

INVENTORY

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Chapter A

POPULATION AND DEMOGRAPHICS

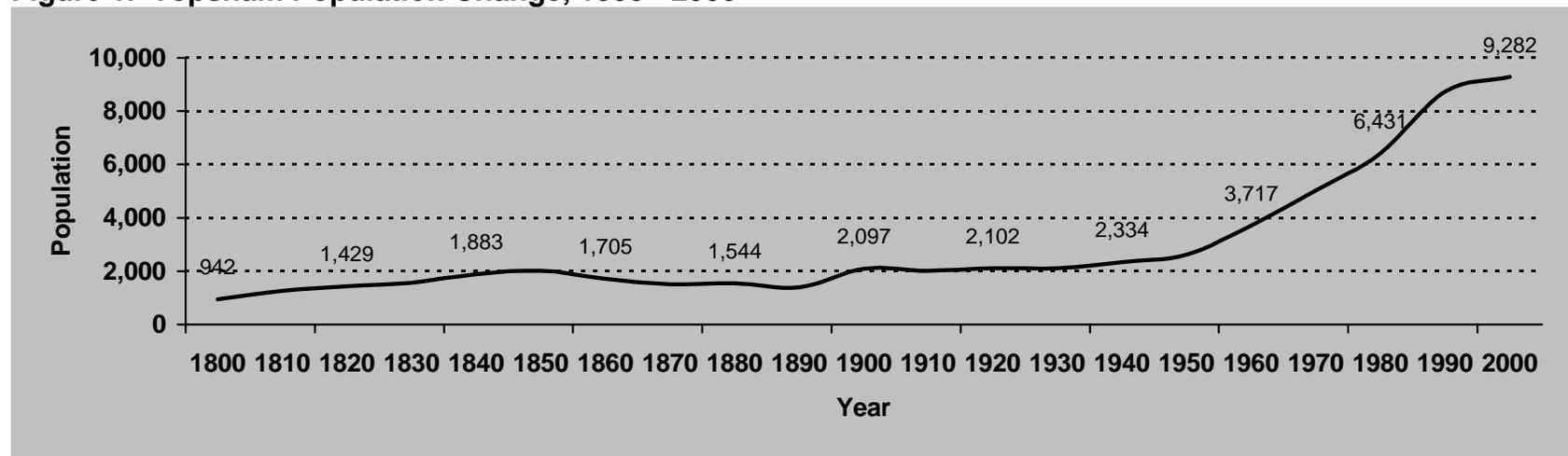
Communities change. Change is easy to recognize when it is fast or large in scale. Change is more difficult to detect when it is subtle. Both types of change can have lasting impacts on a community. A community must understand the trends creating change so that adequate facilities and services can be provided to residents.

This chapter provides a statistical profile of Topsham’s population and demographics and discusses the major trends that could affect future services and facilities.

Population Growth, 1800 - 1990

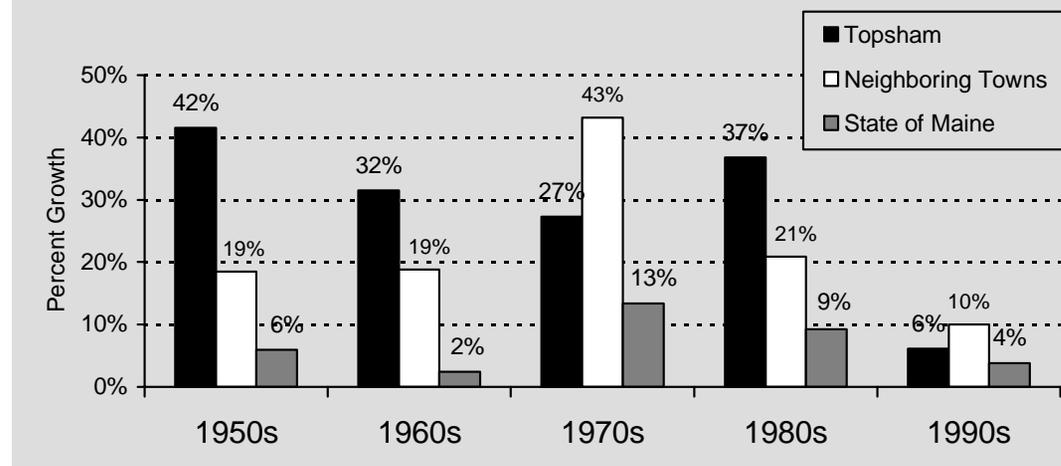
Topsham’s population tripled between 1800 and 1950. Intermittent booms and busts in the town’s farming, logging, and manufacturing industries led to a 1950 population of 2,600 (Figure 1).

Figure 1. Topsham Population Change, 1800 - 2000



Source: US Census, Town Records, Planning Decisions

Figure 2. Population Growth by Decade, 1950 – 2000



Source: US Census; Town Records; Planning Decisions, Inc.

This intermittent pattern of growth changed in the 1950s. A new era of rapid growth was founded on both maturing employment centers (for example Brunswick Naval Air Station, Bath Iron Works, and L.L. Bean) and improved access between employment centers and rural areas on the growing road network and the popularity of the automobile.

In the 1950s, Topsham’s population grew by 42% (Figure 2). In the 1960s it grew by 32%. And in the 1970s and 1980s it grew by 27% and 37%, respectively. The consistency and

longevity of this rate of growth outpaced the state as a whole and generally outpaced the average growth rates in Bowdoinham, Bowdoin, Lisbon, and Brunswick during this time period¹.

Population Growth, 1990 - 2003

Not until the 1990s did Topsham’s rate of growth moderate. Topsham’s population is estimated to have reached 9,282 residents by 2000 – a growth rate of 6% in the 1990s² (Table 1). The addition of 410 year-round

Table 1. Estimated Population, 2000

1990 Year round housing units	3,224
(+) estimated new yr-round units, '90 – '00	410
(=) estimated year round housing units, '00	3,634
(X) occupancy rate, '00	96%
(=) estimated year-round households, '00	3,489
(X) persons per household	2.62
(=) estimated year round population	9,141
(+) group quarters population	141
(=) Total estimated population, 2000	9,282

Source: US Census; Topsham; Planning Decisions

¹ Analysis averages the rates of growth for each town in each decade to ensure that significant population changes in smaller towns were not overwhelmed by insignificant changes in larger towns.

² The 2000 US Census reports a net increase of 336 housing units versus town records which report a net increase of 410 housing units (419 building permits minus a factor for conversions and demolitions). Given this more robust housing unit growth, Planning Decisions estimates Topsham’s 2000 population to have been 9,282.

Table 2. Population Growth, 1950 – 2000

	1950	% Change	1990	% Change	2000
Bowdoin	638	246%	2,207	23.6%	2,727
Bowdoinham	1,039	111%	2,192	19.2%	2,612
Topsham	2,626	233%	8,746	6.1%	9,282
Maine	913,774	34%	1,227,928	3.8%	1,274,923
Brunswick	10,966	91%	20,906	1.3%	21,172
Lisbon	4,318	119%	9,457	-4.0%	9,077

Source: US Census, Planning Decisions, Inc.

Topsham grew moderately in the 1990s when compared with surrounding communities (Table 2). The smaller communities of Bowdoin and Bowdoinham grew faster, while the larger communities of Brunswick and Lisbon grew slower.

In the three years since the Census was conducted, Topsham’s population is estimated to have increased another 349 residents to 9,631 (Table 3).

Using the same formula, the addition of more households is moderated by a decrease in the number of persons per household. The group quarters population is estimated to have remained stable.

housing units (422 permits for new units minus a factor for conversions and demolitions) and an occupancy rate of 96% increased the number of households to 3,634. Tempering this increase was a decline in the number of persons per household from 2.80 persons to 2.62 persons. The group quarters population increased slightly to 141 persons.

Topsham’s growth rate moderated for three reasons. First, several of the region’s major employers downsized in the 1990s, most notably Bath Iron Works and the Brunswick Naval Air Station. Losing these regional jobs suppressed the amount of regional demand for housing. Second, the recession of the early 1990s severely suppressed growth throughout Maine for the first half of the 1990s. It wasn’t until 1995 that most communities started growing again. And finally, Topsham’s demographics suggest that many of the young families that moved into the community in the 1970s and 1980s have matured and children have left home.

Population Projections, 2003 - 2015

Projections for the future are difficult in the best circumstances. Trends in the national economy, changes in the regional housing market, and even local policy decisions can affect population growth rates.

Based on available information and existing trends, the Comprehensive Plan Update Committee projects Topsham’s population will increase from an estimated 9,282 residents in 2000 to 10,702 residents in 2015. This projection is based on:

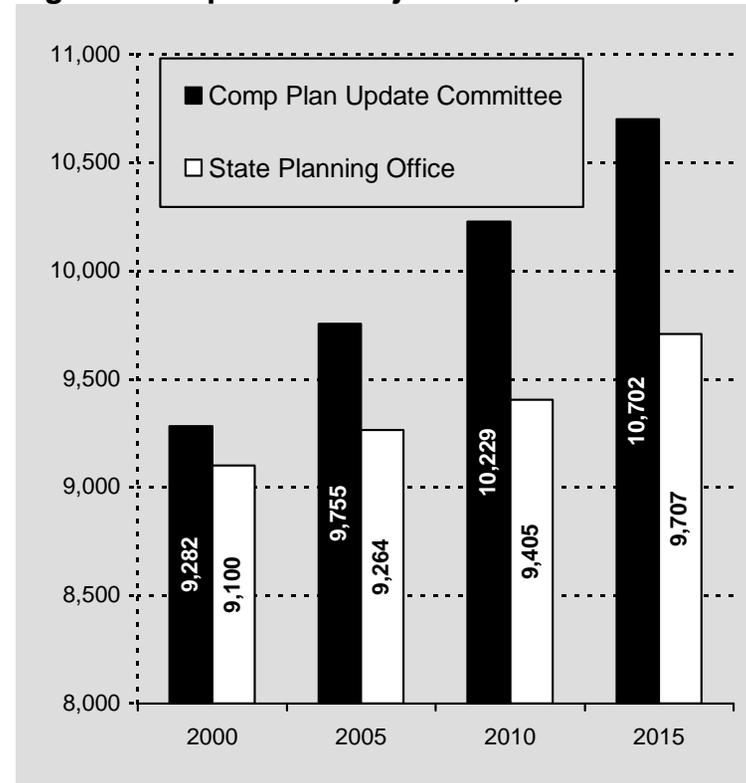
2000 Year round housing units	3,634
(+) estimated new yr-round units, '00 – '03	150
(=) estimated year round housing units, '03	3,784
(X) estimated occupancy rate, '03	96%
(=) estimated year-round households, '03	3,633
(X) estimated persons per household	2.61
(=) estimated year round population	9,481
(+) estimated group quarters population	150
(=) Total estimated population, 2003	9,631

Source: US Census; Topsham; Planning Decisions

- Moderate housing unit growth will continue through 2015. The Comprehensive Plan Update Committee projects a moderating regional housing market (from current high levels) will be more than offset by Topsham’s location as an accessible community to jobs in Portland, Augusta, and Lewiston. In addition, Topsham’s growing role as a regional service center could attract a range of services and businesses, which could increase local employment and therefore housing pressure. Therefore, the CPUC estimates that housing growth will continue at a rate of 55 units per year through 2015.
- Occupancy rates will remain high at the current 96% - a reasonable level for a community with a mix of owner-occupied housing units and a stable regional economy.

- The average number of persons per household will continue to decrease from the current 2.61 persons per household to 2.45 persons per household. The attractiveness of Topsham as a community for younger families will tend to hold this number up, while a national trend towards smaller households and the attractiveness of senior living developments in the area, like the Highlands retirement community, will tend to push this number down.

Figure 3. Population Projections, 2000 – 2015



Source: Maine State Planning; Planning Decisions

- The group quarters population (principally assisted-living and adult-care facilities) is projected to increase from 150 to 250.

The discrepancy between the projections made by the Comprehensive Plan Update Committee (10,702 residents in 2015) and those done by the State Planning Office (9,707 by 2015) is due to the basis on which each projection was made. The State Planning Office projections are based on the survival rate of age cohorts as reported by the US Census between 1990 and 2000. The Comprehensive Plan Update Committee projections are based on local records, regional housing trends, and local demographic characteristics.

Household Change

Household sizes have decreased nationwide for the last 40 years for several reasons; a trend towards single-person and smaller households in the Baby Boom generation, the increased longevity of seniors, an increase in divorce rates, and the trend for younger couples to wait longer before starting families.

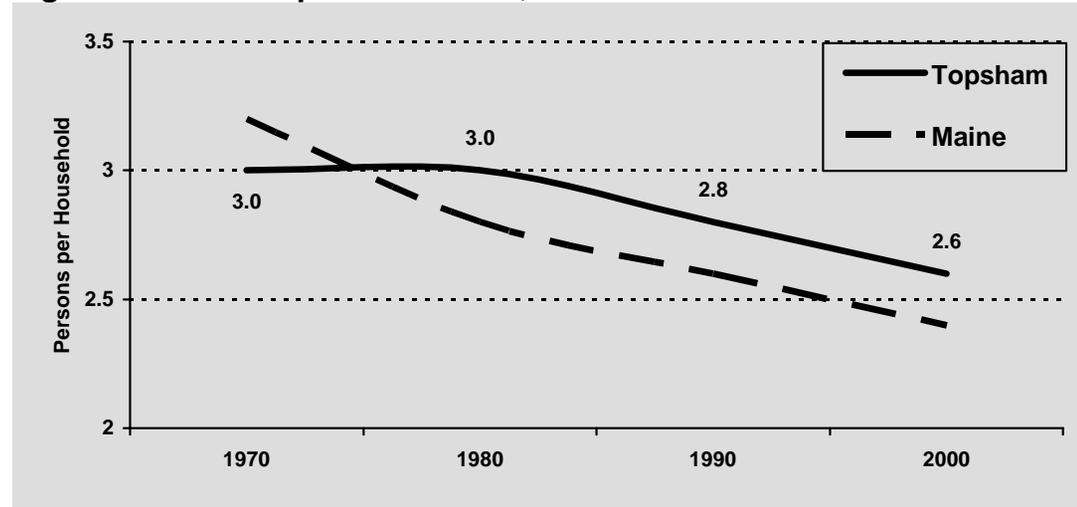
Following this trend, the average Topsham household size has decreased from 3.0 persons to 2.6 persons (Figure 4) between 1970 and 2000. This decrease is smaller than the decrease recorded for the state as a whole, in part due to Topsham's attractiveness as a community for younger families.

Planning Decisions projects this trend will continue through 2015 when the average Topsham household will have 2.45 persons per household.

These seemingly small changes in the average household size can have large impacts on the community. For example, assume no new housing units are built for ten years and the average number of persons per household decreases by 0.2 (the same decrease as recorded in Topsham between 1990 and 2000). In a community Topsham's size, this translates into a decline of roughly 700 residents. Therefore, to make up for those 'lost' residents, an additional 270 occupied housing units would have to be added to the town's housing stock.

Because of this, seemingly small population changes can mask significantly larger amounts of change in a

Figure 4. Persons per Household, 1970 - 2000



Source: US Census

community’s demographic composition and housing unit growth.

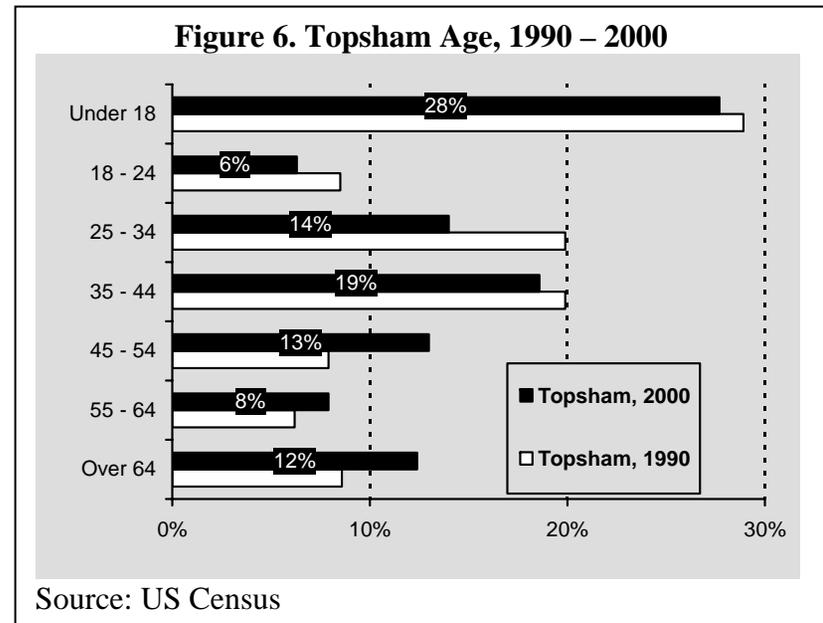
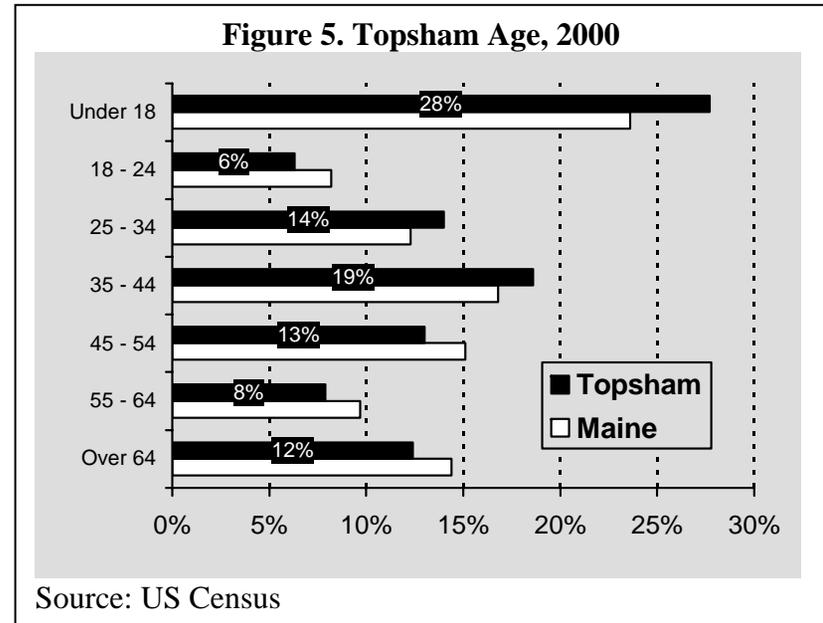
Age Distribution

In 2000, the median age for Topsham residents was 36.3 years. More than one-quarter of the town’s residents were under 18 years, and another 20% were between 18 and 34 (Figure 5). The baby boom generation, those born between 1945 and 1964, had become mature adults in 2000 – nearly one-third of the town’s residents were between 35 and 54 years. Residents older than 64 accounted for 12% of the population.

Compared with the state, Topsham is a young town. The median age of Topsham’s residents is 2 years younger than that of the state as a whole. The town’s younger populations are relatively larger than the state’s and its older populations are relatively smaller (Figure 5).

Even though Topsham is a relatively young town, it is getting older. In 1990, Topsham’s median age was 31.5, nearly 5 years younger than it was in 2000. All of its younger age groups were relatively smaller in 2000 than they were in 1990, and all of the older age groups were larger in 2000 than they were in 1990 (Figure 6).

This aging population is part of a national trend that is driven by several factors, including the aging Baby Boom generation (notice two changes between 1990 and 2000: those between 25 and 34; and those between 45 and 54). These changes show the baby boom generation moving through the age profile. Also affecting the town’s population are younger families choosing to wait longer before having children and increased life expectancies.



In the future, the Comprehensive Plan Update Committee projects a distinct aging of the population. Three factors will drive this trend.

First, the community's relatively low cost of housing, accessibility, efficient level of town services, and presence of the Air Station Annex will attract younger families with children. However, increasing housing prices and demographic trends towards smaller households will likely decrease – or at least hold steady – the number of children in the community in the future.

Second, demographic trends towards an older population will affect the entire community, especially as the baby boom generation ages and reaches the retirement age.

Finally, an older demographic are being attracted to the elderly-services in the region and the accessibility to cities, rural areas, and the coast (e.g. the Highlands). As this population becomes more prominent in town, their

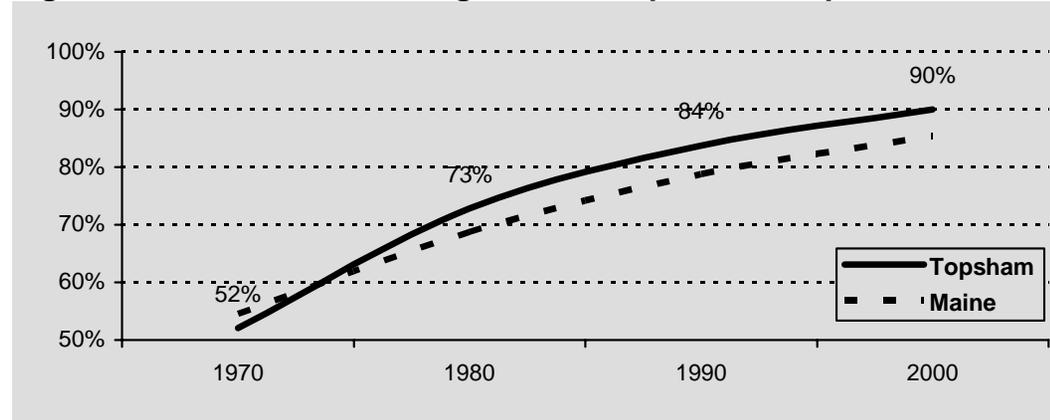
demands on local services and facilities (especially health services and recreation facilities) will increase.

Education Attainment

Topsham residents are increasingly better educated. In 2000, nine out of ten residents had at least a high school diploma (or equivalent), up from 52% in 1970 (Figure 7). This is slightly higher than the average for the state as a whole.

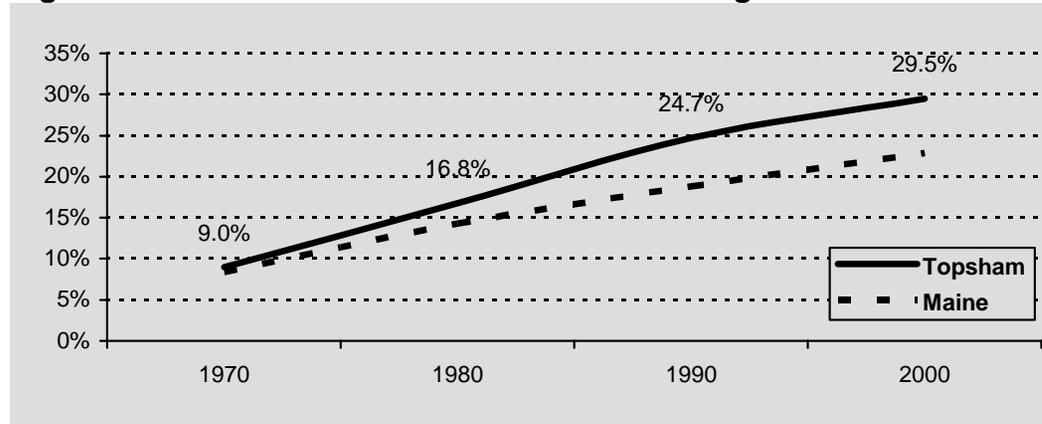
A more significant increase is the number of residents with at least a Bachelors degree. In 2000, three in ten residents had at least a Bachelors degree while only at one in ten in 1970 (Figure 8). In addition, the growth rate in this demographic is significantly higher than the state as a whole.

Figure 7. Residents with a High School Diploma or Equivalent



Source: US Census

Figure 8. Residents with at least a Bachelors Degree



Source: US Census

The national trend towards a higher level of formal education will continue into the future, especially as Topsham becomes increasingly interwoven in an economy that demands formal and specialized training. This suggests that Topsham’s population has changed significantly in recent decades and is likely to continue to change with respect to educational attainment. This may influence citizens’ expectations for municipal services, especially in the area of public schools.

Occupational Characteristics

More than one-third of Topsham’s employed residents work in managerial or professional occupations (Table 4) and another quarter work in sales. Traditionally blue-collar jobs – construction, extraction, maintenance, production, and transportation – account for another quarter of the jobs. The remaining 17% work in service professions.

Comparisons with Topsham’s historic occupational profile are difficult because the US Census changed the categories of occupations in the 1990s. Generally speaking, Topsham residents are becoming more white-collar and service oriented. This follows a national trend as more and more of the traditional manufacturing jobs have left the region and have been replaced by service-oriented jobs.

Compared with the state as a whole, Topsham residents are more likely to have managerial and professional occupations and less likely to have production and transportation occupations.

Table 4. Occupational Profile, 2000

	Topsham	Maine
Managerial and Professional	35.7	31.5
Service	17.2	15.3
Sales	23.6	25.9
Farming, Forestry, Fishing	0.2	1.7
Construction, Extraction, and Maintenance	11.1	10.3
Production, Transportation	12.2	15.3

Source: US Census

Household Income

In 1999 (the year in which the US Census tracks income data), Topsham’s median household income was \$47,682. Twenty percent of the households earned less than \$25,000 and nearly one-third earned between \$25,000 and \$50,000 (Figure 9). Roughly half of the households earned more than \$50,000.

Topsham households have higher incomes than the state as a whole. Topsham’s median income in 1999 was \$10,000 higher than the state’s median of \$37,240. In addition, significantly fewer Topsham households earned less than \$25,000 per year (Figure 9).

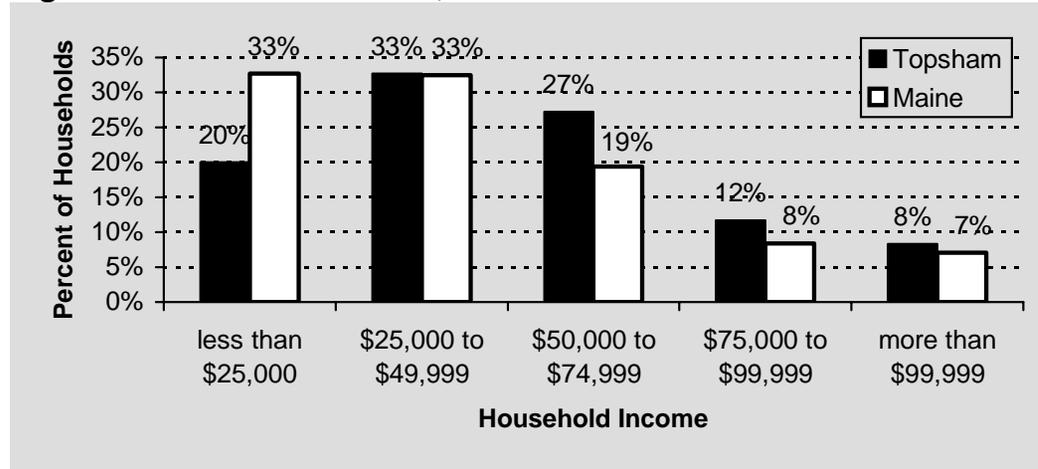
Topsham households earned more in 1999 than they did in 1989. Median household incomes increased from \$34,287 to \$47,682. After adjusting for inflation (using the Consumer Price Index All-Urban by the US Dept of

Labor), this is an increase of 5.5%. During this same period of time, the median income for Maine rose 1.4% after inflation.

Issues and Implications

1. Topsham’s moderate 7% growth rate in the 1990s was as low as it has been in five decades, and is a growth rate that is projected to continue in the near future. The Town should consider what this future level of growth means for its current facilities and services.
2. Smaller household sizes and a growing population have created a demand for housing that is disproportionate with the town’s population growth rate.
3. Topsham’s median age is increasing. This increase is the result of natural trends, but it is also the result of the region’s attractiveness as an adult living center. As the town’s population ages, the demand for services, especially in recreation, will change.
4. Topsham’s location at the intersection of Routes 95, 1, and 196 makes it ideal for both commuters and employers. If the level of movement of people into and out of Topsham increases in the future, this could significantly impact the infrastructure, services, and facilities provided by the town.

Figure 9. Household Income, 2000



Source: US Census

5. Topsham's household income estimates suggest that the number of households with higher incomes is increasing while the number of households with lower income levels is decreasing. Growing incomes can change residents' expectations for the town's facilities and services.
6. While town's household population is diverse (education levels, occupations, income levels) this is becoming less so. The Town should consider whether it should work to maintain this diversity in the future.

Chapter B

HOUSING

A house or apartment is more than just shelter. It represents security, privacy, health, community and all the other things we associate with “home.” It is a basic necessity of life. Many argue that safe, affordable housing is a right that all Americans should enjoy.

Unfortunately, that is not always the case. Rising housing costs can create affordable housing challenges for all Topsham residents, and can have far reaching affects. It can affect the town’s ability to attract business. It can determine whether the people who serve the community (cashiers, wait staff, police officers, teachers, and others) can afford to live in the community. It can determine whether families remain in Topsham from one generation to the next.

This chapter examines the supply and condition of housing in Topsham, considers its affordability in relation to local incomes, and analyzes its availability, especially for lower income households.

Housing Stock, 2003

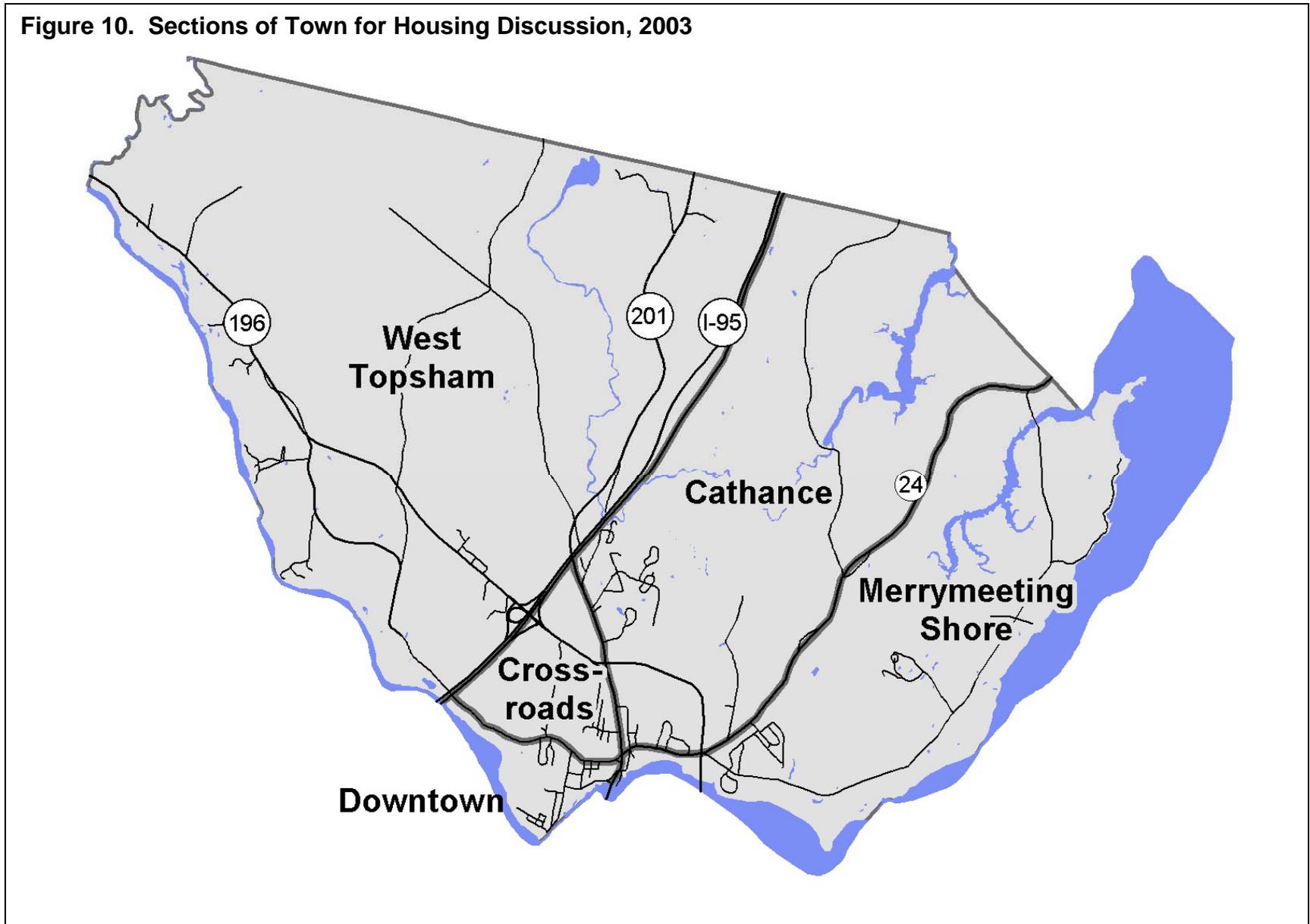
In 2003, Topsham had an estimated 3,828 housing units. The number of units was roughly balanced between the older and more compact eastern sections of town and the newer and more rural western sections of town (Figure 10).

For analytical purposes, this section on Housing will boundaries determined by the US Census Bureau. The Census divides Topsham into five areas that can roughly be defined as: the Downtown, the Crossroads, Merrymeeting Shore, Cathance, and West Topsham.

- The **Downtown** is bounded to the north by Winter Street and to the south by the Androscoggin River. This section of town had 359 housing units in 2003, roughly 9% of the town’s housing stock. Between 1990 and 2003 the Lower Village had a net loss of 2 housing units. The Lower Village’s housing is the oldest town wide – the median age of each housing unit was 59 years.

It is common to see housing stocks decrease in traditional village settings. Three trends burden the housing stock in these settings: the best buildable lands are already developed; demolitions or conversions from housing to commercial uses are more likely; and older units are often combined to create larger units with more amenities for the modern family. Countering these trends are the very large older homes that are sometimes broken into smaller rental units.

Figure 10. Sections of Town for Housing Discussion, 2003



Given current conditions, the Lower Village is unlikely to experience significant housing stock growth in the future.

- The **Crossroads** is bounded by Route 201 to the east, Winter Street to the south, and Interstate 95 to the west. This section of town had 648 housing units in 2003 (17% of the total housing stock). Between 1990 and 2003, this section of town experienced a net growth of 3 housing units. This is the second oldest section of town – the median unit was built in 1973. Since much of the housing is in subdivisions, the housing units in the Upper Village are not experiencing the same pressures as the older units in the Lower Village.

The Upper Village is unlikely to experience significant growth in its housing stock in the future because not much land for development exists. Growth that does occur will tend to be smaller infill housing projects or units built on smaller parcels.

- The **Merrymeeting Shore** is bounded by Middlesex Road (Route 24) and the Androscoggin River. This section of town had 788 housing units in 2003, or one-fifth of the town's total housing stock. Between 1990 and 2003 this section of town added 69 new housing units.

The Merrymeeting Shore is a transition area – it displays characteristics of both the village (denser development on the public water and sewer systems) as well as more rural areas typical of the Cathance and West Topsham sections of town. Nearly all of the

20 seasonal housing units are located along the waterfront in this section of town.

The Merrymeeting Shore will continue its modest growth in the future, especially further out the Foreside Road in the more rural areas.

- **Cathance** is bounded by Routes 24 and 201 and includes much of the Cathance River watershed. In 2003 it had 1,104 housing units, or more than one-quarter of the town's housing stock. Most of this housing is located closer to the Village in The Highlands and at the Naval Air Station Annex. Between 1990 and 2003, Cathance added 305 new housing units (an increase of nearly 40%).

Expansion at The Highlands has accounted for approximately 140 of these new housing units. Approximately 250 housing units will be added at The Highland Green in Phases I, II, and III. Future phases will accommodate an additional 350 units. In addition, Topsham Crossing, a 60 unit subdivision off of the Tedford Road, has been approved by the Planning Board.

Much of Topsham's future housing unit growth will occur in or near the public water and sewer services in Cathance and in the more rural areas of Cathance and West Topsham. Significant growth in these areas could affect the type of services offered by the Town as well as the manner in which these services are delivered.

- **West Topsham** includes all lands west of Route 201 and Interstate 95. In 2003 this section of town had

929 housing units. Between 1990 and 2003, this section of town added 210 new housing units (an increase of 23%). The units in West Topsham tend to be the newest in town – the median age of a housing unit in 2003 was 22 years.

Since 2003, the Town had experienced the construction of almost 300 additional housing units through the spring of 2006 (see table below). Of these units, 244 or 82% were located within the Town’s designated Growth Area with the balance or 18% occurring in the Rural Area. This pattern has been reasonably consistent over the past three and a half years.

Recent Housing Construction

Year	Total Units	Growth Area	Rural Area
2003	78	70 (90%)	8 (10%)
2004	108	89 (82%)	19 (18%)
2005	70	54 (77%)	16 (23%)
2006(part)	41	31 (76%)	10 (24%)

Much of the recent construction of new housing within the Growth Area has occurred in larger developments on the fringe of the built-up area including the Highlands, Highland Green, and Topsham Crossing all of which are located in the Cathance area as described above. The Highlands has some remaining development potential and the owner of the project has a contract to purchase the Town Hall/Police Department property which abuts the Highlands from the Town. The intention is to redevelop this site with 25-30 additional housing units as part of the Highlands. Highland Green, an active adult

community, has the potential for the development of up to 633 single and multi-plex units based upon its approved master plan. Through June of 2006, 218 single-family units have received development approval of which 102 have been built. This leaves a potential for over 500 additional units to eventually be built as part of this project. Topsham Crossing is a “great American neighborhood” adjacent to Highland Green. As of June 2006, 55 of its 68 lots have been developed.

There is no consistent pattern to the type of housing in Topsham – housing varies from single-family units to the large Lodge at The Highlands. More than two-thirds of the housing units were single-family units in 2003 (Figure 11). Roughly 15% were multi-family units (3 or more units in one building). Duplexes and mobile homes/other (other includes campers, boats, and similar unconventional housing) account for another 15% of the housing. The Town has 6 mobile home parks as of June 2006 that accommodate a total of 191 mobile homes. The parks range in size from 3 lots to 94 lots. Five of the six existing parks are located within the Town’s designated Growth Area while the sixth is a small park on the fringe of the Growth Area.

Compared with similar suburban communities in the region, Topsham has a relatively small percentage of single-family housing. The Naval Air Station Annex and The Highlands symbolize the wide range of housing available in the community and the inherent diversity built into the community as a result. At the same time, the new housing built in Topsham since 1990 has been largely single-family housing, which indicates the community’s attractiveness as a more traditional suburban community.

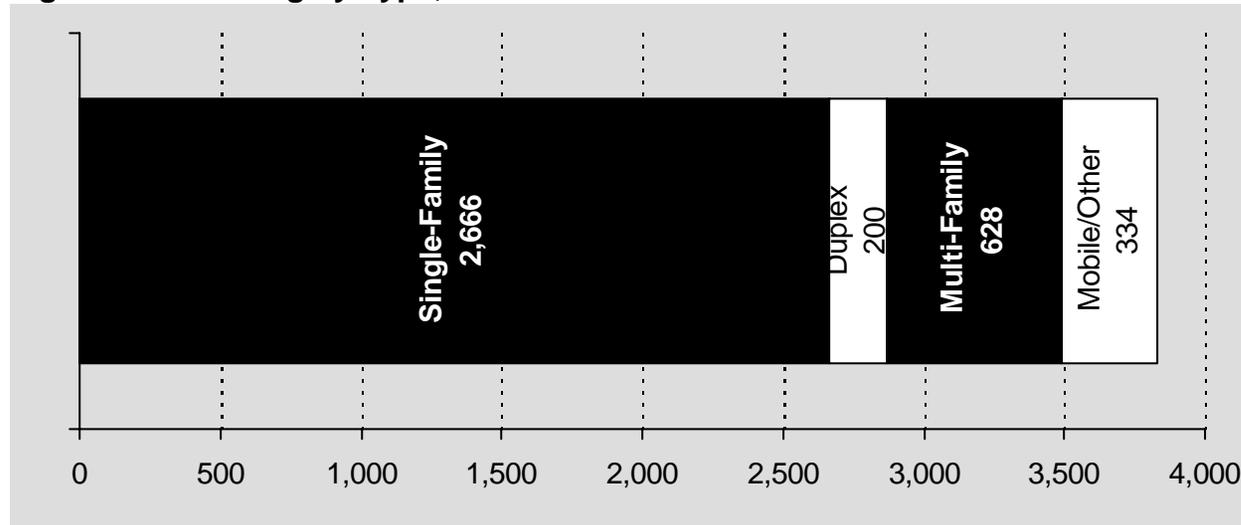
Tenure and Occupancy Rate

Nearly 30% of Topsham’s housing was rented in 2003. This is unusually high for a suburban community like Topsham – a high level of renter occupied housing is usually associated with more dense service-center communities like Brunswick, Lewiston, Bath, and Portland.

Two populations have influenced this trend. First, roughly 170 units at The Highlands are rented on a month-to-month basis. While no more rental units at The Highlands are planned, the success of The Highlands suggests other similar developments (most likely smaller in scale) could be attracted by the growing number of elderly services in the region. Second, the transient populations that are associated with the Naval Air Station have created a large demand for rental housing (the 177 units at the Annex are rental housing). However, housing allowances paid by the Navy have not kept up with the rising rents in Topsham, so many Navy personnel have moved out of town.

In 2003, approximately 96% of the housing units were occupied. Rental units tend to have lower occupancy rates than owner-occupied units. Considering the number of rental units in Topsham, this is a high occupancy rate. If the economy softens and unemployment increases from current levels, the town’s occupancy rate will decrease.

Figure 11. Housing by Type, 2003



Source: US Census; Planning Decisions

Table 5. Age of Housing Stock, 2003

Year	Number of Housing Units	Percent of Total
2000 – 2003	150	3.9%
1990 – 1999	454	11.8%
1980 – 1989	997	26.0%
1970 – 1979	668	17.5%
1960 – 1969	468	12.2%
1950 – 1959	210	5.5%
1940 – 1949	261	6.8%
Pre 1940	620	16.2%
Total Units	3,828	100.0%

Source: US Census; Topsham; Planning Decisions

Age of the Housing Stock, 2003

Despite Topsham’s long history, its housing stock is relatively new. More than 40% of the town’s housing units have been built since 1980, and another 30% were built between 1960 and 1980 during the decades of rapid expansion following World War II (Table 5). Most of the newer construction has been in the Cathance and West Topsham sections of town, which if continued could impact the manner in which services are delivered and facilities are located.

Brunswick Naval Air Station Annex

The Brunswick Naval Air Station Annex is located east of Route 201 on the slopes of Mt. Ararat. The Annex has 177 units of housing in an assortment of single-family units, duplexes, and multi-family units. This is designated family housing by the Navy – occupants must be active military personnel and their family. Therefore, the average household size in these units is larger than the town as a whole.

The barracks that once housed visiting Navy personnel were demolished in the early 1990s. Several agreements between the Navy and the Town of Topsham have resulted in a concentration of Town services and facilities located alongside Navy facilities.

The Highlands

The Highlands is a retirement community located between Elm Street and the Coastal Connector. The Highlands offers its residents a range of elderly care services and living arrangements depending on residents’ needs.

- Units with the fewest services include the Highland Estates and Highland Green developments. Snow and trash removal, maintenance, emergency care, and other services are provided to these independent-living units. All of these units are owner-occupied.
 - **Highland Estates** will total 123 units when it is completely built out. These are single-family and

duplex units. Construction began in 1996, and all but 33 units have been completed.

- **Highland Green** is a three-phase active adult community built around a golf course north of the Coastal Connector. Phase I has been approved with 51 units and is currently under construction (2 units are occupied). Phase II has been approved for 83 units, but construction has not yet begun. Phase III is being designed and no definitive unit-count is available.
- Mid-level services are offered at the Main Lodge, Benjamin Porter House, and the Frost Mansion. All of these units are rental units, and the monthly fee includes maintenance, housekeeping, and additional services for semi-independent living.
 - The **Main Lodge** was built in the mid 1980s and has 120 units.
 - The **Benjamin Porter House** is a historic Federal style home that is the gateway for the Highlands development. This home has been converted into six apartments.
 - The **Frost Mansion** was recently purchased by the Highlands and has been approved to be converted into ten apartments.
- The Cadigan Lodge offers the highest levels of care for its residents. Cadigan Lodge was built in the mid-1990s and totals 44 units. These assisted living units

are served by 24-hour nurses, a pharmacy, and includes apartments for residents with Alzheimer's and other memory/dementia-related illnesses.

Topsham Housing Authority

The Topsham Housing Authority provides rental assistance to needy families in the community. It is directed by a board of directors that is appointed by the Town Council.

The Authority does not have any staff. Rather, it relies on a property management company to administer the voucher program.

The Authority provides 26 vouchers to needy families living in Topsham. Approximately 30 more low-income households that initially received vouchers from other housing authorities have moved into Topsham. The Topsham Housing Authority is administering these vouchers.

There is more demand for affordable housing than the Housing Authority has vouchers to grant. There is a waiting list of approximately 100 people at any given time.

Affordable Housing Demand

While having a dry and warm place to live is considered a basic right by many, providing dry and warm places that are also affordable can be a Herculean challenge. This

can be especially true in a community like Topsham, where demand for new housing is strong and property values are rising – between 1998 and 2002, the median sale price for existing homes has increased 29%, from \$108,900 to \$140,000. At the same time, the median rent for a 2-bedroom unit has reached \$793 (including utilities).

Affordable housing for homeowners is defined by Maine’s Growth Management Act as housing in which the mortgage payment, taxes, insurance, condominium fees, and utilities do not exceed 33% of the homeowner’s

gross income. For renters, the standard is 30% of gross income for rent and utilities.

One of the State of Maine’s objectives is to encourage a supply of housing that is affordable to households in three income groups:

- Very Low Income Households – these households make less than 50% of Sagadahoc County’s median household income in 2002. In Topsham, this includes the estimated **632 households** earning less than \$22,000 per year.

Table 6. Affordability Summary for Topsham, 2002

	Very Low Income	Lower Income	Moderate Income
% of County Median Income	50%	50% - 80%	80% - 150%
Household Income	< \$22,000	\$22,000 - \$35,250	\$35,250 – \$66,000
Affordable Gross Rent (at 30% of income)	< \$550	< \$880	< \$1,650
Affordable Mortgage (including PITI and utilities at 33% of income)	< \$605	< \$970	< \$1,815
Minus property taxes, insurance, utilities	\$225 ¹	\$255 ²	\$305 ³
Affordable principal and interest mortgage payment	< \$380	< \$715	< \$1,510
Affordable house purchase price with 10% down, at 6.00% interest for 30 yrs (including PMI)	< \$70,000	< \$130,000	< \$280,000

Source: Maine State Housing Authority; Planning Decisions; US Census

Note: all monthly housing expenses include monthly cost of \$125 for utilities

1- assumes monthly costs of \$100 for taxes and insurance

2- assumes monthly costs of \$130 for taxes and insurance

3- assumes monthly costs of \$180 for taxes and insurance

- Lower Income Households – these households make between 51% and 80% of the county’s median household income. In Topsham, this includes the estimated **694 households** earning between \$22,000 and \$35,250 per year.
- Moderate Income Households – these households make between 81% and 150% of the county’s median household income. In Topsham, this includes the

estimated 1,377 households earning between \$35,250 and \$66,000 per year.

Affordable Housing Supply

For analytical purposes, the Growth Management Act considers housing affordability based on a percent of Sagadahoc County’s median household income. In 2002, Sagadahoc County’s median household income was \$44,000.

Table 7. Affordability Summary for Topsham, 2000

	Supply	Demand
Very Low Income		
Rental units below \$550	301	
Housing Units below \$70,000	248	
Total	549	632
Low Income		
Rental units, \$550 to \$880	357	
Housing Units, \$70,000 to \$130,000	906	
Total	1,263	694
Moderate Income		
Rental Units, \$880 to \$1,650	117	
Housing Units, \$130,000 to \$280,000	1,230	
Total	1,347	1,377

Source: US Census, Planning Decisions, Inc.

In 2002, affordable rents (as considered by the Growth Management Act) ranged from below \$550 (including utilities) for a very low income household to \$1,650 (including utilities) for a moderate income household (Table 6). Affordable purchase prices ranged from below \$70,000 (including taxes and insurance) for a very low income household to \$280,000 for a moderate income household.

The most recent statistics on the cost of housing in Topsham is the 2000 US Census. According to the Census, the affordable housing supply for **Very Low Income** households in Topsham totaled 549 units (Table 7). These units included 248 houses valued below \$70,000 and 301 units of rental housing with a gross rent below \$550.

The affordable housing supply for **Low Income** households totaled 1,263 housing units. These units included 906 housing units valued below \$130,000 and 357 rental units with a gross rent below \$880.

The affordable housing supply for **Moderate Income** households totaled 1,347 housing units. This included 1,230 housing units valued below \$280,000 and 117 rental units with a gross rent below \$1,650.

Using this analysis, Topsham’s median housing unit (which cost \$140,000 in 2002) would be affordable to a household that made \$50,348 (Table 8). Topsham’s median household income in 2002 was \$52,648. Therefore, the MSHA considers Topsham to be affordable (an affordability index rating greater than 1.0 indicates an affordable community).

Table 8. Affordability Summary, 2002

Geography	2002 Median Income	2002 Median Home Value	Income Needed to Purchase Median Home	Affordability Index
Topsham	\$52,648	\$140,000	\$50,348	1.05
Sagadahoc County	\$46,514	\$129,900	\$45,818	1.02
Maine	\$42,029	\$133,500	\$47,302	0.89
Bath-Brunswick Housing Market*	\$46,553	\$149,000	\$53,307	0.87

Source: Maine State Housing Authority

Note – an affordability index reading greater than 1.00 suggests that a community is affordable.

* Bath-Brunswick Housing Market includes the communities of Durham, Brunswick, Harpswell, New Gloucester, Pownal, Dresden, Arrowsic, Bath, Bowdoin, Bowdoinham, Georgetown, Phippsburg, Topsham, West Bath, Woolwich, Richmond, Alna, Edgecomb, Wiscasset, and Westport

According to this analysis, the supply of affordable housing meets the demand for affordable housing for low income and moderate income households. The supply of affordable housing does not meet demand for low income households.

The Maine State Housing Authority calculates its own affordability index based on whether a community’s median household income can afford to purchase that community’s median housing unit.

Using this same analysis, Topsham is considered to be more affordable than Sagadahoc County, the Bath-Brunswick Housing Market, and the state as a whole.

Issues and Implications

1. Much of Topsham’s housing unit growth has occurred in the more rural areas of Cathance and West Topsham. If current growth patterns continue, the rural character of these areas could be affected.
2. If current growth patterns continue and most of the town’s future housing is built in the more rural areas, the town might have to change the way it provides facilities and services.
3. Topsham has a diverse housing profile (rentals versus owner-occupied units, single-family versus multi-family, condominiums, etc), which is one of the ingredients for a diverse community. Much of the current development in Topsham has retained that mix. As the town develops its housing stock in the

- future, the community should consider preserving this diversity of housing.
4. Most of the denser development in and around the village is dependent on the availability of public water and sewer. The density of future development in large part depends on the practicality of water and sewer extensions (especially along the Foreside Road, much of which is underlain by a sand and gravel aquifer).
 5. A high percentage of rental units can lead to a lower level of civic participation. Considering the important role citizens play in the community's governance (committees, library volunteers, fire fighters), the community should consider if these residents have ample opportunities to participate.
 6. Topsham's housing stock is relatively new and in good condition. The town's older housing is well documented (see historic chapter) and generally well preserved. The town has made significant efforts to protect important historic structures and the lower village.
 7. For very low income households, Topsham's housing and rental markets are tight. The Topsham Housing Authority provides assistance to some of these households, but it cannot help all of them. There are not enough affordable units for those households in the most need.
 8. The availability of affordable housing for low income and moderate income households is adequate.
 9. Housing prices and rents have been increasing in Topsham in recent years. If median incomes don't rise along with housing costs, affordability will become a more pressing issue for a larger number of residents.
 10. Housing development can increase demand on the transportation network. Housing that is built closer to existing facilities and that has access to safe alternative transportation networks (sidewalks, trails, etc) could have less of an impact than housing that is built away from these resources.
 11. Topsham's growing role as a retail and service center could impact the demand for new housing in the community. Higher paying jobs (many of the new service jobs in the community) are more likely to attract residents that want to live in the community than retail jobs.

Chapter C

LOCAL ECONOMY

Since its earliest settlers first came to the shores of the Androscoggin River, Topsham's economy has undergone constant evolution. Vestiges of early European settlement's agrarian economy as well as the industrial revolution's manufacturing economy have become hallmarks of the town's identity. But they do not drive the local economy as they once did.

Following World War II, Topsham's economy began a long transition to a service-oriented economy that fulfilled the day-to-day needs of the local population. Construction of the Topsham Fair Mall in the mid 1980s highlighted this new role.

At the start of the new millennium, Topsham's service-economy continues to strengthen. Some of the growing service-economy is easily visible – for example the recent approval of a large-scale retail center at the Topsham Fair Mall. However, much of it is not as visible but is equally important – for example the rapid growth in professional and high-wage service jobs at the Great Bowdoin Mill, SAD 75, The Highlands, and other locations throughout Topsham.

The ability to understand changes in the town's economy and how those changes will impact the town's character, job opportunities, and its existing economy are critical to making policy decisions about the town's future. This chapter inventories the local labor force, commuting patterns, and the regional job market and discusses trends that will impact the economy in the future.

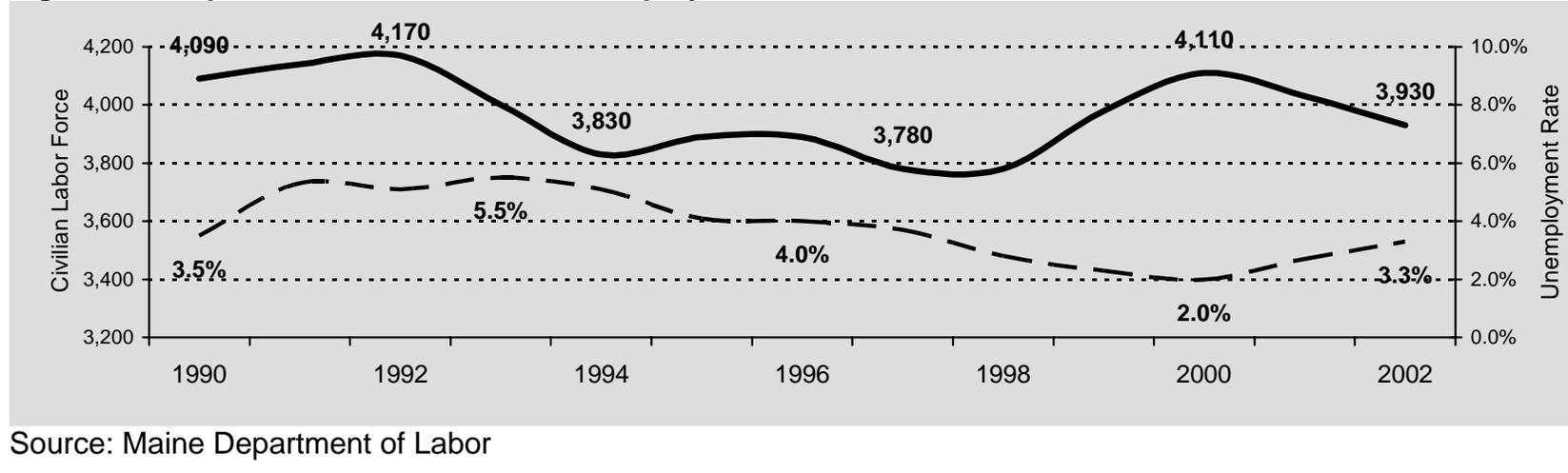
The Topsham Labor Force

In 2002, an estimated 3,930 Topsham residents participated in the labor force³ (Figure 12). This is a decline from the town's peak of 4,170 in 1992 and reflects the national economy's weakness. The subtle changes throughout the decade suggest that labor force participation decreases during periods of economic weakness and increases as the economy strengthens.

Labor force participation often exhibits this pattern. New jobs and competition among employers for employees during economic booms create the conditions necessary to draw people into the labor force. During economic slowdowns, many of these marginal jobs disappear and participants will choose to leave the labor force – which is what likely happened in the mid-1990s when the labor force was shrinking while unemployment declined.

³ Participation includes all those employed in businesses that offer worker's compensation coverage as well as those receiving unemployment benefits. Excluded in labor force statistics are those not subject to worker's compensation coverage, such as sole-proprietors, agricultural workers, and military personnel.

Figure 12. Topsham Labor Force and Unemployment



Topsham’s unemployment rate in the 1990s virtually mirrors that of the Bath-Brunswick Labor Market Area⁴ (Figure 13) and is consistently 1.5% lower than the State of Maine as a whole. Between 1990 and 2001, Topsham’s labor force consistently accounted for between 11% and 12% of the Bath-Brunswick Labor Market Area’s labor force.

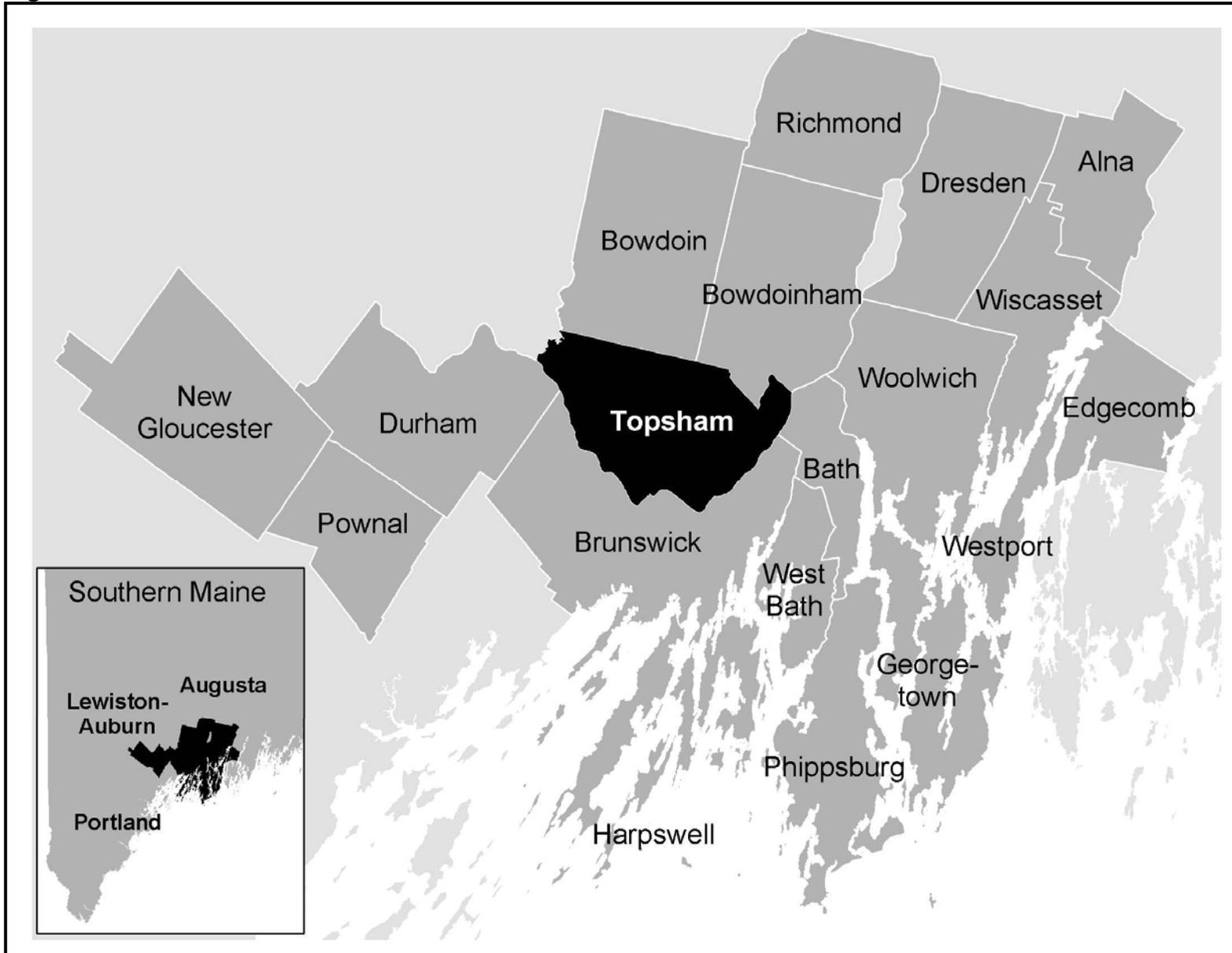
In addition to these subtle changes in the town’s labor force participation have been the thousands of jobs lost at regional employment centers (Bath Iron Works and the Brunswick Naval Air Station). While Topsham was likely spared the brunt of the job reductions at Bath Iron Works, the reductions at the Naval Air Station likely had a more immediate impact on the community. That the labor force was able to absorb these job losses without

noticeable strain is a testament to the underlying strength of the region’s economy.

Of the 3,930 labor force participants in 2002, approximately 130 (or 3.3%) were receiving unemployment benefits (Figure 12). Topsham’s unemployment rate peaked at 5.5% during the height of the recession in the early 1990s. After that, the unemployment rate began to decline. Topsham’s unemployment rate bottomed out at 2.0% in 2000 and has since risen due to weakness in the national economy and is close to the average unemployment rate for Topsham 3.6% (from 1990 to 2002).

⁴ The Maine Department of Labor defines a labor market area as an economically integrated geographical unit within which workers may readily change jobs without changing their place of residence.

Figure 13. Bath-Brunswick Labor Market Area



Not all of Topsham's labor force works in Topsham. In fact, there were 4,030 labor force participants in Topsham in 2001 and only 3,013 jobs. A better picture of how Topsham's residents fit into the regional economy can be drawn by examining the towns to which Topsham residents commute for work.

In 2000, Topsham's labor force was very closely tied with the jobs in Brunswick, Topsham, and Bath (Figure 14). Nearly 70% of the town's labor force labor worked in one of these three communities. This is an unusually high concentration in such a small area, and signifies the importance the regional employers have on Topsham's labor force. Brunswick attracted 37% of Topsham's labor force and Bath another 18%. Only 20% of Topsham's

labor force worked in Topsham.

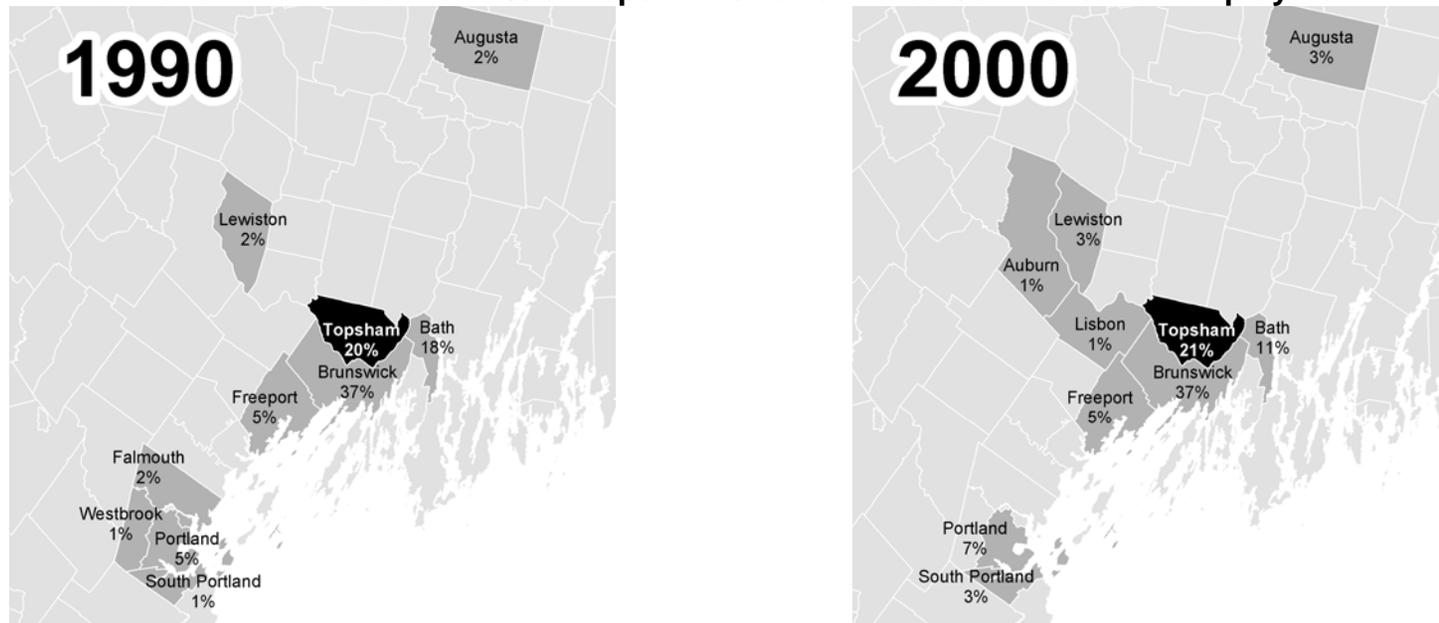
Other communities that attracted Topsham's labor force included the Portland area (10%), Freeport (5%), the Lewiston-Auburn area (5%), and Augusta (3%).

In the last decade, significantly fewer Topsham residents have worked in Bath, and the larger employment centers of Portland, Lewiston-Auburn, and Augusta have attracted a larger share of the town's labor force.

Local Employment Profile

The other half of the local employment picture is a description of the jobs that are available within Topsham.

Figure 14. Towns to which more than 1% of Topsham's Labor Force Commuted for Employment



Source: US Census

Table 9. Wage and Salary Employment, 2001

	Topsham		State of Maine	
	#	%	#	%
Manufacturing	160	5.3%	84,910	14.1%
Construction	302	10.0%	29,580	4.9%
Transportation/ Public Utilities	62	2.1%	24,320	4.0%
Wholesale	80	2.7%	27,510	4.6%
Retail	741	24.6%	122,700	20.3%
FIRE*	19	0.6%	30,700	5.1%
Services**	1,573	52.2%	185,290	30.7%
Government	76	2.5%	99,290	16.4%
Total	3,013	100.0%	604,300	100.1% ^a

Source: Maine Department of Labor

* FIRE includes Finance, Insurance, and Real Estate

^a variation from 100.0% due to rounding error

** Services include personal and business services such as barbers, lawyers, health care, etc.

Topsham's local employment profile is dominated by service and retail jobs.

Of the 3,013 jobs available in Topsham in 2001, more than half were in the service sector (Table 9). Another quarter of the jobs were in the retail sector, and construction accounted for 10%. Manufacturing jobs accounted for a relatively low 5% of the jobs in Topsham.

Because the Bath-Brunswick LMA has an unusually large number of manufacturing and government jobs, a better

comparison for the Topsham employment profile is with the state of Maine as a whole. Compared with the state, Topsham has significantly more service, retail, and construction jobs and fewer manufacturing, FIRE, and government jobs. This suggests that the local/service economy is very strong in Topsham.

While wholesale and manufacturing jobs more than doubled between 1991 and 2001, the 73% increase in service jobs had a much larger impact on the town's employment growth (Table 10). Many of these new jobs were located in the Great Bowdoin Mill, the new SAD 75 Middle School, The Highlands, and other locations throughout town.

Table 10. Wage and Salary Employment, '91 – '01

	%		
	1991	Change	2001
Manufacturing	56	185.7%	160
Construction	198	52.5%	302
Transportation/ Public Utilities	45	37.7%	62
Wholesale	23	247.8%	80
Retail	540	37.2%	741
FIRE*	51	-62.7%	19
Services	908	73.2%	1,573
Government	58	31.0%	76
Total	1,879	60.3%	3,013

Source: Maine Department of Labor

Note: excludes agriculture-related jobs

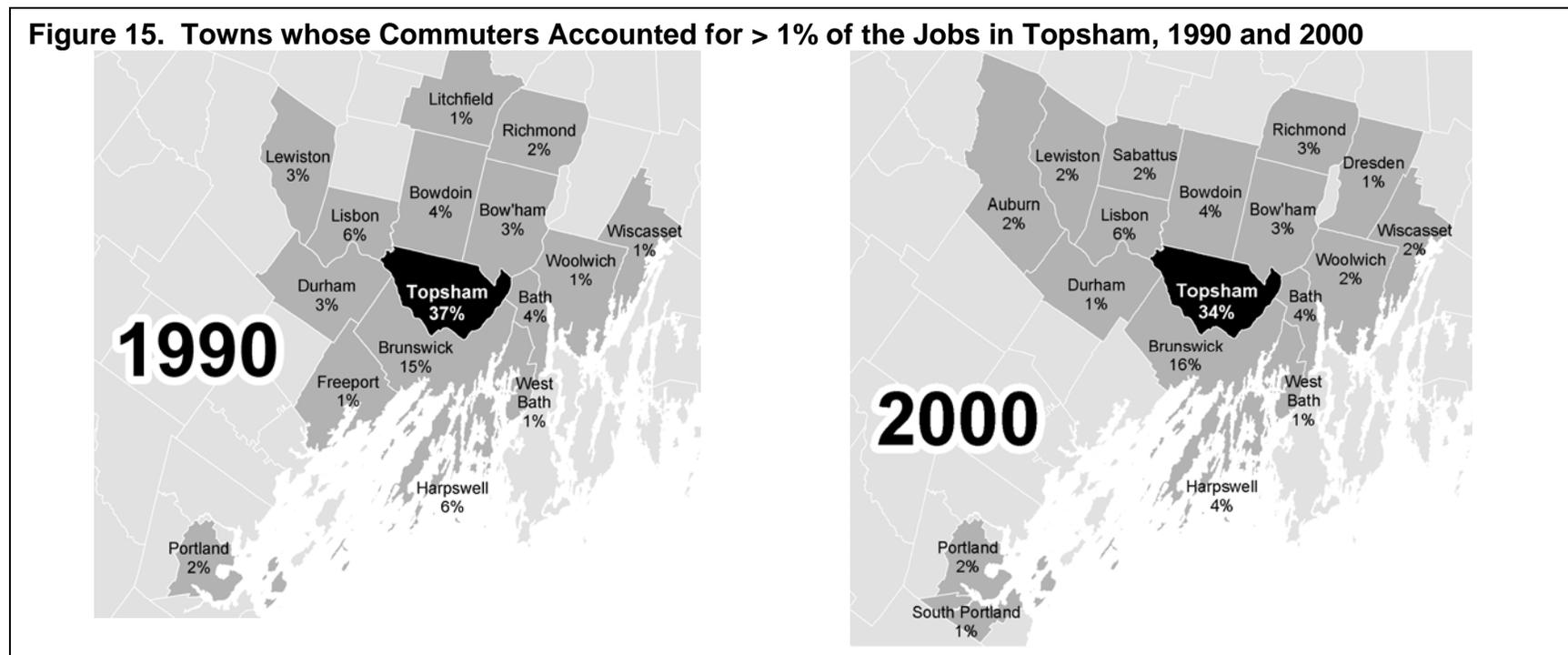
* FIRE includes Finance, Insurance, and Real Estate

Over the last decade, the only category of employment that lost jobs in Topsham was in the finance, insurance, and real estate industry. All told, the town's covered employment increased by 60% (as tracked by the Maine Department of Labor).

Just as Topsham residents commute to other communities for employment, so do residents of other communities commute to Topsham for work. Commuting patterns from 2000 suggest that one-third of the jobs in Topsham were filled by Topsham residents (Figure 15).

Another 20% of the employees commute to Topsham from Brunswick and Harpswell. Approximately 27% commuted from an assortment of communities to the north and west of Topsham (from the I-95 corridor to Auburn and Durham). Another 10% commuted from the mid-coast corridor.

In the last decade, commuters to Topsham have not changed significantly. Commuters were more likely to come from the north and west in 2000 than 1990. As Topsham's service and retail center grows, commuting patterns will likely continue to shift towards employees that come from the north and west of the town.



Future Role as a Service and Retail Center

Between 1991 and 2001, more than 850 service and retail jobs were created in Topsham. This trend emphasizes Topsham’s growing role as a regional retail and service center.

Three-quarters of these jobs were created in service-related industries. In most cases, these service jobs exist where they are not very visible to the casual observer and can easily be overlooked. Many of the town’s major employers are service-providing organizations (Table 11).

The future for these service-related jobs in Topsham looks optimistic. The success of the improvements in the Lower Village could continue to attract service jobs to

Topsham. The growing attractiveness of the Midcoast area for elderly facilities and services (The Highlands, Thornton Oaks in Brunswick, Midcoast and Parkview Hospitals) could spawn a wide range of elderly care services in and around Topsham. Also, Topsham’s location equidistant from Portland, Lewiston, and Augusta is attractive to employers whose markets extend beyond the Bath-Brunswick LMA.

Service jobs cover a wide variety of occupations. Hotel and restaurant, personal services (beauty, cleaning, etc), business services, auto repair, health services, legal services, education services, social services, and engineering are only some of the jobs considered to be services. Those employed in services tend to have specialized education or training.

Many of the new service jobs that have grown in Topsham recently (health, education, and business) tend to have relatively high salaries. These workers are more able to afford the higher costs of housing in places like Topsham and are more likely to move to be closer to their work.

Retail activity doubled when Topsham Fair Mall was built in mid 1980s. And this activity is poised to increase significantly as large scale retail stores that have been approved for the Topsham Fair Mall open for business. But these stores are only the more visible manifestation of Topsham’s growing role as a service and retail center.

Topsham’s share of the region’s taxable

Table 11. Major Employers in Topsham, 2002

More than 100 employees	
	Harry Crooker & Sons – construction
	Highlands of Topsham – health services
	SAD 75 (teachers, support staff, SAD admin staff) – ed. service
	Shop ‘n Save – retail
	Topsham Town Government – government and service
	Village Candle Factory – manufacturing
More than 50 employees	
	Amenity Manor – health services
	Sea Dog Brewing – retail
	Wright-Pierce – business services
	McTeague, Higbee, MacAdam, Case – legal services

Source: Maine Business Directory

Table 12. Taxable Total Consumer Sales

	Topsham	Brunswick ESA*	Topsham as % of ESA* Sales
1996	\$41,830.3	\$379,218	11.0%
1997	\$41,442.2	\$386,521	10.7%
1998	\$48,356.9	\$424,310	11.4%
1999	\$54,767.5	\$465,796	11.8%
2000	\$57,573.6	\$489,126	11.8%
2001	\$60,363.4	\$505,676	11.9%
2002	\$64,899.7	\$510,125	12.7%

Source: Maine State Planning Office

* The Brunswick Economic Summary Area includes Topsham, Arrowsic, Bath, Bowdoin, Bowdoinham, Brunswick, Dresden, Georgetown, Harpswell, Phippsburg, West Bath, and Woolwich.

consumer sales has been steadily increasing from 11% to 13% (Table 12). The regional retail center that is being built at the Topsham Fair Mall will increase Topsham's share of the region's consumer sales dramatically. Many of the consumer sales that currently occur elsewhere in the region will move to Topsham.

Many of the new retail jobs that Topsham has been attracting tend to have lower wages than the service-oriented jobs. These employees will be less able to afford housing in Topsham and are therefore less likely to place demand significant amounts of new housing. However, these employees will rely on the regional transportation network to reach their jobs in Topsham.

Various retail and service centers function quite differently in terms of their retail drawing power. The following is an overview of the various types of retail centers:

- Super Regional Center - These centers provide an extensive variety of general merchandise, apparel, furniture, and home furnishings along with services and recreation. These centers are anchored by three or more department stores. Typically, they contain 600,000 to 1,500,000 square feet (SF) of space and draw on a trade area of 250,000 or more people. The Maine Mall falls into this category.
- Regional Center - These centers provide a range of general merchandise, apparel, furniture, and home furnishings as well as services and recreation. Typically, it is anchored by two department stores. These centers range in size from 200,000 to 750,000 S.F. and draw on a trade area of 50,000 to 250,000. Auburn Mall is a regional center.
- Community Center - These centers provide convenience goods (food, drugs, sundries) and personal services (barber, laundry, etc.) needed for everyday living. These centers are typically in the 60,000 150,000 S.F. range with a supermarket and draw on a population of 20,000 to 40,000 people.

Topsham is growing from a community center to a regional center. This regional center will draw on a market that extends from Yarmouth to Gardiner along Interstate 95 and from Lewiston to Wiscasset along the Route 196/Route 1 corridor. At the outer limits of this market area, competition from other regional centers in

Table 13. Regional Labor Force Participation, 1991 – 2001

	1991	2000	% Change
Portland MSA	123,150	155,370	26.2%
Lewiston-Auburn LMA	37,550	46,040	22.6%
Maine	515,050	604,720	17.4%
Augusta LMA	36,360	42,690	17.4%
Bath-Brunswick LMA	29,140	32,700	12.2%
Boothbay Harbor LMA	7,470	6,960	-6.8%

Source: Maine Department of Labor

Note- Boothbay LMA was affected by losses at the Maine Yankee nuclear power plant.

Augusta, Lewiston-Auburn, and Portland increases dramatically.

Major Trends in Regional Employment

In the last decade, regional employment has undergone a significant adjustment. Major regional employers (Bath Iron Works and the Brunswick Naval Air Station) significantly reduced the size of their workforces. These decreases help explain the slower population, housing, and labor force growth rates in the 1990s (Table 13).

The Bath-Brunswick LMA has historically depended on large regional employers for its workforce. This dependence can be troublesome when the large employers face difficult economic times. It can be even more troublesome when the local product is national defense and the nation continues to change its national defense posture following the end of the Cold War. While Topsham largely escaped the brunt of the job losses in the 1990s, the future of these regional employers is not guaranteed:

- **Bath Iron Works** was the largest employer in the state before it cut its workforce from 11,000 to 7,500 in the early 1990s. BIW's near-future looks solid – its current backlog of 14 ships is the largest backlog in the company's 100 years of shipbuilding. However, this backlog is expected to turn into a lull by 2005 and 2006 when the Navy switches to produce the newer DD (X) generation of ships.

BIW recently lost a contract to design the new generation of ships for the Navy, and unless new design work is found could mean layoffs for BIW designers and engineers.

- At the same time, the **Brunswick Naval Air Station's** future is uncertain. In a continuing realignment from its Cold War posture, the Department of Defense is conducting a new round of base closings in 2005. However, recent upgrades (including construction of a \$31 million hanger) and the fact that the Air Station is the only active military airfield north of New Jersey underpins the hopes of many that the Air Station will remain active after 2005.

If the military base does remain active, the Department of Defense could consolidate activities from closed bases to active bases. Under this scenario, the Brunswick Naval Air Station could well experience an expansion in its mission and personnel. The Air Station currently employs nearly 5,000 military and civilian personnel.

Local Economic Development Organizations

Topsham Development Inc. is a quasi-municipal nonprofit organization that serves as Topsham's economic and community development office. TDI's mission is to attract new businesses, assist existing businesses, and undertake economic and community development initiatives that will preserve Topsham's natural and historic heritage and enhance Topsham residents' quality of life. TDI is governed by a fifteen-member board of directors, including the Town Manager and Planning Director, a representative from the Planning Board, and Topsham residents/business leaders appointed by the Board of Selectmen. TDI is staffed with one part-time executive director. The office is funded annually from the general fund.

The **Midcoast Council for Business Development and Planning** provides business and community services to Topsham, Bath, Brunswick, Richmond, Bowdoinham, and Phippsburg. MCBDP is a public-private non-profit development corporation run by a 32 member Board and a nine member Executive Committee.

Topsham pays approximately \$1 annually for each Topsham resident for MCBDP's services. These include:

- the Maine Small Business Development Center,
- business development services,
- business financing services and revolving loan fund,
- site location assistance,
- business attraction services,
- land use planning technical assistance, and

- assistance with and administration of the Community Development Block Grant program.

Topsham Business Park

The Topsham Business Park is a 25-acre parcel adjacent to the Topsham Fair Mall. The Park is served by public water, public sewer, natural gas, and 3-phase power.

The park was subdivided into seven parcels in the mid 1990s. All but one of these parcels has been sold and developed, and the remaining parcel will be developed in 2004.

All of the businesses that have located in this section of the Park were local or regional businesses that needed additional space for their operations. The businesses located in the park are either professional or light manufacturing.

The Topsham Fair Mall is adjacent to the business park. The mall is predominantly retail-oriented, although some service and light manufacturing businesses are located in the park. Nearly 100 acres of land behind the mall is currently being developed. Businesses attracted to this location tend to be national retail chains, including Home Depot (opens in 2004) and Wal-Mart. The development of this section of the park will affect the traffic volumes throughout town.

Issues and Implications

1. In 1990, Topsham exported nearly 80% of its labor force to work in surrounding communities. The

declining importance of large regional employers and the increasing number of jobs available in Topsham will likely decrease this percentage in the future.

2. Number of jobs in Topsham grew rapidly in the 1990s and will surely continue for the next several years as the Topsham Fair Mall adds hundreds of thousands of square feet of new retail space. Employees to fill these jobs will come from Topsham, but will also commute from surrounding communities and could add commuter strains to the transportation network.
3. Topsham's growing service and retail economy is relatively clean – it emits few pollutants into the environment. Service jobs tend to pay higher wages and are more likely to draw people that want to live in the community. Retail jobs tend to pay lower wages and are more likely to draw employees that commute from surrounding communities. However, unplanned expansion can lead to a sprawling development pattern that does have environmental impacts beyond the development's footprint.
4. Topsham and Brunswick are becoming a center for elderly services. Amenities in the area include two hospitals, rural lifestyle, and quick access to urban areas and the coast. The success of The Highlands and Thornton Oaks has already spawned numerous smaller senior-living developments in the area. More of these living arrangements will be built in Topsham as the critical mass of elderly and health care services develops.
5. The health of a large part of the regional economy is tied to national security (Bath Iron Works and Brunswick Naval Air Station). As the Department of Defense continues to realign its forces to a post-Cold War world, future employment at these job centers is uncertain.
6. The series of employee reductions at Bath Iron Works and the Brunswick Naval Air Station have reduced the dependence the region has on these major employers and diversified the economy. This will help the area's long-term stability.
7. The town's growing role as a regional service center should be approached with care. Service industry jobs tend to pay higher wages and be environmentally benign, but could increase the demand for local housing and higher levels of service from the local government. Expansion of the retail industry will make Topsham a center of activity for the region, but could impact traffic volumes, community character, demands on local government, and existing local businesses. Careful attention must be taken to minimize the negative impacts to the largest number of citizens and accentuate the positive impacts.
8. Topsham has a limited amount of resources to put into economic development. Most of these resources are controlled by Topsham Development, Inc. The Town of Topsham should examine the types of businesses on which it wants to spend these limited resources.
9. The amount of vacant land around the Interstate 295 intersection with Route 196 will likely be developed in the future.

10. Topsham has used Tax Increment Financing as a tool to attract economic development and pay the costs associated with this new development. Topsham currently does not have a TIF policy to ensure that the benefits from this tool are being used in the best interests of the community.
11. The Table of Permitted Uses in our Town's land use management ordinance has not been updated to reflect the changing demands of today's economy.
12. Home occupations are an important component of our town's economy.

Chapter D

TRANSPORTATION

Whether it is to buy a gallon of milk, ride a bike to the park, or commute to work, transportation corridors are the link to the world beyond our doorstep.

Changing development patterns affect the way people use these networks. Topsham's residential development pattern is changing as the majority of housing units are built in more rural areas of the community. Populations in communities surrounding Topsham are growing and rely on the town's transportation network. Topsham's growing role as a retail and service center is making the town's center a destination for employees and shoppers throughout the region.

This chapter inventories Topsham's transportation network and where appropriate, quantifies the changing uses of this system.

Vehicular Traffic

The Topsham transportation system is, for the most part, comprised of roadways. The various components of this roadway system serve a variety of functions, and the responsibility for building and maintaining the

components is shared by the Town and the State of Maine.

Within the Town of Topsham, there are 83 miles of publicly maintained roadways. They vary in function and character from the high-speed interstate highway to low-speed residential streets.

- 15.4 miles of arterial roadways, defined by the Maine Department of Transportation as travel routes that carry high speed, long distance traffic usually with interstate or U.S. Route number designations. The arterial routes in Topsham include Interstate 95, Route 196, and Route 202.
- 6.6 miles of collector roadways, defined by MDOT as travel routes that collect and distribute traffic from and to arterials, serving places of lower population densities and somewhat removed from main travel routes. In Topsham, these collectors include the Cathance Road, Foreside Road, and River Road.
- 61 miles of local roads, defined by MDOT as all roadways not classified as an arterial or collector, and serving primarily adjacent land areas.

In general, the transportation network is oriented radially outwards from the more built up areas in town. Interstate-95 and Routes 196, 201, and 24 funnel traffic into the heart of the community around the Topsham Fair Mall and the Village. This orientation has led to congestion and safety concerns.

Route 196 is the backbone of the town's transportation network, especially the length of road between Interstate-

95 and Main Street (Route 201). Nearly all of the arterials and collector streets feed into this short corridor. In 2000, more than 26,000 vehicles per day traveled this stretch of road (Table 14).

The Coastal Connector was recently built to alleviate some of this traffic and improve safety. The Connector extended Route 196 from its intersection with Main Street (Route 201) and across the Androscoggin River to Route 1. In 2000, this stretch handled a daily average of 18,500 vehicles.

Before the Coastal Connector was finished in 1997, an average of 25,000 vehicles (much of it regional traffic from the north and west) traveled down Route 196, then down Main Street, over the Androscoggin River to Brunswick and Route 1. In 2000 after the Connector was completed, traffic volume along Main Street had fallen to fewer than 15,000 trips per day, although volumes appear to be increasing again.

Other high volume transportation corridors include Route 196 near the Lisbon town line, Interstate-95, and Route 201 north of Topsham Village.

In addition, MDOT tracks accidents and measures potential safety problems by looking at the total number of accidents in a location and comparing this to the number that may be expected given the type of roadway involved and its traffic volume. From this information, MDOT calculates a “critical rate factor” (CRF). Any location that has a CRF greater than 1.00 and that has had eight or more accidents over a three-year period is considered a high crash location.

The Town maintains approximately 80 miles of roads and streets. The Public Works Director feels that the overall condition of the road system is fair to good in its current condition. During 2005, the Town instituted a formal Road Surface Management System using a software program provided by the Maine Local Roads Center. This program evaluates the existing condition of roads based upon the following criteria: traffic volume, longitudinal/transverse cracking, alligator cracking, edge cracking, potholes, roughness, rutting, and drainage. Based upon these criteria, the program establishes a value for the existing condition of the road with a higher value indicating a need for quicker repairs.

The Town has collected the necessary data on each local road segment and has used the program to grade the current condition of all Town maintained roads and streets. The Town is now using these grades to prioritize its road improvement budgeting. A copy of the RSMS spreadsheet is included in Appendix B.

The Town faces a backlog of improvement needs. This backlog can be addressed as long as the Town continues to fund road maintenance at an adequate level on an on-going basis. Addressing this backlog has been made more difficult as a result of steep increases in paving costs over the past few years. While the amount of money budgeted by the Town for repaving was increased by 20% in the current budget, the cost of paving has increased by almost 50% resulting in fewer improvements being accomplished.

Table 14. Average Annual Daily Traffic, 2000

Map Reference	Location	AADT
A	Route 196, east of Mall entrance	26,620
B	Coastal Connector	18,580
C	Main Street, south of Elm Street	14,300
D	Interstate 95 northbound	13,430
E	Route 196, near West Mallet Drive	12,100
F	Interstate 95 northbound	9,240
G	Route 201, near I-95 overpass	8,180
H	Route 24, near Bowdoinham town line	1,930

Source: Maine DOT

Note: Average Annual Daily Traffic (AADT) is counted on a three year, rotating schedule. The most recent data for Topsham is from 2000.

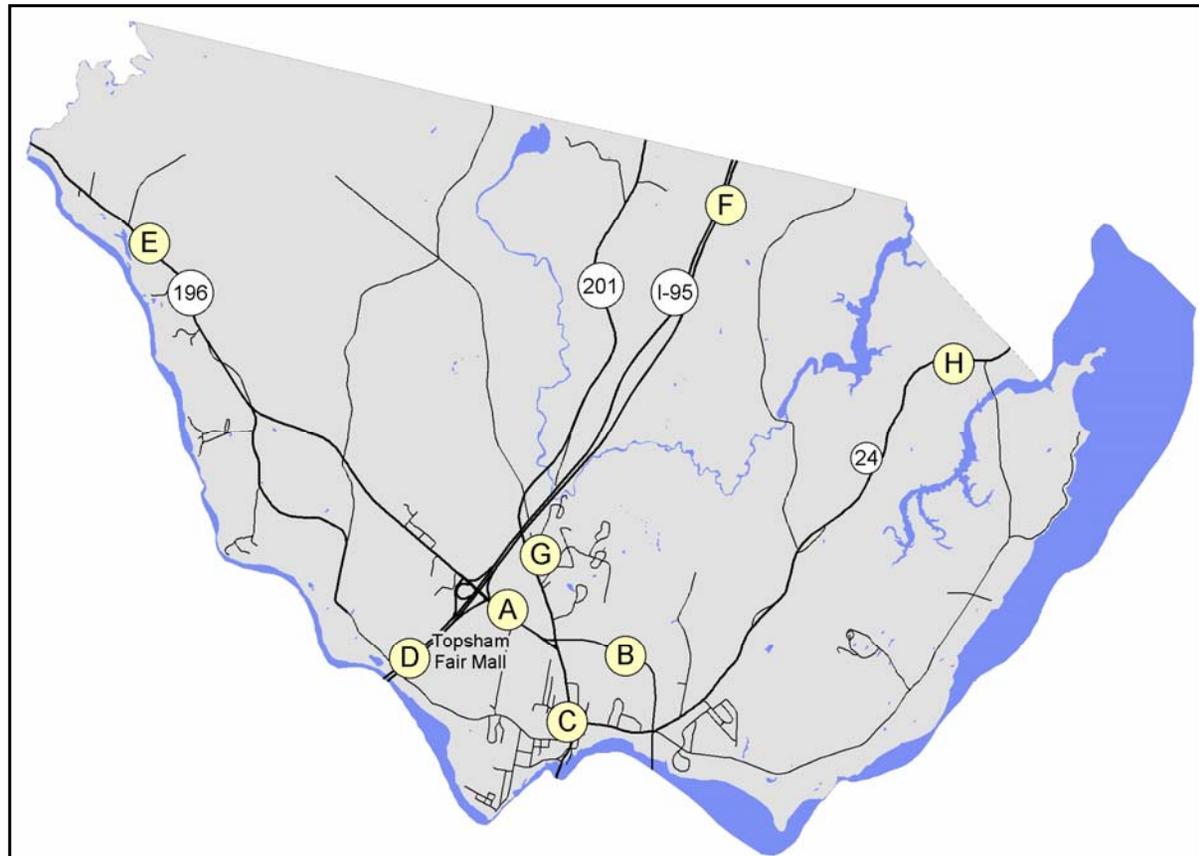


Table 15. High Crash Locations, 2000 - 2002

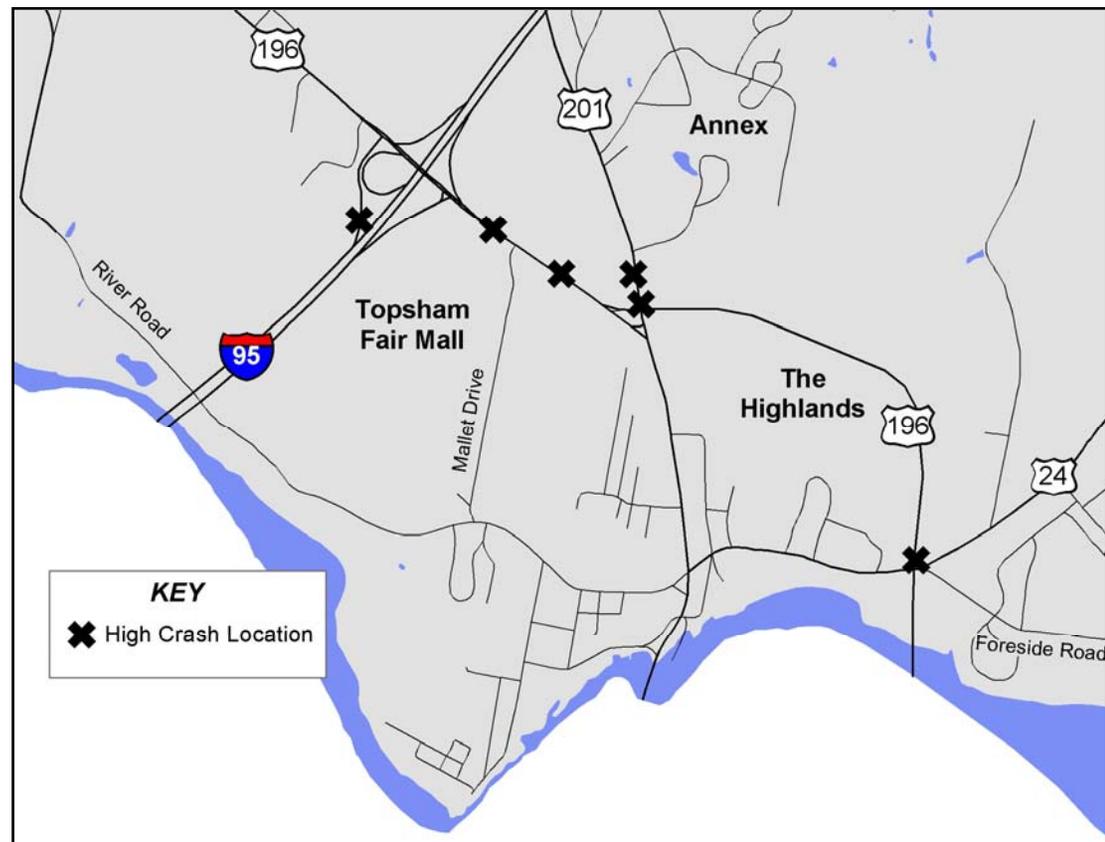
Location	Critical Rate Factor	Accidents
• Interstate-95 southbound access ramp	2.23	12
• Main Street, between Route 196 intersection and Fourth Street	2.20	8
• Main Street and Route 196 intersection	1.25	24
• Route 196, between Mallet Drive and Mall Road	1.24	10
• Route 196, intersection with Hamilton Court	1.18	13
• Route 24 and Coastal Connector	1.07	11

Source: Maine Department of Transportation

Between 2000 and 2002, nearly all of Topsham’s high crash locations were located in the Route 196 corridor between Interstate-95 and the Coastal Connector (Table 15). High traffic volumes, stoplights, curb cuts, multi-lane roads, and other traffic hazards are prevalent in this corridor.

In the last ten years, many historically high accident areas have become safer, largely due to the completion of the Coastal Connector. Intersections along Main Street once dominated the list of high crash locations.

Some intersections, most notably the Meadow Road intersection with Meadow Cross and Ward Road, are still safety concerns even though not listed as a high crash location. This intersection was the most dangerous intersection in



Topsham a decade ago. Improvements to decrease the likelihood of accidents have yet to be made.

Continued residential and commercial development in the community as well as growth in traffic coming to Topsham and passing through the community will tax the ability of the existing road network to provide efficient and safe vehicular movement. To understand this issue, the Town conducted a Town-wide transportation study (2005). This study projects potential future development in Topsham over the next twenty years and assesses the traffic implications of this growth in combination with growth in background traffic volumes through 2024. Based upon the projected traffic growth, the study evaluated the capacity of the existing road system to accommodate the increased volume of traffic and identified a comprehensive set of improvements that could be undertaken to provide the needed capacity if the projected traffic growth actually occurs.

The Town-wide transportation study addresses two sets of issues – short term improvements needed to accommodate traffic in the vicinity of Topsham Fair Mall and longer-term, town-wide improvements to accommodate future growth and development in the community. To address the short-term issues, the study proposed the construction of a connector road from Topsham Fair Mall Road to Monument Place. The Town has moved forward with this project and construction will be completed in 2006. This improvement is funded with a combination of revenue from the Municipal TIF District and an impact fee that is paid by new developments in the mall area that benefit from the improvement.

The transportation study identified a set of longer-range improvements that could be undertaken to accommodate both background traffic growth and traffic resulting from possible future development in Topsham. The study identified the following possible major improvements:

- traffic management improvements in Lower Village
- improvements in the Upper Village to compliment the construction of the Monument Place Connector
- construction of a number of new or expanded facilities to accommodate traffic growth including the Routes 201/196 Western Connector, the Route 1996/River Road Connector, the Routes 201/196 Eastern Connector, a Commercial Connector linking commercial development on the opposite sides of I-295, and related improvements including enhanced signalization and traffic management.

As part of the Town's on-going planning effort, a committee is currently (2006) looking at the I-295/196 intersection area and recommended that the Town move forward with some of the background work needed to set the stage for some of these improvements. This recommendation was adopted by the May 2006 Town Meeting. This background work will be funded with TIF revenue.

A new public road is designed to connect Tedford Road with the Annex by traversing the Highlands Green development. Also, Winter Street has been connected to the Topsham Fair Mall Road as part of the Topsham Fair Mall expansion.

In Topsham, whether it is for residents, employees, or customers, the vast majority of automobile parking is provided by the private sector. As a result, there are no significant general-purpose public parking areas that the Town owns and maintains. The Town does, however, maintain public parking areas at the following locations.

- Public Library
- Town Hall
- Fire Station
- Grange Hall (park and ride)
- Topsham Fair Mall
- Lower Village

The Public Library is a new facility and has adequate off-street parking. The Town is in the process of building a new Town Hall and Public Safety facility. These facilities are being designed to provide adequate off-street parking. Parking at the Fire Station has been expanded

as a result of the Lower Village improvements and is adequate for current needs. There is limited on-street parking in Lower Village. As part of the Lower Village redevelopment, additional on-street parking has been provided along with 13 spaces of off-street parking off Summer Street. In addition, substantial private off-street parking has been constructed to serve the new development in the Lower Village. In general, there are no significant issues with publicly-controlled parking in the community.

Maine DOT has not planned to make any major improvements to Topsham's road network between 2004 and 2009.

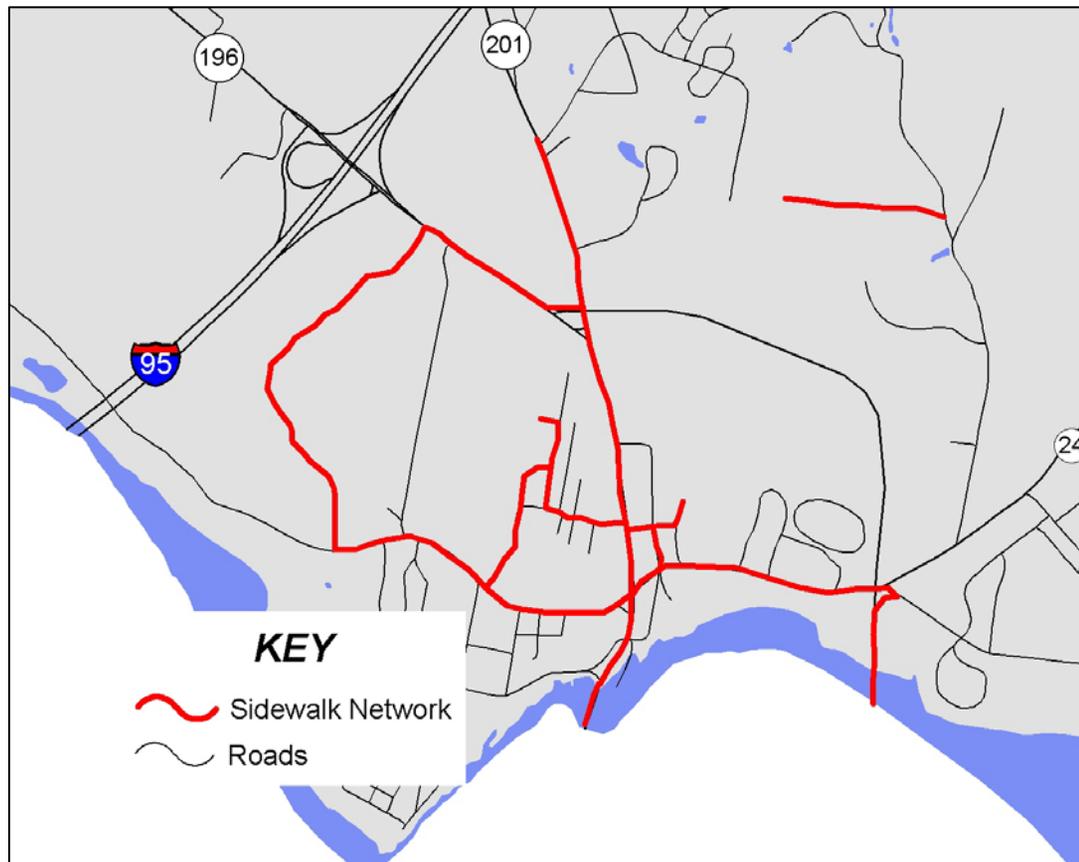
Pedestrian Facilities

Topsham has nearly 8 miles of sidewalks adjacent to several roadways within the urban area. Primarily, they are located along urban arterials where the potential conflict between vehicles and pedestrians is greatest. These locations are listed below.

- Main Street, from Brunswick to Canam Drive
- New Lewiston Road, from Topsham Mall Road to Main Street
- Winter Street, from Main Street to Topsham Fair Mall Road
- Wilson Street, from Main Street to Barrows Drive
- Bickford Drive, from Barrows Drive to Winter Street
- Barrow Drive, from Wilson Street to Woodside School
- Topsham Fair Mall Road, from New Lewiston Road to Winter Street
- Topsham Crossing, from Tedford Road to Crabtree Drive
- Elm Street, from Main Street to Foreside Road
- Pleasant Street, from Elm Street to Perkins Street
- Perkins Street, from Elm Street to Williams Cone School
- Melcher Place, from Main Street to Pleasant Street

The recently constructed Androscoggin Bike Path is heavily used by local residents and visitors alike. The Town is studying how to expand this pedestrian facility from Middlesex Road (Route 24) to Mt. Ararat High School.

The Healthy Maine Walks initiative by a coalition of government agencies and nonprofit organizations has identified a 3.3 mile loop that relies on these sidewalks for pedestrian safety.



Rail Network

Two railroad lines traverse Topsham. The first crosses the Androscoggin River from Brunswick and then follows the river into Lewiston. The second crosses the Androscoggin River from Brunswick adjacent to the Coastal Connector and then strikes north through Cathance and up the Kennebec River Valley to Augusta and Bangor.

Although not currently utilized to a significant extent, these rail lines have potential for the movement of freight cargo. Recent plans to extend the passenger rail system from Portland to Brunswick would not affect Topsham's rail corridors.

Issues and Implications

1. Route 196 is a major transportation corridor that serves both commuting traffic and local traffic. Planning and future development should accommodate these two demands on the same roadway.
2. Topsham's growing role as retail/service center will affect the way the town's transportation network is used. Traffic volumes in areas that aren't immediately affected by the new developments could change dramatically. Future commercial development could consider the impacts on the transportation network beyond the immediate development.
3. The trend towards residential development in the more rural areas of Topsham will affect traffic volumes, safety, and the cost of providing adequate

transportation services to the more rural areas of town.

4. As the number of pedestrian facilities in Topsham continues to grow, the Town should consider creating a master plan to direct these facilities to where they will most efficiently serve residents and employees. Particular attention should be given to connections between residential neighborhoods, community facilities, natural resources, and economic centers.
5. Some of the subdivisions being built in rural parts of Topsham are being constructed on private ways. The Town is not required to maintain these private ways, and therefore future maintenance decisions could allow these private ways to become safety concerns for those living on them. These new private roads can be accepted as public roads with a vote at Town Meeting. The Town is then liable for the expense of improving and maintaining these new private roads to public road standards.
6. Two new connections (the Winter Street connection to Topsham Fair Mall Road and the Tedford Road connection to the Annex) will relieve the pressure on the Route 196 corridor and Main Street. However, these connections, and future connections like them, must be designed to minimize harm to the affected neighborhoods.
7. Much of the transportation demands placed on our Town's transportation network come population and economic growth in the surrounding region.

8. Topsham currently has no infrastructure-maintenance program that identifies what level of service should be maintained on the Town's roads and at what cost.
9. The availability of public parking lots and on-street parking in the Lower and Middle Villages could decrease the need for as many parking spaces currently required in the development review process. By decreasing the number of parking spaces required, it would become easier to redevelop and infill new development in these older sections of our town.

Chapter E

PUBLIC UTILITIES

Within the denser areas surrounding Topsham Village and the Topsham Fair Mall, public water and sewer service are available. For the rest of the town outside of this area, water generation and septic disposal are an individual responsibility. This chapter provides an overview of this area's water and sewer utilities.

Public Water Supply

On March 11, 1903 the state legislature approved an act to incorporate the Brunswick and Topsham Water District.

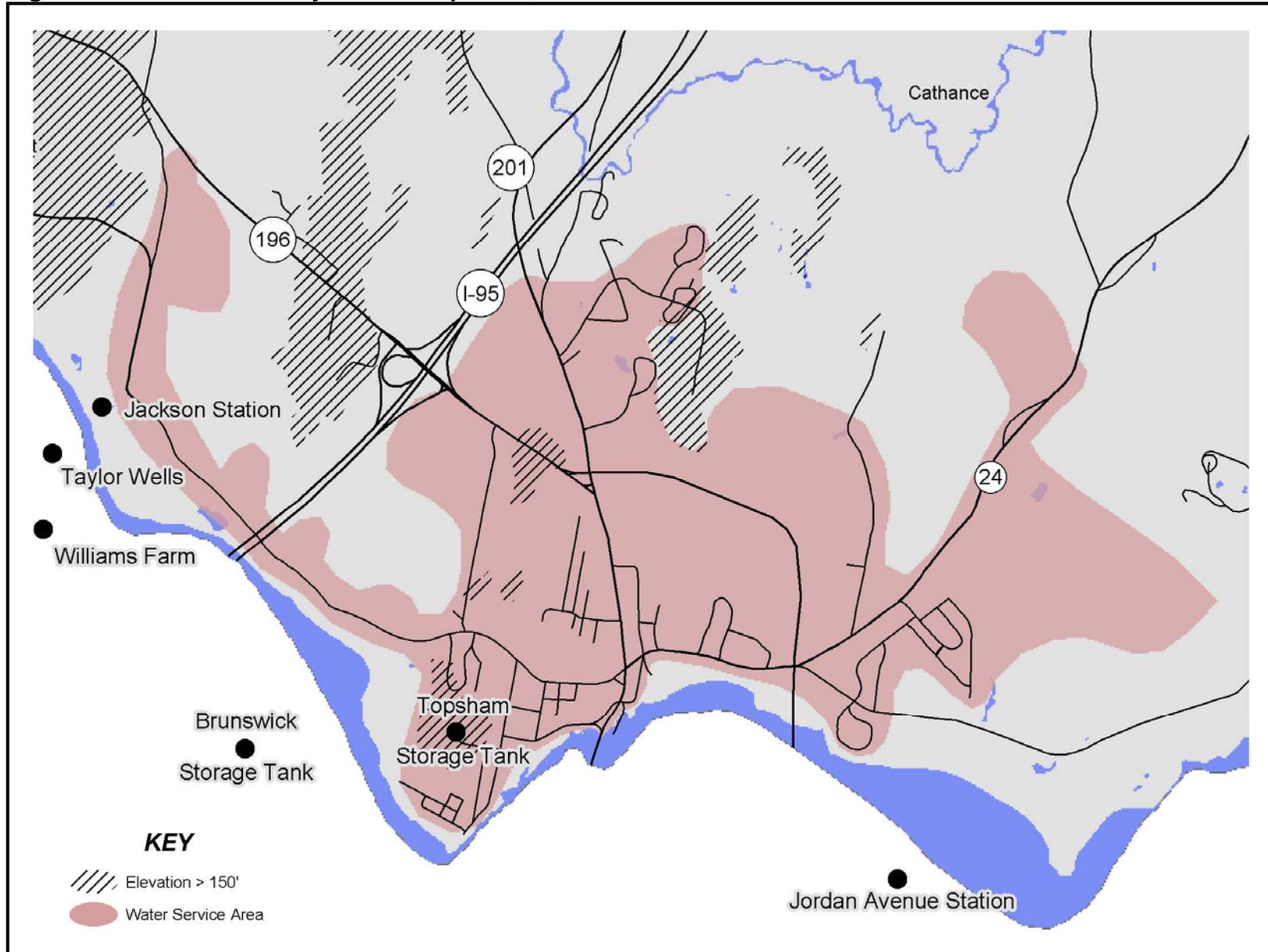
The Water District is a quasi-municipal organization governed by a Board of Trustees. Of the six members of the Board of Trustees, four are appointed by the Brunswick Town Council and two members appointed by the Topsham Board of Selectmen. All appointments are for three-year terms with two terms expiring each year.

The Water District is a self-supporting organization procuring its operating funds from user fees. The District's charter area includes the geographical boundaries of Topsham and Brunswick.

The Water District's source of supply is from groundwater with several wells and/or well fields located at various locations (Figure 16):

- Off of **Jordan Avenue** in Brunswick are 160 2.5" wells approximately 20 to 26 feet deep with a current pumping capacity of 950 gallons per minute (1.37 million gallons per day). The quality of the water pumped from this well is very good – it requires minimal treatment to adjust the water's Ph levels. Chlorine and fluoride are added for public safety and a corrosion inhibitor is added to maintain the water distribution system.
- At **Williams Farm** in Brunswick is a 12" well 78 feet deep with a current pumping capacity of 450 gallons per minute (0.65 MGD). The water quality from this well is excellent – no water quality treatment is needed at all. Chlorine and fluoride are added for public safety and a corrosion inhibitor is added to maintain the water distribution system.
- Two wells are located at **Taylor Farm** in Brunswick. One is a 12" well 156 feet deep with a pumping capacity of 1,000 gallons per minute (1.43 MGD). The other is an 8" well 108 feet deep with a current pumping capacity of 400 gallons per minute (0.57 MGD). An ion exchange treatment for these wells improves the water quality by removing trace amounts of iron and manganese. Chlorine and fluoride are added for public safety and a corrosion inhibitor is added to maintain the water distribution system.

Figure 16. Public Water System in Topsham, 2003



- At **Jackson Station** in Topsham is an 18" well with a current pumping capacity of 2,500 gallons per minute (3.57 MGD). The water from this well is treated for trace amounts of iron and manganese. Chlorine and fluoride are added for public safety and a corrosion inhibitor is added to maintain the water distribution system.

As some of these wells are getting old, the Water District is in the process of developing a backup and replacement well system. This involves replacing the existing pump at the Taylor Station with a new pump capable of producing 3.0 MGD and developing a backup well at the Jackson Station capable of producing 10.0 MGD.

A study completed in the early 1990s suggests that the large sand and gravel aquifer supplying the Jackson, Taylor, and Williams wells has an estimated safe yield of 12.4 MGD. Pumping capacity from this aquifer alone totals 4.8 MGD, or approximately one-third of the aquifer's safe yield.

Once water has been drawn into the wells and pumped to the surface, the Water District moves the water into water tanks for storage. Three water tanks store a combined 6,300,000 gallons, or enough for three days of normal demand:

- A steel standpipe off of the River Road in Brunswick is the oldest of the three structures. The standpipe or water tower was constructed in 1939. It is 103 feet tall and 40 feet in diameter. These dimensions create a storage capacity of 900,000 gallons.

- A new concrete storage tank is located off of the Church Road in Brunswick. It was built in 1988 and while it only measures 40 feet high, it is 112 feet in diameter (creating storage for 3.0 million gallons).
- A water tank off of Oak Street in Topsham that holds 2.5 million gallons.

Once the water is in the storage tanks, the water is gravity-fed through the water distribution system to the tap.

The Water District's distribution network consists of 105 miles of water mains ranging in size from 1" to 20". These mains typically run underneath roadways and deliver the water from the storage tanks to each user's water service line. Because much of the distribution system is built on the area's sandy soils, the Water District's distribution system is in excellent shape.

Approximately 6,300 water service lines supply water from the water mains to the customer's home or business and another 600 fire hydrants are connected to the water mains.

Because the distribution system is gravity fed, there is an elevation limit to how high water will flow to homes and businesses. Using the existing infrastructure, the effective limit of the current water distribution system is 150 feet above sea level. Areas that are higher than 150 feet above sea level are likely to have low water pressure levels. If an expansion were to occur above the 150-foot level, a booster system would have to be installed to provide adequate service.

In 2002, the Water District's water consumption averaged 2.14 million gallons per day. This fluctuates on a seasonal basis, as the seasonal demand for water typically increases in the summer and decreases in the winter. Daily water demand peaks in the early morning hours and tapers off throughout the day.

In 1994, the Water District completed a hydrogeologic study that suggested areas around the wells be provided additional protection from land uses that are detrimental to water quality. Both Brunswick and Topsham created wellhead protection zones to help protect the quality of the public water system. In addition, the Topsham well – Jackson Station – is located within the Town's Aquifer Protection Overlay District.

Expansions to the public water system are built to the engineering standards of the Water District and paid for by the developer requesting access to the water system. The developer then deeds the expansion to the Water District for maintenance and operation.

Public Sewer Service

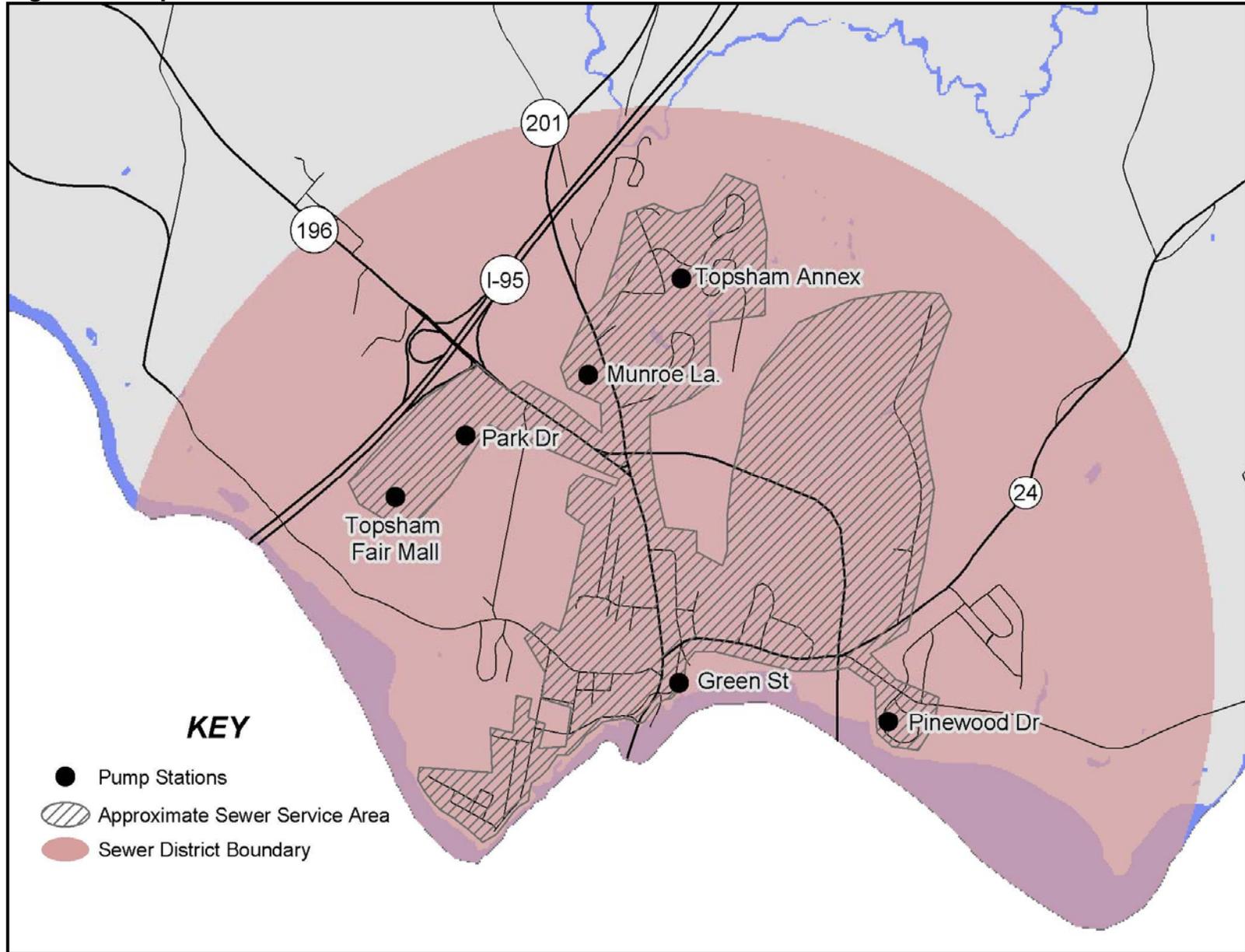
Public sewer service for Topsham is provided by the Topsham Sewer District. The Sewer District is a quasi-municipal organization created by the state legislature. The Sewer District's chartered service area is within a two mile radius of the intersection of Main and Elm Streets. This service area could be increased, if desired, by amendment to the charter. A three member Board of Trustees sets the rates and formulates the policies for the operation of the Sewer District. The Board of Selectmen annually appoints a trustee to a three-year term on a rotating basis.

The Sewer District is unique because it is a collection system and has no treatment plant. The sewerage is pumped across the Androscoggin River to the Brunswick Sewer District Treatment Plant. The Topsham Sewer District has a contractual agreement with the Brunswick Sewer District that provides the payment terms for the treatment for all the sewage produced by Topsham until the year 2023. After 2023, a new contract will need to be negotiated, but Brunswick is required by state law to accept Topsham's sewerage.

The Topsham Sewer District originally served 190 units and operated two miles of sewer lines. Since then the system has grown to serve an estimated population of 4,600, including residential, commercial, SAD 75 schools, and the Naval Air Station Annex. The District presently operates a system of gravity lines, force mains, and pressure effluent systems that totals more than 15 miles in length (Figure 17).

The Sewer District has been repairing and improving its sewer lines on an as-needed basis. Almost all of the sewer lines were brand new or significantly improved within the last 32 years. Due to the high quality of the sewer lines, the infiltration level (groundwater that seeps into the sewer lines) is very low.

Figure17. Topsham Sewer District



Pumping stations on Pinewood Drive and Green Street were brought online in 1977, with the Munroe Lane station becoming operable in 1983. A pumping station located at the Topsham Fair Mall was constructed in 1985.

The pumping stations were designed for a 25-year life expectancy (Table 16). New variable frequency drives were installed in the Pinewood Station to improve the efficiency of the pumps in 1991. The Topsham Fair Mall pump station will be replaced with new pumps to increase the capacity of the system to handle the new retail developments underway.

When designed it was estimated that the system would serve a population of 5,200 plus an additional 800 residents are the Naval Air Station Annex. Daily average flow is designed to be 680,000 gallons with a possible peak flow of 2,600,000 gallons. The present average daily flow is 360,000 gallons.

As with the public water system, expansions to the sewer system are built to meet the requirements of the sewer district and paid for by developers. Ownership of the

expansion is then given to the Sewer District to operate and maintain. Recent expansions include extending service to The Highlands and the Topsham Fair Mall.

Natural Gas

Natural gas has only recently become a viable option for Maine communities since 1997. To date, the Maine Public Utilities Commission has approved 36 communities to receive natural gas as a utility. Topsham is one of these communities, and Maine Natural Gas, a subsidiary of the Energy East Company, is working to expand its natural gas lines to the community.

Topsham’s first natural gas service was available in 2001 to homes and businesses along the Route 201 corridor down to the Annex. As of November 2003, this service area had expanded to include the Topsham Fair Mall.

Issues and Implications

1. Topsham’s public water and sewer systems have an abundance of excess capacity. As Topsham contemplates where to accommodate future housing and commercial growth, strong consideration should be given to areas of the town where infrastructure and excess capacity already exist and near natural areas that are susceptible to septic system runoff.
2. Until improvements are made, commercial and large scale

Table 16. Station Design Capacity

	Pumps	Pump Size (horsepower)	Capacity (GPM)
Pinewood Drive	3	20 hp	900 GPM each
Green Street	2	10 hp	250 GPM each
Munroe Lane	2	4.5 hp	250 GPM each
Topsham Fair Mall	2	18 hp	500 GPM each
Topsham Annex	2	20 hp	500 GPM each
Park Drive	2	10 hp	150 GPM each

residential developments should be discouraged in areas where water pressure does not meet the standards of the insurance industry.

3. Due to the laws controlling the operation of public utilities in the State of Maine, utilities cannot pay to extend water or sewer lines. The rationale is that current customers should not have to pay to expand service to new customers. Therefore, developers are required to pay for utility expansions. These expansions can be costly, and only fiscally sound if the development is going to be large.
4. Many of the Growth Areas proposed in Section F: Future Land Use Plan are not currently within the service area of the Topsham Sewer District.
5. Several of the land use management zones in the denser part of the community served by public water and sewer do not make efficient use of these utilities, thereby decreasing the incentive for a developer to consider expanding these utilities to new areas.
6. Natural gas is going to become more widely available in the community over the next decade.

Chapter F

PUBLIC FACILITIES

Growth and development increases the demand placed on municipal services and facilities. This section looks at the adequacy of major public facilities in Topsham and assesses what impacts continued development will have on the demand for municipal these services and facilities.

For a more detailed analysis of the public facilities in Topsham, see the 2000 Municipal Facilities Report located on the Town's website.

General Government

Town Hall, located at 22 Elm Street, is the center of the town's government. This 7,000 square foot structure was built in 1880 and houses most of the administrative offices necessary for the government to function, including assessing, codes enforcement/planning, general assistance, clerk, recreation, and treasurer.

Since the Comprehensive Plan was approved in 1992, the available public space to adequately serve the community has increased. The construction of the police station/EMS building in addition to the relocation of S.A.D. 75's administrative offices to the Annex have

effectively created more space for general governmental services.

However, structural, safety, storage, and access concerns remain. Many of the departments report inadequate space for storage as a significant issue. Access from the parking lot into the buildings is poor, and the structural integrity of the building has been pushed to the limit.

Growth in the community, both residential and commercial, will likely increase the need for space in the Town Hall. Recommendations for features to include in a modern municipal building are included in the 2000 Municipal Facilities Report, which is located on the Town's website.

Public Works Facility

The Public Works Department provides all of the town's road, sidewalk, signal, and stormwater maintenance. It also improves the town's roads (prior to paving) and maintains these roads in the winter (sanding, plowing, etc). It is staffed by 8 full-time employees (director, foreman, and 7 operators) and two part-time employees (clerical assistant, laborer). In addition, three seasonal employees work part-time.

The department recently moved into a new facility adjacent to the Coastal Connector that should meet the community's needs for the foreseeable future. This 22-acre parcel has a 16,000 square foot main building and a 9,600 square foot sand storage building. All of the department's equipment is stored in the new facility. The main building also has office space and a lift for

Topsham Public Works Department Fleet, 2003

2001	MT5 Trackless sidewalk plow
2000	International truck
1998	Chevy dump truck
1998	GMC 4X4 pickup with plow
1996	GMC pickup
1995	GMC 4X4 pickup (recreation)
1994	GMC dump truck, sander, and plow
1993	GMC dump truck
1984	Chevy pickup
1990	GMC dump truck
1990	GMC one ton pickup
1986	GMC dump truck
1986	Ford Ranger (code enforcement)
1981	GMC dump truck
1968	Jeep 4X4 truck

Source: Public Works Department

equipment maintenance. The department relies on two enclosed storage containers at the new facility and four storage containers at the town’s solid waste facility.

The Public Works Department operates the solid waste transfer station on Foreside Road. A director and three full-time operators staff this facility. Solid waste is handled by a two-container compactor that handled 1,050 tons of material in 2002. The recycling center is housed in a 40 foot by 80 foot steel building and includes five bailers and two glass crushers. More than 1,500 tons of material was recycled in Topsham in 2002.

Public Safety

The **Topsham Police Department** provides public safety services to the town. The department, along with the communications department and EMS, is located in 7-year old freestanding facility located to the rear of the Municipal Building.

The department is authorized to have 14 full-time officers. This includes one police chief, one lieutenant, two sergeants, one detective, and nine patrol officers. Two of these officers are assigned to be school resource officers and spend much of their time in the public school system. In addition, the department relies on four part-time reserve officers.

The department operates a total of nine marked and unmarked vehicles.

In 2001, Topsham reported 123 indexed crimes (violent crimes and property crimes), or a rate of approximately 13 crimes for every 1,000 residents (Figure 18). This was about half of the crime rate for the state as a whole (26 crimes for every 1,000 residents). In general, Topsham’s crime rate has fluctuated between 15 and 20 crimes per 1,000.

Topsham police department responds to 10,000 to 12,000 service calls per year. This has been steadily increasing as the town has grown. Topsham always has two patrols out, and it splits the town into two sides (up Main Street and Route 201) so that one patrol is always close to a service call.

Public safety communications are currently located within the police department. This service, which is staffed by four full-time employees, currently handles all of the service calls for fire, police, and emergency. Starting in 2005, this service is going to be transferred to the Sagadahoc County Regional Dispatch Center. This regional center, which currently handles all of Topsham's E-911 calls, will provide all of the town's service calls as well. The department estimates it will save \$100,000 annually.

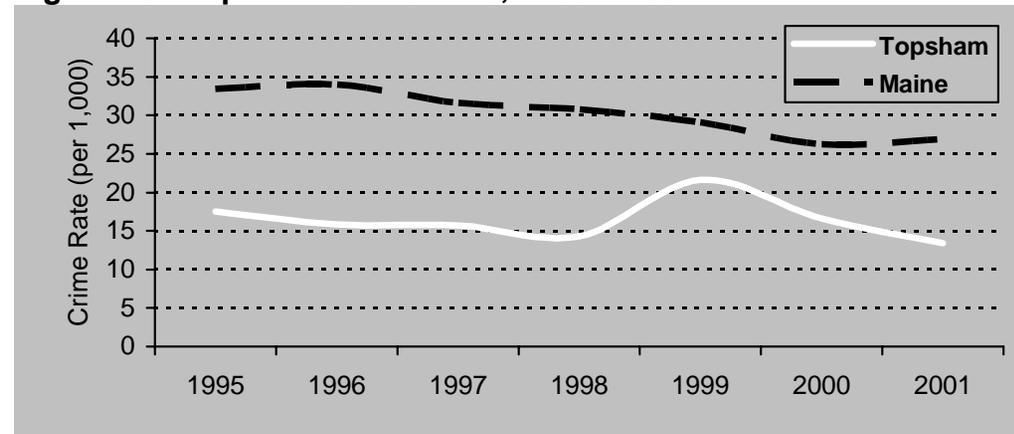
Topsham residents recently voted in support of a new regional jail that will be located in Wiscasset. This jail will serve all of Lincoln and Sagadahoc Counties.

Growth, both commercial and residential, will force the police department to grow with the community. As more people come to Topsham to live or to shop, the number of incidents requiring police services (traffic, shoplifting, indexed crimes) will likely increase. This growth will likely require that the department hires additional staff.

The police station is centrally located, is easily accessible, and has a good location with regard to the Coastal Connector. However, the facility is becoming crowded and will not meet the needs of the Police Department as the town continues to grow. There are significant benefits to having the police and fire services co-located in a central facility.

The **Topsham Fire Department** is housed in the fire station on Green Street in the Lower Village. The station

Figure 18. Topsham Crime Rate, 1995 – 2001



Source: Universal Crime Report, Department of Public Safety

was built in 1960 on leased land. As the town has grown, adequate space to protect all of the department's equipment has become a pressing issue.

Also, the department's location in the community is not as good as it once was. In the days before the Coastal Connector, the Green Street location was centrally located. However, because the ability to move from one side of town to the other was dramatically improved once the Coastal Connector was completed, the department would like to move to a location that would improve response times throughout the town.

The Fire Department is staffed by one full-time employee (fire chief) and nearly 40 volunteers. These include two deputies, three captains, three lieutenants, two safety officers, 28 fire fighters, and five junior fire fighters. The firehouse is staffed seven days a week by at least two volunteers that receive per diems (payments at a fixed daily rate).

Fire fighters are first responders for emergency care (approximately 12 members of the fire department are licensed EMTs or paramedics) and provide a public education program to K-5 students in the Woodside Elementary and Williams-Cone schools.

The fire department has 9 apparatus, including 3 fire engines, 1 ladder truck, 2 tank trucks, 1 squad truck, 1 squad car, and a light generator trailer.

Education

The Town of Topsham is a member of School Administrative District No. 75. Four of the District's schools are located in Topsham – Mt. Ararat High School, Mt. Ararat Middle School, Williams-Cone School, and Woodside Elementary School.

S.A.D. 75 is a quasi-municipal agency. It is governed by a Board of Directors that consists of 14 elected representatives, two from Bowdoin, two from Bowdoinham, four from Harpswell, and six from Topsham.

The budget for the entire S.A.D. in 2003-2004 was \$30.5 million, of which \$6.3 million was from the Town of Topsham. This includes funding for the vocational school (S.A.D. provided a total of \$600,000), vocational school adult education (S.A.D. provided a total of \$9,000), and Merrymeeting Adult Education programs (S.A.D. provided \$91,000).

Williams-Cone Elementary School is located near the heart of the upper village. Enrollment in 2003-2004 is approximately 285 students in kindergarten through 5th

grade. Williams-Cone has more than 20 classrooms, a library, computer lab, art room, music and instrumental music rooms, gymnasium/cafeteria, and large all-purpose athletic field.

Woodside Elementary School is located in the Woodside neighborhood in Topsham. Enrollment in 2003-2004 is approximately 435 students in kindergarten through 5th grade. Woodside has more than 33 classrooms, a library, art room, music and instrumental music rooms, gymnasium, cafeteria, and large all-purpose athletic field.

Mt. Ararat Middle School was opened in 2001 and serves students from all four towns in the S.A.D. Nearly 810 students were enrolled in grade 6 through 8 in 2003-2004, 428 of whom were from Topsham. The middle school has 48 classrooms, 3 art rooms, 4 foreign language rooms, two technology education classrooms, a library with conference room, vocal music room, instrumental music room, cafeteria, large gymnasium, fitness room, and a small physical fitness room.

The Orion Performing Arts Center is located in the Mt. Ararat Middle School. It is the largest performance auditorium in the region, with seating for 900 people. The theatre was designed to support the performing arts, in particular dance, music, and drama. It serves the residents of Topsham, Bowdoin, Bowdoinham, and Harpswell, as well as residents of other surrounding communities.

Mt. Ararat High School serves students from all four communities in the S.A.D. It is older and was built on an open-concept design that was popular in the late 1960s and has since fallen out of favor. Second floor

classrooms were originally designed with no walls so that four classes shared a common space. Partitions have since been erected to improve the sound and privacy of the classrooms, and in consequence have blocked some rooms from adequate exits and windows. In addition, other classrooms can only be reached by traveling through existing classrooms.

Overcrowding is an issue at the High School. It was designed for 900 students, and it is currently serving 1,100 students (about half of which are from Topsham). The school has added 6 portable classrooms to augment the 66 other classrooms to handle the overcrowding. In addition, the school has a library, a 'commons' cafeteria with a stage, and a large gymnasium capable of holding three physical education classes simultaneously.

Special education students in the S.A.D. are educated in the neighborhood elementary schools as much as possible. Facilities for these students throughout the system are adequate, although due to a shortage of some types of special education teachers, the S.A.D. does sometimes have hiring issues.

All of the schools within the S.A.D. have been updated recently, with the exception of the high school. School enrollments are projected to remain steady or decline slightly in the next decade. Space demands, safety concerns, and the quality of the learning environment at the high school will continue to be concerns in the future.

Merrymeeting Adult Education is funded by the Brunswick School Department and M.S.A.D. No. 75. Originally, it was designed as an organization that could provide a place for residents to complete their high

school educations or test for their GED. The program has since expanded to provide English-as-a-Second Language, basic literacy programs, and other adult learning interests. Currently, the organization offers 75 courses per semester and graduates nearly 100 adults annually.

Programs in the school department are generally in good shape. One concern within the S.A.D. is compliance with the certain provisions in the federal 'No Child Left Behind Act.' Attracting teachers with the quality sought by the school district could be a challenge, especially in math, science, and foreign languages.

The S.A.D. is concerned that adjustments to the state education funding formula could decrease the amount of state aid that is provided to the district. The district receives about 40% of their funding from the state, so even small changes in the funding formula could impact the budget raised from local property taxes. The SAD's funding from the State has increased nearly every year in the past decade.

Due to the structure of the cost sharing provision within the S.A.D., the town's share of education funding is determined based partly on the number of students in the community and partly on the town's assessed valuation. Therefore, Topsham's education expenses could increase if its share of the District's students increases, or if the town's valuation increases faster than the other town's in the district.

Library

The Topsham Public Library provides a wide range of services to the residents of Topsham, Bowdoin, Bowdoinham, and Harpswell. It is governed by a 12-member Board of Directors, and is funded through an annual appropriation from the Town's budget.

The library is staffed by two full-time employees and three part-time employees. The library relies heavily on volunteers whose efforts make many of the library's services possible.

There are approximately 25,000 titles at the library. This represents an increase of 4,000 titles since the 1992 Comprehensive Plan was approved. Space considerations have limited the number of titles available, as have its recent history of moving (once the new library is complete, the library will have moved itself twice within the last decade).

In addition to its stacks, the library's current home in the Naval Annex provides computer access at six terminals, limited meeting space, and limited office space.

Demand for services has steadily increased. Both circulation and demand for programs have increased. Currently, the library offers many reading programs, craft activities, discussion groups, and outreach efforts (e.g. Books on Wheels program that delivers books to those who can't visit the library). In addition, the library sponsors the fishing tackle loaner program to encourage interaction with the town's natural resources.

The Topsham Public Library is currently constructing a new \$2.5 million building on the Foreside Road. This new facility will have considerably more space (13,000 square feet) to house its stacks, expand its meeting space (there will be a 150-seat community center), literacy rooms, and a children's wing.

This project is being paid for with town appropriations, a \$1.5 million bond guaranteed by the Town, and a \$1 million capital campaign. This estimated price tag includes everything from construction to furnishings, equipment, financing, project administration, and start-up costs.

While the Topsham Public Library currently provides free services to residents of Bowdoin, Bowdoinham, and Harpswell, it is going to charge a \$25 annual fee to the patrons from these three communities once the new facility is complete.

Solid Waste Disposal

The Town provides for the disposal of municipal solid waste through a contract with MERC. The Town operates a transfer and recycling center. Residents are responsible for transporting their wastes to the facility individually or via a private hauler. The facility is equipped with two trash compactors and operates at approximately 50% of its capacity. The recycling facility can handle all types of material. The Town composts yard waste at the site. Other recyclable materials are processed and sent to various places.

The Town contracts with Pine Tree Wastes to transport the wastes to MERC's incinerator or landfills. This

contract runs through 2008. There is no limit on the volume of wastes that can be disposed of through this arrangement.

The Town's current system is adequate to meet the Town's waste disposal needs and can handle the increased volumes resulting from growth. The Town does not anticipate making any changes in its system except for adjustments needed to comply with any changes in state regulations or requirements.

Stormwater System

The Town has a stormwater system to manage runoff. The condition and adequacy of the various elements of the system vary and are related to when the various portions of the system were installed. In general terms, the system can be broken into three categories, the Lower Village, the systems in pre 1990 developments, and the systems installed since 1990.

The stormwater systems in Elm Street and Water Street in the Lower Village were installed in the late 1970s. These systems are adequate for current flows but may need to be replaced in the next 10 to 15 years as the system ages and/or flows increase.

The stormwater systems in developments built prior to 1990 are in poor condition in many cases and some are failing and need to be replaced or upgraded. The older systems in areas such as the Topsham Heights area, the Arbor Avenue Subdivision, the Barrows Drive area, and the Pinewood Drive area are failing. The Heights area system is built with metal pipe with hand-built basins and is in need of replacement. Most pipes are failing due to

age and the basins cannot handle the flows. The Arbor Avenue Subdivision system is made of metal pipe with metal basins and most are failing at this time. The detention area is in poor condition. The Town is replacing the detention area this year (2006) with a trunk line to a discharge point which will allow better flows. The Town needs to continue to replace this system and expand the system to other streets in the subdivision. The Barrows Drive area has plastic pipe with concrete basins. There are also basins that have barrel block tops and they will need replacement within the next 5 years. Also in the area of Barrows Drive are Williams Drive and Hanson Drive. These two streets are in need of systems. There is a lot of over land flow as well as a high water table in this area and the need for under-drainage is high.

The Bay Park Subdivision drainage system was put in to manage the height of the water table and not to handle major rain events. The system is fair at best. All the pipes are flexible corrugated perforated pipe which are hard to clean and the Town has a problem with root contamination in this system. Most of the systems pipes are too small to handle current flows. The Town is enlarging the outfall pipes on Hunter Lane this year (2006) to help increase outfall discharge flows.

The stormwater systems installed since 1990 are generally in good condition and adequate to handle 25-year storms. Most of these systems are constructed with plastic smooth bore pipe and concrete basins and will be adequate for the foreseeable future.

The Town needs to improve the quality of the information it has on the current stormwater system. The Town should accurately locate the elements of the system and

add this to the Town's GIS data base. The Town should also undertake a survey of the current system.

Issues and Implications

1. Topsham has changed a lot in the last 20 years, and will continue changing in the future. The needs of our community are expanding rapidly. The number of Town Meetings held each year is increasing, while participation in these meetings is unpredictable.
2. The Town of Topsham has used new computer technology to make its activities more accessible to the general public.
3. As residential development expands, especially in the more rural areas of town, demand for Town services and facilities in these areas are going to increase. However, the Town of Topsham benefits by having many of its facilities centralized in the heart of our community.
4. While the demand for space at the municipal building has decreased, there remain concerns with handicap accessibility and space for meeting, storage, and offices.
5. The Public Works Department's space demands have been significantly decreased with the construction of the new garage complex. The department does not anticipate a need for new space or a significant upgrade in its fleet for the foreseeable future.
6. The Topsham Fire Department is concerned that its firehouse is not large enough for the increasing demand for services. A more centrally located public safety facility would be able to better respond to service calls throughout the community.
7. The number of volunteers available to the fire department and library has been decreasing in past decades. Lifestyle changes and regulatory demands for training have made the job of fighting fires more difficult. The Junior Firefighter program has helped introduce new volunteers to the department. At what point will the increasing demand for services and protection outstrip the department's ability to provide these services with a progressively smaller roster?
8. Recent investments in the neighborhood schools and at the Middle School have improved the quality of education for Topsham residents.
9. The High School is overcrowded and outdated. The S.A.D. has twice applied to the state for renovation dollars to ease the overcrowding and design issues. It will continue to apply for state-assisted funding to ease the tax burden on local communities.
10. Regionalizing services (sharing the cost of services with surrounding communities) can be a tool to provide services very efficiently. Topsham already has several regional services (schools, public water, public sewer, land conservation, etc).
11. Topsham does not currently use impact fees to offset the expense of providing new facilities that needed to service new development.

12. The Town of Topsham has an opportunity to become a leader in the community in energy efficiency, recycling, and conserving natural resources.
13. The Town will need to continue to develop better information about the existing stormwater system and to upgrade and replace older portions of the stormwater system on an on-going basis.

Chapter G

LAND USE

Topsham is a quintessential New England town. Commercial activity, stately homes, and friendly neighborhoods form the town's center. Away from the village, forests and picturesque fields drape over the rolling landscape.

But, just as this land use pattern has evolved over time, it will continue to change in the future. How land use patterns change raises issues about traditional rural land uses, new development, and the cost of providing adequate Town facilities and services.

Residential Land Uses

In 2003, Topsham had an estimated 3,828 housing units. From older stately homes in the village to waterside cottages to assisted living apartments, the pattern of residential development varies widely.

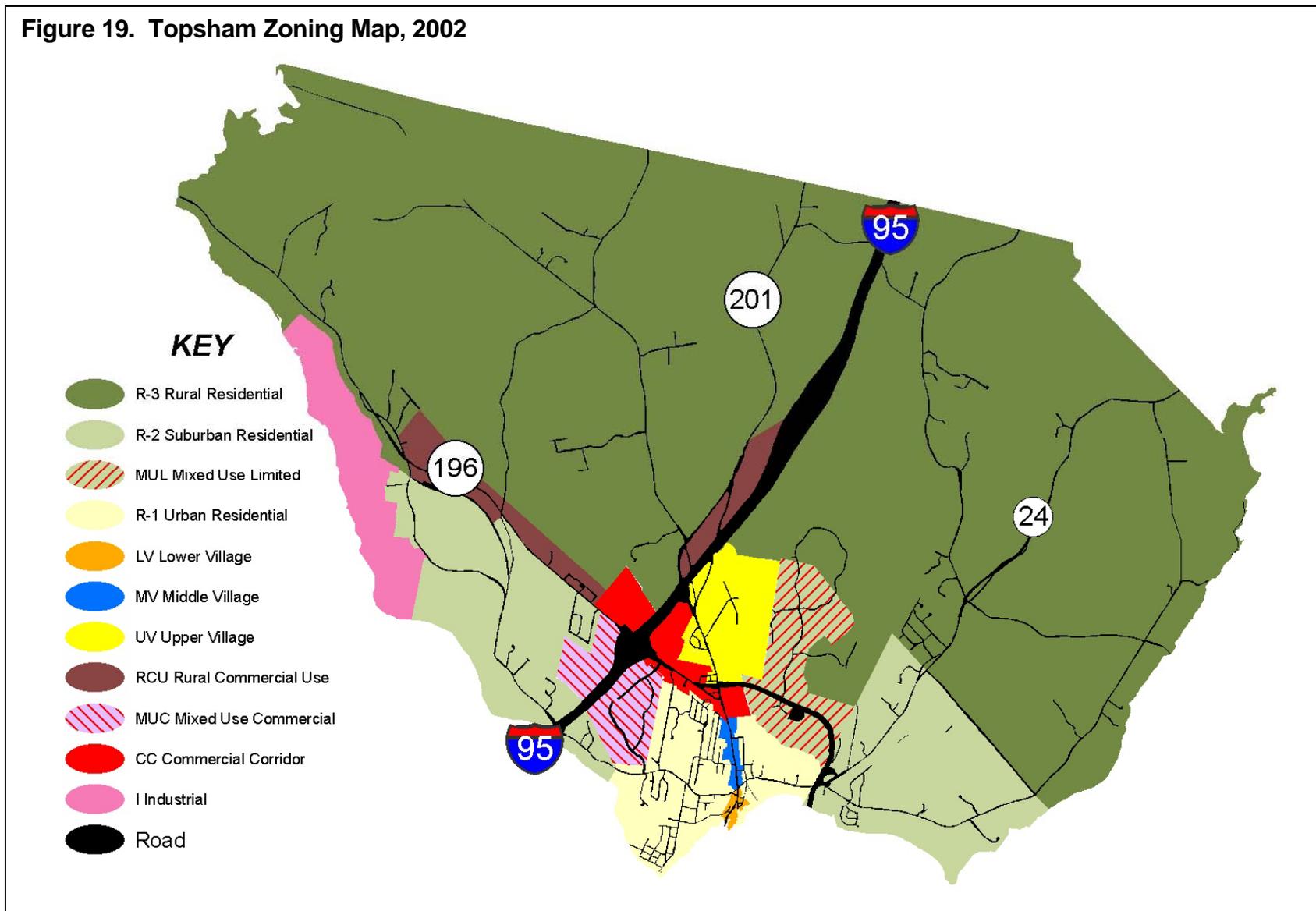
The **Village** is the heart of historic Topsham. It extends from the Androscoggin River to the Route 196 corridor and from Mallet Drive in the west to the Coastal Connector (Figure 19). Some of the oldest and most dense housing is located in this section of town (the area is served by public water and sewer). These neighborhoods are closest to most facilities and services.

The Village's most attractive land for development (flat, dry and deep soils, close to services) has long been built upon. Despite zoning that allows for moderate densities, the little land that is available will severely limit new development to small infill projects rather than larger developments. In the future, new residential development in the Village will be limited.

Any new residential development that does occur will be in one of three zoning districts:

- The Urban Residential Zone (R1) covers the entire Village, except for the Main Street corridor (Figure 1). It encourages denser development (smaller lot sizes, multi-unit buildings, smaller setbacks) that fits in with surrounding neighborhoods.
- The Middle Village and the Lower Village encourage a mixture of commercial and residential development that matches Main Street's historic and pedestrian-friendly character. The Lower Village extends up Main Street from the River to Winter Street and has a pedestrian emphasis. The Middle Village extends along Main Street from Winter Street to Route 196.

Figure 19. Topsham Zoning Map, 2002



Surrounding the Village is the **Village Fringe**, a combination of residential and commercial activity that acts as a transition from the denser Village to the rural areas of Topsham. Much of this area is served by public utilities, and the development pattern is a mix of more dense developments interspersed with undeveloped blocks of land. This area includes the Highlands, Annex, Topsham Fair Mall, River Road corridor, and parts of the Route 24/Foreside Road corridors.

Large blocks of land remain undeveloped in the Village Fringe, which when combined with public utilities and its proximity to local services and facilities, suggests that larger subdivision projects could be built in this section of town. Much of the Town's recent residential development has been occurring in this area (see Housing discussion). When new residential development does occur, the zoning ordinance provides three residential or mixed use zones:

- Suburban residential zones (R2) rely on public utilities to create medium density housing, and serve as the transition between the denser village and the more rural areas of town. These zones extend along the River Road between the village and Route 196, and on the other side of the village between the Androscoggin River, the Coastal Connector, and Eider Lane.
- The Upper Village zone encourages mixed uses and extends the village character of the lower and middle villages across Route 196 and includes the Annex, and School Administrative District 75 facilities. The decision in the fall of 2005 to close Naval Air Station Brunswick by 2011 will result in the Annex property

becoming available for reuse and possibly redevelopment.

- Mixed Use Limited zone (MUL Zone) is north of the Coastal Connector and promotes higher density commercial and/or residential uses. The Highlands North development is being constructed in this zone.

Outside of these areas is **Rural Topsham**. Housing in Rural Topsham tends to be along the principal travel corridors, although subdivision activity stretching away from the roads is becoming more common. Housing built in recent decades is interspersed among the many rural farmsteads built in the 1800s. These areas tend to have very limited amounts of commercial development.

The availability of undeveloped land, relatively inexpensive prices, and attractive rural character make rural Topsham desirable for future residential development. Recent development patterns (Housing Inventory) suggest that the majority of the town's recent housing development has been occurring within growth areas but if adequate land is not available in these areas, future growth could occur in the rural part of town.

The R3 zone encompasses rural Topsham. This zone promotes low density residential development with the intention of preserving valuable open space, farmlands, forests, recreation areas, and viewsheds.

If development accelerates in Rural Topsham, the Town will have to change the manner in which services and facilities are provided.

The Village and Village Fringe are the town's designated growth zone. They are mostly served by public utilities and are near services and facilities. These areas have experienced most of the town's past growth, and are largely developed although there remains significant potential for additional residential development within this area.

The Town has six existing mobile home parks as of June 2006 with a total of 191 lots and allows for mobile homes parks in a number of locations in the community in designated mobile home park overlay districts (see Overlay Districts Map). All of the existing mobile home park overlay districts are located within the area proposed to be designated as the Town's Growth Area in the Future Land Use Plan.

Commercial Land Uses

Topsham's commercial land use pattern is, like the residential pattern, expanding outward from its historic center. Topsham's economy has evolved from a manufacturing economy largely dependent on the Androscoggin River to a service based economy largely dependent on the regional transportation network to access its markets (Local Economy Inventory).

The Village, which had been passed over for years as an economic center, has only recently begun to redevelop. Manufacturing buildings have been transformed into office buildings, and retail activity tends to be locally-owned operations that serve convenience or niche markets. The commercial activity in the Village tends to be smaller in scale and is becoming the center of the

town's service economy (professional services, health services, legal services, business services, etc).

In contrast, the Topsham Fair Mall and Route 196 east of I-295 are quickly expanding into a regional retail supercenter. This transition began in earnest in 1986 when completion of the Topsham Fair Mall doubled the amount of taxable sales in town. Businesses in this area tend to be larger retail establishments and many are national chains. These businesses rely on the I-95 and Route 196 intersection to draw on markets that reach far beyond Topsham's borders.

This regional retail supercenter is in the process of expansion. The area is zoned as a Mixed-Use Commercial zone (MUC Zone) and is where larger-scale developments are encouraged to locate. As the area expands, traffic volumes will increase and could impact the character of the community.

The Commercial Corridor zone (CC Zones) and the Rural Commercial Use zones extend along Routes 196 and 201. These zones allow smaller scale commercial development and are the transition between the more densely developed Route 196/Topsham Fair Mall corridor and Rural Topsham.

Industrial Land Uses

Topsham has one industrial zone located between the Route 196 corridor and the Androscoggin River in the western part of town. Current industrial activity in this corridor is limited to the Grimmel site near Pejepscot Village. This stretch along the river is the only land zoned for industrial activity, and much of it is

undevelopable due to steep slopes and environmental constraints.

Farmland, Forests, and Open Spaces

Housing units and occasional businesses are interspersed throughout Rural Topsham, but away from the road corridors this area is largely undeveloped. Fields and forests support farming and forestry, and while these resources are privately owned, they are enjoyed by the public as an important community asset.

See the Open Space, Agriculture, and Forestry section for more information on farming, forestry, and open space preservation efforts in Topsham.

Issues and Implications

1. Topsham's land use pattern is changing. As populations shift from the Village to more rural areas, the Town will have to change the way services and facilities are offered to residents. Historic and current services and facilities may not be compatible with future demands.
2. Increasing residential development in the town's rural areas could affect the visual, functional, and environmental quality of Topsham's rural areas.
3. New rural residential development could create tensions with traditional rural land uses. The town should consider ways to mitigate these conflicts before they begin.
4. As the population grows in Topsham and spreads into more rural areas, the demands on the transportation network are going to increase. Topsham's position as a regional transportation hub suggests that land use and economic changes in the region will also impact the town's transportation network.
5. The redevelopment of the Naval Air Station Annex could provide an opportunity to expand on the resources in the area and shift development from the rural areas of Topsham to the center of the community.
6. The gateways into our community from the south are distinct, but the more rural gateways in the north and west could be threatened by development pressure in these more rural areas.
7. Residential subdivisions are not using Topsham cluster development ordinance because the ordinance does not provide enough incentives for the developer to consider this option.

Chapter H

PARKS AND RECREATION RESOURCES

Topsham's Parks and Recreation Department designs all of the recreation programming sponsored by the Town and maintains the town's recreation facility.

Changing demographics can change the types of recreation programs and facilities offered to the community.

This section inventories the town's parks and recreation resources, and summarizes how the community's changing needs could alter the way the Town provides these resources.

Recreation Resources

The Town of Topsham owns and operates a recreation complex at Foreside Road. This is the town's active recreation complex. The town maintains

- Three 60' baseball diamonds
- Six multi-purpose playing fields
- One 90' baseball diamond
- One full-size soccer field
- Two outdoor basketball courts

- Four miles of hiking trails
- Two winter skating rinks
- One handicap-accessible concession pavilion with restrooms and kitchen facilities
- One playground

In addition, participants in Parks and Recreation programs are able to use various venues for recreation at several School Administrative District 75 facilities.

The **Williams/Cone School** has two outdoor basketball courts, a playground, a playing field, a gymnasium, and three miles of hiking trails.

The **Woodside Elementary School** has a gymnasium, a 90' baseball diamond, a playground, and a soccer field.

The **Middle School** has four outdoor basketball courts, a 60' softball diamond, a 90' baseball diamond, and two multi-purpose fields.

Mount Ararat High School has two outdoor basketball courts, a soccer field, a 90' baseball diamond, two multi-purpose playing fields, two 60' baseball diamonds, a 440 yard track, a gymnasium, a stage/auditorium, and 5.5 miles of cross country trails. In 2001, the Town partnered with SAD 75 to and built five new tennis courts that are available to the public.

The Topsham Naval Annex has two outdoor tennis courts and a playground/picnic area.

In addition to these resources, nearby private resources include the wide range of facilities at Bowdoin College, the Brunswick Naval Air Station, hiking trails at Bradley

Table 17. Parks and Recreation Department Programming
Spring

Bambino Baseball	Babe Ruth
Bowling	Track and Field
Tennis	Easter Egg Hunt
Easter Crafts	Lacrosse
April Vacation	Cross Country

Summer

Playground	Tennis
Basketball	Swimming Lessons
Arts and Crafts	Youth Baseball
Softball	Bambino
Babe Ruth	Track and Field

Fall

Soccer	Tennis
Cross Country	Racquetball
Halloween	Red Cross Babysitting
Window Painting	Parade

Winter

Basketball	Indoor Soccer
Open Gym	Learn-to-Ski
Tennis	Volleyball
Bowling	Kid's Crafts
February Vacation	

Pond and The Highlands, fitness centers, water access points to the Androscoggin River (Lisbon town line, Brunswick) and Merrymeeting Bay (Bowdoinham), the Androscoggin Bike Path, and golf at The Highlands, Brunswick Golf Course, and the Naval Air Station.

The Parks and Recreation Department runs recreation programs throughout the year (Table 17). In addition to these programs, the town has in the past sponsored

senior activity groups, including the Evergreens, Merry Meeters, and the 55+ Center in Brunswick (although the level of town funding has fluctuated based on the budget situation).

The department has been using a wide variety of indoor spaces for its variety of programming. The gymnasiums at the elementary schools are used extensively, and the library is used for several programs.

The lack of appropriate space has limited the range of programs the department has been able to run. Alternative recreation programs (arts and crafts) lack adequate space. There is no space to run a pre-school program even though demand is high. The new library will alleviate some of this demand, especially for some senior citizen activities.

In the past, the town has focused its outdoor recreation facilities at one central recreation complex. This helps control maintenance and other operating costs.

The demand for space for outdoor recreation programs can change dramatically from one year to the next depending on the number of participants and the type of activity. For the foreseeable future, there is enough outdoor recreation space to accommodate the needs of the Parks and Recreation Department.

Parks

A 'park' has different features for different people. This section considers parks to be lands owned by the Town, but without a large amount of active recreation.

Topsham's inventory of these parks is small, but has begun to grow in the last decade.

The Selectmen created the Townsend Way Recreational Area in 1997. While this area has not been developed, there are two ponds for fishing and approximately 22 acres of fields and woods. One pond is stocked with bass and the other is stocked with trout. Recent field work has determined that the ponds are suitable for swimming.

The Rogers property is across the Cathance Road from the water tower and abuts the Highlands North property along the shores of the Cathance River. This 32-acre parcel was acquired through the non-payment of property taxes. The 2003 Inventory of Town Owned Property by the Conservation Commission identifies the parcel as an important wildlife corridor between the Highlands North conservation easement and the Cathance Preserve. There are plans for a trail network on this property that will be an important link for a town-wide trail network.

The Topsham Conservation Commission has recommended several parcels of land that the town already owns be retained for possible future development. For more information, see the 2003 Inventory of Town-Owned Property.

In addition, the Main Street Vision suggests a village green and riverfront park that should be developed along with the redevelopment of the Great Bowdoin Mill.

Issues and Implications

1. The supply of outdoor active recreation space should be sufficient for the foreseeable future. The Foreside Road recreation center has had recent upgrades, and the amount of extra recreation facilities available at the SAD 75 schools and the Naval Air Station Annex should satisfy the town's active outdoor needs.
2. The supply of indoor recreation space is limited. While there are sufficient gymnasium facilities for the foreseeable future, there is not enough activity space for seniors or the young. The Parks and Recreation Department has considered the Commissary at the Naval Annex as a potential facility, but the Navy's future plans for this facility are uncertain.
3. The town has been determined to maintain a single central active recreation center for the entire community. This helped keep expenses low and the level of service high. As development patterns change and more people live in the rural areas of Topsham, there might be pressure for the Town to reconsider this strategy.
4. As more parks and recreation opportunities are created, the maintenance responsibilities for these facilities might be reconsidered. Currently, the Parks and Recreation Department maintains the Foreside Road Recreation Center and the Public Works Department maintains everything else. As trails, green spaces, playgrounds, and other active/passive recreation resources are created, maintenance responsibilities for these resources might be better consolidated under one department.

5. The Parks and Recreation Department currently has no master plan to help guide its efforts. The Townsend Way Recreation Area, Rogers property, Riverfront Park in the lower village, and other town-owned properties that the Conservation Commission recommended be held for parks are examples of future recreation developments that could benefit from a unified master plan.
6. Topsham residents, particularly in the more rural areas of our town, rely on the generosity of private property owners for many of our traditional outdoor recreation opportunities. As the types of recreation opportunities change and the owners of this land change, the potential for conflict between these two groups will increase.
7. The demographics of our community are changing rapidly, especially with our growing role as a center for retirement living.
8. There are a large number of private recreation opportunities being provided in the community, especially in the senior-living and active-adult community. There may be opportunities for these private groups and the Town of Topsham to work together to increase the range of recreation opportunities available to the rest of the community.
9. As the Lower Village continues to redevelop, there is an opportunity to provide a waterfront park that provides access to the Androscoggin River.

Chapter I

OPEN SPACE, AGRICULTURE, AND FOREST RESOURCES

Topsham has a variety of landscape features that give the community its open and rural character. Views sweep out over rolling hills, water bodies, and fields. Deep forests and large blocks of undeveloped land create a sense of isolation and nature. Active farmlands both tie us to our past and give hope for the future.

In contrast to the community’s more active recreation resources, its open space resources tend to be owned by private landowners. How these landowners choose to use their land contributes significantly to the community’s setting and character. Changes in use on these private lands can impact the community’s image of itself.

This chapter inventories these open space, agricultural, and forest resources and discusses the economic significance of these resources.

Agricultural Resources

Agricultural operations have a unique status in many Maine towns. First and foremost, they are private

businesses that provide income to the landowner and other employees. In addition, farms frequently provide public benefits such as scenic views, open space, and a direct link to the town’s agrarian history. As such, farmland and its management frequently are the subject of public interest and debate.

Topsham has approximately 11 working farms: one dairy farm, six beef farms, one seasonal orchard, and three green producers. Table 18 summarizes the product and land characteristics of the 11 active farms.

In addition to the farms in the table, several other

Table 18: Farming Operations in Topsham

Farm/Owner	Primary Product	Acreage Used to Farm*
Bisson and Sons	Beef	166 acres
Favreau	Beef	26 acres
Flaig	Beef	50 acres
Hanson	Dairy	45 acres
Karonis	Vegetables	6 acres
McManus	Beef	15 acres
Rackley	Vegetables	40 acres
Totman	Beef	29 acres
Utecht	Beef	37 acres
Wallace	Vegetables	23 acres
Welch	Orchard	16 acres

* Excludes wetland, tree growth, house, and other acreage.

landowners devote acreage exclusively to haying. Most of this hay is sold to horse owners or cattle operations. Topsham also has a number of farm hobbyists and residents who live on farms but do not work the land.

While significant from the standpoint of maintaining diverse land uses and open space in the community (see below), farming plays a relatively minor role in the municipal and regional economy. As described in Local Economy section, agriculture is a minor component of the town's overall employment and output profile. Most of Topsham's farms are operated by the owner and employ only family members.

Some farming operations have local retail components that are well known and popular in the community. For example, Bisson Farms maintains a retail meat store and Sunset Farm (owned by Roy Wallace) sells produce at a stand in the lower village.

From the standpoint of Topsham's Comprehensive Plan, the focal issue for farming operations is their economic viability and the associated implications for land use and preservation of open space. To gather information on these issues, the Comprehensive Planning Review Committee conducted interviews with four farm owners. Several themes were prominent in the interviews:

- Local farms struggle to remain viable. A beef farmer noted that the prices of farming inputs (e.g., machinery) are high and make it difficult to turn a profit. Only larger-scale farming operations can be viable in the modern agricultural economy. Farm owners indicate that, to the extent that income is earned on farms, it is a supplementary income for the

family rather than a primary income. The economics of small local farms preclude selling entire farming operations; i.e., there are no buyers because there is no money to be made.

- The pressure to sell off land for residential development is strong. Many of Topsham's farmers are older and may soon be unable to perform the work required to maintain the farm. Faced with the taxes on their land, many see few options other than selling the land into development. Furthermore, developers recognize the potential for housing construction on farmland; one farmer indicated that he has been approached by developers "half a dozen times" to sell his land.
- Farmers are keenly aware of the public's desire for open space and many share that desire. One farmer described how he would like to find a way to sell his land to a single buyer who would retain the property as open space. Interviewees consistently indicated that they do not want to put land into house lots, but may have no choice. Some expressed frustration over the tendency for the public to defend the idea of open space while expecting land owners to shoulder the tax burden to ensure this outcome.

Pressure to convert farmland to residential lots is evident in recent development patterns. Nearly two-thirds of all housing units built in Topsham in the period from 1997-2001 are located in the rural residential zone. Many of these new housing units reside on converted farmland. The use of farmland for housing is evident along such rural routes as Foreside Road, Meadow Road, and Meadow Cross Road.

Concerns over farming viability and conservation of open space are not unique to Topsham. Throughout the U.S., rural and suburban communities face choices between preserving productive farmland and supplying the ever-growing demand for housing and other forms of development.

Communities and policymakers have generated a variety of land use innovations that seek to balance these competing interests. However, most farmland preservation measures are suitable for regions with large-scale agriculture and pressure for residential developments that involve hundreds of housing units. For example, communities have used farmland zoning to designate land where farming is the primary land use and introduce requirements for very low-density residential development (e.g., one house per 10 acres). However, farms in Topsham are small (generally less than 100 acres) and scattered, making it difficult to create specialized zones. Furthermore, creation of such zones is inappropriate for marginally productive land like that in Topsham; restricting residential development to extremely low-densities would remove the last viable economic option available to farmers struggling to make ends meet and would contribute to a spread-out pattern of development.

Instead, preservation of farmland in Topsham should be considered as a component of the larger goals of preserving open space and preventing sprawl. If farming is productive, farmers will stay in business.

While sprawl-prevention policies are the cornerstone of farmland protection, policy efforts should be enhanced with steps to raise residents' awareness and appreciation

of farming in Topsham. Many residents are unaware of the farming operations in town, what they produce, and the role they play in the historical development of Topsham. The town may wish to consider publicizing the cultural value of the town's farms through newspaper articles, website articles, or other means. Such awareness-raising may help garner support for farmland protection policies.

Forestry Resources

Much of the land in rural areas of Topsham is covered by forest. Despite this, commercial logging in Topsham is insignificant, with the exception of a few properties that produce firewood for sale to the public. The biggest threat to forestland in Topsham is development, not timber harvesting.

Current Use Tax Programs

Rural landowners in Topsham have relied heavily on two voluntary tax programs sponsored by the State to reduce their tax bills and help keep large areas of Topsham rural. Farm and forestland that is enrolled in the program is assessed for its current use, as opposed to its potential fair market value for more intensive uses⁵. The property owners receive a reduced tax bill from the town. The State reimburses the Town for the tax revenue that was lost because of the lower valuation. The public enjoys the benefits of having more land remain as active farms and forests.

⁵ There is also a current use tax program for important open spaces, but no properties in Topsham are currently enrolled in this program.

In 2002, nearly 3,200 acres of forestland was enrolled in the Tree Growth Tax Program (Figure 20). The number of acres enrolled in this program has decreased from its peak of more than 5,000 acres in 1992, although nearly all of the decrease is accounted for by an increase in the number of acres enrolled in the woodlot component of the Farmland Tax Program. This decline has leveled in recent years. Most of the land enrolled in this program is in the more rural northern and western sections of town.

Roughly 1,200 acres of land was enrolled in the Farmland Tax Program in 2002. This program grew rapidly in the last 10 years, mostly as forests from the farmland tax program were transferred to the woodlot component of the Farmland Tax Program. In 2001, roughly 600 acres were removed from the woodlot section of the Farmland Tax Program when construction

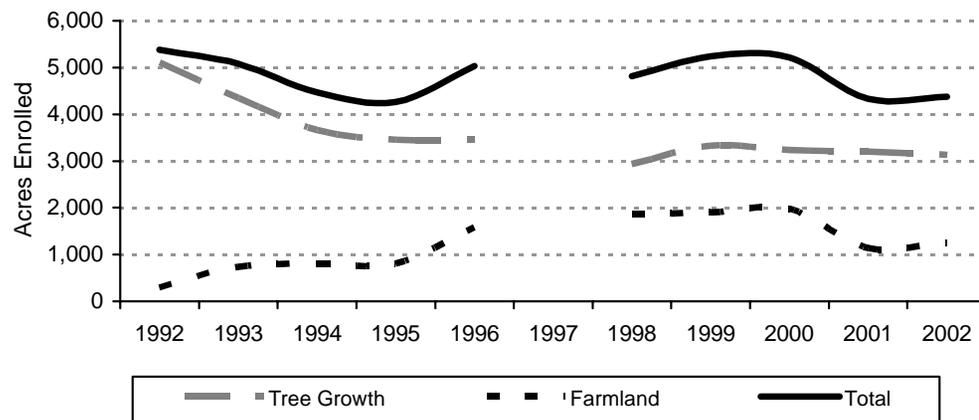
began on the Highlands North development.

Brunswick Topsham Land Trust

Founded in 1985, the Brunswick-Topsham Land Trust is a local nonprofit organization dedicated to protecting land with important natural, agricultural, and aesthetic values. The Trust has more than 900 members and is run by a 20-member Board of Directors.

The Brunswick-Topsham Land Trust uses several approaches to land protection. In addition to public awareness campaign, the land trust owns land and holds conservation easements. The trust owns several hundred acres in the two communities on 5 parcels. The trust also holds easements on 8 parcels that total 650 acres.

Figure 20. Acres Enrolled in Current Use Tax Programs*, 1992 – 2002



* 20 acres were enrolled in the Open Space Tax program in 1992, but had been removed from the program by 1994.

Source: Maine Revenue Services

In Topsham, the Trust owns more than 50 acres of land on two parcels. One is a 12-acre parcel located in the upper reaches of the Muddy River basin, and the other is the 40-acre Cow Island in the Androscoggin River.

In addition, the Trust has two large easements in Topsham. The first is at the Bradley Pond Farm, a 163-acre easement with a 2.5 mile long walking trail. The second is the 230-acre Cathance Preserve easement. This easement provides a 1,000-foot buffer along 1.5 miles of the Cathance River and protects a valuable heath barren.

One of the Trust's long term goals is to encourage more protection of the Cathance corridor between the Highlands Green easement and Bradley Pond Farm.

Issues and Implications

1. The nature of farming in New England is not what is used to be. Most of the newer farms that are starting up tend to be much smaller in scale and sell high-value products to the local market. The large land-intensive farms with woodlots and rolling pastures are becoming increasingly difficult to keep viable. Yet it is these larger farms that receive most of the attention in farmland preservation efforts.
2. Most active farms in Topsham are run by older farmers. If farming is becoming less lucrative, attracting younger farmers to these farms is going to be nearly impossible. The town's rural character could change dramatically if these farms become housing developments instead of commercial enterprises.
3. Maintaining economically viable working farms and forests is the most effective way to preserve these important places in our town.
4. The farmland tax program appears popular with many of the farmers in Topsham. Enrollments had increased steadily to 2,000 acres in the late 1990s before the Highlands North removed 600 acres from the program. The community should monitor whether this development was an aberration or whether this is going to be a more common pattern in the future.
5. Development pressure is projected to increase in rural Topsham where many of the farms and other open spaces are located. The town could explore development options that both allow property owners to retain their rights while attracting development that respects the community's rural character.
6. The Open Space Tax Program does not appear to be popular in the community. While it does not offer as much tax abatement as the more popular farm and tree growth programs, land owner savings through the open space program can still be significant. In addition, the entrance requirements are not as stringent as they are for the farm and tree growth tax programs.
7. The Brunswick Topsham Land Trust, as well as other nonprofit and government groups, has used conservation easements and fee ownership as tools for protecting valuable habitat and open spaces in Topsham. The community benefits by having these fragile lands protected from development. A more detailed study could determine the fiscal benefits to Topsham of land conservation.

Chapter J

HISTORIC AND ARCHAEOLOGICAL RESOURCES

Topsham is brimming with historic and archaeological resources. Native Americans hunted the woods, fished in nearby waters, and left archaeological sites along the banks of the rivers. European settlement and the steady evolution of modern Topsham has created its own set of historic villages, homes, buildings, sites, and bridges. All of these historic and archaeological resources add to the community's character and should be identified and protected for future generations.

Archaeological Resources

Archaeological resources (which require excavation) are largely Native American sites that date prior to 1700 – about the time of large-scale European settlement. It is difficult to 'see' these resources in the same manner that one 'sees' a historic building, but a properly excavated archaeological site can speak volumes about the area's earliest residents.

That Topsham is rich in archaeological resources should be no surprise. For centuries the town's waterways were

its first highways; Native Americans and early European settlers used the nearby rivers, bays, oceans, and lakes as their major transportation corridors. Topsham's location at the head of two of the state's largest rivers (the Kennebec and Androscoggin rivers) as well as the smaller Cathance and Muddy Rivers create an excellent background on which the town's Native American history can be examined.

Topsham was surveyed for archaeological resources in the early 1990s. The survey identified known archaeological sites and created a list of potential high and moderate archaeological areas in which particular care should be taken when disturbing the ground. The following notes summarize the results of this survey:

- Twelve archaeological sites have been identified in Topsham, as well as a preliminary definition of the Cary's Garden complex.
- The survey identified areas with high archaeological potential – those areas that are likely to contain archaeological resources. These areas include the lowland terraces along the Muddy River and the lower Androscoggin River, as well as the entire Pleasant Point peninsula (Figure 21).
- Areas with moderate archaeological potential include the river terraces above the Frank Wood Bridge (Figure 2). The survey suggests these areas are relatively high and steep sided with many eroding faces. In addition, dam construction both upstream and downstream of these sites might have altered or damaged remaining sites along the upper stretches of

the Androscoggin River. The report suggests the Town address these sites on a case-by-case basis.

- A survey of the Bradley Pond area and the Cathance River drainage revealed three small archaeological sites. The quarries around Bradley Pond might have been mined for quartz by Native Americans, but an extensive survey of this area hasn't been completed. Additionally, the riverbanks surrounding Cathance might reveal a longer history in the area than the existing mill that was built in 1910. Besides these locations, the rest of the drainage does not appear to be particularly productive and does not appear to exhibit either high or moderate archaeological potential.

The Maine Historic Preservation Commission has identified twenty known historic archaeological sites in Topsham. These range from farmsteads to bridges to blacksmiths. The twenty sites are:

- Bay Bridge #1
- Mustard Farmstead
- Bay Bridge #2
- Gore/Purinton Homestead
- Lilac Foundation
- Bay Bridge #3
- Bay Bridge #4
- Bay Bridge #5
- Henderson
- Gray #1
- Hackett #1
- Pleasant Point #1
- Trafton Field

- Paine
- Hunter #1
- Hunter #2
- Hunter #3
- Ambrose
- Smith
- Hertlein

Additional information about these historic archaeological sites is available from the Maine Historic Preservation Commission or the Topsham Planning Department.

Historic Resources

Historic resources as a rule date after European settlement (around 1700) and include villages, historic districts, buildings, cemeteries, roads, bridges, and other similar resources. In Topsham there are seven sites identified on the National Register of Historic Places as well as numerous other locally significant resources.

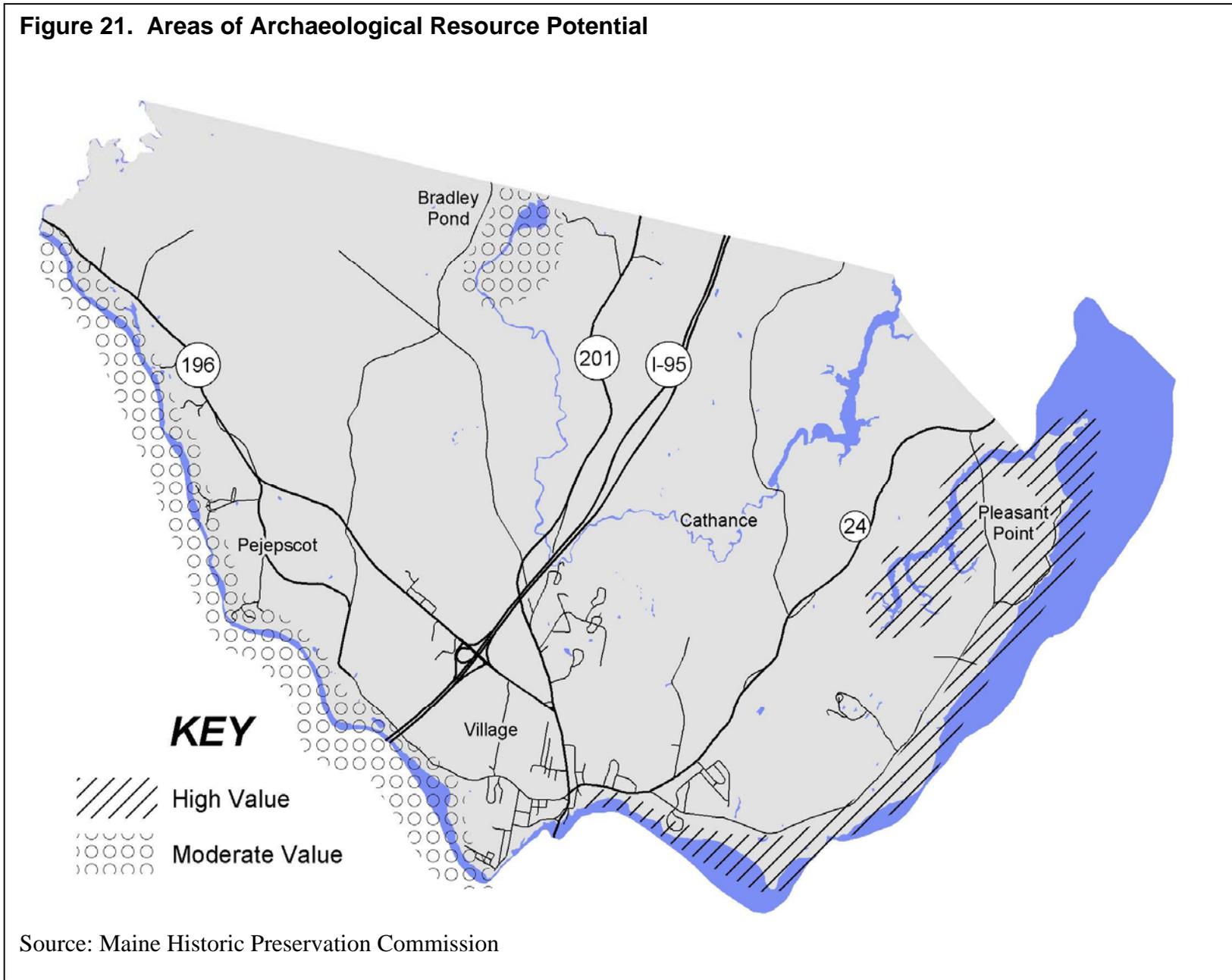
The National Register of Historic Places is the nation's official list of cultural resources worthy of preservation. The National Register is a program run by the Department of the Interior and it "coordinates and supports public and private efforts to identify, evaluate, and protect significant historic and archeological resources."

The Pejepscot Paper Company is located off of Route 201 on the Androscoggin River and was listed on the National Register in 1974.

Topsham Historic District stretches from the intersection of Main and Elm Streets along Elm Street to the railroad tracks. The District also reaches up portions of Pleasant Street, Perkins Street, Town Landing Road, and Green Street. It includes 58 homes and buildings, ranging in style from Federal, Greek Revival, Italianate, Queen Ann, Colonial Revival, Eclectic, and Contemporary. In their many and varied styles, orientations to the street and each other, the buildings in the Topsham Historic District reflect the growth of the village as it occurred during its most important period of development.

- **Hunter Site** has a restricted address (to protect it from vandalism) and was listed on the Register in 1984.
- The **Pejepscot Site** also has a restricted address and was listed in 1987.
- The **Purinton Family Farm** is located at 65 Elm Street and was listed in 1989.
- The **Topsham Fairgrounds Grandstand**, which has been substantially updated, was listed on the National Register in 1992.
- The **Cathance Water Tower** off of Cathance Road was listed on the National Register in 2001.

Figure 21. Areas of Archaeological Resource Potential



In addition to the seven sites on the National Register are numerous locally significant historic sites that were identified in the 1992 Comprehensive Plan.

- **Lover's Lane** is one of Topsham's earliest roads. It was probably laid out sometime before 1764. Half of the original road is lost; one-quarter is a regarded gravel road; and one-quarter is a two-wheeled path. Despite these changes, the look and feel of the original road is still very much in existence.
- While the **First Parish Meeting House** on Middlesex Lane no longer exists, it is important because it was the first public building in Topsham and the locations of very few original meeting houses have been located statewide. In addition, the adjacent **graveyard** has many historically significant grave markers that have been vandalized in other graveyards throughout New England. Many of the grave markers are showing signs of age, sometimes encouraged by poorly repaired grave markers and sometimes by the effects of acid rain.
- The **Cathance Mill** area was the focus of significant interest for mill development back to 1717, there are no historical records indicating when mills were first constructed on this site. The current mill building – which has been converted to residential use – was built in 1910.
- The **Pejepscot Mills** area is of particular interest for industrial historians and archaeologists. Much of the village still exists, which provides a good microcosm in which to study small mill village development. Mill workers' living conditions are an area of particular

interest, given the number of boarding houses still standing and the archaeological remains of others.

- As **Pleasant Point Road** was one of the first areas settled, the early homes that survive from that period of development beg for investigation. In addition, the **Hunter Farm** is significant primarily because the parcel is still intact from the water to the back lot, while many of the neighboring properties have been subdivided over the years. Further out on Foreside Road, the **William Randell House** of 1800 is a transitional Georgian-Federal design, exhibiting high style Georgian quoins, a low hipped Federal roof, and an added Greek Revival doorway.
- The site of the **Bisson Farm** on Meadow Road clearly shows a substantial farm for one family. The size of the fields, the location of the farm buildings, and the clear pattern of use are stark reminders of the town's history. In addition, the property is reported to have been the site of an original land grant from the Pejepscot Proprietors. The original settler, William Wilson, built a hip-roof Georgian farmhouse that was moved early in the 19th century to its current location and remodeled under the Greek Revival influence.
- The **Topsham Fair** has been operating since 1855 and remains a significant annual social and recreational event. The fair has a wide range of exhibits and livestock on display with awards to the best in each class. The fairground is used for numerous other activities throughout the year.

Organizational Coordination

In addition to archaeological and historical artifacts, several organizations work to preserve Topsham's history.

The **Pejepscot Historical Society** has served the Topsham region since 1888. Its mission is to collect, preserve, and interpret history within the Pejepscot region, which includes Topsham, Brunswick, and Harpswell. For decades the Pejepscot Historical Society has served as an archive for many of the Town's records for decades.

More recently, the **History Committee** has begun an effort to archive the Town's historic records. The Topsham archive has been recalled from the Pejepscot Historical Society and is being stored with other Topsham artifacts in the Town Hall. Members of the History Committee are appointed by the Town Selectmen.

Topsham **Historic District Commission** is composed of five residents of Topsham and is charged with:

- inventorying cultural resources in Topsham,
- recommending methods and procedures to preserve historic sites owned or operated by the Town, and
- reviewing the alteration, relocation, or demolition of historic sites.

The Historic District Commission reviews development proposals that affect properties within the Historic

Overlay District (Figure 2) or that are on the National Register of Historic Places.

The **Historic Overlay District** promotes the "educational, cultural, economic and general welfare of the public through the preservation and protection of buildings, sites, monuments, structures and areas of historic importance or interest..." The Historic Overlay District includes most of the older buildings in the heart of Topsham Village. To retain the historic character of the Village, major renovations or improvements to buildings within the Overlay District must apply to the Historic District Commission and receive a certificate of appropriateness. This certificate ensures that renovations or improvements are completed to The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings (1995).

Topsham participates in the Certified Local Government program through the National Park Service. As one of only eight municipalities with this distinction in the State of Maine, Topsham qualifies for technical support and matching grants to undertake a variety of projects, including studies, inventories, publications, and design guidelines.

Issues and Implications

1. Many of the town's archaeological resources are located in areas with poor soils for development. However, many of the medium or high potential archaeological resources are waterfront locations that are desirable for development.

2. Topsham's Site Plan Review ordinance requires that proposed developments within the Cultural Resources Protection Zone as delineated by medium or high potential archaeological areas require Phase I reconnaissance level archaeological surveys. This level of survey is required for the Town to ensure that development does not degrade important archaeological resources. This requirement does not, however, apply to identified historic archaeological sites or to proposed subdivisions that are not subject to Site Plan Review.
3. Topsham has taken advantage of its Certified Local Government status to inventory and preserve archaeological and historic resources in the community.
4. Significant public and private investments are being made to improve Lower Main Street. These investments could spark interest in additional improvements in both the private and public sectors. If done well, these improvements could significantly improve the contemporary function as well as the historical character of the Historic Overlay District.
5. Topsham has an enormous archive of historic items that are not able to be shared with the public because of a lack of space and an incomplete inventory.

Chapter K

NATURAL RESOURCES

Topsham's topography is the fabric on which the town's natural resources are laid. Long ravines and steep hills are prominent west of the Meadow Cross Road and are easily visible along Route 196 towards Lisbon (Figure 1). The center of town is characterized by a large lowland area around Bradley Pond and the Bisson Farm. Long ridges are punctuated by the Cathance, Muddy, and Androscoggin Rivers in eastern Topsham.

These natural resources are both widespread and finite. The pattern and pace of current development could alter these resources by damaging habitat or by introducing exotic and invasive species. The cumulative impact of small changes can add up to a significant impact to the town of Topsham.

This chapter inventories these natural resources and discusses the implications of changing land uses on Topsham's future.

SOILS

Not all soils are equal. Farmers like soils that produce high yields with minimal amounts of energy. Developers

like soils that are deep, well drained, and stable. The soil needs of important ecological areas vary depending on the particular habitat.

The town is comprised of four major soil associations. A soil association is a distinct pattern of soil types, topography, and drainage (Figure 22). Note that these soil associations are broad generalizations for planning purposes and that future land use changes should depend on more detailed site surveys.

- The **Hollis-Sutton-Buxton** association is shallow to deep, moderately to well drained soils generally at the top of low hills and ridges (Figure 2). This association covers the tops of Mt. Ararat, Tate Hill, and other long ridges. These soils support naturally wooded areas, mainly maple, birch, beech, and oak trees in Topsham. Septic systems have serious limitations in these soils, and supplying drinking water can be a problem.
- The **Scantic-Leicester-Scarboro** association is deep soil that is poorly drained. These soils are generally wet, not well suited for development, and important places for diverse wetland habitats. Farming occurs on these soils, but it is generally for hay production or grazing. These soils line the lowlands in the Cathance River watershed and the Muddy River watershed.
- The **Buxton-Hartland-Belgrade** association is deep, moderately to well drained soil. These soils tend to be on steeper slopes, although flat areas are relatively common. These soils tend to be well suited for development. This association is located above

the Muddy and lower Cathance River estuaries, along the lower Androscoggin shore, and in west Topsham near the Little River.

- The **Adams-Hinckley-Ninigret** association is deep and well drained soil. The topography of these soils varies widely from steep slopes to gentle fields. Much of Topsham's developed land is on this soil – the Village, Topsham Fair Mall, Routes 201 and 196, and the Foreside Road.

Outside of built-up areas, the primary method of wastewater disposal will continue to be septic systems. In order to insure that these systems work properly, they must be located in areas with proper slope and soil conditions so that wastewater can move vertically through the soil column.

Current residential development patterns suggest that future residential development will occur largely in these more rural sections of town. Topsham's lowlands and the tops of ridges tend to have more limited capacity to handle on-site septic disposal associated with this development.

SURFACE WATERS

Tumbling creeks, wide rivers, waterfalls, and tidal marshes characterize the diversity of Topsham's water resources. Each water resource fills a different role in the town's natural environment:

- The **Little River** forms the town's boundary with Lisbon and is easily visible from Route 196 as it tumbles towards the Androscoggin River (Figure 23).

The river's watershed includes rural areas of Topsham, Lisbon, and Bowdoin. This river's watershed is undeveloped and has a forested shore that is valuable for wildlife habitat.

Development in the Little River watershed is not likely in the near future due to its remoteness and steep topography. The Maine Department of Environmental Protection (MDEP) considers the water in the Little River 'unimpaired,' which means the river can support wildlife habitat in its natural state.

- The Little River empties into the **Androscoggin River**, one of the largest in Maine. The Androscoggin's headwaters are in New Hampshire, and it has historically been heavily used for transportation and manufacturing; there are no fewer than 10 major dams on the Androscoggin in Maine as it flows through communities like Rumford, Livermore, Lewiston, Lisbon, and Topsham.

MDEP considers the Androscoggin a class C river – the lowest water quality classification. This low classification is largely the result of the river's industrial past. Technological advances and water pollution regulations have improved the water quality significantly since the early 1970s. Considering the intense use that industry, agriculture, and communities still place on this water body, it is not likely to return to a truly pristine state.

The Androscoggin forms Topsham's southern border with Brunswick. Its watershed roughly parallels the river's course and includes many of Topsham's more developed areas.

Figure 22. Topsham Soil Associations

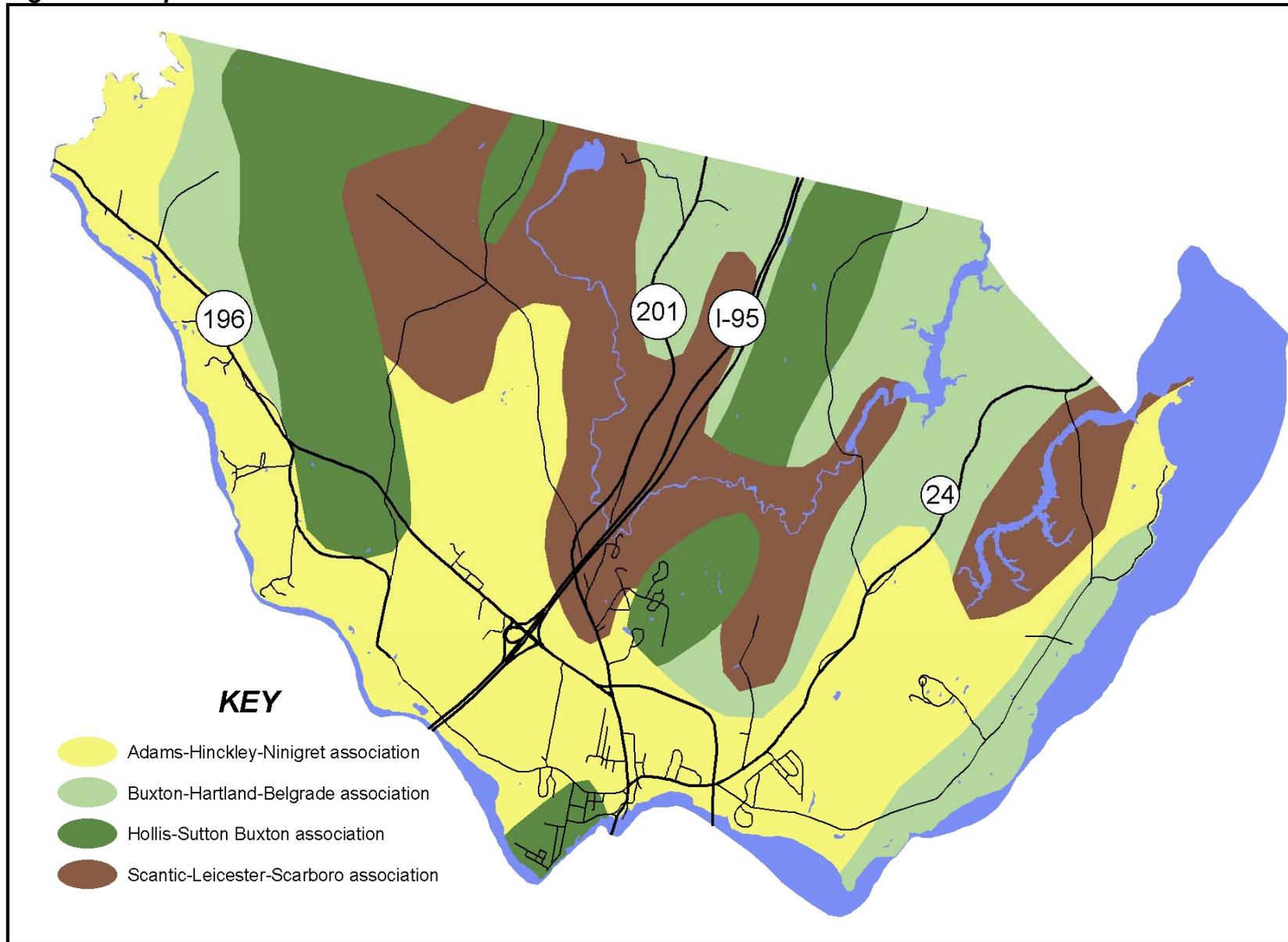
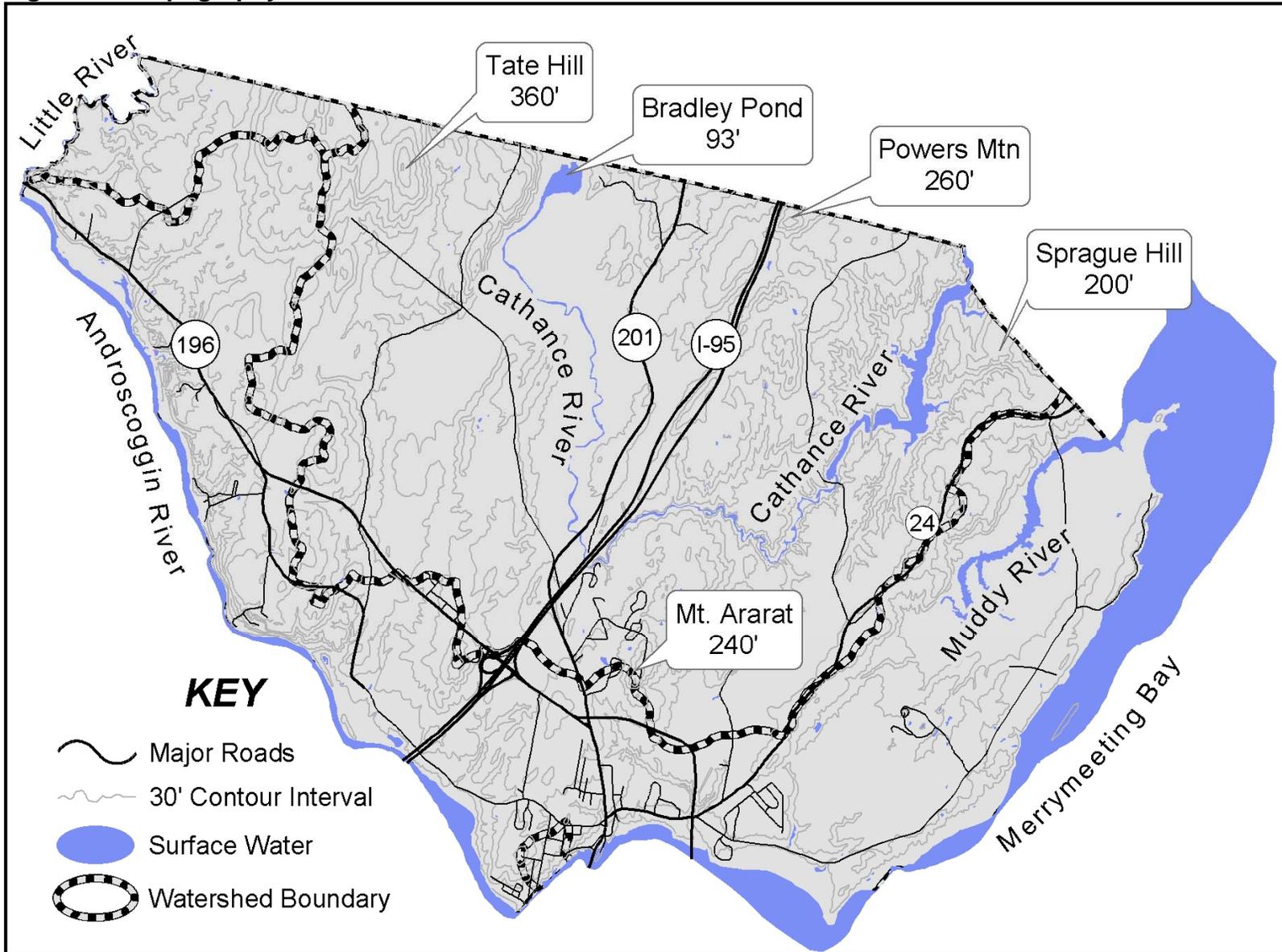


Figure 23. Topography and Surface Water Bodies



As water quality improves along the river, it could become a more attractive place to live near. Above the village, steep banks and the Brunswick – Lewiston railroad have historically limited development pressure along the immediate shoreline. Below the village, spring flooding cycles and poor soils for development have discouraged development along the riverbank.

Development along some of the Androscoggin’s tributaries could threaten the ecology of those smaller watersheds. Impervious surfaces (from buildings, roads, and large parking lots) in the Topsham Fair Mall area could decrease base flow in the river by reducing the amount of rain and snow melt that penetrates into the soil. Nonpoint source pollutants (low-level pollution from surface runoff) could impair water quality and wildlife in the smaller rivers. Nonpoint pollution is a special concern in the Muddy River watershed, which is the largest tributary of the Androscoggin in Topsham.

The Maine Department of Environmental Protection has identified Topsham Fairground Stream as an “urban-impaired watershed”. This stream originates near the intersection of Route 201 and the Coastal Connector, runs through the Highlands and Topsham Fairgrounds, crosses under the Coastal Connector and Elm Street and empties into the river behind the new library on Foreside Road. A development in an “urban-impaired watershed” that must obtain a state stormwater permit under the state’s stormwater permitting system is required to take action to improve the water quality of the stream. The state

requirements encourage the development of local watershed management plans for these watersheds.

- The **Cathance River** flows from Bradley Pond for 10 miles and into Merrymeeting Bay. Most of Topsham is in the Cathance watershed. The upper third of the Cathance meanders through lowlands from Bradley Pond to Route 201 and is bounded by agricultural lands. The middle third has steep banks and is relatively inaccessible between Route 201 and the falls at Cathance Road. The lower third is tidal to Merrymeeting Bay and has a steep and relatively inaccessible shoreline.

The MDEP considers this an ‘unimpaired’ water body, although nonpoint source pollutants from residences and agricultural practices threaten the Cathance River’s water quality.

Of Topsham’s surface water bodies, the Cathance is in the most danger from changing land uses. The current pattern of residential development suggests that much of the future’s residential development will occur within this watershed. Development in rural areas will rely on on-site sewage disposal, and the cumulative impact of this development could affect the river’s water quality.

Bradley Pond, a 34 acre impoundment of the Cathance River located near its headwaters, does not have the assimilative capacity that the river has and is potentially sensitive to phosphorous loading – a nonpoint source pollutant associated with agriculture and residential development. The pond is a great pond and has a water quality classification of GPA.

There is very little water quality information available for the pond. While the 1994 Maine Department of Environmental Protection Water Quality Assessment identified Bradley Pond as “threatened” based upon its vulnerability index, subsequent state assessments have not identified significant water quality issues with this pond. There is limited potential for activities that would have a detrimental impact on the water quality of the pond since the pond is entirely surrounded by wetlands and conservation land.

Despite the tremendous amount of surface water that makes Topsham a virtual island, the town’s surface water bodies are largely inaccessible. Steep banks and tidal marshes characterize much of the town’s shoreline. This inaccessibility has helped maintain the quality of the surface waters from the direct impacts of poor land use practices, but even though these rivers are out of sight, indirect impacts to the surface waters could impair the water quality in the town’s surface waters.

Streams, both perennial and intermittent, are another important resource.

These are located throughout the community. However, there is no single data source that can identify all of the streams in Topsham. Much of the time the streams are too small to be identified by satellite – fieldwork is the only reliable way to locate these perennial and intermittent streams.

The Town of Topsham’s zoning ordinance currently has a Resource Protection Zone. This zone provides extra protection to land within 250 feet of; freshwater wetlands, salt marshes, salt meadows, upland edges of freshwater

or coastal wetlands, great ponds (at least 10 acres), rivers, and salt water bodies. In addition, Topsham has a Stream Protection District that protects lands within 75 feet of streams⁶.

GROUNDWATER

Groundwater is water below the water table that saturates soil and cracks in bedrock. Precipitation, whether rain or snowmelt, percolates into the ground and flows at very slow rates downhill. Rural residences rely on wells that pump groundwater to the surface to be used for potable water. Areas of town served by the public water system rely on groundwater pumped through a series of much larger wells in Topsham and Brunswick.

When this groundwater can be pumped to the surface fast enough to be economically useful, the saturated soil or bedrock is called an aquifer. The northeast United States is almost entirely underlain by aquifers. An economically useable aquifer must be able to hold a lot of water, and that water must be able to ‘flow’ easily.

Two types of economically useful aquifers are common in Maine. Bedrock aquifers store water in cracks and fractures in the bedrock. Most of these aquifers are relatively small (about 10 gallons per minute), but large enough to supply individual households in rural Topsham. Because the bedrock fractures tend to be

⁶ In Topsham, this is “A free-flowing body of water from the outlet of a great pond or the confluence of two perennial streams as depicted on the most recent edition of a United States Geological Survey 7.5 minute series topographic map, or if not available, a 15 minute series topographic map, to the point where the body of water becomes a river.”

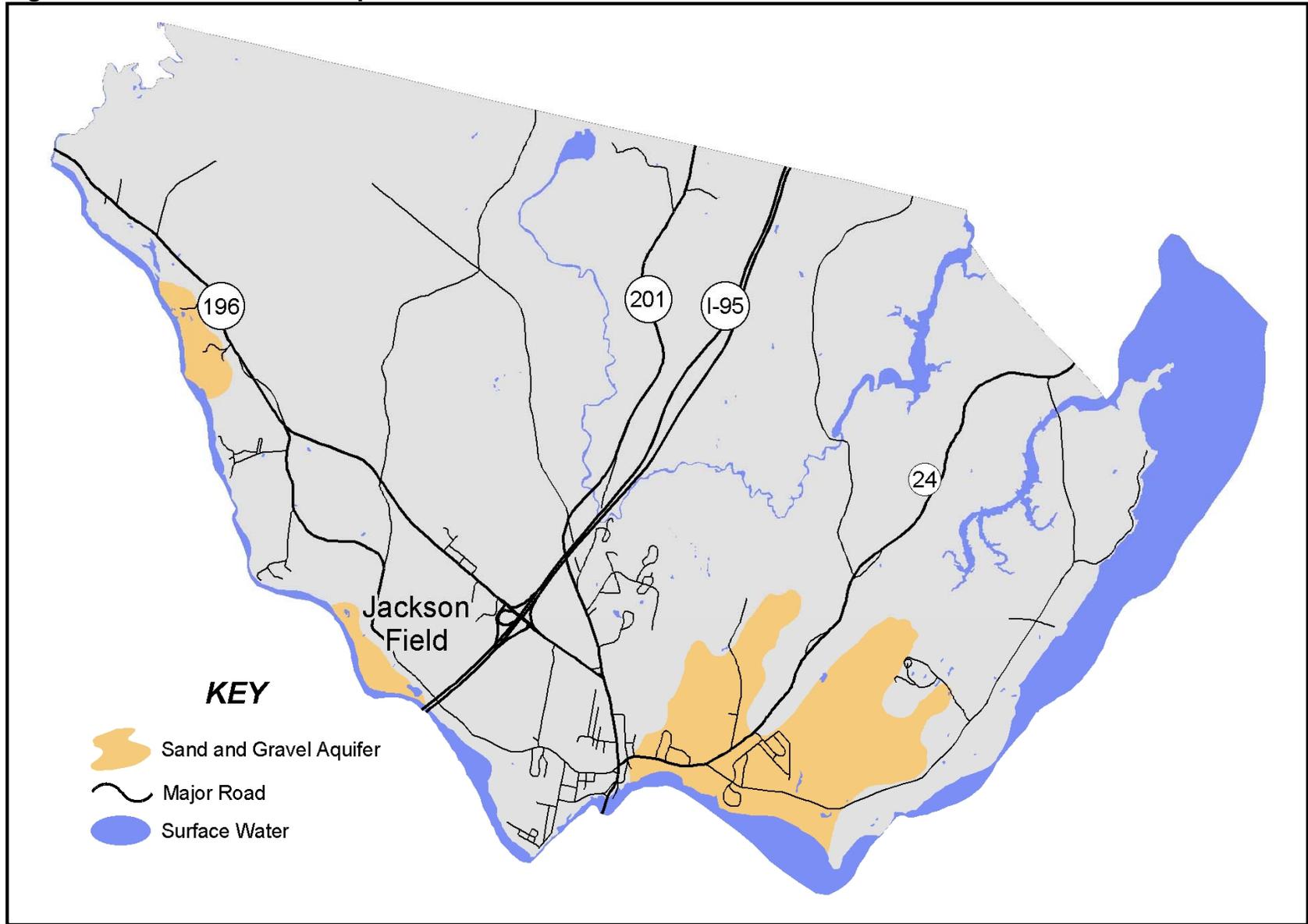
interconnected, these aquifers are particularly susceptible to contamination.

Sand and gravel aquifers store water in the pores between the grains of sand and gravel. The sand and gravel was deposited more than 10,000 years ago by the meltwater from glaciers. These aquifers can hold large volumes of water and can transport this water quickly, making these the most valuable groundwater aquifers with the most abundant yields.

The Maine Geologic Survey has produced maps that delineate the location and extent of high yielding sand and gravel aquifers in the State (Figure 24). In Topsham, most of these aquifers are located in the Androscoggin River watershed and the Adams-Hinckley-Ninigret soil association. These well-drained soils allow rain and snowmelt to quickly seep into the aquifer and be stored for future use. Jackson Field off of the River Road is where one of the Brunswick-Topsham Water Districts major wells is located.

Because much of the groundwater is recharged by rain and snowmelt, aquifers are susceptible to damage from improper land uses.

Figure 24. Sand and Gravel Aquifers



- Pollution that enters the ground can seriously impair an aquifer. Once the pollutants are in groundwater, they are very difficult to remove. For this reason pollution sources around significant aquifers must be closely monitored.
- Reducing the amount of recharge into an aquifer by creating too much impervious surface (buildings, roads, parking lots) or by diverting recharging water can deplete the amount of groundwater available.

Pollution is the largest threat to Topsham’s sand and gravel aquifers. The land uses around these aquifers vary from denser development in the village to woods and fields. Future land use changes are not an imminent threat to these aquifers.

An Aquifer Protection Overlay District creates an added layer of protection for all of the sand and gravel aquifers in town. Depending on the proposed land use within the overlay district, the ordinance requires higher levels of monitoring, on-site remediation, and/or performance limitations to receive a permit.

WETLANDS

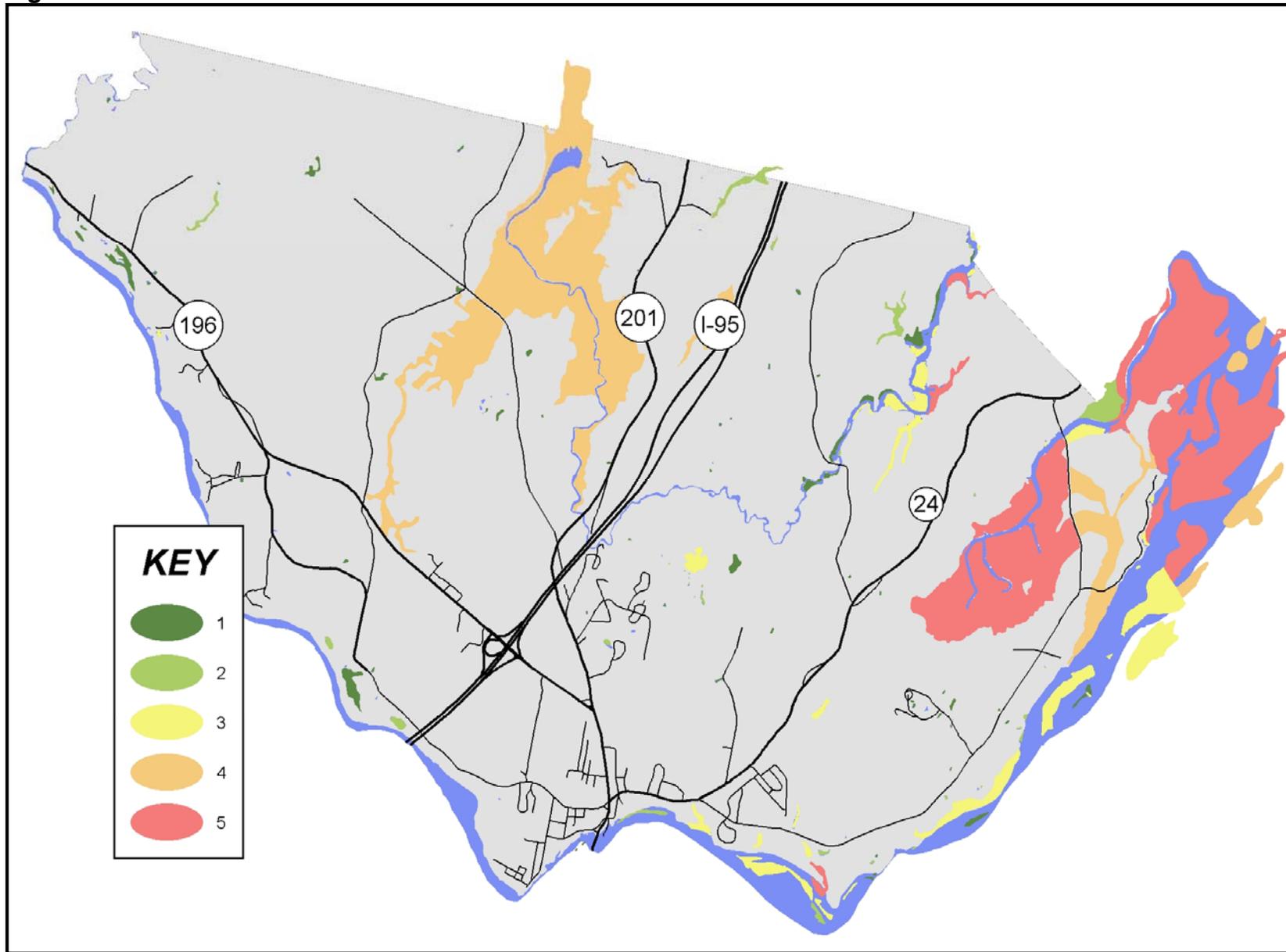
Wetlands are an integral part of the hydrologic net that includes lakes, ponds, streams, brooks and estuaries. The ecological and economic benefits of wetlands have been widely recognized. These benefits can be loosely grouped into three categories:

- **Biological benefits** include fish, shellfish and wildlife habitat (feeding, breeding, nesting, and cover) and travel corridors.
- **Water quality benefits** include groundwater recharge and discharge, stream flow maintenance, flood prevention, water quality maintenance, and shoreline protection from erosion.
- **Human benefits** include recreational uses such as hunting birding, fishing, boating, and hiking. Wetlands also provide important aesthetic and open space values to communities.

In Topsham, more than one-third of the town is covered by hydric soils – an important determinant for the presence of wetlands. Some wetlands provide more benefits than others, and therefore have more functional value to a town’s natural environment. The Maine State Planning Office has developed a screening tool that categorizes wetlands based on a subset of six wetland functions. These six functions are:

- Sediment retention
- Floodflow alteration
- Plant and animal habitat
- Finfish habitat
- Marine shellfish habitat
- Education/cultural value

Figure 25. Wetlands Characterization



Each wetland found on the National Wetlands Inventory maps is screened for characteristics which imply the likelihood of that wetland providing one of these six functions. Wetlands classified as providing several of the selected functions are providing a broad range of ecosystem value to the landscape. However, wetlands that provide a fewer number of functions may be essential in their landscape position for the particular function(s) that they provide and should not be overlooked in the planning process.

Topsham has two large concentrations of wetlands providing multiple functions as described through the wetlands characterization process (Figure 25). The first is in the Muddy River/Princess Point area. There are a significant number of multi-function wetlands in this area, mostly associated with the extensive tidal marshes in the Muddy and Androscoggin Rivers.

The second area is along the Cathance corridor which includes a large wetland complex extending from the Route 201 corridor to Meadow Cross Road and a concentration of wetlands along the Lower Cathance.

Wetlands are some of the most important and vulnerable habitats in Topsham. Land use activities which impact wetlands directly such as draining, clearing, filling, and waste disposal can significantly alter or destroy the functional ability of these wetlands. Activities in the uplands surrounding wetlands can be equally as destructive to wetlands and can degrade them to the point where they are no longer able to function.

Wetlands are currently protected by the town's Shoreland Zoning Overlay District. This district provides a greater

level of protection within 250 feet of freshwater wetlands (greater than 10 acres) or marine wetlands.

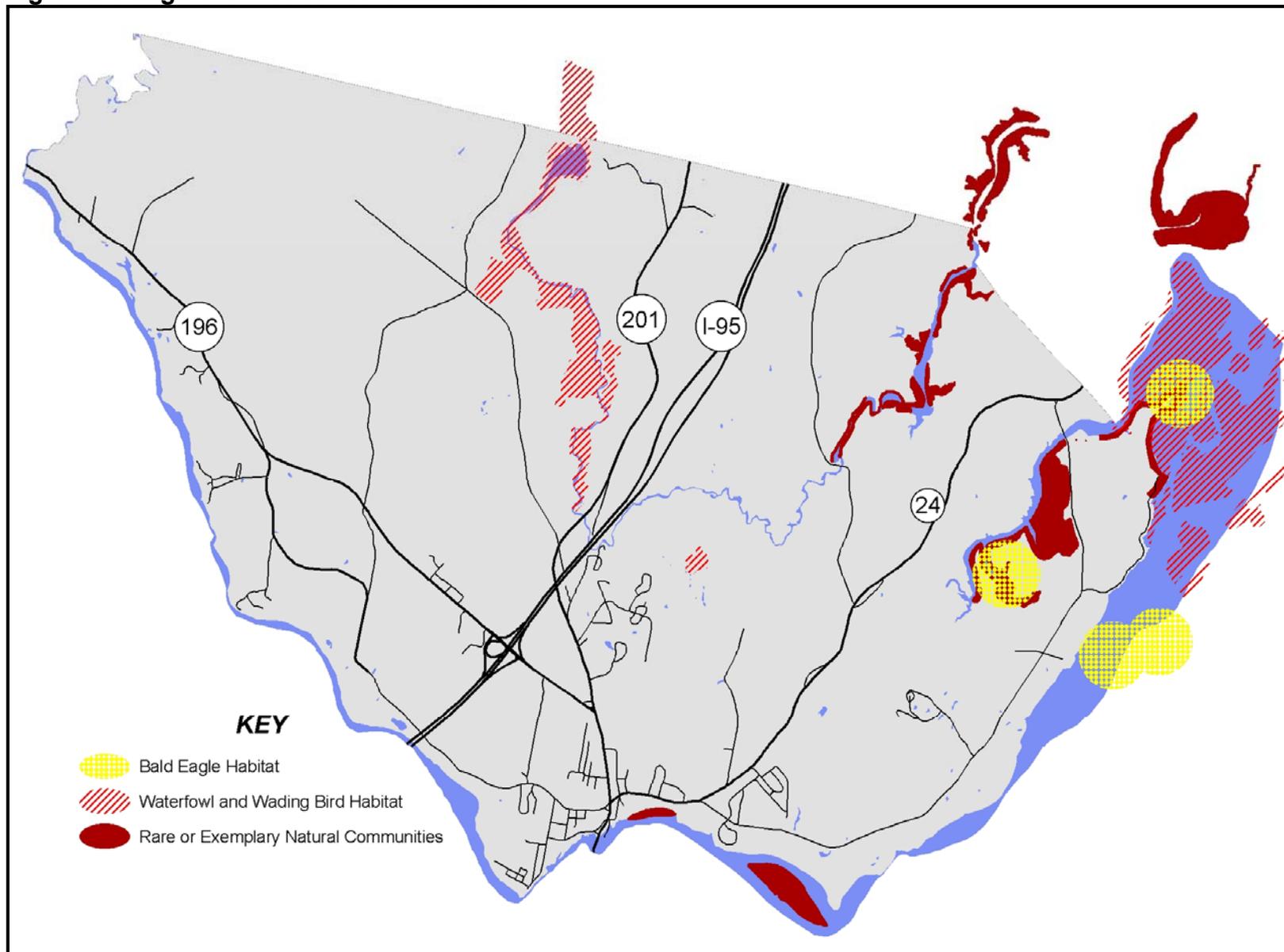
Vernal pools are small wetlands which are typically created as winter runoff and spring rains collect in depressions in the landscape. Vernal pools may dry completely in the summer and early fall. Despite their temporary nature, these pools are important habitat for wood frogs, salamanders, fairy shrimp and other threatened and endangered species. Vernal pools have not been mapped in Topsham. Because of their size and since little is known about their location, these pools could be easily damaged or destroyed by development.

Large Undeveloped Blocks of Land

Large undeveloped blocks of land provide continuous habitat areas for animals with large home ranges, such as bear, fisher, and moose. Undeveloped blocks of land greater than 2,500 acres could hold the full complement of species in a pristine Maine environment while small blocks of land (less than 250 acres) tend to support species more typical of a suburban environment (raccoons, skunks, squirrels, songbirds, deer).

Topsham has several large undeveloped blocks of land. These are spread out across the northern half of the community and tend to be divided by larger transportation corridors such as I-95, Route 201, and Route 24. Many extend northward into Bowdoin and Bowdoinham. The largest block, which encompasses more than 7,000 acres, is located between the Meadow Cross, Route 196, Lisbon Falls, and Route 125.

Figure 26. High Value Plant and Animal Habitat



Other large blocks are around the Bradley Pond, the Upper and Lower Cathance River, and the Muddy River.

As development occurs in rural Topsham, these large blocks of undeveloped land are going to be pressured. Significant amounts of development in the wrong locations could effectively fragment some of these larger blocks.

High Value Plant and Animal Habitat

The availability of high value plant and animal habitat is essential to maintaining an abundant and diverse population for both ecological and recreational purposes. Topsham has several areas that offer quality habitat for a variety of species.

Rare and exemplary natural communities are recorded by the Maine Natural Areas Program. The most important plant and animal areas in Topsham are aquatic habitats and the areas immediately adjacent to aquatic and wetland areas. In general, these areas near the tidal stretches of the Androscoggin, Cathance, and Muddy Rivers have been examined extensively for rare or exemplary natural communities (Figure 26). This is where most of the town's threatened species and species

of special concern are located. These areas are sensitive to change and vulnerable to degradation.

The Maine Department of Inland Fisheries and Wildlife has identified several important habitats (Figure 5). They include:

- **Waterfowl and Wading Bird Habitat** provides breeding habitat, wintering habitat, and staging habitat for migrating birds. Inland waterfowl and wading bird habitat is located around Bradley Pond and the Upper Cathance River, as well as the quarry in the Lower Cathance watershed in The Highlands Green development. Tidal waterfowl and wading bird habitat located around the Muddy River and lower Androscoggin River contain this habitat.
- **Bald Eagle Habitat** is located in several places along the Androscoggin River from the end of Princess Point towards Mustard Island.

Table 19 and Figure 27 identify all of Topsham's rare species and natural community locations. Note that this list of species and important habitats only includes those areas that have been surveyed in the field. Other areas of Topsham may have additional plant and animal resources that haven't been surveyed.

Table 19. Rare Species and Natural Community Locations, 2003

Number	Feature	State Rarity	State Status	Number	Feature	State Rarity	State Status
1	Freshwater Tidal Marsh	S2		15	Pygmyweed	S2	S. Concern
2	Freshwater Tidal Marsh	S2		15	Threadfoot	S2	S. Concern
3	Alder Thicket	S5		15	Water Pimpemel	S3	S. Concern
4	White Oak-Red Oak Forest	S3		15	Mudwort	S3	S. Concern
5	Northern White Cedar Swamp	S4		15	Estuary Monkeyflower	S2	S. Concern
6	Silver Maple Floodplain Forest	S3		15	Spongy Arrow-Head	S3	S. Concern
7	Eaton's Bur-Marigold	S2	Threatened	15	Dwarf Bulrush	S1	Threatened
8	Parker's Pipewort	S3	S. Concern	15	Parker's Pipewort	S3	S. Concern
8	Estuary Bur-Marigold	S3	S. Concern	16	Narrow-Leaf Arrowhead	S2?	
9	Long's Bitter-Cress	S2	Threatened	17	Eaton's Bur-Marigold	S2	Threatened
10	Spongy Arrow-Head	S3	S. Concern	17	Estuary Bur-Marigold	S3	S. Concern
11	Pygmyweed	S2	S. Concern	17	Estuary Monkeyflower	S2	S. Concern
12	Estuary Monkeyflower	S2	S. Concern	17	Spongy Arrow-Head	S3	S. Concern
13	Stiff Arrow-Head	S1, S2	Threatened	17	Parker's Pipewort	S3	S. Concern
14	Eaton's Bur-Marigold	S2	Threatened	18	Spongy Arrow-Head	S3	S. Concern
14	Estuary Monkeyflower	S2	S. Concern	19	Bald Eagle	S4B, S4N	Threatened
15	Eaton's Bur-Marigold	S2	Threatened	20	Tidewater Mucket	S2	Threatened
15	Estuary Bur-Marigold	S3	S. Concern	21	Creeper	S?	S. Concern
15	Long's Bitter-Cress	S2	Threatened				

Source: Maine Natural Areas Program, Maine
Department of Inland Fisheries and Wildlife

Rarity:

S1 – critically imperiled in Maine because of extreme rarity or vulnerability to extirpation

S2 – imperiled in Maine because of rarity or other factors that make it vulnerable to decline

S3 – rare in Maine

S4 – apparently secure in Maine

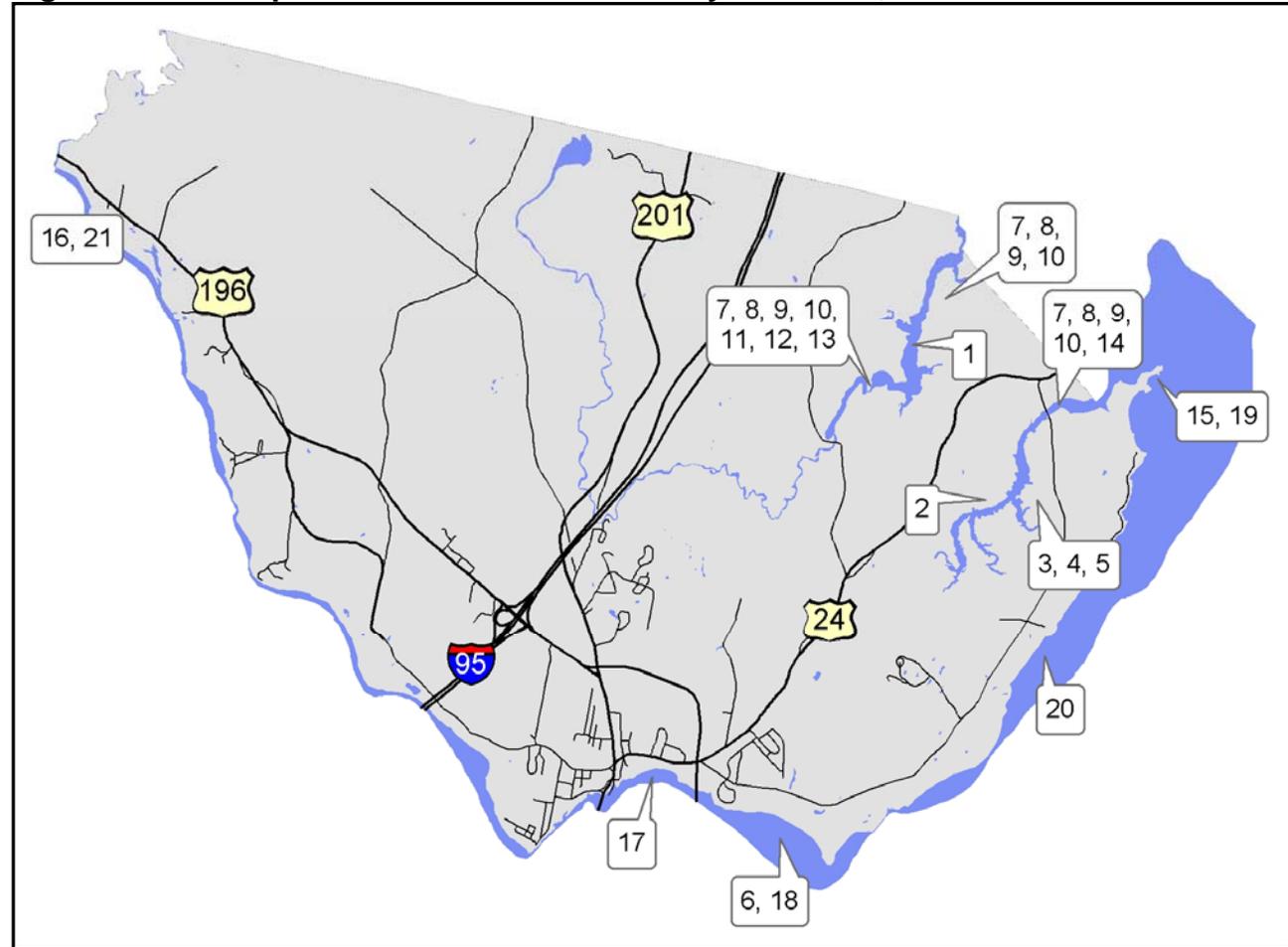
Status:

Endangered – rare, in danger of being lost from Maine in the foreseeable future, or federally listed as endangered

Threatened – rare and, with further decline, could become endangered, or federally listed as threatened

Special Concern – rare in Maine, but not sufficiently rare to be considered endangered or threatened

Figure 27. Rare Species and Natural Community Locations, 2003



Merrymeeting Bay

In addition to these important habitat areas in Topsham, Merrymeeting Bay is teeming with a diversity of plant and animal life:

- It is nationally known as an important feeding and resting area for both spring and fall migrating waterfowl. Black Ducks, Mallards, Green-Winged Teal, Blue-Winged Teal, Canada Geese and Mergansers occur there in very large numbers. Goldeneyes, Buffleheads, Scaup and other waterfowl are found in smaller numbers.
- Resident Great Blue Herons and other wading birds frequently feed in the area and the Great Black-Backed Gulls, Herring Gulls, Double-Crested Cormorants and other seabirds have also been found in the Bay throughout the years.
- A diverse continuum of vegetation zones, including arrowhead/pickerel weed, wild rice beds, alder swamps, and bordering red maple wetlands can be found around the Bay.
- Shad, alewives and striped bass spawn and are reared in the Bay.
- Many mammals and reptiles use it as a travel corridor.

Increases in the types and intensities of land use activities can negatively impact coastal wildlife by direct or indirect changes in water quantity and habitat availability.

Issues and Implications

1. Current development patterns suggest that much of Topsham's future residential development will occur largely in more rural areas in the north and west. Care must be taken to ensure this housing is built at sufficient densities so as to not overwhelm the soils and groundwater quality.
2. Topsham's surface waters are generally healthy. As residential development spreads into rural areas, the health of these water bodies (in particular the Cathance River, Bradley Pond, and Muddy River) will be threatened. Nonpoint source pollution is the largest threat to these water bodies. The development pattern in neighboring communities 'upstream' from Topsham can have significant impacts on the water quality in our town.
3. The Brunswick Topsham Water District relies on groundwater from sand and gravel aquifers to supply the public water system. Care must be taken to protect these recharge areas from contamination, especially from mining operations.
4. The biological, water quality, and human benefits of wetlands are well known. Critical wetlands and their boundaries in Topsham should be identified and given prime consideration and protection when reviewing development proposals.
5. Topsham's wetlands, especially those along the Cathance River, Muddy River, and lower Androscoggin River are tremendous ecological

- resources. Other wetlands in the community do not have as many functional roles.
6. Rural development could endanger Topsham's large blocks of undeveloped land. Fragmentation is the biggest danger, and future development could minimize fragmentation if it was designed to accommodate wildlife corridors. Many of these large blocks of unfragmented land extend into neighboring communities.
 7. Topsham has a wide variety of known rare species and natural communities of state-wide significance, yet large areas of Topsham remain to be surveyed. The absence of known rare species and natural communities in these un-surveyed areas does not mean that there are no high-value wildlife areas there.
 8. Increases in the types and intensities of land use activities can negatively impact coastal habitats. Development near water bodies should be designed to minimize the impact on water quantity and habitat availability.
 9. The health of Topsham's flora and fauna can depend on the amount of connectivity that natural areas have with each other. Development, if not well planned, can fragment and isolate natural areas. Maintaining these connections with well-planned wildlife corridors can improve habitat conservation efforts while allowing development to occur.
 10. Invasive species are becoming more prevalent in the region and in Topsham.
 11. Natural resources concerns cannot be delineated by municipal boundaries. Rare areas and species in neighboring communities could be dependent of the quality of Topsham's wildlife, and vice-versa. Topsham could coordinate its resource protection efforts with neighboring communities to better protect the region's resources.
 12. Vernal pools are hot spots of diverse species. Little is known about the location of vernal pools in Topsham.
 13. Many of the owners of our town's important scenic areas qualify for a reduced tax burden if they enrolled in the Open Space Current Use Tax Program. However, no landowners use this program in our town.

Chapter L

MARINE RESOURCES

Topsham may not feel much like a coastal community, but it does have miles of shoreline on the largest freshwater tidal bay in the northeast – Merrymeeting Bay.

Back when waterways were the lifeblood of commerce, the town’s coastline would have bustled with activity. Fishers and shipbuilders would have been very familiar with Topsham’s shoreline. But those days are long gone. Recreation now dominates Topsham’s shoreline.

Water quality and other natural resource issues on the Bay and lower Androscoggin River will be addressed in more detail in the Natural Resources Inventory.

Since one of the State’s goals for comprehensive planning is to ensure that access to the shore is protected for commerce and the general public, this chapter inventories the access to these resources and how these resources are currently used.

MERRYMEETING BAY

Merrymeeting Bay is the largest freshwater tidal bay on the eastern seaboard north of Chesapeake Bay. It is formed by the confluence of six rivers, including Maine’s

second largest (the Kennebec) and third largest (the Androscoggin). These two rivers alone drain a combined 9,320 square miles – an area that is approximately the size of Vermont. Other minor rivers flowing into the bay include the Cathance, Eastern, Muddy, and Abagadasset.

Europeans first visited Merrymeeting Bay in the early 1600s. Since then, the Bay has been used for various industries including fishing, shipbuilding, ice cutting, transporting lumber, and recreation.

Commercial activity on the Bay has largely disappeared. An eel fishery is still active in the Bay, but very little information has been collected on this activity.

The Bay is largely used now for recreation. Dedicated hunters across the nation are familiar with the waterfowl hunting in the area, and sturgeon, herring, smelt, salmon, alewives, shad, and sea bass attract sports fishermen from throughout the year. Hikers, sightseers, and recreational boaters enjoy the long views and undeveloped shorelines of the Bay.

Point-source pollution from upstream sources has decreased significantly in recent decades, although concerns about non-point source pollution are increasing as the communities ringing the Bay grow. The removal of the Edwards Dam in Augusta has improved the breeding grounds for the Bay’s anadromous fish, but the current condition of the dams at Fort Andros and Fort Fairfield are barriers to further improvement.

LOWER ANDROSCOGGIN RIVER

The Androscoggin River flows between Topsham and Brunswick to Merrymeeting Bay, where it meets the Kennebec River. The Androscoggin basin totals 3,450 square miles (80% of which is in Maine). The river winds 200 miles inland to its headwaters in Umbagog Lake.

The lowlands bounding the river below Topsham Village are routinely flooded during spring runoff, resulting in a shoreline that is mostly undeveloped.

HARBOR AREAS, MOORINGS, WATER-DEPENDENT USES

Topsham has no formal harbor or mooring areas although boats do moor in the river between the Topsham and Brunswick shores. Much of the Topsham shoreline is undeveloped, although a portion (particularly in the Pleasant Point area) has dense residential development. The primary water-dependent development is a seasonal smelt fishing camp which provides access for ice-fishing during the winter and early spring on the Androscoggin River.

PUBLIC ACCESS

Many residents use the Brunswick boat ramps on Water Street and the Old Bath Road to gain all-tide access to the lower Androscoggin River and Merrymeeting Bay. Due to the relatively undeveloped nature of the Androscoggin River below the Village and Merrymeeting Bay, many people access the shoreline through consensual agreements with property owners.

The town's Lower Village Plan includes a waterfront park that would provide access to the lower Androscoggin River as well as walking trails along the river.

Pedestrian access exists to the Muddy River from two state owned parcels, but no parking facilities are available. Parking along the shoulder of this stretch of Foreside Road can be dangerous.

All-tide boat access to Merrymeeting Bay would at best be difficult to provide from Topsham. The Bay's shallow depths and large tide range (5 feet) would require that an access point reach out into the Bay a considerable distance.

ISSUES AND IMPLICATIONS

1. All-tide access to the Androscoggin River and Merrymeeting Bay is adequate from neighboring communities. Brunswick has two access points, Bowdoinham has two access points, and Bath has one access point.

Chapter M

ASSESSED VALUATION, COMMITMENT, AND TAX RATE

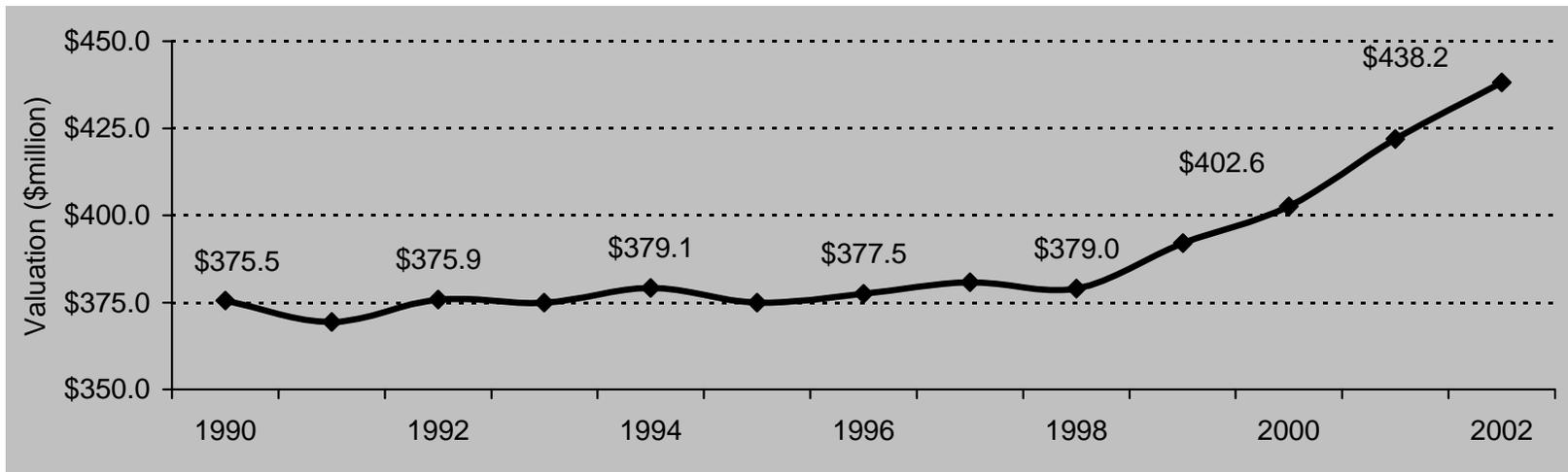
FISCAL CAPACITY

Understanding Topsham’s ability to fund new projects is crucial when planning for the community’s growth and changing needs. This section examines Topsham’s fiscal capacity and its ability to fund new and existing services and facilities.

Examining **assessed valuations** is one way to track the fiscal health of the community. Assessed valuation is the basis upon which local property taxes are levied. A rising valuation is a sign of fiscal strength – smaller tax rates are needed to raise a given sum of money.

In 2002, Topsham’s assessed valuation had reached \$438.2 million, an increase of \$60 million since 1990 (Figure 28). Topsham’s assessed valuation vacillated near \$380 million for much of the 1990s – a common trend statewide as new development suffered a hangover

Figure 28. Topsham Assessed Valuations*, 1990 – 2002



* assessed valuations reflect true market value only for the years in which the Town completes a revaluation and/or upgrades to 100% of market value. Topsham’s last revaluation occurred in 1990. In 1995, building valuations were adjusted downward slightly to more accurately reflect market values.

Source: Maine Revenue Services

from the building boom in the 1980s as well as a soft regional economy.

Since 1998, assessed valuations have dramatically increased, fueled by commercial development in the village and Topsham Fair Mall, expansions to the Highlands retirement community, and increased residential subdivision activity.

A growing tax base (assessed valuations are the basis on which local property taxes are raised) increases the amount of taxes collected for a given tax rate. For example, between 1996 and 1999, Topsham’s assessed valuation increased by \$15 million on a stable tax rate (Table 1). The Town raised an additional \$330,000 in property taxes as the result of the increased valuation.

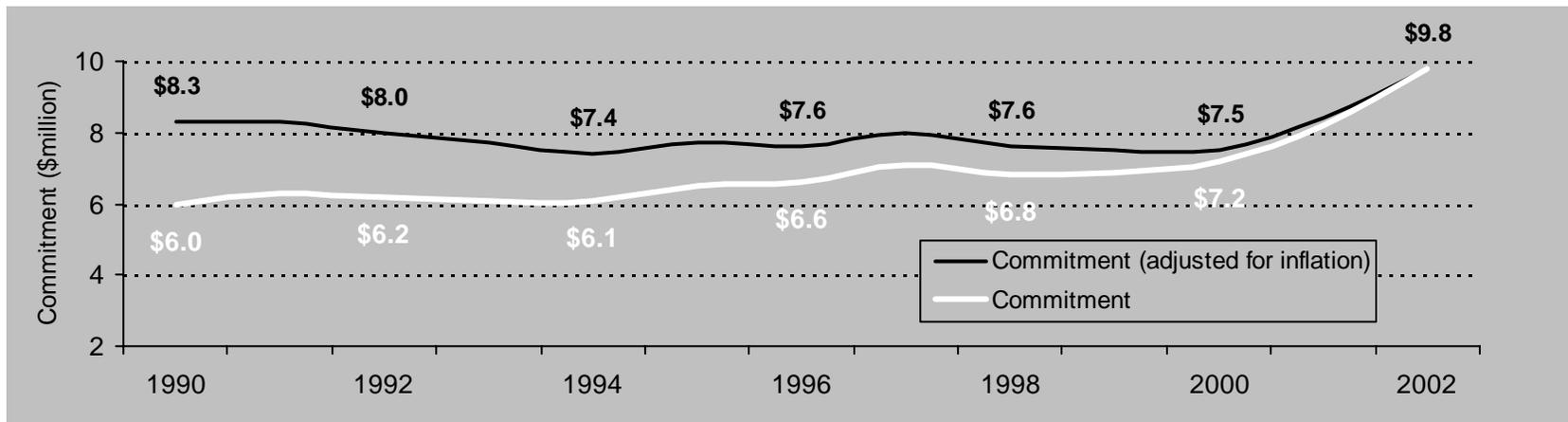
Local commitment, or the amount of property taxes

collected to fund local government, for 2002 was \$9.8 million (Figure 29, Table 20). This was 60% higher than the \$6.0 million commitment in 1990 (after adjusting for inflation, commitment increased by a more modest 20%).

Commitment increased moderately for much of the 1990s, but in 2001 and 2002, commitment increased dramatically – from \$7.2 million in 2000 to \$9.8 million in 2002. The Town has decided to fund capital improvements from the general fund and a capital improvement fund, which in 2001 and 2002 was used to build a new \$1.1 million public works facility. This capital improvement accounted for a large part of the recent commitment increase.

The decision to fund capital improvements from general fund revenues has consequences for the town. On the one hand, the town saves money from not having to

Figure 29. Local Commitment*, 1990 – 2002



* adjusted using the Consumer Price Index (all-urban), a commonly used inflation index in Maine when accounting for changes in real estate

Source: Maine Revenue Services

Table 20. Local Valuation, Tax Rate, and Commitment, 1990 - 2002

Year	Assessed Valuation (\$million)	Tax Rate* (mils)	Commitment
1990	\$375.5	16.00	\$6,007,209
1991	\$369.3	17.00	\$6,277,504
1992	\$375.9	16.59	\$6,235,784
1993	\$375.0	16.39	\$6,145,617
1994	\$379.1	16.15	\$6,122,570
1995	\$374.9	17.36	\$6,507,563
1996	\$377.5	17.45	\$6,587,258
1997	\$380.1	18.71	\$7,124,572
1998	\$379.0	18.08	\$6,851,790
1999	\$392.0	17.64	\$6,916,242
2000	\$402.6	17.84	\$7,182,588
2001	\$421.9	19.54	\$8,244,125
2002	\$438.2	22.46	\$9,841,705

* One mil equals \$1.00 in taxes for every \$1,000 in valuation.

Source: Maine Revenue Services

Excludes exempt properties

finance debt by issuing bonds and paying the interest on those bonds for years into the future. On the other hand, the local tax rates can fluctuate wildly year-to-year to cover the cost of capital improvements, thereby increasing fiscal uncertainty for the taxpayers.

In part to cover the costs of capital improvements, Topsham's **tax rate** has increased dramatically in recent years. The tax rate reflects how much of the local valuation is committed in property taxes each year. In 2002, Topsham's local property tax rate was 22.5 mils (a mil is the number of dollars in property tax paid for each \$1,000 in assessed valuation⁷). Since 1990, the tax rate

⁷ A tax rate of 22.5 mils means that a property will be taxed \$22.50 for every \$1,000 in assessed value. At this tax rate, a property assessed at \$200,000 would pay an annual tax of \$4,500.

has steadily increased from 16.0 mils, with the largest jumps in 2001 and 2002 (Table 20).

Table 20 illustrates the compounding effect of growing local valuations and an increasing tax rate (local valuation multiplied by tax rate equals commitment). As the assessed valuation and tax rate increased after 1999, commitment jumped \$3.0 million in three years.

While Topsham's tax rate has increased significantly in recent years, a comparison with neighboring communities suggests the town's tax rate is average versus neighboring communities (Table 21). Full value tax rate is used by the State to adjust for local valuation discrepancies

between communities⁸.

Topsham's full value tax rate is 16.36 mils. This tends to be a higher tax rate than smaller and more rural communities and a lower tax rate than larger and more urban communities.

⁸ Local assessed valuations reflect full market value only in the years a town completed a revaluation. Therefore, neighboring communities may have significant differences in the reported value of two properties that in fact have the same market value. Because the State disburses aid to communities based in part on their assessed valuation, the State annually adjusts these valuations to account for market fluctuations. The resulting valuation is often called the Full Value and is the best basis on which comparisons between communities should be made.

Table 21. Full Value Tax Rates, 2001

Municipality	Full Value Tax Rate
Bath	27.04
Lisbon	22.55
Sagadahoc County	17.44
Brunswick	17.32
Cumberland County	16.84
Topsham	16.36
Bowdoin	15.93
Bowdoinham	15.90
Freeport	15.75
Sabattus	13.94
Durham	13.76
Harpswell	7.44

Source: Maine Revenue Services

Note – full value tax rates do not account for differences in services and facilities. For example, larger and more urban communities tend to have more programs and facilities, thereby increasing the cost of the local government (and vice-versa for more rural communities). Exceptions to this rule include towns with small populations and unusually high valuations. Harpswell has miles of coastline and a relatively small year-round population. Freeport has a commercial tax base that is disproportionately larger than its population.

As new development increases the size of Topsham’s tax base, the ability to fund services and facilities from local property taxes will increase. However, demand for services and facilities will likely increase to meet the needs of the expanded tax base. Local government will have to balance the higher valuations created from new development with the demand for new services and

facilities in order to provide efficient facilities and services for its taxpayers.

REVENUES

Local property taxes (commitment) were the largest source of revenue for Topsham in 2002, but nearly 20% of the Town’s \$11,444,663 in revenues came from other sources (Table 22). Since 1997, total annual revenues have increased by \$3.0 million (or 35%).

Taxes, which include both property and excise taxes, are the single largest source of revenue, accounting for more than 80% of annual revenues. Local property taxes accounted \$8.3 million in 2002, while excise taxes accounted for \$1.2 million. Tax revenue increased by 28% (\$2.0 million) between 1997 and 2002.

Intergovernmental revenue includes state revenue sharing funds, block grants, and property tax assistance programs. These revenue streams accounted for 13% of 2002 revenues. The majority of these funds came by way of school education aid. In the last five years, intergovernmental revenues have more than doubled.

Charges for services include revenues from public works, ambulance, and public safety services rendered. These accounted for two percent of revenues in 2002. More than half of these revenues were from ambulance services provided.

Licenses, permits, and fees include revenues for building permits, cable TV fees, registrations, etc. Fees collected for cable TV accounted for more than half of the

Table 22. Total Annual Revenues, 1997 - 2002

	1997	2002	% Change	% of Total
Taxes collected	\$7,448,665	\$9,541,512	28.1%	83%
Intergovernmental	\$664,918	\$1,440,837	117.0%	13%
Charges for services	\$99,386	\$210,212	111.5%	2%
Licenses, permits, fees	\$110,513	\$168,072	52.1%	1%
Investment income	\$125,142	\$56,427	-54.9%	< 1%
Miscellaneous	\$8,738	\$27,603	215.9%	< 1%
Total	\$8,457,362	\$11,444,663	35.3%	100%

Source: Town of Topsham

\$168,072 collected in 2002. Since 1997, these revenues have increased by 50%.

Investment income includes proceeds made by the town on its short investments. In 2002, this accounted for less than 1% of revenues. The decline in investment income in the last five years is the result of smaller capital improvement balances (drawn down to pay for recent investments) and a smaller rate of return due to historically low interest rates.

Miscellaneous income includes other forms of income not included above. In 2002, miscellaneous income accounted for \$27,603, or less than 1% of Topsham's total annual revenues.

EXPENDITURES

In 2002, Topsham spent more than \$12.0 million to provide services and facilities to citizens (Table 23). This is \$3.6 million more than in 1997. A large measure of the increase is from the Town's decision to fund new capital projects without bonding.

Education expenses pay for the town's public school expenses at School Administrative District 75. These expenses totaled \$6.0 million in 2002, fully half of the town's entire budget. Since 1997, education expenses increased nearly 30%.

Capital outlay includes the capital investments, particularly the new \$1.1 million public works building. This expenditure is likely to vary widely from year to year depending on the town's needs.

Public safety includes police services, fire protection, and ambulance services for the town of Topsham. In 2002, public safety expenditures accounted for more than \$1.2million, or 10% of all expenditures. Since 1997, public safety expenditures have increased by 25%.

General government expenditures pay to administer the local government, including administration, tax collection, assessing, and insurance. In 2002, these expenses amounted to nearly \$900,000, or 7% of expenditures. This represents an increase of 11% since 1997.

Table 23. Total Annual Expenditures, 2002

	1997	2002	% Change	% of Total
Education	\$4,627,894	\$5,951,647	28.6%	50%
Capital Outlay	\$318,030	\$1,452,739	356.8%	12%
Public Safety	\$976,764	\$1,217,558	24.7%	10%
General Government	\$793,942	\$878,575	10.7%	7%
Fixed Charges	\$488,833	\$832,078	70.2%	7%
Public Works	\$695,012	\$815,605	17.4%	7%
Recreation / Culture	\$152,614	\$268,194	75.7%	2%
Debt Service	\$45,925	\$257,407	460.1%	2%
Public Utilities	\$175,539	\$180,532	2.8%	2%
Health / Soc. Services	\$41,593	\$32,705	-21.4%	< 1%
Contractual Services	\$58,579	\$78,431	33.9%	< 1%
General Assistance	\$20,975	\$35,080	67.2%	< 1%
Total Expenditures	\$8,395,700	\$12,000,551	42.9%	100%

Source: Town of Topsham

Fixed charges include county government taxes (\$800,000), emergency fund (\$17,660), and overlay (\$16,639).

Public works pays to maintain the town’s roadways and run the town’s garbage collection and transfer station. In 2002, its expenditures accounted for more than \$815,000.

Recreation and culture expenditures include the maintenance of all park facilities and programs run for Topsham residents. In 2002, Topsham spent \$270,000 on recreation and culture, and increase of 75% from 1997.

Debt service expenditures include short term leases for items such as public works trucks, police cruisers, and photocopy machines. While this expenditure has

quadrupled in the last five years, it accounts for only 2% of expenditures in 2002.

Public utilities include funds used to support the town’s water and sewer districts. These expenditures have been relatively stable in the last five years, and account for 2% of the annual expenditures.

Health and social services includes funds paid in general assistance. The state requires municipalities to provide assistance for the immediate needs of residents in dire circumstances. The state reimburses the community for a share of these expenses.

Contractual services include funds for hiring outside assistance. These funds increased to \$78,000 in 2002, but still account for less than 1% of municipal expenditures.

General assistance is required by the State and includes monies disbursed to help needy families and individuals on a case-by-case basis. In 2002, this accounted for \$35,000 in expenses.

TAX INCREMENT FINANCING

Tax Increment Financing (TIF) is a tool used by communities to promote economic development. Since 1977, the State of Maine has allowed communities to exclude the added valuation of economic development projects from the community's assessed valuation, so long as the increased property taxes garnered from the new development are used for economic development purposes. This allows the community to maintain its level of intergovernmental funding (much of which is based on the wealth, or assessed valuation, of the community)⁹.

Topsham has actively used TIFs as a tool to promote economic development. In 2002, the total amount of property taxes that have been collected from the TIF projects was \$550,000 (Table 24).

⁹ Tax Increment Financing (TIF) is a program designed to promote economic development. The Town of Topsham delineates a development district – depending on the project this could be a single business (e.g. Coastal Metal Fabrication) or a geographic area (e.g. Topsham Fair Mall). All of the new taxable value that is created in the development district is taxed by the town, but this tax revenue goes into a special fund to pay for economic development infrastructure (street improvements, traffic signals, new fire trucks to serve the new development, etc) or economic development capacity (economic development and planning staff, community improvements that will attract economic development, etc.).

Table 24. TIF Financing Plans, 2002

	Credit Enhancement	General Fund	Development Fund	Total
Highlands	\$230,070	\$153,380	\$0	\$383,450
Village Candle	\$30,405	\$0	\$20,270	\$50,674
Great Bowdoin Mill	\$41,146	\$0	\$27,431	\$68,577
Highland Green	\$0	\$5,329	\$15,988	\$21,317
Coastal Metal Fab.	\$10,587	\$0	\$10,587	\$21,173
Total	\$312,208	\$158,709	\$74,275	\$545,192

Source: Town of Topsham

Nearly 60% of the captured TIF property taxes were returned to the developers via credit enhancement to payback the developer for prior investments (developers are required to put this money back into their TIF project). Nearly 30% of the revenues went into the general fund and the remaining \$75,000 was paid to an economic development fund that helped pay for infrastructure improvements and other economic development activities.

LONG-TERM DEBT

Unlike many communities, Topsham currently has no long-term debt. If demand for new services and facilities grows, Topsham has ample ability to float long-term debt to fund this new growth.

ISSUES AND IMPLICATIONS

1. The Town's pattern of rapid growth in taxable property, especially nonresidential property, improves its ability to undertake new projects.

2. Commitment in 2001 and 2002 increased dramatically in large part to pay for capital improvements to the public works facility. If the Town continues to pay for capital improvements in this manner, the tax rate is going to fluctuate wildly, making financial planning difficult for the taxpayers. This also raises the issue of who pays for the cost of the bond – taxpayers in 2001 and 2002 paid for a facility that they might not be around to enjoy the benefits from over the lifetime of the building.
3. Topsham, because it has paid for recent capital improvements out of general revenues, has considerable borrowing capacity.
4. The Town's public utilities are operated as separate entities and each has its own mechanisms for financing capital improvements and the operations of their systems. The Town needs to be cognizant of their programs, since they are also paid by the taxpayers.
5. Topsham has not completed a revaluation recently. Significant changes in property values (as in the last ten years) can lead to taxable valuations that do not reflect current market values.