. Some other key partners include, but are certainly not limited to, the Preservation Trust of Vermont, the Center for Rural Studies at the University of Vermont, the Vermont Natural Resource Council, the Regional Planning Commissions, and the Regional Development Corporations.

Private sector partners are also critical to the success of any downtown or village center program. These partners can range from key property owners, generous individuals and families, corporate partners, and private foundations.





Main Street in Waitsfield. (Current condition)



Main Street in Waitsfield. (Potential rendering)

## 6.2 Local Tools

Vermont towns, villages, and cities can encourage good design through incentives at the local level. These incentives cover a wide array of potential services and funds and can be scaled to suit the budget and size of the community. Among the most frequently used local tools are:

- **Design services** - Design services from local professionals is an excellent tool to provide assistance to local business and property owners when they explore renovating a building or creating a great window display. Some communities provide a stipend for a design professional consultation.
- **Façade Grants** - Façade grants can take many forms. The most common façade grant is an ongoing fund that provides a matching grant to private property owners seeking to invest in their buildings. The grants vary widely in amount depending on the size and budget of a community. Other façade grants focus on a particular component of a building such as awnings, signs, or doors. The most advanced form of façade grant uses an easement with a number of buildings to create multiple façade renovations in a short period of time.
- **Loan Programs** - Some communities provide loan pools for building improvement with favorable terms, second position financing to secure traditional bank financing, and revolving loans.
- **Easements** - Easements provide private property owners ways to expand the use of their buildings. Many easements allow for outdoor dining and merchandising.
- **Downtown Improvement Districts (DID)** - DIDs are special assessments made on downtowns where the additional tax revenues are dedicated to improvements within that district.

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## 6.3 Vermont Tools

The State of Vermont offers an array of tools and incentives to encourage investment in downtowns and village centers throughout the state. Some of these are linked to downtown and village center designation; others are linked to Federal programs, and some are stand-alone programs. The following is not designed to be an exhaustive inventory but rather a synopsis of tools available:

- **Downtown and Village Center Tax Credit** - State investment tax credit for qualified historic rehabilitation, façade, code and technology upgrades for properties constructed before 1983 located within a Designated Downtown or Village Center.  
[http://accd.vermont.gov/strong\\_communities/opportunities/funding/downtown\\_village\\_tax\\_credit](http://accd.vermont.gov/strong_communities/opportunities/funding/downtown_village_tax_credit)
- **Sales Tax Reallocation Program** - Municipalities and the developer of a qualified project may jointly apply for a reallocation of sales taxes on construction materials. Qualified projects must be located within a Designated Downtown and reallocated taxes must be used by the municipality to support the qualified project. Projects are awarded on a competitive basis.  
[http://accd.vermont.gov/strong\\_communities/opportunities/funding/salestaxreallocation](http://accd.vermont.gov/strong_communities/opportunities/funding/salestaxreallocation)
- **Community Development Block Grant Program** - The Community Development Block Grant Program can fund an array of improvements for downtowns including the following:  
[http://accd.vermont.gov/strong\\_communities/opportunities/funding/vcdp](http://accd.vermont.gov/strong_communities/opportunities/funding/vcdp)
  - **Accessibility Modification Grants** - Federal grants to bring existing municipal buildings and non-school libraries into compliance with the Americans with Disabilities Act (ADA).
  - **Implementation Grants** - Federal grants for economic development, housing, public facilities, and public services that will benefit low/moderate income individuals, eliminate slums or blight, or address an urgent need.
  - **Planning Grants** - Federal grants for community development planning, downtown planning studies, and project development to benefit people with low to moderate incomes and/or eliminate "slums and blight."
- **Downtown Transportation Fund** - State grants for municipalities to finance transportation-related capital improvements in support of economic development, within or serving a Designated Downtown, including construction or alteration of roads and highways, parking facilities, pedestrian and streetscape improvement, rail or bus facilities or equipment, and underground relocation of electric utility, cable and telecommunications lines.  
[http://accd.vermont.gov/strong\\_communities/opportunities/funding/downtown\\_transportation\\_fund](http://accd.vermont.gov/strong_communities/opportunities/funding/downtown_transportation_fund)
- **Municipal Planning Grants** - State grants for a wide range of municipal planning projects including municipal land use plans, zoning and subdivision bylaws, designated downtown, village and neighborhood planning.  
[http://accd.vermont.gov/strong\\_communities/opportunities/funding/overview/municipal\\_planning\\_grants](http://accd.vermont.gov/strong_communities/opportunities/funding/overview/municipal_planning_grants)
- **Hazard Mitigation Grant Program** - Provides grants to implement long-term hazard mitigation actions that reduce structure damage or loss of life due to natural disasters. Examples include upsizing culverts, elevating or floodproofing buildings, property acquisitions/demolitions, and mitigation planning.  
<http://vem.vermont.gov/mitigation/applications/>
- **Federal Rehabilitation Investment Tax Credit** - Federal investment tax credit for 20% of the rehabilitation costs (including labor, materials and architects or other consultant fees) for income-producing buildings listed in the National Register of Historic Places.  
<http://www.nps.gov/tps/tax-incentives.htm>
- **State Historic Preservation Grants** - State 50:50 matching grants for the repair and restoration of historic buildings listed or eligible for listing in the National Register of Historic Places in Vermont.  
[http://accd.vermont.gov/strong\\_communities/preservation/grants/historic\\_preservation](http://accd.vermont.gov/strong_communities/preservation/grants/historic_preservation)
- **Certified Local Government Program** - Federal grants available for resource identification and planning, National Register nominations, downtown planning, public education, archeological studies, and building feasibility studies.  
[http://accd.vermont.gov/strong\\_communities/preservation/planning/clgp](http://accd.vermont.gov/strong_communities/preservation/planning/clgp)

- 
- **Brownfield Revitalization Fund** - Grants and loans for remediation of brownfield sites. The funds are made available to Vermont by the EPA and eligible applicants can be private developers, non-profits and municipalities.  
[http://accd.vermont.gov/business/relocate\\_expand/capital/brownfields](http://accd.vermont.gov/business/relocate_expand/capital/brownfields)
  - **Cultural Facilities Grant Program** - Matching state grants to improve community facilities used to provide cultural activities to the public to enhance or expand the capacity of an existing building to provide cultural programming.  
<http://www.vermontartsCouncil.org/grants-and-services/organizations/cultural-facilities>
  - **Human Services and Educational Facilities Grant Program** - Matching state grants for capital costs associated with the major maintenance, renovation, and development of facilities used for human services and health care, or educational opportunities.  
<http://bgs.vermont.gov/formsandpublications>
  - **Regional Economic Development Grant Program** - Matching state grants to stimulate the creation and development or retention of economic development of individual or regional Vermont communities.  
<http://bgs.vermont.gov/formsandpublications>
  - **ANR Recreational Trails Grant Program** - State 80:20 matching grants for the maintenance, restoration, design and construction of recreational trails.  
<http://fpr.vermont.gov/recreation/grants/rtp>
  - **Recreational Facilities Grants Program** - Matching state grants for capital costs associated with the development and creation of community recreational opportunities.  
<http://bgs.vermont.gov/home>
  - **ANR Ecosystem Restoration Grant Program** - State grants for the design and construction projects that target nonpoint sources of pollution that cause or contribute to the state's surface waters.  
<http://www.watershedmanagement.vt.gov/grants.htm>
  - **ANR Caring for Canopy Grant Program** - State 50:50 grants to help communities care for tree canopy by taking the necessary actions to developing and sustaining a community-wide tree program, including tree plantings, inventories, maintenance, and planning.  
[http://fpr.vermont.gov/forest/community\\_forests/community\\_canopy\\_grants](http://fpr.vermont.gov/forest/community_forests/community_canopy_grants)
  - **VTrans Transportation Alternative Program** - State 80:20 matching grants for the construction, planning, and design of bike and pedestrian facilities (on or off road), sidewalks, bicycle infrastructure, lighting, and others.  
<http://vtransengineering.vermont.gov/bureaus/mab/local-projects/transportation-alternatives>
  - **VTrans Bicycle and Pedestrian Program** - State 90:10 matching grants for the scoping, design, and construction of bike and pedestrian facilities, sidewalks, bicycle lanes, crosswalks, shared-use paths, and lighting.  
<http://vtransengineering.vermont.gov/bureaus/mab/local-projects/bike-ped>
  - **VTrans/ACCD Strong Communities, Better Connections Program** - State 90:10 matching grants for planning that align land use planning and community revitalization with transportation investments.  
<http://vtransplanning.vermont.gov/programs/scbc>
  - **State Infrastructure Bank** - The State Infrastructure Bank (SIB) program, operated by the Vermont Economic Development Authority (VEDA) in conjunction with the Vermont Agency of Transportation (AOT) and the Federal Highway Administration, is available to assist in the construction or reconstruction of highways, roads and bridges, and pedestrian facilities, as well as certain capital facilities related to rail transit or public transit. Also, in certain cases, infrastructure for electric vehicle charging stations and natural gas refueling stations available for public use are eligible for SIB financing.  
<http://www.veda.org/financing-options/other-financing-option/state-infrastructure-bank-program/>



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## Background and Acknowledgements

This Design Tool Kit is a product of the Vermont Downtown Action Team (V-DAT) process. The V-DAT project team was selected by the State of Vermont, Department of Housing and Community Development in May 2013 to conduct community planning and economic development charrettes for eight communities adversely affected by Tropical Storm Irene in August 2011 or the spring floods of 2012. The project team held design workshops from August 2013 through April 2014 in Barre, Brandon, Brattleboro, Northfield, Waitsfield, Warren, Waterbury, and Wilmington. The V-DAT was comprised of experts in architecture, planning, landscape architecture, historic preservation, economic development, organizational structure, landscape architecture, engineering and community branding.

This report includes those communities and many others across Vermont to illustrate the opportunities for good design as way to foster community revitalization and economic prosperity.

Special thanks to Richard Amore, with the Vermont Department of Housing and Community Development, Ben Muldrow and Shawn Terpack with Arnett Muldrow & Associates, and Randy Wilson with Community Design Solutions for the beautiful design and photos included in the Design Toolkit.

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For more information about the design toolkit or downtown/village center design please visit [http://accd.vermont.gov/strong\\_communities](http://accd.vermont.gov/strong_communities) or contact Richard Amore, [richard.amore@state.vt.us](mailto:richard.amore@state.vt.us) or (802) 828-5229.

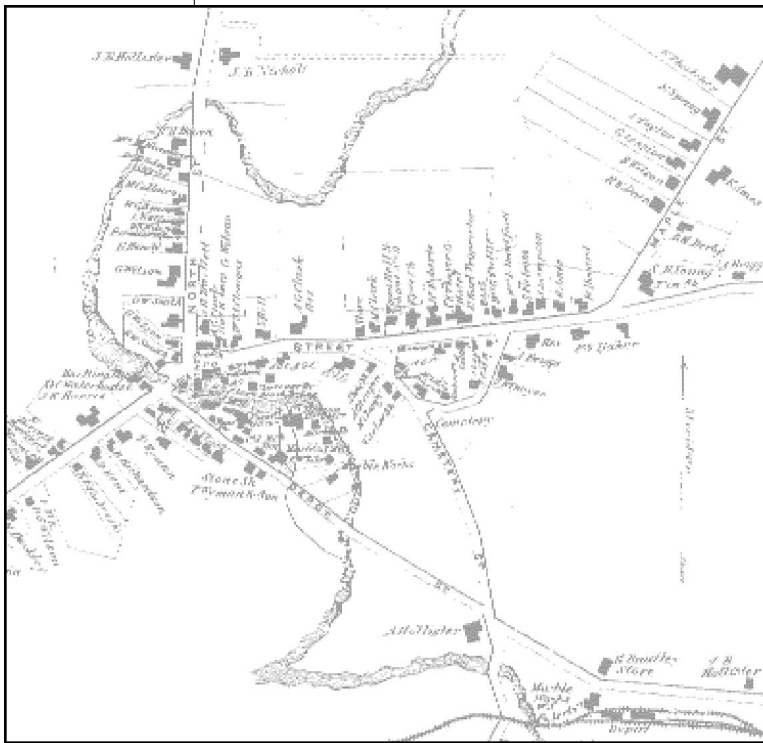


VERMONT

AGENCY OF COMMERCE & COMMUNITY DEVELOPMENT  
DEPARTMENT OF HOUSING & COMMUNITY DEVELOPMENT



# **Design Guidelines** *for* MANCHESTER'S COMMERCIAL AND HISTORIC DISTRICTS



*This project has been funded by a special  
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**“The Town of Manchester seeks to maintain and enhance those aspects of the built environment that contribute to our unique character and historic heritage.”**



# Premise and Purpose

The Town of Manchester has a long history of dealing with land use and development issues. Growth and development, especially in the downtown, have dominated public discussion and the political landscape for decades. As pressures have increased, the Town has taken many pro-active steps to shape land development into patterns that help maintain and enhance the unique, historic heritage of this community. Two of the most significant regulatory tools were the adoption of Design Review for our commercial and historic districts, and Major Development Review. Since the mid- to late-1980's, these two bylaws have certainly influenced the look and feel of Manchester as we know it today, and have moderated outside market forces that would have created very different results.

Other, non-regulatory tools which have helped to clarify community goals and forge positive outcomes include the 1994 Community Vision Statement, the 1996 Commercial District Parking and Pedestrian Plan, and the 1997 Town Plan. Each document (and the public processes leading to the creation of each document) helped community thinking evolve from a pure "command and control" approach to development to a system that is still rooted in a firm regulatory foundation, but which is also tempered by guidance, encouragement, and incentive to achieve community goals.

Design Review began, and continues today, with a series of statements about what we will review: building design, rooflines, materials, and the like. As the community gained collective experience with the process, and through efforts such as the Parking & Pedestrian Plan, we have learned how to better articulate what works for Manchester, rather than simply stating what we wish to avoid. By communicating more clearly with landowners as to preferred land use patterns and architectural designs, we can work together to

improve our community. Note that while site and design elements are described individually for clarity and simplicity, it is equally important to consider the interaction between elements. Done well, a synergy emerges that is truly more than the sum of the parts.

**“Design Review is one of the most powerful tools we have as a community.” –Lee Krohn**

Moving forward in time, the 1997 Town Plan helped further the use of illustrations and guidelines to clarify desired outcomes. We thought it important to provide guidance for what we'd like to see on the ground when buildings and sites are developed, upgraded, or rehabilitated.

These Design Guidelines are a natural step forward in that process. The intent is to provide greater clarity and guidance to citizens, landowners, and reviewing Boards about community goals and standards for architectural

design, historic preservation, sign placement and design, and site and streetscape design. The emphasis here is on guidance, not requirements. This is not a binding regulatory document, nor is it a mandate for the use of any specific types of designs or materials. However, these Guidelines will serve their purpose where they help to clarify the range of choices for designs, patterns, or materials, so that renovations, rehabilitation, infill, and new development may be of a style and pattern that reinforces our historic heritage, strengthens the community's character, and enhances Manchester's vitality and economy in the long run.

## GOALS ...represent shared visions which govern physical design and development

The primary goals of this Guideline document for Manchester are:

To preserve historical precedence, reflect tradition

To build on current architectural and landscape patterns that fit the context of community character

To sustain and enhance the outstanding and valued physical attributes of the design review districts (and Manchester as a whole)

## PRINCIPLES ...are the values and concepts which reflect and further the goals

These principles of design follow the previously stated goals in that they strive to promote the positive patterns of the district(s) and help achieve meaningful spaces that function well and are aesthetically pleasing.

**Respect natural assets.** Blend human development with existing topography and vegetation. Nurture existing vegetation, especially mature trees. Pay careful attention to native species. Maintain views and access to the river.

**Protect and enhance the landscape.** Preserve and enhance established tree lines along streets. Encourage landscaping that creates green space between streets, sidewalks and buildings, and incorporates shade trees.

**Promote contextual design.** Encourage architectural design that complements the New England tradition and responds to the historic qualities of its surroundings, but is creative in its own approach.

**Provide for the comfort and safety needs of pedestrians** in both commercial and residential areas, taking special consideration for children's safety. Enforce pedestrian oriented design in the classic "village" style and human scale. Maintain "a carefully designed network of attractive sidewalks, walkways, and bicycle paths..." to encourage pedestrian circulation in favor of the automobile and to ultimately help ease traffic congestion.

**Make accommodations for automobiles.** Allow for plenty of parking spaces, but avoid buildings as islands in a sea of parking. Decrease visibility of parking lots whenever possible.

**Support functional and safe vehicular circulation.** Create the means for logical and comfortable vehicular circulation by reducing the number of curb cuts. Consider alternative vehicular routes; improve infrastructure and off-street links between parking lots.

**Maintain and enhance the visual landscape:** "Lighting will be soft in nature yet sufficient for safety and security. Fixturing will be attractive and decorative. Signs will be strictly controlled to protect the aesthetics and individuality of the town." Hide dumpsters and advocate for burial of overhead utility lines.

(All quotes are from the Manchester Vision Statement)

**PATTERNS** ...are physical planning and design examples which illustrate and implement the goals and principles.

The guidelines formulated in this document are presented in a series of patterns for buildings and sites.



## **Survey Says...**

To help begin the process of developing a set of design guidelines for Manchester, the Town set out to hear the opinions of folks in the community. The survey asked questions about what buildings or places people like or don't like, what they think works and what doesn't, and which part of downtown or historic areas they'd like to stay "as is" and what parts need the most improvement.

A brief summary of the general trends and themes is as follows.

**Favorite Streets:** Main Street, Bonnet Street; architecture, history, streetscape elements (greenspace, street trees, sidewalks)

**Favorite buildings:** Factory Point National Bank, Northshire Bookstore, Baptist Church, Zion Church, Quality Restaurant, former News Guide & Colonial Theater buildings

**Most Improved Areas:** Main Street, the Depot, Town Green conversion, three new buildings at Town site, interconnected rear parking lots, Manchester Shopping Center

**What to Keep:** historic architecture, sense of place, Main & Bonnet Streets

**What to Improve/Add:** extend sidewalks, get rid of overhead power lines

**Defining Characteristics:** caring people and community, the views, the variety

High marks were also given to the Depot, the existing roundabout, the proposed roundabout, and strong planning & zoning to keep things under control and looking good.

## Section 2

# Defining the Districts

The following are brief architectural descriptions of Manchester's commercial and historic districts. For more detailed architectural information on the historic districts please refer to Manchester's 1997 Town Plan. As currently configured, the Design Review District includes land within all of the Commercial and Transient Commercial zoning districts, and lands within the four historic districts identified in the Manchester Town Plan.

## COMMERCIAL DISTRICTS

### Depot Street

Leading east to Route 7 from the town core, Depot Street features buildings of many different eras, shapes, and siting strategies. Auto traffic tends to dominate this area due to the speed of cars on Depot Street, the scale of the parking lots, and the lack of pedestrian amenities.

The town green at the west end of Depot Street, proximity to the Battenkill River, and links to the Depot District are all features that might be drawn upon to improve the area's character. Overall, the street would benefit from more consistency in its architecture and more attention to the needs of pedestrians. The trio of newly developed buildings from 301-341 Depot Street suggests an approach to siting, scale, parking, and sidewalk enhancement that could, over time, greatly improve the appearance of the area if adopted by new development.

### Route 7A South of the Junction

Route 7A South to Manchester Village lacks the architectural definition that the town's historic districts have. Great variety in building size, setback distance, and quality of renovations means that more consistent building patterns will need to be established before the street will gain its own architectural identity. New work in this area should be directed at enhancing the pedestrian environment, designing more discreet parking, drawing upon Manchester's architectural precedents, and ensuring that the spaces between buildings are not neglected. (See Building Pattern: Outdoor Room)

**“We will encourage the preservation and restoration of historic buildings and districts.”**

## HISTORIC DISTRICTS

### **Historic Main Street**

Historic Main Street is home to landmark buildings such as the Baptist Church, the Northshire Bookstore, and the Factory Point Bank Buildings. One special quality of this part of Main Street is that one's view terminates with a different significant building whichever direction one is traveling. One and two-story commercial buildings that line each sidewalk, though, set the architectural tone for the district. A strong line of building faces, street trees, benches, and shopfront windows make this a welcoming pedestrian environment near the intersection with Bonnet Street.

Further north, more recent development at Green Mountain Village and Rite Aid has set buildings back behind parking lots, eroding the established patterns. In the vicinity of Adams Park, however, a fabric of historic, residential-scaled buildings set behind modest lawns reestablishes a village character.





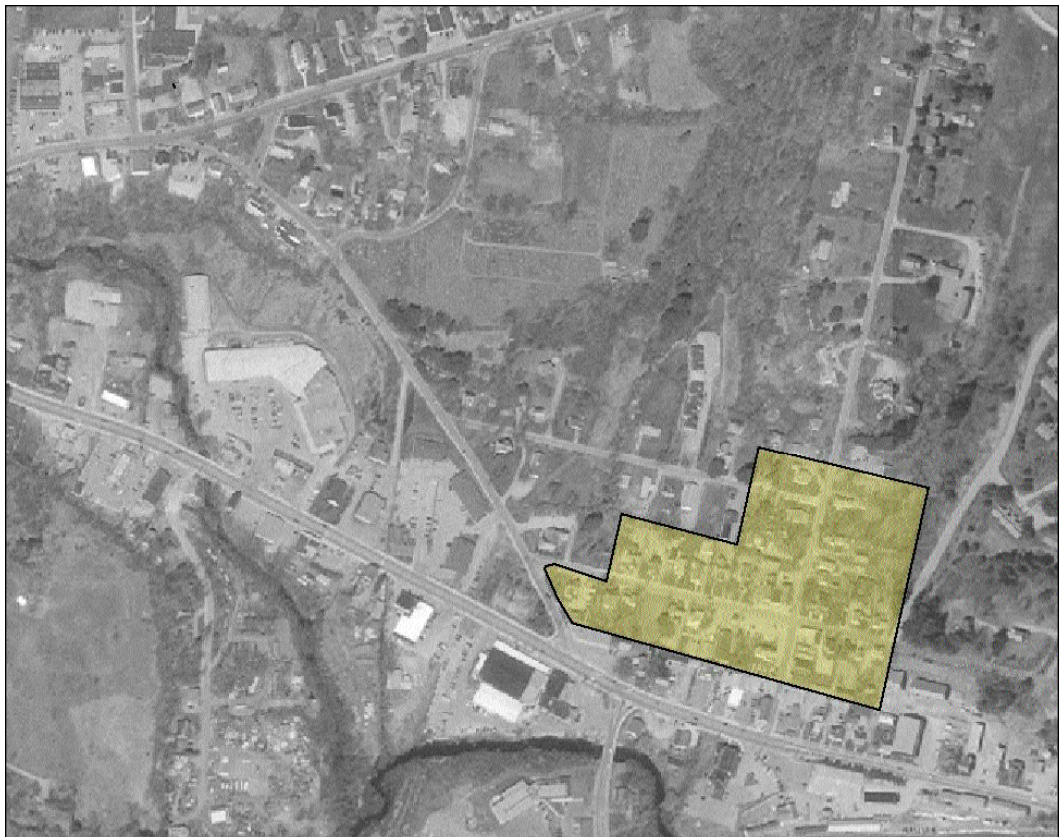
Section 2: Defining the Districts

**Photos of Main Street**



### **Manchester Depot Historic District**

Comprised mainly of Elm Street and Highland Avenue, the Depot District developed in the early years of the 20th century in response to the railroad and due to nearby processing of marble and wood. Consistency in setback from the street, common gable roof shapes, and size of the houses along Elm Street all help lend continuity to the district. Like Bonnet Street, the neighborhood today is marked by variety in the color of the houses and many of them have become offices. A series of closely spaced buildings at the intersection with Highland Avenue, the most prominent of which is the former Colonial Theater, visually anchor the neighborhood. This is a true mixed-use and pleasantly walkable area.



**Photos of Depot Street**

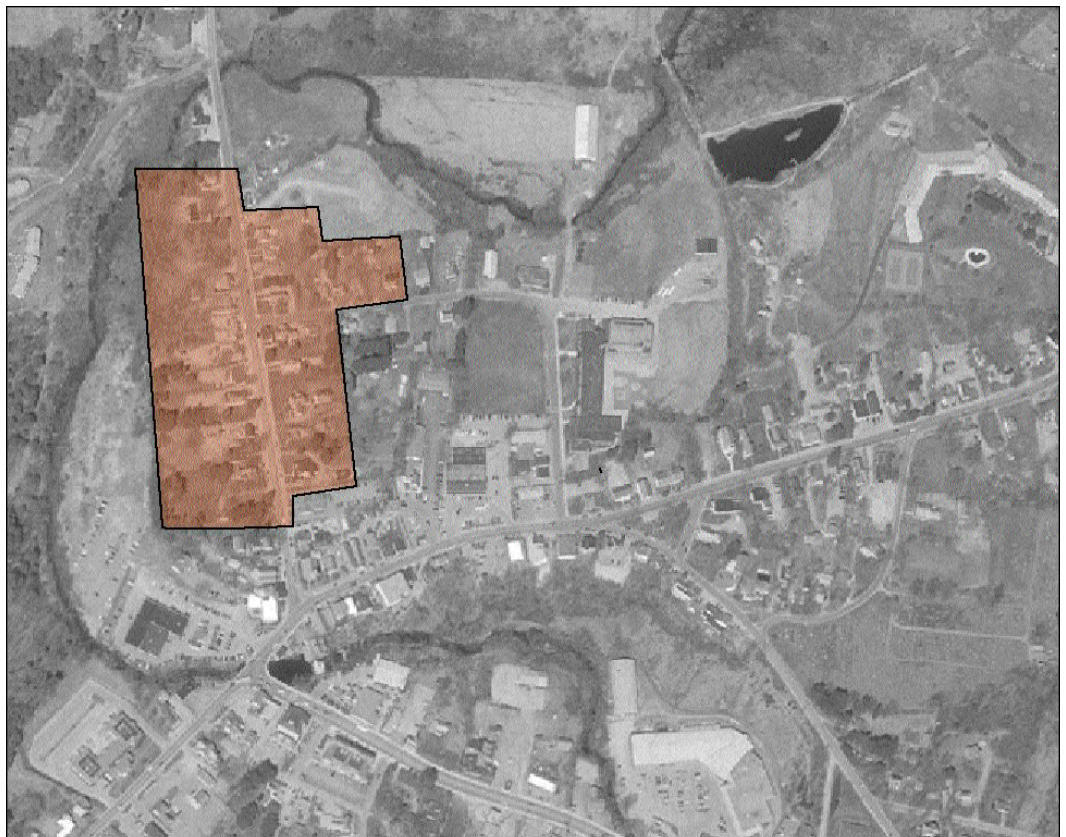




### **Bonnet Street Historic District**

The historic section of Bonnet Street leads north from its intersection with Main Street. Houses from multiple eras line both sides of the road at regular intervals. Architectural styles date from the 19th and early 20th centuries and include Federal, Victorian, Italianate, and Bungalow. Despite the varied colors and architectural themes, the neighborhood remains architecturally cohesive for several reasons. Setbacks from Bonnet Street are relatively consistent, as is spacing along the street. Gable-shaped roofs and clapboards also help lend continuity from one property to the next. Level of detail in trim and building features is fairly regular, too.

The street has retained a residential character, in spite of the fact that many of the houses have become offices, because the outer appearance of the buildings has changed little. Business signs are small in size and lighting is unobtrusive. Finally, mature trees and landscaping throughout the neighborhood give it a settled, established character.

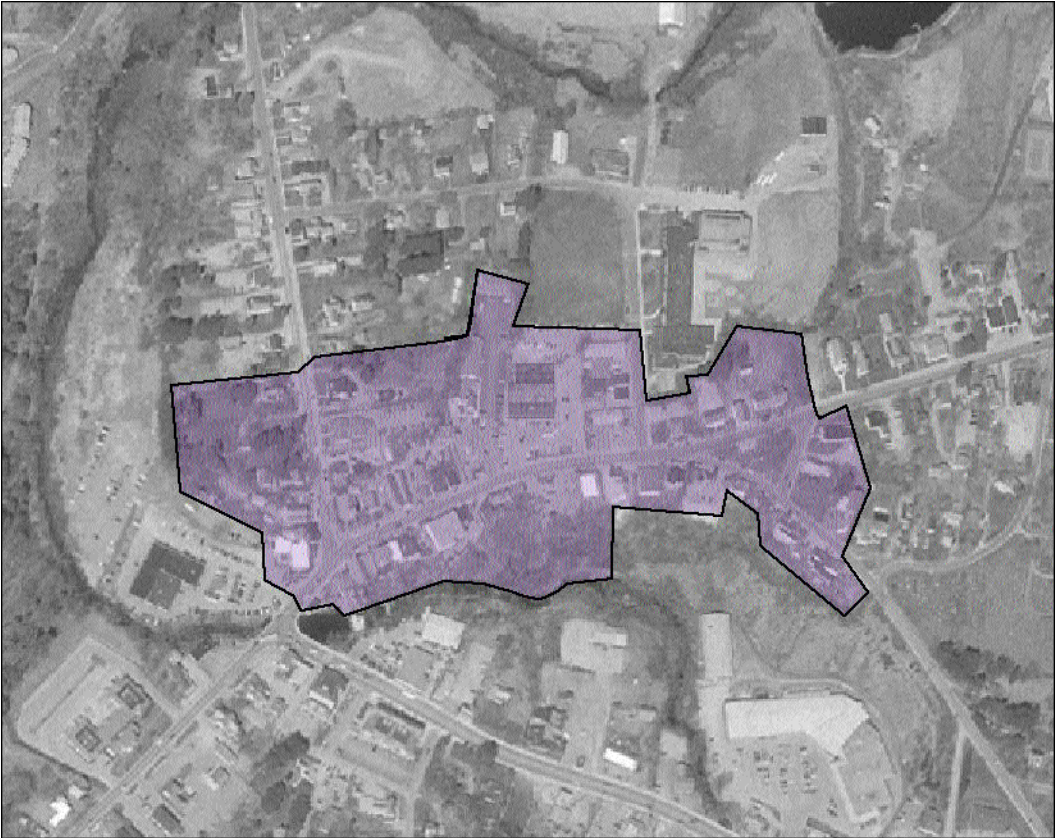


**Photos of Bonnet Street**



**North Manchester Center Historic District**

Extending along Route 7A north of the commercial core and Adams Park, the North Manchester Center Historic District is characterized by houses and small shops representing architectural styles dating from the late 18th century through the early 20th century. The street retains a residential flavor, though lacks the architectural cohesiveness seen, for instance, on Bonnet Street. Serving as an introduction to the town from the north, this district sets a tone for the character of Manchester Center.





**Photos of North Manchester**





## Section 3

# Design Principles and Patterns

### Introduction to Principles & Patterns for BUILDING

The following design principles are intended to be an aid when designing or evaluating plans for new construction, renovations, or additions in Manchester Center's commercial and historic districts subject to design review. The architectural patterns deal largely with siting and the exterior appearance of buildings. Based on the features of many existing Manchester buildings, the patterns are also found in the architecture of other traditional New England towns.

Many of the illustrations depict Manchester's older buildings and encourage designers to apply the principles embodied in them. The patterns are not intended to mandate simulations of historic buildings, but to help designers recognize those features that make Manchester's most treasured structures successful. Basic principles of good design are timeless and transcend any particular era or style.

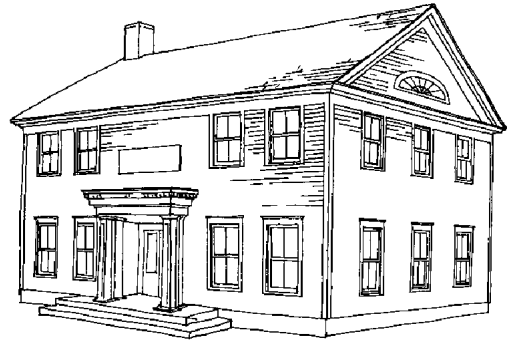
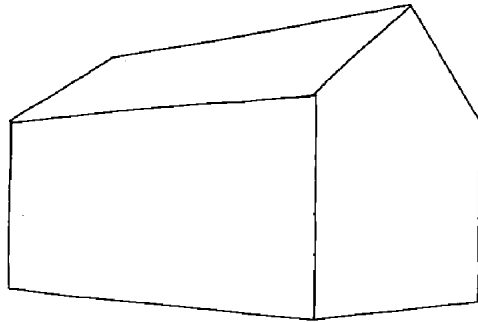
New buildings should help preserve and reinforce the architectural character of each neighborhood and of the town as a whole. On certain sites the buildings next door may not be worth emulating. In such cases, and when design issues arise which are not directly addressed by the Building Patterns, designers are invited to study the established patterns elsewhere in the neighborhood and to complement the desirable features of that district's architecture. In those areas where the architectural fabric of a street is fragmented, new construction will need to set better standards for site planning and building scale which draw upon successful precedents elsewhere in town. It is hoped that the architectural strategies which follow will help keep Manchester a vibrant and attractive place, shape a more pedestrian-friendly environment, and improve the quality of life for Manchester residents and visitors alike.

In general, the design patterns for buildings address Footprints (see glossary), Massing (i.e. Form & Scale, see glossary), Siding, Roofing, Windows, Color and Architectural Details.



### 3.1

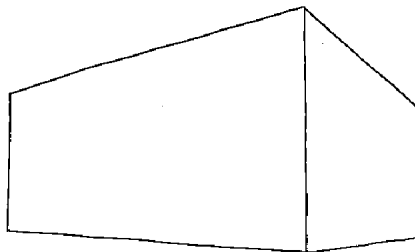
## PATTERNS FOR BUILDINGS



### Simple Shapes

Many of the finest buildings in Manchester have very simple basic shapes. Their richness of character comes from careful placement of windows, detailed trim, and the texture of their wall materials.

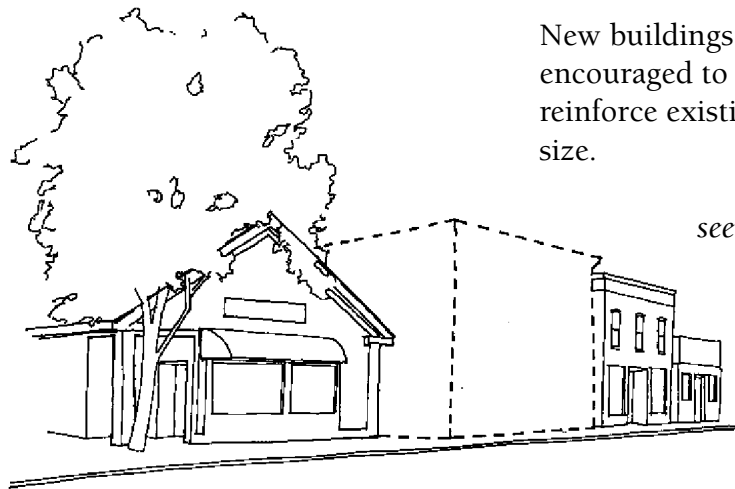
While dormers and other pop-out features can add interest to a building's form, overuse can make a building look cluttered. Try to allow a building's basic shape to be recognizable from any vantage point.



*illustration also shows:  
Rhythm of Openings  
Detail at Parapet  
Commercial First Floor*

## Appropriate Size

New construction should be respectful of neighboring buildings' height and massing. It is not necessary to match the height of adjacent buildings, but new structures should avoid overwhelming the scale of neighbors or appearing undersized amid larger buildings.

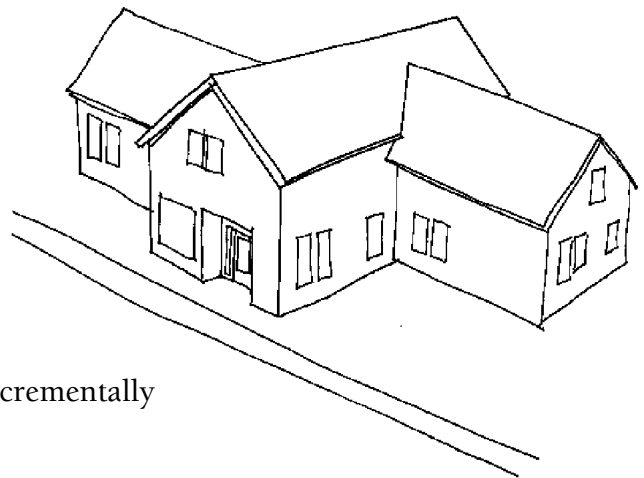


New buildings and additions are encouraged to complement and reinforce existing district patterns for size.

*see definition of "massing"*

## Hierarchy of Forms

Large buildings may be designed as an assemblage of smaller forms in order to help reduce the apparent scale of the new building.



Such a building may have the appearance of having grown incrementally over time.

When this strategy is used, ensure that there is one dominant mass, that it is closer to the street than the smaller forms, and that it has the primary entrance to the building.

## Residential vs. Commercial Scale

New commercial buildings which are larger than a neighborhood's typical house in height or floor area should adopt features appropriate for a commercial building. For example, these may include larger-scaled windows and doors, tall friezes at the roof edge, or trim bands above the first floor level.

Small windows, residential-style porches, and dormers will likely appear out-of-place on a

see also:  
*Appropriate Size*  
*Hierarchy of Form:*

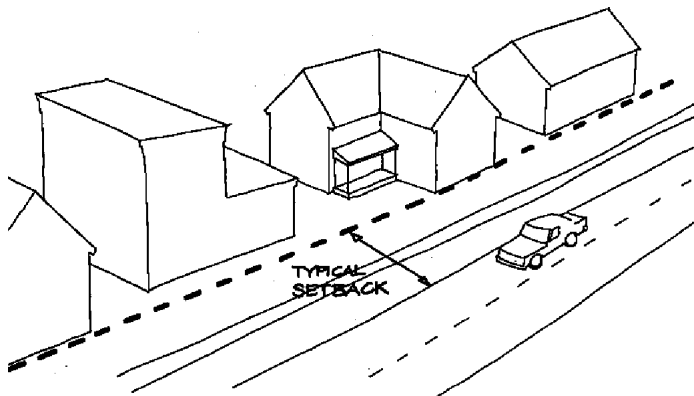


## Respecting Setbacks

Site a new building in such a way that it conforms to its neighbors' typical setback from the street and so its facade is parallel to the street. This helps to maintain a consistent street edge and character in each neighborhood.

Note that setbacks vary between districts. Houses on Bonnet Street have moderately-sized front yards. Setbacks are less on Elm Street. Buildings on Historic Main Street start right at the sidewalk's edge. *Each environment feels comfortable because of the consistent patterns established.*

Depot Street presently has no identifiable common building setback. New buildings should adopt the setback of the buildings at 301-341 Depot Street to help create a more pedestrian-friendly environment at the street's edge.

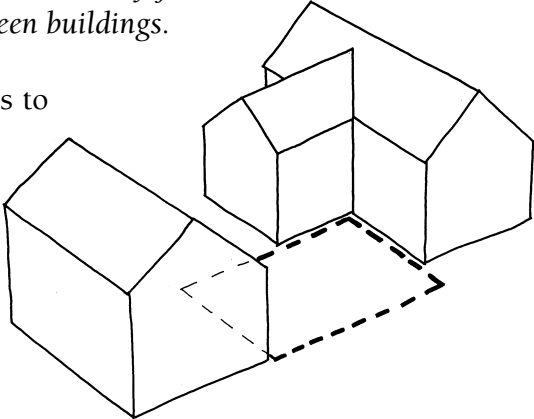




### Outdoor Rooms

The space between buildings is most useful and comfortable for pedestrians when it has an identifiable shape and corners. *When designing, think of the outer walls of a new building as boundaries not only for the indoor spaces, but also for the area between buildings.*

Siting and shaping a new building so as to create "outdoor rooms" is a design exercise that will help the building relate compositionally to its neighbors and make the surroundings a more appealing pedestrian environment.



Consider the path of the sun during the day and ensure that the space will not be shadowed when it should be in use.

The courtyard between the Factory Point Bank buildings on Main Street is a good local example of this principle.

### Attractive Alleys

Attractively-developed alleys are one ingredient of walkable, appealing town centers. Consider how an alley can provide access to retail space or parking set back from the main street. Alleys, even if routes for vehicles, can be pleasant pedestrian spaces when developed with distinctive pavers, lighting, and architectural detail.

*see also: Outdoor Rooms  
Ingredients of a Good  
Pedestrian Space*

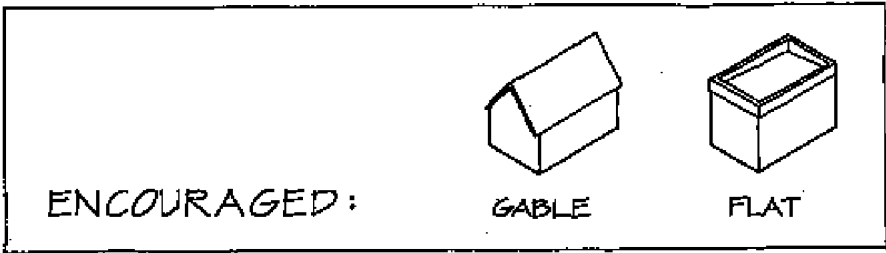
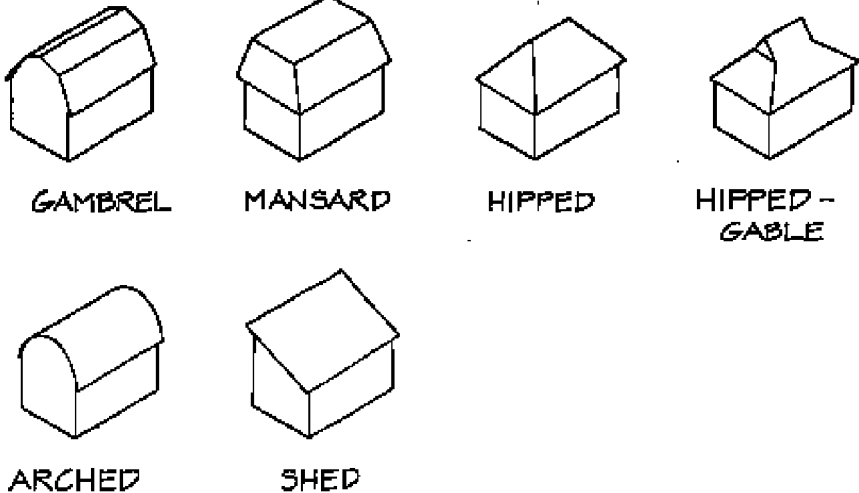


### Roof Shapes

Gable and flat-roofed buildings predominate in Manchester Center's commercial and historic core and are favored on new construction.

The charm of the mansard-roofed Northshire Bookstore building is due, in part, to the fact that there is a strong architectural fabric of gable and flat roofs in the district which allows the bookstore to be a uniquely-sited and shaped landmark. While there are more examples of alternative roof shapes in town, these buildings depart from the established patterns which help lend continuity to neighborhoods.

Flat roofs are suitable on single-story buildings only when attached to a multiple-story flat-roofed mass.



### Roof Pitch

Manchester Center has a well-established fabric of gable-roofed buildings which exhibit moderate to steeply-sloped roofs. For new pitched roofs, a slope of 8:12 or greater is encouraged (except over porches).

## Human-Scaled Architecture

“Human-scaled” is an architectural principle that refers to proportions of both building components and overall form. A building may be human-scaled even when several stories in height when the units of which it’s composed bear a relationship to the dimensions of the human body. Windows and doors are traditionally scaled to human size for ease of operation, passage, and fabrication. Bricks, clapboards, and shingles are units of building materials scaled for ease of handling by builders. Their dimensions and finished appearance subtly remind the viewer of the incremental process of building by hand. This is an important part of the appeal of Manchester’s older neighborhoods. Other elements that contribute to “human-scale” and create a level of comfort at the pedestrian level include porches, recessed entryways, bands of storefront windows, divided-light windows, and sensitively scaled signs and light fixtures.

A building that is not human-scaled is likely to be a poor fit in Manchester. Large expanses of glass, for example, or monolithic-appearing surfaces such as sprayed-on synthetic stucco can be disorienting to one’s sense of scale. Manchester already has a rich array of human-scaled buildings and new construction is encouraged to complement this pattern.



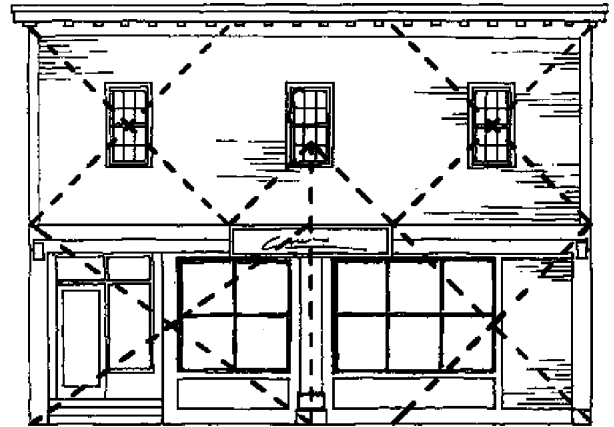


## Organized Facade

Doors, windows, roof features, and surface details should be organized carefully as elements of a larger composition. The simple building below has carefully planned proportions. Superimposing diagonal lines on its facade shows that the horizontal trim band, building height, centerlines of windows, doors, and posts, and even the shop's sign are placed in precise relationship to each other.

This type of design creates a natural symmetry and order. However, it's not necessary for a building to be symmetrical in order for it to appear balanced and well-composed.

*illustration also shows:  
Detail at Parapet  
Commercial First Floor  
Integrated Sign*

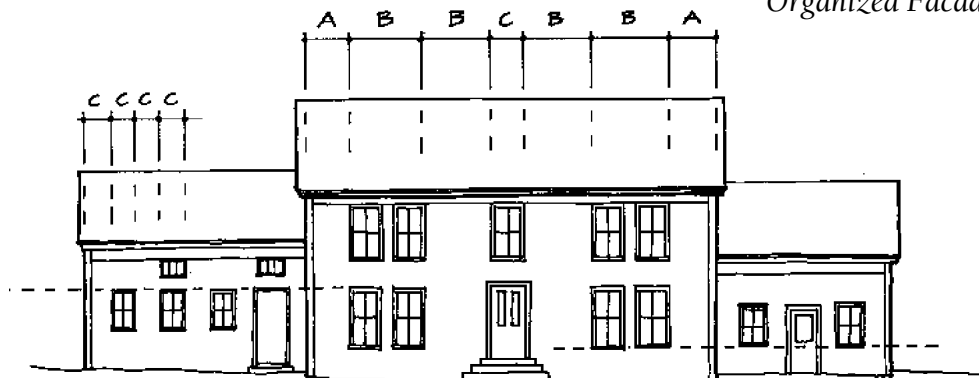


## Rhythm of Openings

When planning sizes and locations for a building's windows and doors, think of the openings as part of a pattern on the face of a building. Windows may be grouped or spaced evenly, but ensure some correspondence in window placement from floor to floor.

Commercial first floors in Manchester are often more glassy and open while upper floors have a greater proportion of solid wall to window. Work toward a balanced composition while, of course, being mindful of the daylighting needs of interior spaces.

*see also: Commercial First Floor  
Organized Facade*



## Commercial First Floor

For mixed-use or commercial buildings, consider giving the ground floor extra height appropriate for a public space and expressing that on the facade with larger windows and horizontal trim lines.



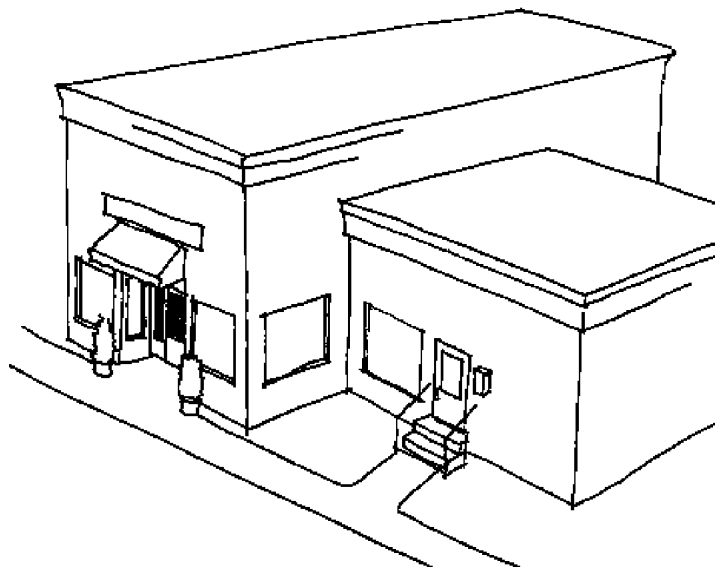
Upper floors may have smaller floor-to-ceiling heights and using smaller windows shows their more private nature.

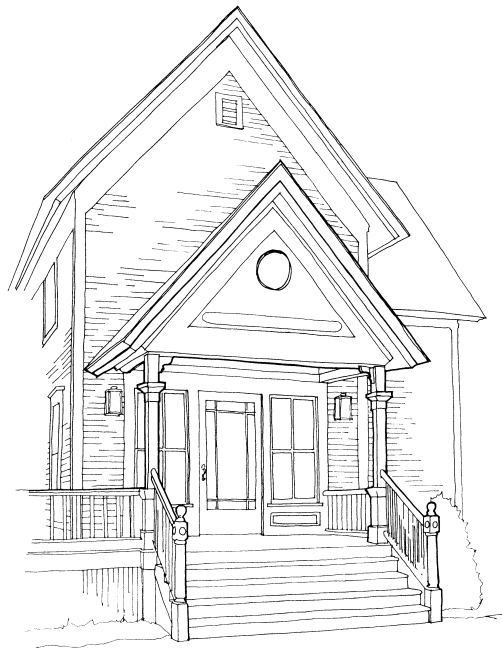
*illustration also shows:  
Entrance Detail*

## Primary Entrance

When a business has multiple entrances, ensure that greater emphasis is placed on one primary entry. This entrance should face the street or an "outdoor room" seen from the street (see Outdoor Rooms guideline), and be identified by the sort of architectural devices described in the Entrance Details guideline, such as porches, awnings, and lights.

This pattern helps establish a clear front facade for a building.





## Entrance Detail

Rely more on architectural features than on large signs to identify the entrance to a building.

Awnings or roofs for shelter, transom and/or side-lite windows surrounding the door, decorative lighting, door hardware, trim, and railings are examples of architectural details which help call attention to entrance doors. These details also help create a pedestrian-friendly transitional area between public and private space.

*see also: Transitional Zone  
Shelter at Entry*

## Transition Zone

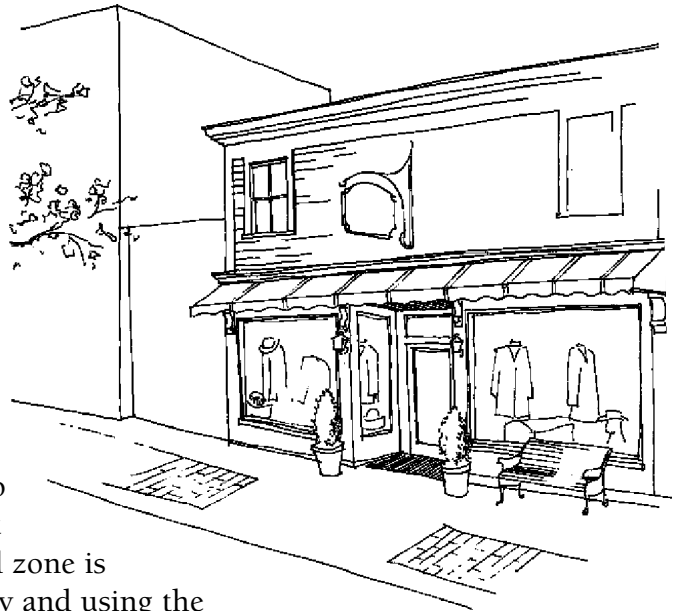
A comfortable walking environment in a commercial area requires some form of transitional space between the sidewalk and the shop interiors.

Shelter over the doorway is particularly important.

Even when a building has no setback, as in the example at right, an inviting transitional zone is created by recessing the entry and using the depth to either side for window displays.

Other successful elements are the shop's awning, the change in pavement texture at the entrance, and amenities like the bench, planters, and decorative lighting beside the doorway.

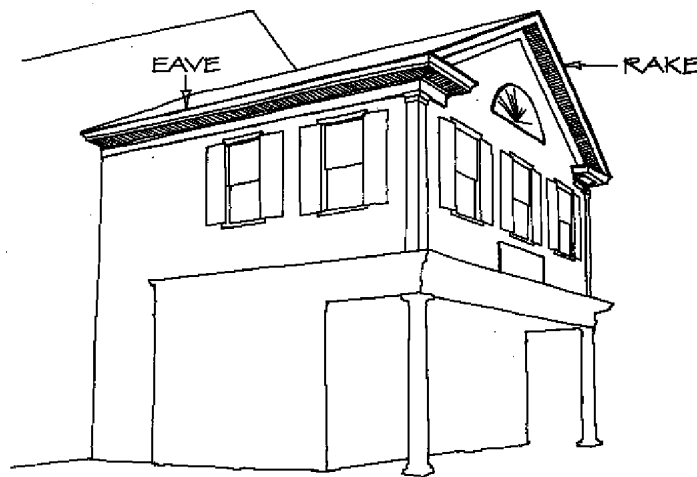
*illustration also shows:  
Entrance Detail  
Integrated Sign  
Commercial First Floor*



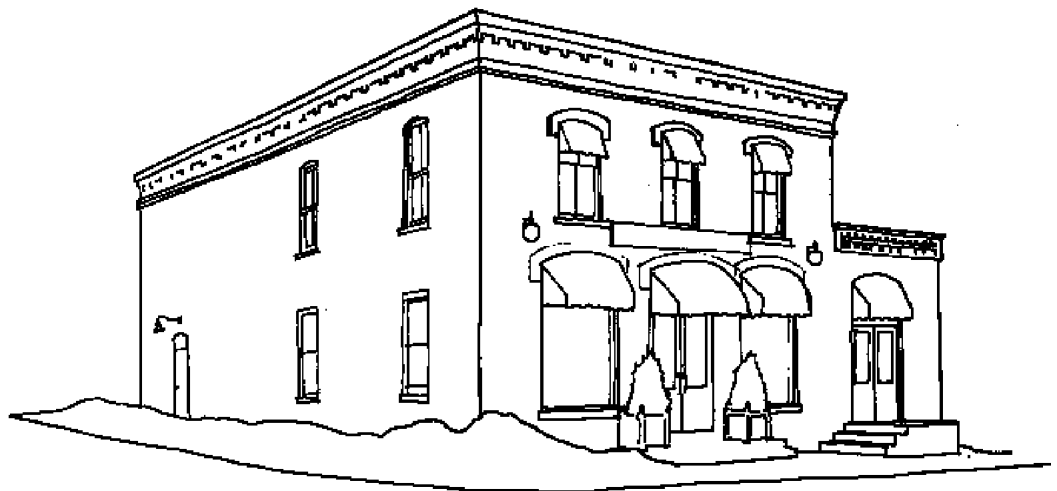


## Roof Overhang

Overhanging eaves and rakes are common to Manchester's older buildings and are desirable features on new construction. Roof overhangs protect a building's walls, give a building a finished, sheltered look, and cast shadow lines that enliven the appearance of a facade.



Size of overhangs will vary with size of the building, but suggested minimums on pitched roofs are 12" for eaves and 8" for rakes.



## Detailed Parapet

The parapets of flat-roofed buildings should have a decorative frieze, cornice, or three-dimensional detail. These features are intended to cap the exterior wall surface in a visually satisfying way by providing the type of textured details seen on older flat-roofed buildings in town.

### Shelter at Entry

Consider the path rain and snow will follow when designing a new roof. Compose roof shapes so that building entries are sheltered from the elements.

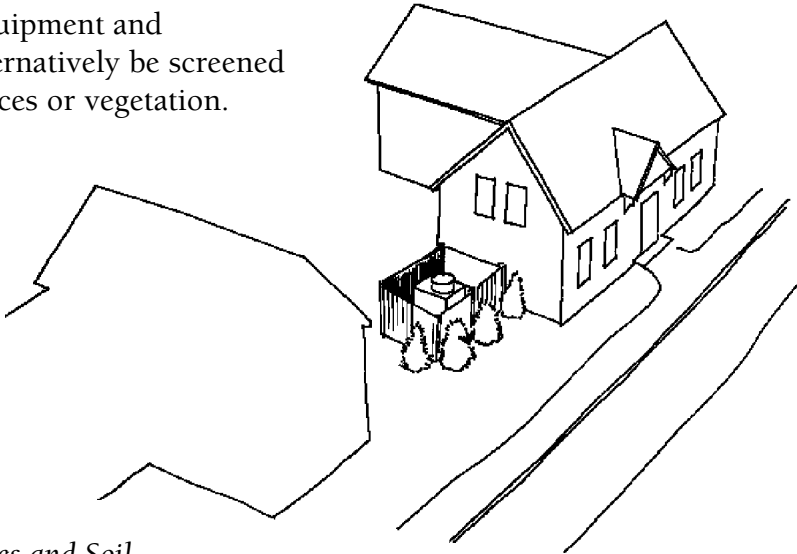


*illustration also shows:  
Entrance Detail*

### Conceal Mechanicals

Mechanical equipment should be shielded from public view, preferably on the rear side of buildings.

Ground-located equipment and dumpsters may alternatively be screened from view with fences or vegetation.



*see also:  
Landscaping, Utilities and Soil*

## Open Porch

Porches, whether new additions or on houses being converted, are best left open rather than walled-in.

Open porches act as a Transitional Zone (see pattern) for visitors and help lend a welcoming appearance to a neighborhood. One will also see the first floor of a house between the posts of an open porch and this helps the viewer's impression that the primary mass of the building is fronting the street (an established pattern for Manchester Center).

*illustration also shows:*

*Columns*

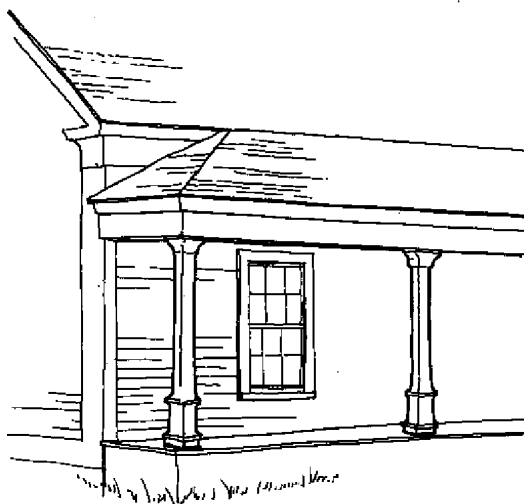
*see also:*

*Hierarchy of Forms*



## Columns

Columns should be large enough to convey a sense of strength and support, and slender enough to be graceful. Smaller columns may be paired side-by-side to provide visual strength without bulk. Only in unusual circumstances, such as when supporting a two-story canopy, should a column be wider than a human torso.



Ideal horizontal spacing between columns is typically no greater than 1 1/2 times the height of each column, nor less than 3/4 of column height.

Columns should have distinct cap and base details, wider than the shaft, to give them a more finished look.

*see also: Open Porch*

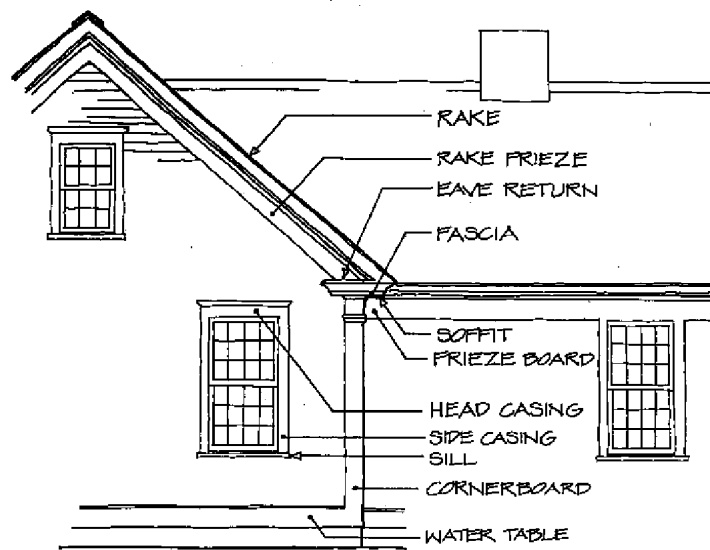


## Wooden Town

Wooden clapboards and trim are Manchester Center's most common type of siding and help to define the town's architectural character. Unlike some other Vermont towns, much of Manchester's commercial core is clapboard-sided including its landmark buildings. Vertical wooden siding, shingles, brick, and stone are less commonly seen on exterior walls.

Use of clapboards will help a new building or addition fit in with its surroundings.

Because it is a more "formal" material, brick in this setting may be more appropriately used for buildings at least two full stories in height.



## Wooden Trim

Cornerboards, window casings, and frieze boards are recommended on buildings with horizontal siding or shingles. A full 1" thickness is appropriate for trim, a depth that will look substantial, throw subtle shadow lines for texture, and cover the ends of clapboards.

Corner boards and door casings should be greater width than window casings. Window and door head casings can be wider than side casings. Frieze boards should be larger than all other trim.

Ideal trim widths will depend upon a building's size, but the scale relationships described above hold true for any building.

### **Color: Wall and Trim**

White siding and trim are traditional building colors in most New England towns, though Manchester Center is marked by more variety in color.

Manchester buildings which are not white or gray are typically light tones which can coexist comfortably with different colors on adjacent buildings. One should use restraint in choosing new building colors and consider compatibility with neighbors.

In general, wooden trim accentuates the architectural features of a building in a more subtle and pleasing way when there is only moderate or low contrast between siding and trim colors.

### **Color: Roof**

Roofs, whatever their material, should be colored shades of gray or earth tones. This helps ensure that a building's facade will, rightfully, draw more attention than its roof.



**Window Shape**

There is strong precedent in Manchester for rectangular-shaped windows. In each building, even if window sizes vary, try to maintain consistency in window shape, proportion and trim in order to give a facade a more unified appearance.

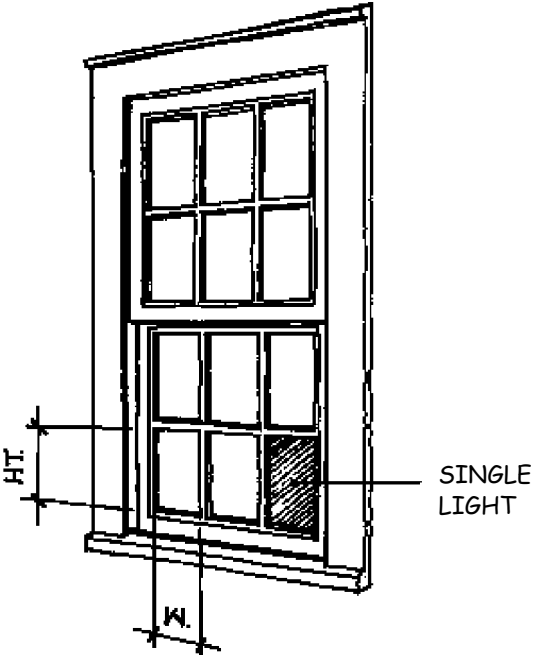
Windows of unusual geometric shape should be used sparingly, if at all. Such a window's best use would be as a small decorative element high in the gable end of a building. Manchester Center has many examples of this type of window placement.

*illustration also shows:  
Wooden Trim*

**Window Muntins**

If muntins are part of a new window's design, "simulated divided lights" or true divided lights are favored rather than snap-in grilles for their more authentic appearance and durability.

Lights of greater vertical dimension than horizontal are encouraged. Such proportions are more traditional for divided-light windows.

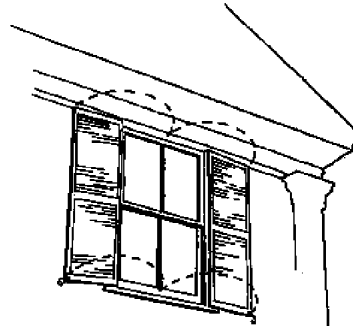




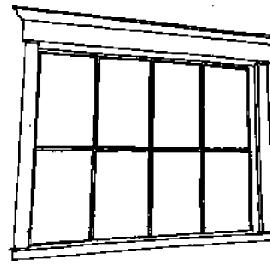
## Shutters

Shutters, if used, should each be half the size of the window so as to completely cover the glass if closed, regardless of whether or not the shutters are operable.

Shutters which appear to be functional look more natural to the viewer.



RESIDENTIAL - SCALE WINDOW WITH APPROPRIATELY - SIZED SHUTTERS



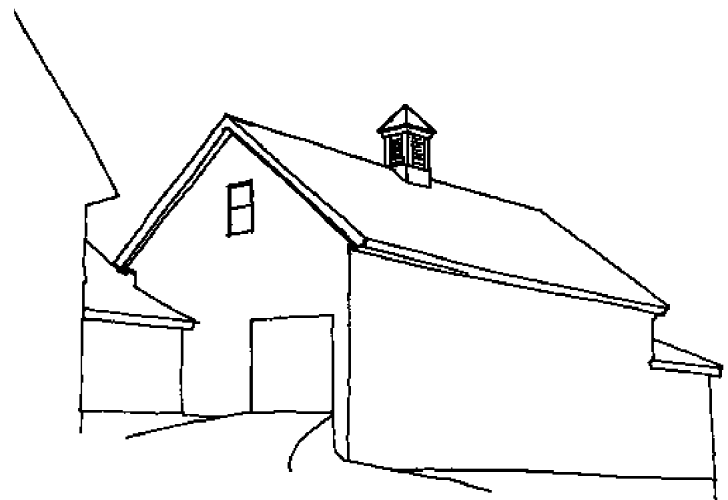
WIDE SHOPFRONT WINDOW WHICH LOOKS BEST WITHOUT SHUTTERS

## Cupolas

Cupolas may be appropriate on buildings of barn-like scale that have non-residential detailing.

Cupolas, in the design stage, should be thought of as miniature buildings. They have the same compositional needs for overhanging roofs and substantial wooden trim that the main body of the building has (though overhangs may be smaller).

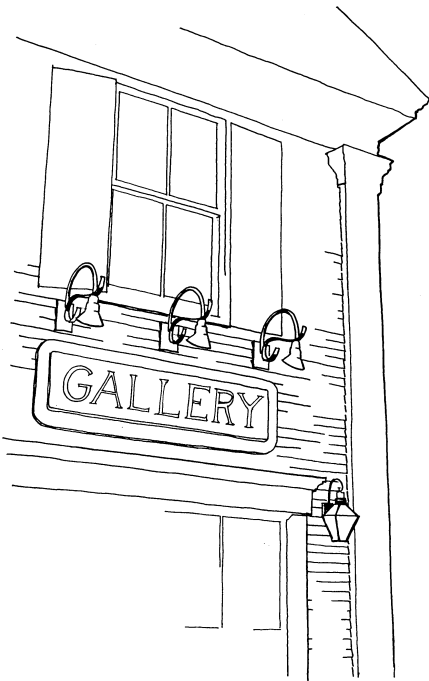
As with dormers and other roof features, be sparing in the application of cupolas and allow the primary form of the building to dominate.



### Integrated Lighting

Exterior light fixtures, whether purely decorative or lighting a sign, should complement the architectural style and color of the building. Consider the fixtures as part of the facade's composition and locate them as thoughtfully as one would other architectural elements.

Fixtures should cast light only where needed to minimize glare, and be no brighter than necessary.



*For detailed guidelines on light sources refer to the Site Patterns: Lighting which follow, and to the Town of Manchester Ordinances.*

### Integrated Signs

Signs should be architecturally integrated in a building's elevation. Whether signs are to be bracketed off the face of a building or mounted directly on the facade, plan for the placement of signs when designing an elevation so that they may be hung in logical spaces between windows or between floor levels. Avoid obscuring key architectural features of a building with signs.

*Refer to the Site Patterns section of this document for guidelines on sign design. Refer to the Manchester Sign Ordinance for current rules regarding signs.*

## 3.2

# PATTERNS FOR SITE

### Introduction to Principles and Patterns for SITE

The principles and patterns presented as part of Section 3.2 on Site provide references and recommendations for a wide variety of elements that are part of site design and development. As with the guidelines for buildings, this information is meant to guide both the design and evaluation of projects proposed for Manchester's Design Review Districts. The patterns presented are designed for application throughout the Districts, rather than providing specific solutions for specific locations. Note that landscaping and site elements are best planned for and designed on a site by site basis.

### SITING

In siting a new building, topography, existing vegetation and other natural features should be incorporated into building placement and lot layout, with the least amount of disturbance possible. Preserving natural land features strengthens the unique quality of the landscape and can help avoid site problems associated with drainage and other sensitive issues.

*Principle:* reflect positive, successful, historical patterns on street in the district

*Principle:* create meaningful spaces for people

*Principle:* promote functional use and circulation patterns

### Siting Patterns:

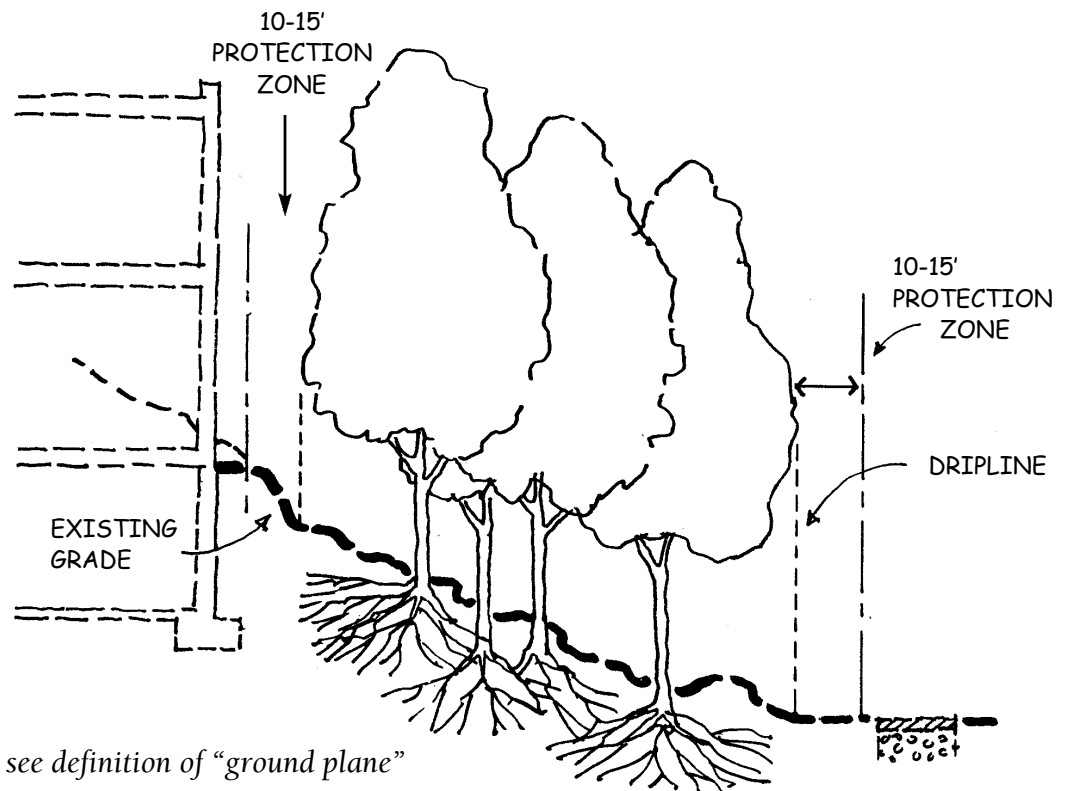
- Use footprints and setbacks that reflect identified historic patterns or identified siting patterns that work well in a specific location, such as Main Street.
- Break up parking with buildings and landscape islands; employ rear access points
- Create ample pedestrian spaces between buildings and at entries
- Rely on extensive yet appropriate landscaping that uses hardy, native material



- Design landscape islands with proper dimensions to serve their function and to accommodate planting.
- Minimize the number of curb cuts and their widths as possible, integrating entries with other access points and streets rather than at random locations along the street.
- Locate buildings and infrastructure to minimize site disturbance, loss of vegetation and the amount of regrading required.
- Plan for infrastructure (see glossary) in an efficient and logical manner and anticipate future use and shared access to parking and utilities.

### Design with Existing Vegetation

New buildings, paved areas and sidewalks should be sited to preserve existing vegetation. Existing trees should be protected in clumps with the ground plane intact and undisturbed.



## LIGHTING

*Principle:* lighting should employ energy conserving fixtures coupled with housings and cut-off luminaries that direct the light only where it is needed.

*Principle:* lighting should not be excessively bright; rather it is necessary to maintain a consistent and uniform level of lighting for reliable visibility.

*Principle:* lighting design needs to recognize the value of the night sky by eliminating excess or unnecessary light and light scatter with fixture design and placement.

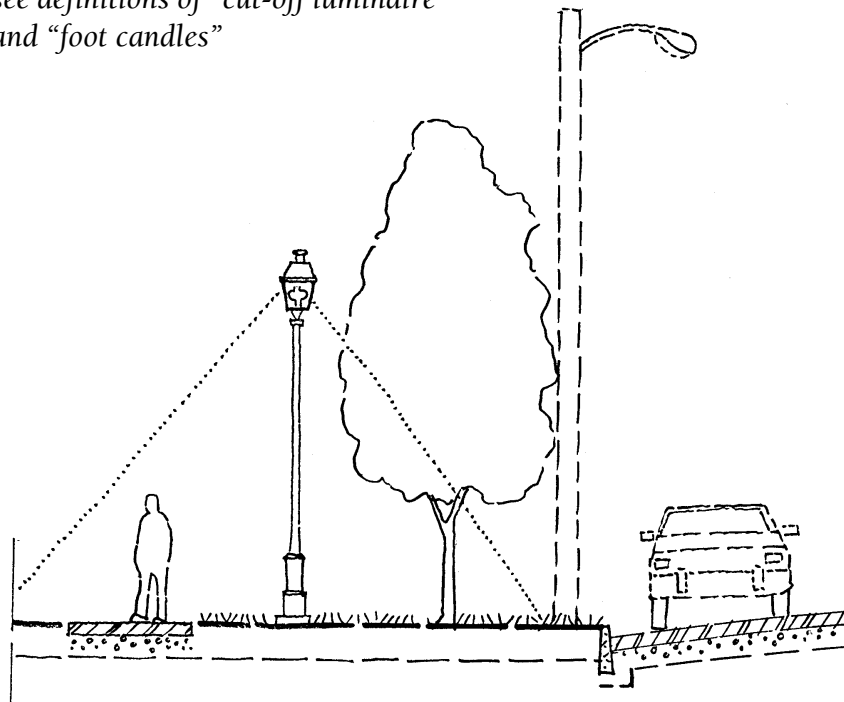
*Principle:* lighting installations should provide illumination levels suitable for the visual task or purpose intended and not create glare or unnecessary light spill.

### Pedestrian Scale Lighting

When lighting pedestrian spaces and walks with decorative lighting only, basic “cut-off” technology can be used. Interference with street trees is not a problem on the street side.

A lower lamp post may be sufficient (12-14’).

*see definitions of “cut-off luminaire”  
and “foot candles”*

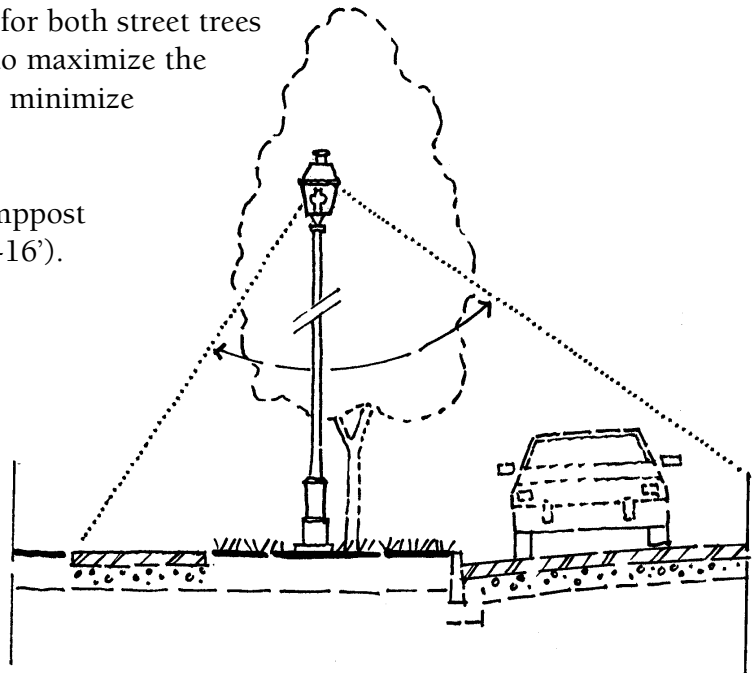


## Decorative Lighting for Streets and Walks

When lighting streets and sidewalks with decorative, specific “cut-off” technology should be employed to ensure sufficient lighting levels for both street and sidewalk.

Streetscape planning should account for appropriate locations for both street trees and lighting fixtures to maximize the benefit of both and to minimize conflicts.

A taller decorative lamppost may be necessary (14-16’).



## Lighting Patterns:

- Metal halide lamps and high-pressure sodium are the most energy efficient types of lighting. Metal halide provides superior color and atmosphere to the sodium/orange cast and is preferred as the primary lighting fixture.
- The lighting plan for any project may incorporate decorative, festive and special effect lighting. Special lighting needs to be considered on project by project basis and must take into account other issues such as light pollution and glare.
- It is desirable to achieve uniform levels of lighting when illuminating specific areas on a site such as parking lots, walkways, public spaces, drives. Where two sites share parking areas, drives, etc., lighting design and installation on both lots should be coordinated so as to maintain a uniform lighting level for both properties.



- The right light for the job matches recommended standards for wattage and/or footcandles

### Recommended Guidelines for Lighting

This table provides a summary of established design standards for lighting applications in Manchester. It is important to note that recommended lighting levels differ depending on land use.

Lighting Application	Recommended Footcandle	Uniformity Ratio*	Lighting & Lamp Type	Recommended Mounting Height
Parking Lots	0.2 - 0.3	4:1	Metal Halide: Functional cut-off “shoe box” style or decorated lamp housings.	16' *
Collection Road	0.3 - 1.0	4:1	Metal Halide: Functional cut-off style lights.	16'
Streetscape (Downtown)	0.5 average	4:1	Metal Halide: Decorative cut-off style lights.	14'-16'
Walkways	0.1 - 0.2	4:1	Metal Halide or incandescent: Decorative post and lamp, or post / bollard mounted downtown light.	12' or 36" - 42" if on post or stairways.
Signs	1.0 - 3.0	2:1	Metal Halide or Incandescent: Ground or sign mounted & shielded.	As Required.

\* 16' is the maximum height for mounting as per the Manchester Zoning Ordinance see definition of “Uniformity Ratio” in glossary.

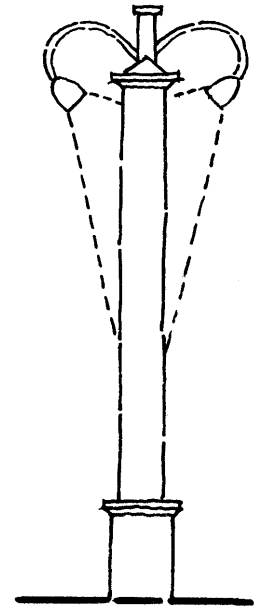
- Built-in lighting is efficient; as an example down-lighting eliminates glare and light spill to the night sky and is recommended for covered walkways and streetscape locations. Effective down-lighting engages and welcomes the visitor.
- Lighting types used shall reduce light pollution and employ designs which control directed light. Bare bulbs or direct light should not be visible to the human eyes.
- Low level post lights (30-42" high) with fixture incorporated into the post are an excellent way to direct light on pathways only.
- Fixtures and housing should employ shielded and directed lighting; lighting should not result in excessive shadows and high contrast bright areas versus dark areas.
- Cut-off lights can provide uniform light levels where needed; non-cutoffs contribute to light pollution.
- For individual project sites next to sites with appropriate lighting already in place, or side by side projects, consistent light level design and use of consistent product, housing and fixture type are recommended.
- Exterior light fixtures should be simple in design.
- Dark colored fixtures are generally preferred for pole mounted lights. Building mounted fixtures generally fit better if painted to match the building or background.
- Fixtures that are appropriate to the historic or contemporary designs and uses of the site should be used.
- Lights which produce a warm effect rather than a cool effect should be used.
- Incandescent and metal halide lights are appropriate.

*See definitions of "cut-off luminaire" and "foot candles"  
See bibliography for additional information on lighting.*

### Lighting Signs from Above

Sign mounted down lights are desirable because they focus light where it needs to be, and minimize, if not eliminate “light spill” and glare beyond the signboard itself.

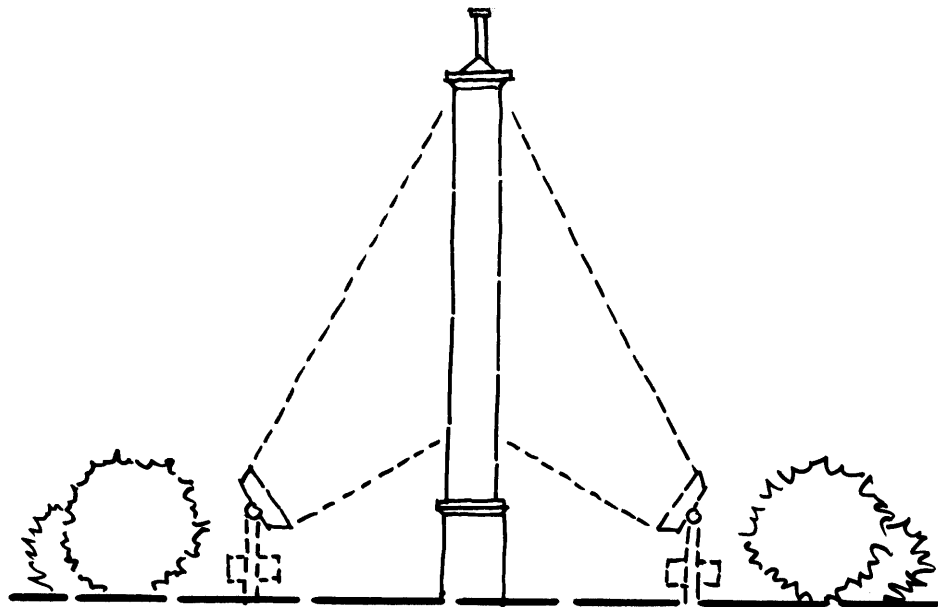
Lighting should be designed and mounted so as to fit the architecture of the sign.



### Lighting Signs from Below

Shrubs hide and protect ground mounted light fixtures.

Lighting should be designed to illuminate only the signboard, limiting the “spill” of light beyond the sign surface and the potential for glare.





## **PARKING & CIRCULATION**

*Principle:* promote safety, function and logical layout patterns

*Principle:* promote aesthetically appropriate parking environments

*Principle:* maintain small/moderate village scale and character in parking lot

*Principle:* to reflect goals set out in Parking and Pedestrian Improvements Plan

### **Patterns for Parking and Circulation**

- The layout of entry roads and parking lot entrances and exits should provide adequate visibility for safe vehicular and pedestrian movement.
- Plan parking lots to avoid building in a “sea of parking” – use landscaped islands, walkways and buildings to break up expanses of asphalt.
- Parking should be creatively screened or located with minimal visibility to the street
- Proper island design should be used for spacing, placement and size.
- Promote maximum integration, circulation and parking stall layout to work for multiple contiguous parcels. This may be more involved than simple allowance of easements or a ROW.
- Provide adequate locations for snow removal/snow storage at the edges of a lot and in islands. Plan the landscaping accordingly.
- Pedestrian circulation should be logical, to reflect desire lines and "pooling" places for gathering and crossing traffic
- Landscape patterns include providing for sufficient growing space, selecting appropriate tree locations, installing sufficient and proper soil, and using hardy species that reflect the principle of using the right plant for the right place.

### ***Pedestrian-Friendly Design***

The term "pedestrian-friendly" is used frequently in these design guidelines and the principles it includes have been endorsed by the 1994 Community Vision for Manchester, the 1997 Town Plan, and the Manchester Commercial District Parking and Pedestrian Plan. A pedestrian-friendly environment is simply one that makes walking an appealing, safe, and efficient way to get around town. Reasonable provisions are made for driving and parking automobiles, but emphasis is placed on the quality of the pedestrian's experience with the goal of reducing gridlock and improving community life.

## **PEDESTRIAN CIRCULATION**

*Principle:* provide for safety and function of pedestrian circulation patterns

*Principle:* integrate with existing and proposed pedestrian circulation routes

*Principle:* design aesthetically pleasing walks and paths

### **Patterns for Pedestrian Circulation**

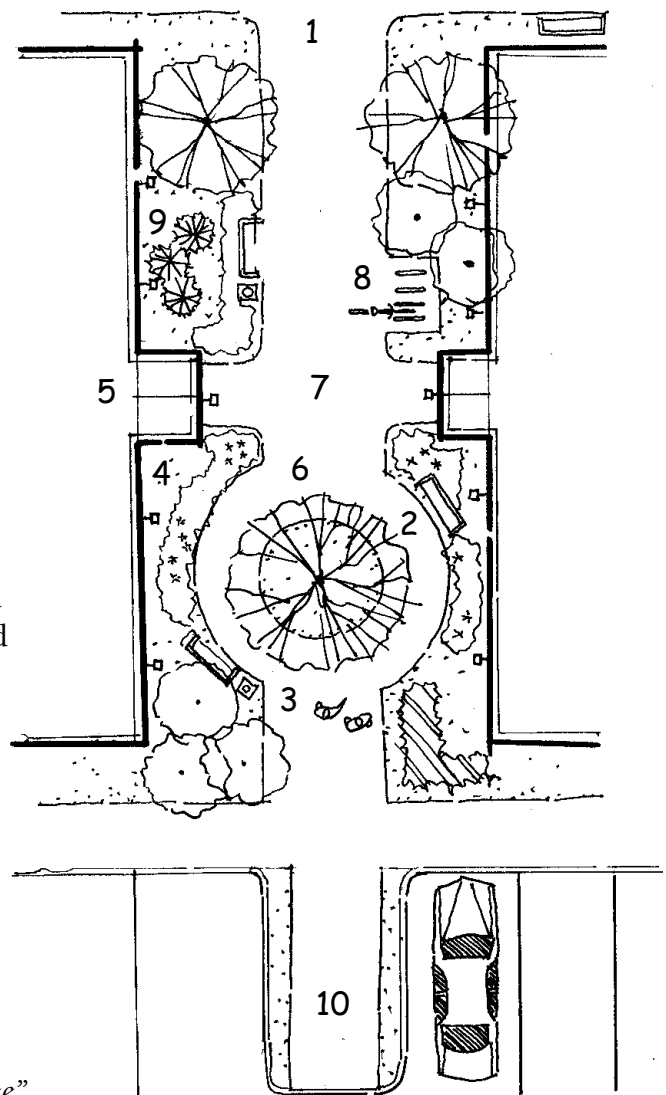
- Develop sidewalks, walkways, and paths with appropriate layout and design to accommodate pedestrian desire lines, access points and safe travel.
- Plan for circulation systems and routes, to include location of crosswalks and connections to other key destinations, adjacent or otherwise.
- Employ durable surface materials and sufficient sub-base preparation: brick, unit pavers, concrete or asphalt to be underlaid with 4-6" sand, 4-6" gravel and stabilization fabric.
- Incorporate accessibility and appropriate grades for pedestrian circulation. Sidewalks should be at a 5% grade or less, where feasible. Rely on ADA (Americans with Disabilities Act) Standards.
- Amenities to provide for pedestrian circulation

*See definition of "specimen tree"*

## Ingredients of a Good Pedestrian Space

This plan shows how a space between buildings can be designed and developed to effectively serve pedestrian needs.

1. Well defined circulation within parking lot and to building entries.
2. Lots of benches with backs
3. Trash barrels
4. Building mounted area lights (focused down)
5. Well defined entry- roof sheds snow off of walk
6. Existing specimen tree protected
7. Ample circulation space
8. Bike racks are well placed and have appropriate ground surface
9. Extensive landscaping is employed to provide shade, color and interest in all seasons
10. Sidewalk access from parking lot islands

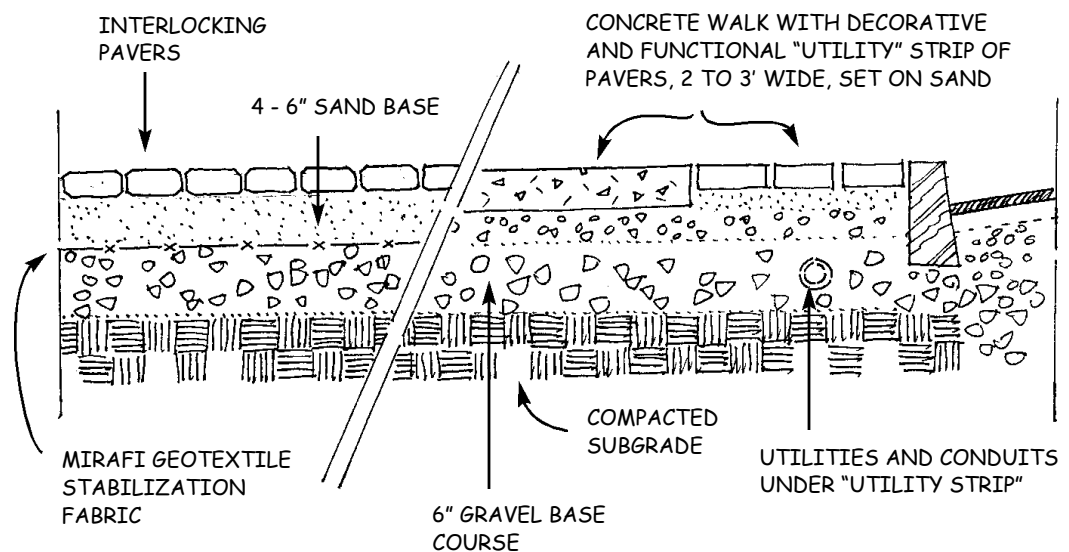


See definition of "specimen tree"

See also: *Outdoor Rooms and Attractive Alleys*

## Design for Walkways and Sidewalks

A safe and comfortable pedestrian walkway has a minimum width of 5' and a maximum grade of five percent. Use of interlocking pavers is recommended to resist heaving. They need to be set on the proper sub-base for pedestrian walks and plazas. Stabilization fabric is recommended under the sand layer. Decorative paver edges/borders or utility strips can serve both aesthetic and functional purposes. Alternatives to pavers such as patterned and colored asphalt and concrete (such as "Streetprint" and "Bomanite") can be considered but must have a well designed and installed with sufficient sub-base and compaction. Basic concrete surfaces should be scored and have a rough or textured aggregate finish.





## **STREETSCAPE**

*Principle:* employ designs that address safety, function and aesthetics

*Principle:* reflect the desirable patterns on street and in the district

*Principle:* create meaningful spaces for pedestrians that draw them in

*Principle:* respect and enhance the village environment

### **Patterns for Streetscape**

- Appropriate planting intervals for street trees from a minimum of 30' to a maximum of 50' on center.
- Provide for proposed and existing streetscape plans and sections for dimensional guidelines (see Manchester Park & Walk plan)
- Identify best streetscape patterns in each district and reflect or reference in new design being proposed.
- Rely on the integration of deciduous trees as street trees to break up expanses and provide shade; see table of recommended street and village trees.
- In commercial districts, accommodate people both sitting and strolling, with suitable walking and sitting surfaces. Provide a variety of seating options, typically 16-20" height.
- Use tree and shrub buffer plantings to screen unwanted elements and soften architecture.
- Consider coordination of private and public utilities to afford suitable tree planting areas and minimize the presence of utilities.

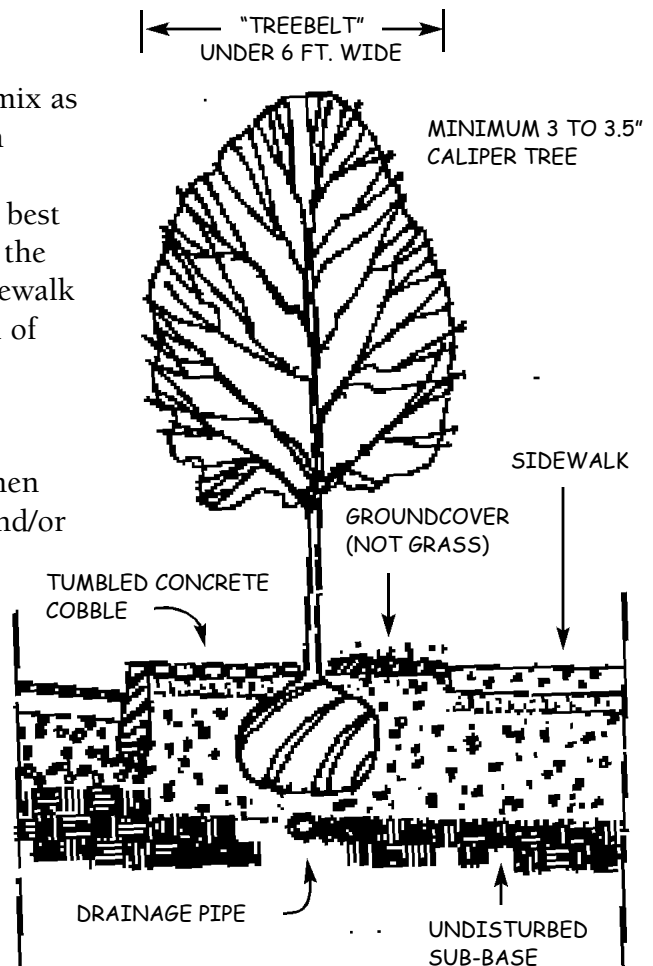
### Treebelt Planting

Using Cornell structural soil mix as a supplement in narrow width treebelts is recommended to a minimum depth of 30" and is best applied continuously through the entire span of treebelt and sidewalk to promote health and growth of larger trees.

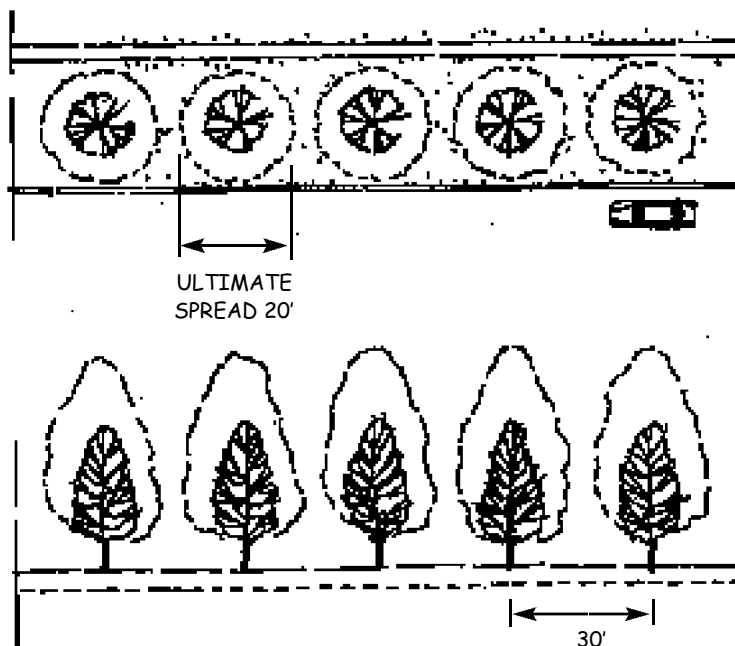
A 4" diameter PVC perforated drainage pipe is to be used when subsoil is highly compacted and/or poorly drained.

Also consider alternatives to grass under trees.

*See definition of "structural soil"*



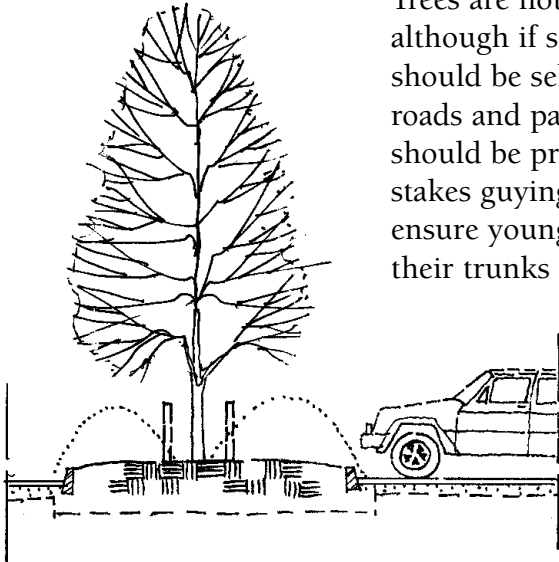
### Tree Spacing and Layout



Use regular spacing of trees where possible in architectural settings. Species can be alternated to avoid a monoculture susceptible to disease or damage. Anticipate growth so that when full grown, tree canopies will almost touch. A planting interval of 30 feet on center is usually sufficient.

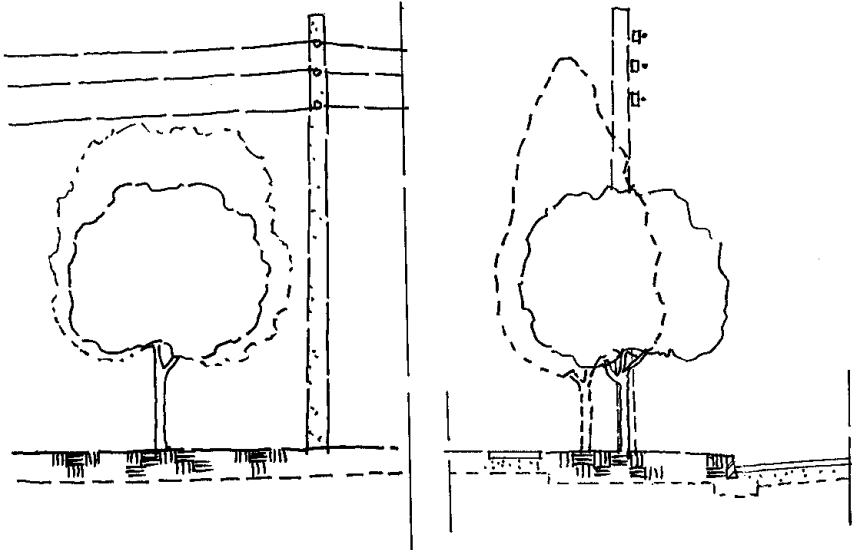
### Trees and Snow

Trees are not negatively impacted by snow piles, although if salt is used, salt tolerant varieties should be selected. Adequate area at edges of roads and parking lots (5' width minimum) should be provided for snow piling. Sturdy stakes guying trees might also be employed to ensure young trees are not pushed over and their trunks damaged.

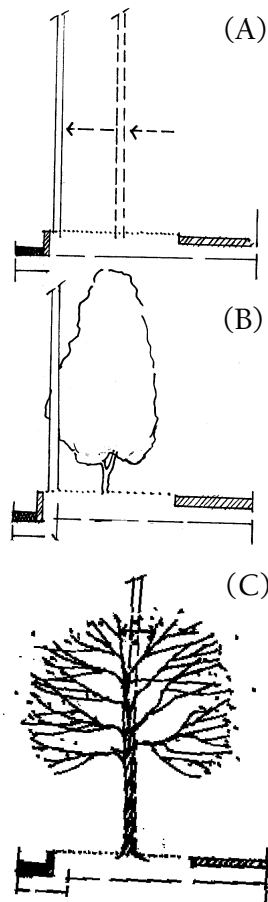


### Planting Under Powerlines

If trees are to be planted under utility lines, specific varieties should be selected which do not exceed the height of the lowest line when full grown. Larger trees can be planted if they are offset from the utility lines.



### Trees and Utility Lines



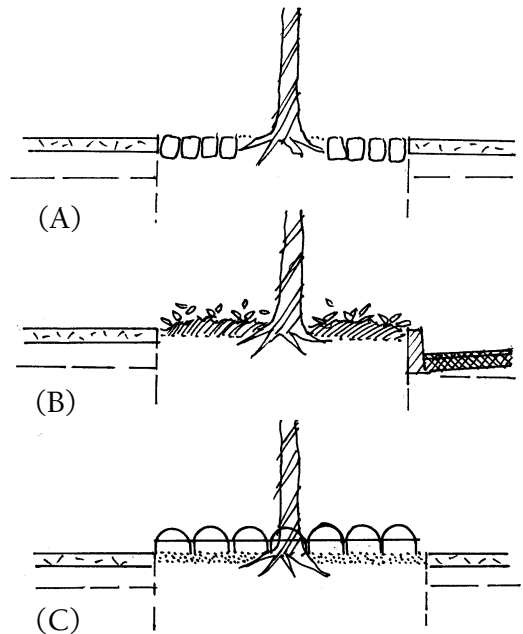
When burial is not an option, moving poles to curbside (A) creates a planting area for a tree with large, oval-shaped canopy (B). Some trees, such as Kentucky Coffeetrees and Honeylocusts, have open habits which allows branching in the upper canopy to co-exist with utility lines (C).

See also: *Street and Village Trees for Manchester* for a listing of appropriate trees

### Treatment of Treebelts and Islands

Some different ways to treat islands and treebelts are (A) cobble surround, (B) groundcover, and (C) low decorative fencing with bark mulch, gravel, or groundcover.

Plantings in islands or streetside treebelts should avoid placement atop underground utilities wherever possible. Root retardant products are available to restrict root systems from affecting waterlines and sewerlines.





## Street and Village Trees for Manchester

Botanical Name	Common Name	Minimum Recommended Growing Area	Salt Tolerance	Recommended Usage
<b>Large Trees</b> -Greater than 50' in height				
<i>Acer rubrum</i>	Red Maple 'Armstrong'	10'x10'	M	For areas unrestricted by overhead utilities; in parking lots; tolerates wetness
<i>Fraxinus pennsylvanica</i>	Green ash	10'x10'	M	For areas unrestricted by overhead utilities; very hardy tolerant tree
<i>Gleditsia triacanthos</i>	Honey Locust	10'x10'	T	Can be pruned around overhead utilities
<i>Quercus rubrum</i>	Red Oak	10'x10'	M	For areas unrestricted by overhead utilities
<i>Quercus palustris</i>	Pin Oak	10'x10'	T	Has low branching habit
<i>Zelkova serrata</i>	Japanese Zelkova	10'x10'	T	For areas unrestricted by overhead utilities
<i>Tilia cordata</i>	Littleleaf Linden	10'x10'	T	For areas unrestricted by overhead utilities
<i>Gymnocodium dioicum</i>	Kentucky Coffeetree	10'x10'	T	Can be pruned around overhead utilities

Botanical Name	Common Name	Minimum Recommended Growing Area	Salt Tolerance	Recommended Usage
<b>Columnar Trees</b> - less than 25' in crown diameter				
<i>Acer x freemanii</i>	Freeman Maple	8'x8'	T	For narrow areas i.e: close to a building or in an island
<i>Fraxinus pennsylvanica</i>	Green Ash 'Empire'	8'x8'	T	For narrow areas i.e: close to a building
<i>Ginkgo biloba</i>	Ginkgo	8'x8'	T	For narrow areas i.e: close to a building. Select seedless variety only.
<i>Prunus sargentii</i>	Sargent Cherry 'Columbiana'	8'x8'	M	For narrow areas i.e: close to a building
<i>Quercus robur</i>	English Oak	8'x8'	T	For narrow areas i.e: close to a building

### Street and Village Trees for Manchester (Con't.)

Botanical Name	Common Name	Minimum Necessary Growing Area	Salt Tolerance	Recommended Usage
<b>Small Trees</b> - less than 28' in height				
<i>Acer tataricum</i>	Tatarian Maple <sup>2</sup> also <i>A. ginnala</i>	6'-8'	M	For areas constricted by overhead wiring or where small trees are desirable
<i>Carpinus caroliniana</i>	American Hornbeam	6'-8'	M	For areas constricted by overhead wiring
<i>Cotoneaster crugalis</i>	Thornless Cockspear	6'-8'	M	For areas constricted by overhead wiring
<i>Malus spp.</i>	Crabapple	6'-8'	T	For areas constricted by overhead wiring or where ornamental effect is desired
<i>Pyrus calleryana</i>	Callery Pear <sup>2</sup>	6'-8'	M	For areas constricted by overhead wiring
<i>Prunus maackii</i>	Amur Chokeberry	6'-8'	M	For areas constricted by overhead wiring
<i>Syringa reticulata</i>	Japanese Tree Lilac <sup>2</sup>	6'-8'	T	For areas constricted by overhead wiring

**Notes:**

1. Refer to: Landscape Plants for Vermont for acceptable cultivars and more detailed information.

2. <sup>2</sup> These trees will often grow well in areas where limited soils exist.

M = moderate tolerance, depending upon cultivar

T = tolerant

## **SIGN DESIGN**

*Principle:* Signs should fit within and enhance the context and character of a district

*Principle:* Signs should provide effective communication and guidance

*Principle:* Signs should be lit evenly and clearly, and without glare or light pollution

### **Patterns for Sign Design**

- Use of appropriate materials such as wood and metals is desirable in sign design and construction.
- Avoid creating light pollution with light fixtures. Shielded and directed lighting is recommended.
- Incorporate appropriate lighting options. Downlighting is preferred.
- Signs should be the proper size in proportion to the building and site.
- Employ contrast and clarity in sign design; reflect the architecture, history or use of the site in the design.
- There is a fine line between too much vs. too little embellishment on a sign face. Simpler signs with only the minimum necessary amount of information are easier to read and more effective.
- Use a hierarchy of information to include a main sign that identifies the complex as the destination, with individual stores identified on their building fronts as well as in an outdoor directory.

*Refer to the Manchester Sign Ordinance for current rules regarding signs.*

*see also: Integrated Signs*

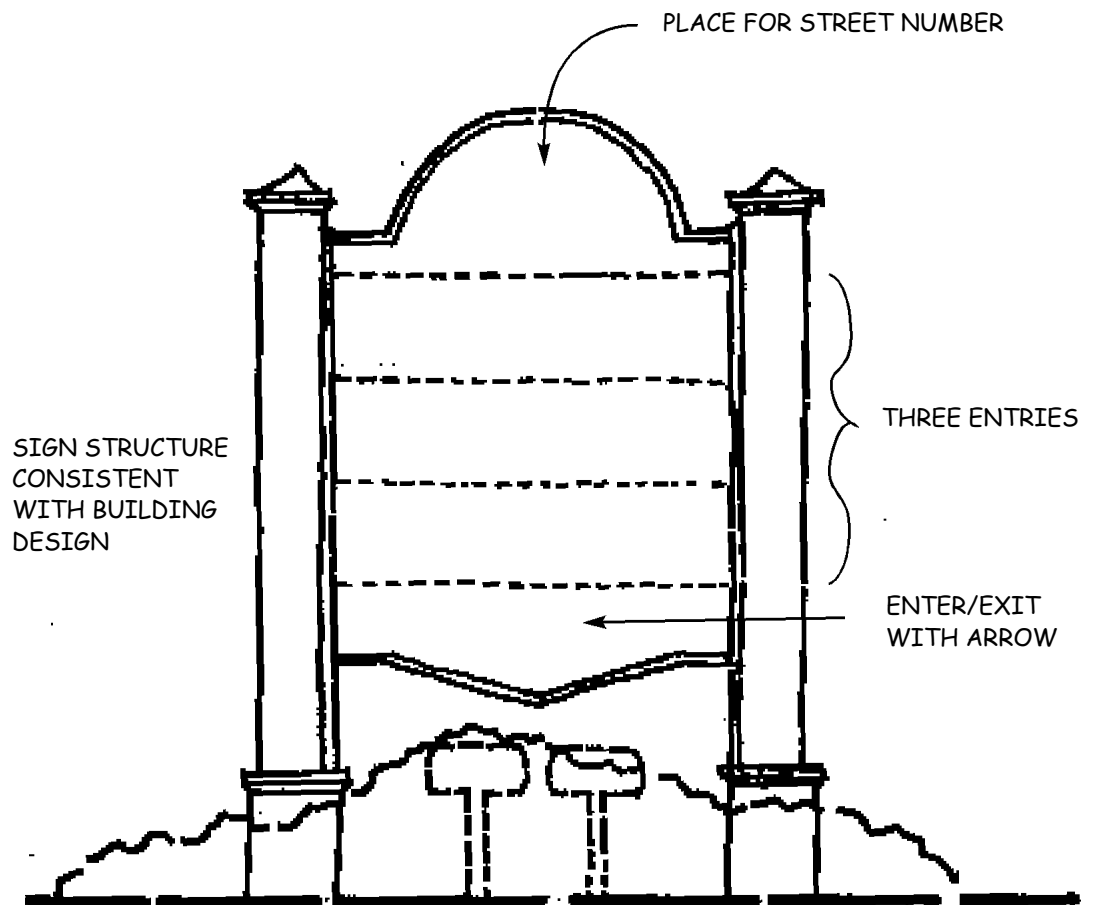
## Sign Guidelines

A maximum of three or four entries is recommended. More than four entries creates a busy, hard-to-read sign and are more difficult for motorists to read safely. When this is not sufficient, it is recommended that one sign with the overall development or complex name be used on the street as the destination. This is in keeping with the accepted principles of wayfinding.

Screen lighting fixtures at the base of sign structure.

Incorporate street number and "enter" or "exit" into signboard to eliminate additional signs and sign clutter.

*see definition of "wayfinding"*





## LANDSCAPING

*Principle:* Employ ecological design methods to include the use of a diversity of plant materials that provide habitat for wildlife. (see also: *Bio-Retention*)

*Principle:* Design spaces that are aesthetically pleasing throughout the seasons and serve the function for which they are intended

*Principle:* Provide adequate screening and buffers where appropriate

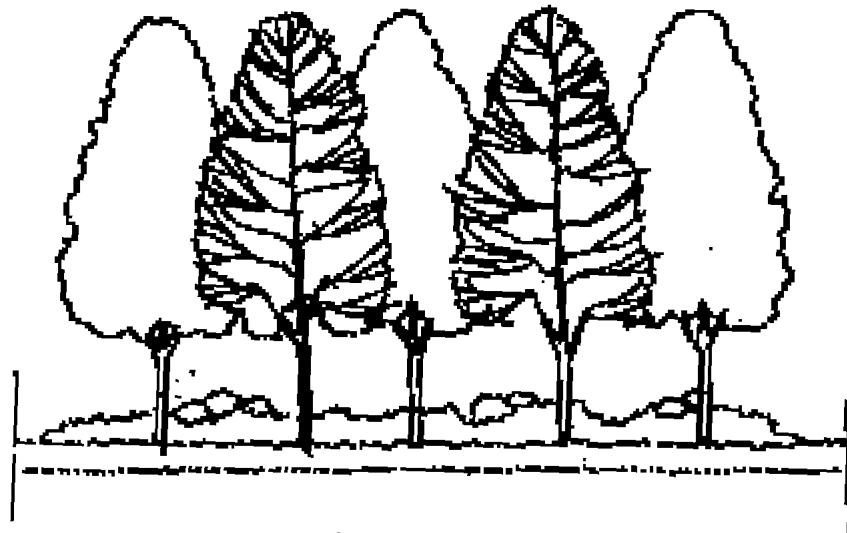
*Principle:* Design for energy conservation and environmental comfort

### Patterns for Landscaping

- Use native or naturalized species with proven performance and hardiness.
- Employ local technologies for installation and management.
- Maintain and enhance views of the surrounding and distant landscape.
- Consider functional landscaping: employ design techniques that stabilize slopes, provide low maintenance alternatives to lawn areas, reduce erosion and reinforce pedestrian circulation routes.

### Creating an Appropriate Environment for Plants

Wherever possible and/or appropriate, trees should be planted in groupings for better health, function and aesthetic value. Underplantings of groundcovers, flowering and evergreen shrubs are recommended rather than grass or mulch. This approach will increase the health and longevity of the plant materials, and reduce long term maintenance costs.



### Planting in Islands

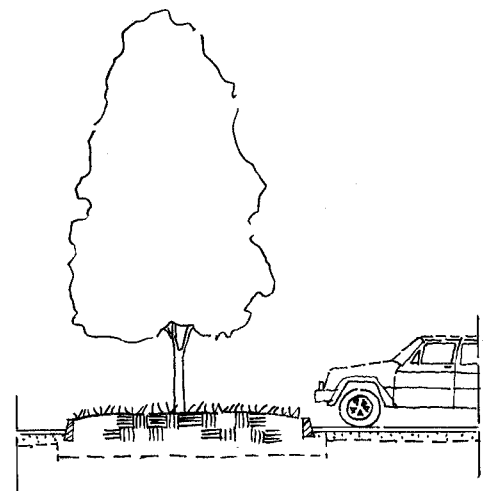
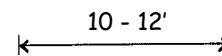
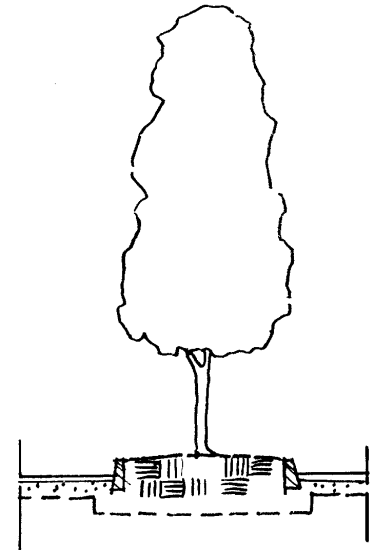
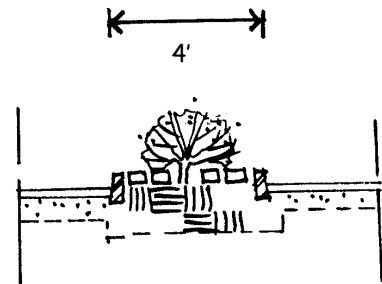
In islands that are 4' in width or less, hardy, sturdy shrubs or perennials such as native rose bushes or daylilies can be planted in a cobble surround. These varieties can withstand drought and snow piles.

The recommended minimum island width for tree planting is 6'. In this type of planting island a columnar tree is recommended.

A minimum 10-12' island is recommended for successful establishment of larger scale landscape trees. Larger trees will more effectively shade asphalt lots, prolonging the life of the asphalt and reducing heat levels in summer.

The island needs to be wider if a pedestrian walk of 5' width minimum is to be incorporated.

*see also: Treebelt Planting and Treatment of Islands and Treebelts*

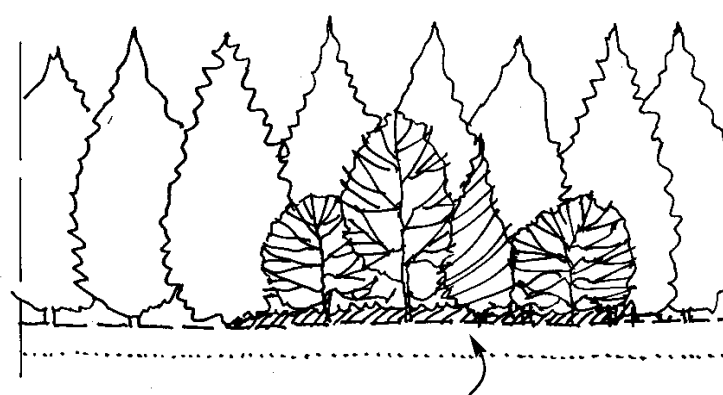


## Living Fences

Living fences are typically linear hedges or buffer plantings. Columnar or pyramidal varieties of evergreens lend themselves well to this use, as they provide color and screening year round.

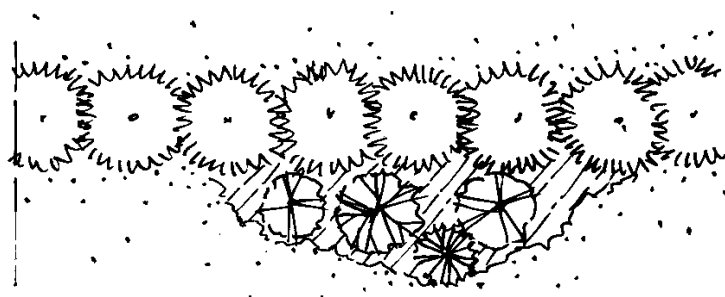
Vines such as Honeysuckle, Virginia Creeper, Silverfleece or Wintercreeper can be grown on wood or metal fencing as another alternative to creating a “living fence” which provides screening.

The formality of screen trees planted in a row can be softened by planting deciduous and evergreen accent trees in front of and as part of the hedge. This approach will break up the continuous line of trees.



ELEVATION

ACCENT PLANTING FEATURE SET OFF BY EVERGREEN BACKGROUND

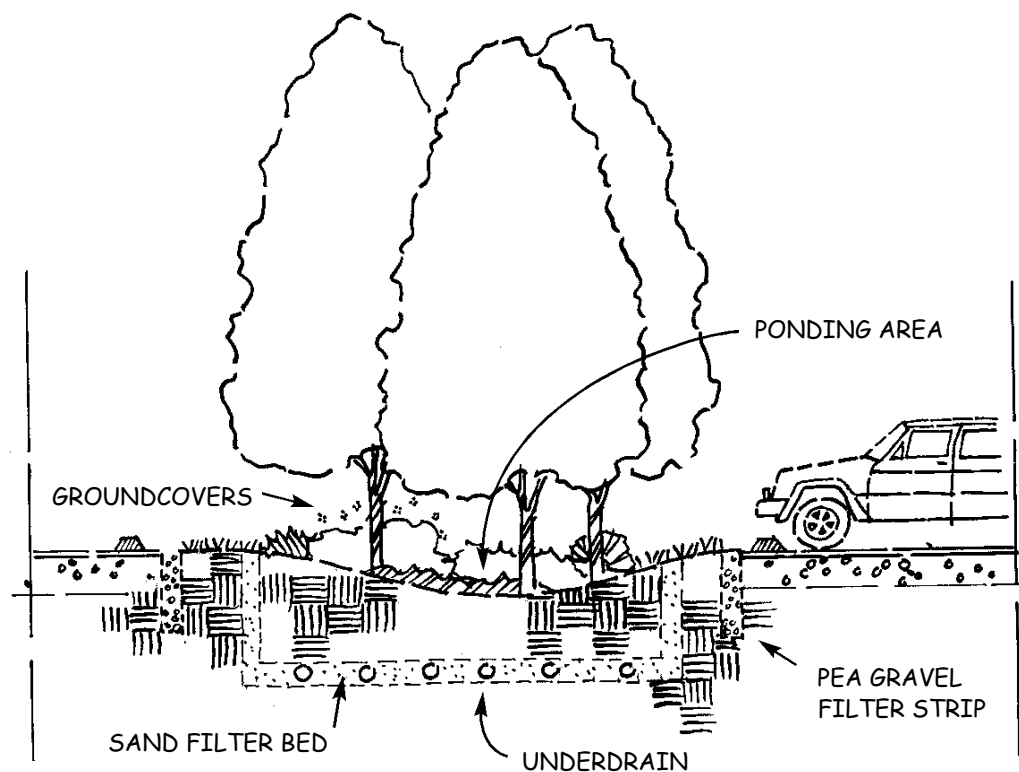


PLAN VIEW

### Bio-Retention

Bio-retention areas in parking lots and development sites offer an example of “Ecological Design” which treats stormwater runoff in a natural manner by detaining it and filtering it as it percolates through plantings and sand filter beds. The more intensive planting approach also offers a viable strategy for beautifying parking lots, attracting birds and screening the parked cars.

Native and naturalized materials are recommended for groundcovers and plantings as part of the bio-retention strategy.



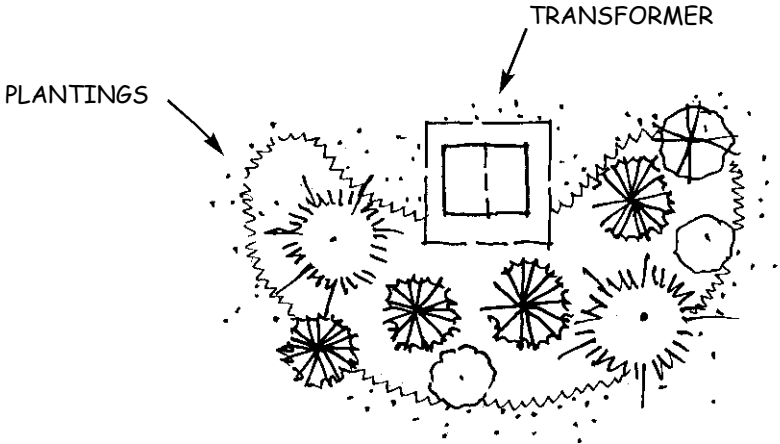
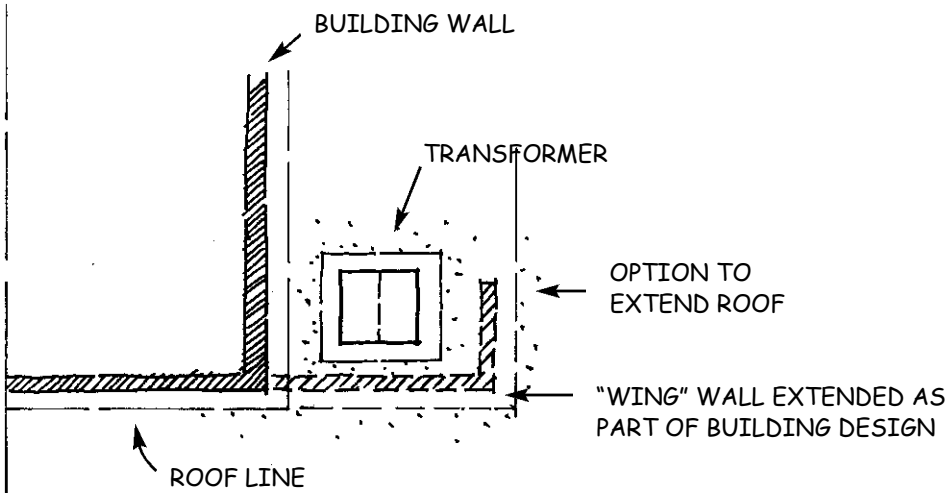
*see definition of “ponding area”*



### Screening

Screening transformers and other utilities can be accomplished in a more creative fashion that calls less attention to the element being screened. Two options include 1) incorporating the screening element into the architectural design of the building or utility buildings on the site or 2) setting the transformer or other such utility within a proposed planting bed rather than creating a rectilinear planting around the transformer designed specifically to screen it.

#### PLAN VIEWS



## SITE FURNITURE

*Principle:* Reflect neighborhood/downtown/site character and context

### Patterns for Site Furniture

- Provide for appropriate placement of site furniture, where people will use it.
- Locate site furniture with security in mind and install in a method which withstands weather and abuse.
- Consider aesthetics – use the right products that fit with the design motif of the project or setting.
- Consider accessibility and universal design applications.
- Use appropriate materials for durability and contextual relationship.
- Details and design are to be guided by the proposed architectural and/or landscape designs.

see definition of “universal design”

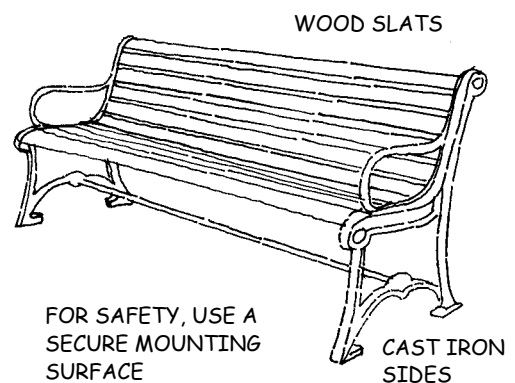
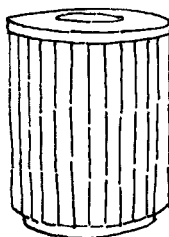
### Benches and Garbage Cans

Where possible, a family of site furniture of similar historic styles prevalent in Manchester should be used. Use sturdy, well-designed site furniture; a wide variety of decorative styles with durable, appropriate materials are available. Consider wood slats; they are not too hot, and not too cold to sit on.

Color and design in site furniture will help unify a project site. A range of colors are available.

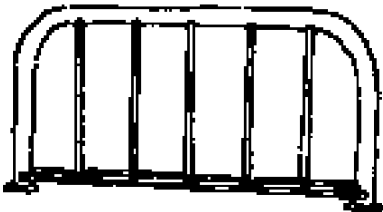
METAL TOP LIFTS  
OFF TO EMPTY

WOOD OR  
METAL SLATS



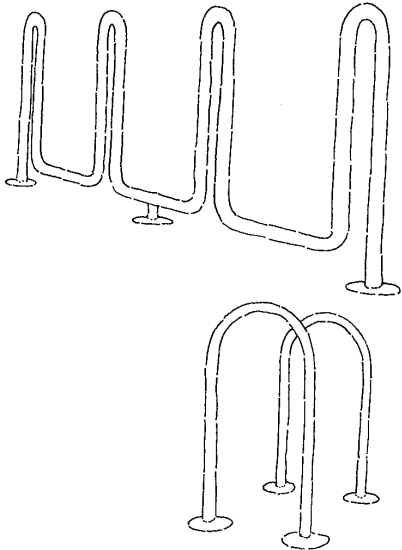
**Bikeracks**

Two types of bicycle racks are shown. Coated metal racks are available in a range of colors, and will not check or warp like wood racks. These metal racks can be surface mounted on concrete or installed by direct burial of longer support posts. Another option is the low profile bike rack as manufactured by Bike Track, Inc. of Woodstock, Vermont.

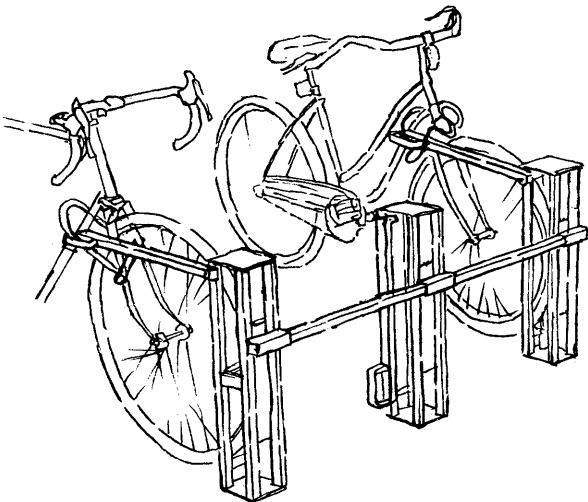


This simple style of rack can be used for tight spaces as it accommodates bicycles both sideways and perpendicular to the rack.

The “Bike Rib” series from Function First Bike Security, in Tuscon, Arizona (888-BIKERIB) offers 2 designs with powder-coated or thermo plastic finishes to protect bikes.



The rack pictured below provides stability and security for bicycles and is available through Bike Track, Inc., of Woodstock, Vermont.



# Appendix

## GLOSSARY

The following terms appear in the preceding Patterns for Buildings and Site and can be helpful when discussing architecture, landscaping and site development.

**Cut-off luminaire** A luminaire is a complete lighting fixture including the lamp (or bulb), the lens and reflectors (which direct and distribute light), the socket and the wiring. A cut-off fixture directs light only where it is needed, and prevents undesirable glare, scatter, or light pollution.

**Desire Lines** Used to describe the routes pedestrians prefer to take when traveling from point to point. Sidewalks do not always match where pedestrians desire to walk.

**Elevation** A drawing of the face of a building which shows no perspective effects. This type of drawing is simple to prepare and flat features are easily measured to determine scale. Also a name for the building facade itself.

**Foot candle** A measure of light falling on a surface. One foot candle is equal to the amount of light generated by one candle shining on a square foot of surface area one foot away. For example, full moonlight provides an illumination level of up to 0.1 footcandle, whereas a windowed room on a cloudy day would be illuminated in the range of 6-8 footcandles. (*from Outdoor Lighting Manual for Vermont Municipalities*)

**Ground plane** Refers to the topography or land surface at the ground level.

**Infrastructure** A term used to describe the physical systems of transportation, utilities and communications (such as roads, parking lots, HVAC units, dumpsters, telephone poles) which are necessary to serve buildings, institutions and communities.

**Massing** (*noun*) How the principle forms of a building are sized, shaped, grouped together, or arranged on a site. In the design process, one can think of walled and roofed shapes as building-blocks (masses) which may be dispersed in order to break up the apparent total volume of enclosed space, or combined to create a single larger mass. For example, "this building has irregular massing," or "the massing of this group of buildings is appropriate for its neighborhood."

**Parapet** The highest part of the exterior wall of a building which is apparently flat-roofed. The parapet hides rooftop equipment and the roof surface which slopes gently to a drainage point. (See Architectural Pattern: Roof Shapes)



**Rake** The inverted "V" shaped edge of a typical gable roof seen when one looks at the peaked exterior wall. The rake usually has the same profile as the eave. (See Architectural Pattern: Wooden Trim for components)

**Soffit** Any solid horizontal surface created by an overhang, whether indoors or outdoors.

**Specimen tree** A term used in the landscape industry to refer to an outstanding individual mature tree or a large tree to be planted which will serve as a focal point for an outdoor space.

**Transom** A small window located immediately above a door or conventionally-sized window. A transom window is always the same width as the door or window below it.

**Uniformity ratio** This is a ratio used in determining the relationship of lighting levels. It refers to the ratio of average illumination to minimum illumination on a surface. A 4:1 uniformity ratio thus indicates the average illumination is four times brighter than the minimum illumination provided by an outdoor lighting installation.

**Wayfinding** A systematic approach to guiding people through an environment to their destination, using signs, maps, landmarks and other means. It literally means finding one's way from place to place.

### **References and Suggested Further Reading:**

Alexander, Ishikawa, Silverstein, A Pattern Language, copyright 1967, Oxford Univ. Press

Arendt, Randall, Rural by Design, copyright 1994, American Planners Association

Carley, Rachel, The Visual Dictionary of American Domestic Architecture, reprint copyright 1997, Henry Holt (paper)

Duany, Andres, and Plater-Zyberk, Elizabeth, Towns and Town-Making Principles, copyright 1991, Harvard Univ. Graduate School of Design

Fleming, John, Penguin Dictionary of Architecture, copyright 1991, Penguin USA

Section 4: Appendix

Hale, Jonathan, The Old Way of Seeing, paperback copyright 1995, Houghton Mifflin Co.

Kunstler, James Howard, The Geography of Nowhere, copyright 1994, Touchstone Books

McAlester, Virginia and Lee, A Field Guide to American Houses, copyright 1989, Alfred A. Knopf

Burlington Dept. of Planning & Zoning. Design Review Guide: "Landscaping", "Site Plans, Signs", "Replacement Siding", "The Process", "Utilities and Other Essentials", "Outdoor Lighting". 135 Church St., Burlington, VT 05401, 1998.

City Of Burlington. Street Tree Planting Plan. Land•Works Landscape Architecture, Middlebury, VT, 05573.

Chittenden County Regional Planning Commission, Outdoor Lighting Manual for Vermont Municipalities. Essex Junction, VT 05453, May 1996.

Duerksen, Christopher J. & Richman, Suzanne, Tree Conservation Ordinances. American Planning Association and Scenic America, Chicago, IL, 1993.

Fleming, Ronald Lee, Saving Face: How Corporate Franchise Design Can Respect Community Identity. American Planning Association, Chicago, IL, and the Townscape Institute, Cambridge, MA, 1994.

Heriteau, Jaqueline & Cathey, Dr. H. Marc. The National Arboretum Book of Outstanding Garden Plants. Simon and Schuster, NY, NY, 1990.

Landscape Plants for Vermont. The Extension Service, University of Vermont, 1966.

Illumination Engineering Society of North America. Lighting Handbook: Reference and Application, 8th ed. (Edited by M.S. Rea, New York: Illumination Engineering Society of North America, 1993)

Williams Jr., Norman & Kellogg, Edmund H. & Lavigne, Peter M.. Vermont Townscapes. Center for Urban Policy Research, New Brunswick, NJ, 1987.

## Submitting an Application for Design Review

Proposals should be illustrated to a degree that gives the reviewing Boards a thorough understanding of the project. The quantity and type of drawings or other information needed will vary with the nature and extent of the project. For example, a more thorough application packet will be needed for a new building in a historic district, or a facade renovation on a historic building, as compared with a proposal for rear deck on a newer building located off the street. The checklist below is a guideline to help inform a prospective applicant as to what may be needed in a design application; Town Boards may request additional information as needed to fully understand any particular project. Town staff are happy to provide guidance and answer questions as to what may be needed in any particular instance.

Helpful or required information may include:

### Building design

- Narrative explaining the scope of work proposed.
- Accurate, detailed drawings or photographs showing existing conditions of the building.
- Accurate, detailed scale elevations illustrating the proposed construction or alteration. Elevations should include neighboring buildings, proposed signs, light fixtures, and landscaping. In minor cases, a sketch superimposed over a photograph may suffice. In other cases (such as for new buildings or other significant proposals), digital imagery may prove helpful in visualizing proposals. Perspective drawings may also be needed -- for example, of a principal facade as seen from pedestrian eye level.
- Accurate detailed scale drawings of site development plan. (Residential uses need a sketch plan).
- Samples, specifications, cut sheets, photos of all materials, i.e.: roofing material, doors, window/muntin specs, siding, site furniture, handrails, fencing, brick, etc.
- Additional drawing(s) or sections of details for trim and finish work.
- Accurate and sufficient samples of paint chips for primary and trim colors.
- Manufacturer's cut sheet or specifications and locations for all HVAC units and other infrastructure

### Lighting

- Show numbers & locations of proposed light fixtures on a site development plan.
- Provide manufacturer's cut sheets for all fixture(s) and/or pole(s); photos if available; specify colors.
- Specify types of bulbs and size/intensity for each type of fixture.
- Accurate, scale drawings or photographs of building elevations for wall-mounted lights.

### Awnings

- Photo or brochure showing proposed design.
- Color sample or swatch of proposed material.
- Photograph or accurate scale drawing of building, showing where awning is to be installed.

**Landscaping**

- Accurate, detailed scale drawing of site plan showing location, number, and types, and sizes of proposed plantings or other site improvements, including fences, screening, benches, and the like.

**Signs**

- Color rendering of proposed sign, or photograph if already existing.
- Material specifications; accurate and sufficient samples of each proposed color.
- Photograph or accurate scale drawing of building elevation showing proposed location(s) of flush mounted or projecting sign(s),  
and/or
- Photograph or accurate scale drawing of site plan showing proposed location of freestanding sign.
- Type & location of all lighting fixtures & bulbs that illuminate sign.

**With a complete submittal in hand, Town Boards can more fully understand the scope of a proposed project. This will help the review process go more smoothly for all parties.**