

Taking Stock

Merrimac is a composite of its preserved colonial past, the legacy of its 19th-century industrial era, and a more recent suburban phase that began during the 1950s. From its distinctive Town Square to the unspoiled hills and farmland that form a seamless edge at the New Hampshire state line, Merrimac retains what many towns have lost: diversity. It has an unusual mix of homes, breathtaking views of the Merrimack River, villages and lakeside neighborhoods, and a pastoral countryside. However, recent development has intruded on some of the qualities that historically made Merrimac unique.



Merrimac's Historic Architecture
Photo courtesy of EOEA

Like most rural-economic centers in Massachusetts,¹ Merrimac is organized around an industrial village with adjacent, densely settled neighborhoods, as illustrated in Map 1. Agricultural land and forests characterize the town's outlying areas, yet largely because of regional market forces, both the supply of open space and the agricultural economy it supported have declined considerably. In 1971, 68% of Merrimac's total land area was forested or used for farming. By 1999, forests and agricultural land had dropped to 55% of the town.

Evidence of modern ideas about development can be found just about everywhere in Merrimac today: larger house lots with homes set back uniformly from the street, and new subdivision roads lined with granite curbing, wider than some of the old country ways that collect and move the majority of traffic in Merrimac. In an attendant trend, land crossed by power lines and used for other public utility rights of way also increased. The force that accelerated Merrimac's growth, I-495, stands out as imposing testimony to the kinds of irrevocable land use change that many small towns faced during the last half of the 20th century. For Merrimac, however, regional transportation improvements meant not only its discovery by a new generation of homebuyers. More significantly, I-495 severed the entire southern end of Merrimac from the rest of town, leaving intact only a few of the old roads that once led seamlessly from New Hampshire south to the Merrimack River.

¹ "Rural-economic center" refers to a group of communities, classified by the Massachusetts Department of Revenue (DOR), that historically supplied employment – mainly industrial jobs – in rural areas of the Commonwealth. Like Merrimac, many of them are quite small and were incorporated during the late 19th century.

Merrimac's development pattern has changed in ways that may not be obvious because the town transformed gradually – but steadily – from rural village to emergent suburb. The staggeringly high rates of growth that have affected many towns near I-495 are not part of Merrimac's recent development history. Still, while the amount of land absorbed by lower-density residential uses in Merrimac increased by 123% between 1971-1999, Table 2-1 shows that nearly two-thirds of it was consumed after 1985. These kinds of changes have come with environmental, social and economic costs, and undeniably, they pose fiscal challenges as well.

Table 2-1 Thirty Years of Land Use Change: Merrimac, Massachusetts

Land Use	Acres in Use			Change in Acres (+/-)	
	1971	1985	1991	1999	1971-1985 1985-1999
Agricultural Land	815	788	648	592	-27 -196
Forest	3,208	3,050	2,946	2,844	-158 -206
Recreation Land	15	11	11	11	-4 0
Higher-Density Residential	23	43	43	43	20 0
Low-Density Residential	822	982	1,164	1,413	160 431
Commercial	36	41	48	50	5 9
Industrial	10	10	14	14	0 4
Open/Urban	134	123	177	152	-11 29
Transportation	116	124	124	120	8 -4
Other	118	125	121	57	7 -67
Wetlands	170	170	170	172	0 2
Water	96	96	96	94	0 -2
Total	5,564	5,564	5,564	5,564	
Total Area (Acres)	5,564				
Total Land Area (Acres)	5,468				
Total Land Area (Mi²)	8.54				

Source: MassGIS (2002).

The People of Merrimac

Merrimac's town character owes as much to the diversity of people who live here as to its scenic landscapes and historic architecture. Working-class and upper-middle-income households, townspeople who work locally and those who commute, life-long residents and newcomers all give Merrimac the feel of a down-to-earth small town that welcomes everyone. Although Merrimac is home to a large number of families with pre-school and school-age children,

it also has a growing population of elders. On both ends of the age spectrum, Merrimac exceeds statewide trends. While the Commonwealth's under-18 population grew by 10.9% during the past decade, Merrimac's grew by 34%. Similarly, Merrimac's over-65 population increased by 21.4% while the state's increased by 17.2%. It seems that Merrimac has something for everyone, which probably explains why those who live in this small town value it so highly. Over the past 20 years, Merrimac's population has grown 38%,² outpacing the Merrimack Valley region, which absorbed a 22% population increase in the same period, and Essex County, 11%.³

Table 2-2 Population Change 1960-2000

	1960	1980	% +/-	2000	% +/-
Essex County	566,831	633,632	11%	723,419	11%
Massachusetts	5,148,578	5,737,037	11%	6,349,097	14%
Merrimac	3,261	4,451	36%	6,138	38%

Source: MISER (2001).

Completion of I-495 in the 1960s facilitated travel between outlying areas and allowed greater housing choice to those commuting to work inside the Metropolitan Boston area. Merrimac's desirability to an expanding market of homebuyers is evident in its significant rate of population growth, even in an era of declining household size. In 1970, the typical Merrimac household consisted of 3.31 people.⁴ The town's average household size subsequently declined, consistent with national trends, but stabilized toward the end of the 20th century. Despite an influx of families with school children during the 1990s, Merrimac's average household size held to a constant of 2.7 people between 1990-2000, in part because the number of non-family households grew at a somewhat faster rate than the number of families. Merrimac also has more "empty-nester" family households today than it did 10 years ago. The community's mix of people by age and household composition remains one of its strong suits.

² Bureau of the Census, Population and Housing, Summary File-1, 1980, and Census 2000 Redistricting Data, PL 94-171 Summary File, 2001.

³ Merrimack Valley Planning Commission at <http://www.mvpc.org/> (Internet). "Merrimack Valley" region means MVPC's catchment area: Amesbury, Andover, Boxford, Georgetown, Groveland, Haverhill, Lawrence, Merrimac, Methuen, Newbury, Newburyport, North Andover, Rowley, Salisbury, and West Newbury.

⁴ Bureau of the Census, Population and Housing, Summary File-1, 1970.

Among the factors that attract families to Merrimac, the quality of its K-12 regional school district ranks high. Merrimac children attend elementary school locally, joining their peers from neighboring West Newbury and Groveland in grades 7-12. Statistics tracked by the Massachusetts Department of Education (DOE) show that between the 1992-1993 and 1998-1999 school years, Merrimac's share of region-wide K-12 enrollments climbed from 961 students to 1,204, or a 25.29% increase in six years – above-average for the state as a whole.⁵ Census 2000 data shed light on what happened. Between 1990-2000, the population of 10 to 14-year olds in Merrimac jumped by nearly 50%. More significantly, while the population percent of children under 5 dropped 3% statewide, in Merrimac the same age group increased by 15.8%. Compared to the town's predominantly white population (99%), the racial and ethnic make-up of families with children is somewhat more diverse. In Merrimac's two elementary schools, 96.9% of the children are white, 1.1% African American, 0.3% Asian, and .06% Native American. Hispanic persons constitute 0.90% of the total population, and 1.1% of local school enrollments.

A recent study by Citizens Housing and Planning Association (CHAPA) placed Merrimac's 2000 median family income at \$56,198, lower than the federal Department of Housing and Urban Development's (HUD) estimated 2000 median family income for the Lawrence MSA (\$60,800). If CHAPA's data accurately reflect conditions across the state, the relative economic position of Merrimac households may have declined slightly during the past decade. In 1990, Merrimac's median family income was \$46,276, just below the regional median of \$46,533 and somewhat higher than the state's as a whole, \$44,367. When the Master Plan Steering Committee's housing task force conducted a needs survey last year, about 45% of the elderly respondents reported incomes below the moderate-income level – that is, below 80% of median family income.⁶

A decade ago, five percent of Merrimac's population, or 258 persons, lived below the federal poverty line. This figure is somewhat higher than the regional average of 3.9% persons, but it significantly exceeds the statewide average of 1.6%.⁷ In suburban communities, poverty sometimes affects seniors more than any other age group and this appears to be true in Merrimac: 78% of persons aged 65+ and living alone, and 13% of the town's overall senior population, lived below

⁵ Massachusetts Department of Education, School District Profiles, "foundationapp.xls," January 2000 <<http://state.ma.us/doe.html>>.

⁶ Master Plan Steering Committee, Housing Task Force, Housing Needs Survey, April 2001.

⁷ Bureau of the Census, Population and Housing, Summary File-3, 1990.

poverty in 1990.⁸ In addition, 126 persons (3.7%) between 16-64 years of age, and 92 persons (16.5%) aged 65+ had a mobility impairment or other disability.

Housing & Residential Development

Residential land use is the primary form of development in Merrimac today. In addition to established neighborhoods around Merrimac Square and along River Road in Merrimacport, residential development extends north of Route 110 along the valleys toward the New Hampshire state line. Since 1970, most of the growth along Merrimac's north-south roadways has consisted of incremental "Form A" lots, or house lots with enough area and frontage on a public way to be created without subdivision approval (see Map 2). The Merrimac Planning Board also endorsed several new subdivisions during the 1990s, however. In nearly all cases, lots approved by the Planning Board have culminated in building permits for new single-family homes. Between 1990-2000, the number of housing units in Merrimac increased by 12.2% but the amount of land used for residential purposes increased by 42.3%.

Housing Stock

For a small town, Merrimac has an unusual mix of homes. Although its 2,295-unit housing inventory is dominated by single-family dwellings (64.4%), even they differ by age, style, size and setting. The spacious, late 19th century residences on West Main Street and around Merrimac Square are distinct from the large homes in new subdivisions, just as the converted cottages at Lake Attitash are unlike the small capes and ranch-style homes in neighborhoods built during the 1950s and 1960s, or the garrisons of the 1970s. Large farmhouses and small homes dot the landscape throughout Merrimac, and along some of the town's oldest streets – Bear Hill Road, River Road, Middle Street, Birch Meadow and Main – stand numerous homes that pre-date 1800. Two-family and multi-family buildings, some owner-occupied, others for rent, along with elderly apartments and two mobile home parks enrich the town's housing stock and enable people from all walks of life to live here. Many turn-of-the-century mixed-use buildings with homes and businesses under one roof can be found all over town.

Despite Merrimac's colonial roots, its housing stock is relatively new. As Table 2-3 shows, over half of all housing units in Merrimac today were built after 1960. More significantly, over half of Merrimac's single-family homes were built after 1980. The completion of I-495 triggered a wave

⁸ Bureau of the Census, 1990. Note: the 1990 U.S. Census provides the most current official information on income and poverty for the nation. However, the survey conducted by the Master Plan's Housing Task Force supplements federal census data by providing a current window to Merrimac's economic characteristics.

of residential growth, and each decade since then has seen a relatively high rate of unit production, from a low of 225 units in the 1960s to a high of 351 units in the 1980s.⁹ Two decades ago, Merrimac experienced a surge of condominium development that produced 92 of the town's 123 condominium units (74.8%). There has been no multi-family development in Merrimac since then, although occasional two-family conversions continue.

Not surprisingly, Merrimac's newest single-family homes are larger than their predecessors. On average, homes built before 1940 contain 1,684 ft² of finished area, with 6.5 rooms and 3.0 bedrooms, and they occupy 1.1-acre lots. In contrast, single-family homes built between 1940-1969 are somewhat smaller: an average of 1,460 ft² of finished area with 5.4 rooms and 2.7 bedrooms, 0.89-acre lots. However, the newest homes – those built between 1995-2000 – are much larger and they also have absorbed more land: 2,230 ft² of finished area with 7.5 rooms and 3.3 bedrooms, 1.4-acre lots. Town-wide, the average size of a single-family home is 1,851 ft² (finished area), and the average lot size, 1.29 acres.¹⁰

Table 2-3 Homes in Merrimac by Residential Use Type and Approximate Age of Housing Stock

Housing Type	# of Units	% of Total	Year Built (All Unit Types)	# Units
Single Family	1,479	64.4%	1990-2000	281
Mobile Homes	224	9.8%	1980-1989	351
Condominiums	123	5.4%	1970-1979	322
Two-Family	246	10.7%	1960-1969	225
Three-Family	15	0.7%	1950-1959	151
Multi-Family	103	4.5%	1940-1949	133
Mixed Use	53	2.3%	<1939	832
Public Housing	52	2.3%		
Total Housing Units	2,295			

Sources: Bureau of the Census, Population and Housing, Summary Files 1 and 3, 1990-2000; Merrimac Assessor's Office, FY02 Parcel Data.

Condition of housing stock

Overall, Merrimac's housing stock seems to be in good condition. Local data indicate that more than 90% of the town's single-family homes, condominiums, two-family homes and multi-family buildings are "average" or better. To the extent that housing quality problems exist, they are more prevalent in the town's inventory of mixed-use buildings and on parcels with more than one house; respectively, 77% and 80% of these units rate as "average" or better.

⁹ Ibid.

¹⁰ Assessor's Office, Town of Merrimac, "bankertrademerrimac.xls," Merrimac parcel database supplied on diskette (January 2001; updated August 2001).

Housing market

Like countless other towns, Merrimac attests to the market's insatiable demand for large single-family residences, replete with modern amenities and landscaped yards. Two-acre zoning, moderately-priced land, the community's natural assets and its quality schools all contribute to making Merrimac attractive to single-family home buyers. Merrimac has also seen its housing prices escalate in recent years. The median sale price of single-family homes jumped from \$108,000 in 1990 to \$235,000 in 2000, for a decade-long increase of 118%. This includes all types of single-family residences located throughout the town, however, without regard to age, style or other distinctions. Recent data indicate that sale price growth is more dramatic for some homes than for others (see Table 2-4). For example, lakeside single-family homes – whether new construction or converted cottages – witnessed the largest categorical increase in median sale price in the past few years, from \$131,500 in 1998 to \$199,000 (52%). Condominiums and multi-family sale prices were similarly affected. These trends go hand-in-hand with an expanded sales volume. Since 1995, approximately 140 housing units have transferred each year.¹¹

Table 2-4 Detailed Sales History, Housing Units by Type/Location in Merrimac

Location	Median Sales Price			% Change
	1998	1999	2000	
Mobile Home	\$56,950	\$54,750	\$68,000	19.40%
Lakeside Homes	\$131,500	\$149,000	\$199,900	52.02%
Single Family	\$205,000	\$210,000	\$240,000	17.07%
Condominium	\$131,000	\$129,900	\$165,000	25.95%
Multi-Family	\$189,900	\$189,000	\$235,000	23.75%

Source: MLS, March 23, 2001.

The prevalence of single-family home development in Merrimac corresponds to a decline in rental occupancy. A decade ago, 77.7% of all occupied housing units in Merrimac were owner-occupied and 22.3%, renter-occupied. According to Census 2000, 82.9% of the town's occupied housing units are owner-occupied and 17.1% renter-occupied.¹² Merrimac has experienced not only a shift in the proportion of rental occupancy, but also an actual reduction in the number of renter-occupied units: from 425 (1990) to 383 (2000). A high rate of homeownership typically correlates with stability and creates a base for community investment. Conversely, a limited number of rental units can act as a barrier to population diversity by narrowing the field of housing choice.

¹¹ The Warren Group (January 20, 2001); Assessor's Parcel Data.

¹² Bureau of the Census, Summary File-3, 1990, and Summary File-1, 2000.

The Merrimac Housing Authority's executive director recently described rental housing in Merrimac as "non-existent."¹³ Many respondents to the Master Plan Steering Committee's survey seem to agree: 48% said the town has a rental housing shortage.¹⁴ Since monthly rents in Merrimac approximate HUD's Section 8 Fair Market Rents (FMR) for the Lawrence area,¹⁵ supply more than cost may be the town's primary rental housing barrier, but federal census data suggest that Merrimac also has a rental affordability gap. In 1990, 36.6% of Merrimac renters between the ages of 15-64, and 27.8% of those over 65, paid 30% or more of their monthly income on rent and utilities.¹⁶ In other words, they were "housing-cost burdened." Lower-income households comprised more than one-third of all housing cost burdened renters in Merrimac a decade ago. Among survey respondents who rent rather than own a home in Merrimac today, seven out of 10 reported incomes below 80% of the region's median family income level – the standard that defines "low or moderate income."¹⁷

Housing Affordability

The term "affordable housing" has several connotations. To some, it means subsidized housing: apartments or free-standing homes financed by tax dollars and occupied by low-income families, the elderly or persons with disabilities. To others, it means a modestly priced home that a town employee or school teacher could buy, an old house that needs work, or a "starter home" for young couples. Recently, it has come to include middle-class housing: homes that can be purchased or rented by people earning at or somewhat above the median household income in a given region. Coined in the 1980s by policymakers who wanted to change the public's attitude toward low-income housing, "affordable housing" is a euphemism that endures precisely because of its ambiguity.

¹³ Interview with Robert Mazzone, 5 April 2001.

¹⁴ Interview, Mazzone; Housing Task Force Survey, April 2001. In order to have a better sense of the community's housing needs and perceptions, the Master Plan Committee's Housing Task Force conducted a community-wide survey in April 2001.

¹⁵ Interview with Ed Madden, Ed Madden Real Estate, 23 March 2001. Mr. Madden could not specify average rents because the town's rental stock varies greatly even though it consists of a limited number of units. His estimated rents for Merrimac properties are nonetheless comparable to HUD's FY01 Fair Market Rents (FMR's) for the Lawrence MSA.

¹⁶ Bureau of the Census. By HUD definition, "affordable" rental housing means the combined cost of rent and utilities is equal to or less than 30% of a household's monthly gross income.

¹⁷ Housing Task Force Survey, April 2001.

To people who cannot find a home or apartment at a price that fits their household budget, affordable housing is an immediate, real-life problem. The shortage of housing affordable to lower- and middle-income people is gradually restructuring the age and class composition of growing communities, affecting everyone from the elderly to modest wage-earners and young families. Whether publicly subsidized or moderately priced in comparison to other homes on the market, “affordable housing” means this: for tenants, the cost of rent and utilities is equal to or less than 30% of the household’s monthly gross income, and for homeowners, the combined cost of a mortgage payment, insurance and property taxes is equal to or less than 28% of the household’s monthly gross income. Today, Massachusetts cities and towns are subject to two state directives on housing affordability:

- M.G. L. c.40B (the Anti-Snob Zoning Act of 1969) provides for a “comprehensive permit” that entitles eligible developers of low- and moderate-income housing to a streamlined approval process in communities where less than 10% of all housing units meet the statutory definition of “low- and moderate-income units,” i.e., subsidized by a federal or state housing program. The Massachusetts Department of Housing and Community Development (DHCD) maintains a “Chapter 40B Subsidized Housing Inventory” that identifies each community’s status under the 10% threshold.
- Executive Order 418 (January 2000) rewards communities that produce “housing affordable to a broad range of incomes” by giving them preferential access to a variety of state grant programs. “Broad range of incomes” means a continuum from very-low-income to 100-150% of median family income.¹⁸

Not so long ago, Merrimac contributed to the region’s supply of homes that sold at the lower end of the market. Since Chapter 40B does not recognize lower-end market housing as low-income housing, Merrimac’s affordably priced homes and cottages never counted toward the 10% statutory threshold but they were nonetheless important to maintaining the town’s socio-economic mix. About 560 single-family homes are assessed for tax purposes in a range that would be affordable to a median-income household: at or below \$169,600. This inventory of modest homes includes 300 or so that would be affordable to a moderate-income household *if* they were sold at a price comparable to their assessed value, meaning at or below \$150,000. They are generally smaller and older than the balance of Merrimac’s housing stock: 1,182 ft², 5.2 rooms

¹⁸ “Preferential access” means that communities in compliance with E.O. 418 receive bonus points or other competitive advantages when they apply for state grants. Cities and towns are currently required to demonstrate compliance by obtaining a “housing certification” that shows progress toward creating homes priced in a range affordable to low- and middle-income households.

and 2.5 bedrooms, built during the 1930s and located on lots of about .25 acres.¹⁹ About 64% carry a condition rating of “average” or “fair.”²⁰

While homes like these traditionally supplied avenues to homeownership in Merrimac, today their affordability is jeopardized by the same forces that have driven up home prices around Lake Attitash and in neighborhoods near Merrimac Square. The market seems to be attracting homebuyers in search of a good investment opportunity: a home that can be acquired at a relatively low price, renovated and modernized, resulting in a substantial increase in value. Building permit records reinforce what is visually evident from a tour of Merrimac today. Major alterations, substantial reconstruction and “gut-rehab” projects are a town-wide trend. The volume of reinvestment in older homes indicates Merrimac’s desirability, but as property values rise, the base of affordable homes will also decline. It is little wonder why CHAPA’s statewide housing study (2001) concludes that the estimated median family income in Merrimac today is \$54,394 shy of the income required to purchase a home at the town’s median single-family sale price.²¹

Merrimac’s two mobile home parks continue to provide low-cost housing and choice to small households. Despite their exclusion from the Chapter 40B subsidized housing inventory, the mobile home parks create a sizeable base of homes affordable to moderate-income households: nearly 10% of all housing units in Merrimac today. Table 2-5 summarizes the present inventory of affordable housing in Merrimac, considering both Chapter 40B low-income units and Merrimac’s mobile home communities on Route 110.

Table 2-5 Affordable Homes in Merrimac
(Estimated: 2002)

Housing Type	# of Units
Chapter 40B units	76
Mobile homes	230
Total	306

Sources: DHCD, Chapter 40B Subsidized Housing Inventory, October 2001); mobile home count est. 1990 Census. Merrimac’s Chapter 40B inventory consists of units restricted to elderly occupancy.

¹⁹ Assessor’s Parcel Data. Note: these figures do not include mobile homes.

²⁰ Ibid.

²¹ Citizens Housing and Planning Association, 2001.

Subsidized Housing

The state's Chapter 40B subsidized housing inventory shows that 76 units, or 3.33% of all year-round homes in Merrimac, qualify as low- and moderate-income housing. For Merrimac, Chapter 40B units include both conventional public housing and subsidized but privately owned affordable housing, in all cases restricted to elderly tenants. The Merrimac Housing Authority owns and manages 52 units of senior housing, including 48 one-bedroom, elderly apartments in "Merri Village" and four scattered-site family units. Carriage Square, a privately managed complex financed by the U.S. Department of Agriculture, provides 24 units of elderly housing.

Two years ago, the Zoning Board of Appeals approved a comprehensive permit for a 24-unit "Local Initiative Program" (LIP) condominium development on Broad Street. The permit calls for a mix of two- and three-bedroom units, 18 to be sold at market prices ranging from \$129,000-\$160,000, and six lower-income units priced at \$65,500-\$67,500. To date, the project has not been built because the property owner wants to sell the land and transfer the comprehensive permit to a new developer.²² More recently, the town has been asked to approve three Chapter 40B developments, all of which are pending before the Zoning Board of Appeals. One would serve "over-55" households, another is a 468-unit rental complex proposed for 70+ acres on East Main Street, and the third is a proposal to add 30 apartments to an existing 28-unit rental development on West Main Street.

A limited number of HUD Section 8 rental vouchers are administered by the Merrimac Housing Authority. Section 8 vouchers defray a portion of the monthly rent for lower-income tenants living in private, market-rate rental units. The Section 8 waiting list is very long and has been closed for two years. Merrimac residents receive priority for available vouchers.²³

Local Economy

Merrimac's economy consists mainly of small businesses, a handful of industries, service organizations and the self-employed. A large amount of land is zoned for commercial and industrial use, mostly along Route 110, but the majority of Merrimac's business-zoned land remains vacant or underutilized. As Route 110 passes through Merrimac from Amesbury to Haverhill, its character changes considerably. Pockets of low-intensity automotive, trucking, storage and contractor-related uses, a few small industries, modest retail establishments and

²² Interview with Sandra Venner, 13 April 2001.

²³ Interview, Mazzone.

private homes line both sides of East Main Street. From Merrimac Square to the Haverhill line, Route 110 becomes more residential, although West Main Street has a number of small businesses and a large amount of open land. In contrast to Merrimac's history as a vital industrial center, economic development plays an insignificant role in the town's character, land use pattern and tax base today.

Less than three percent of Merrimac's land area is devoted to commercial and industrial activity today, but current conditions belie the significant, untapped development potential of business-zoned areas on Route 110. Under the town's zoning bylaw, the potential is six times today's inventory of commercial and industrial space. The enormous gap between what exists and what could exist in the future owes mainly to a lack of market demand for commercial real estate. As the population in and around Merrimac increases, the market for commercial land is apt to increase as well. The limited scale of industrial development in Merrimac seems less prone to change, however. Although the town allows industrial land uses in the commercial zone on Route 110, its industrial districts are tied to land that is poorly suited for development. Not surprisingly, most of the land is vacant or used for municipal purposes, e.g., the wastewater treatment plant.

Today's economic development profile differs significantly from that of a century ago, when Merrimac was as an industrial hub surrounded by farms. A town where people once lived and worked has gradually become more suburban – if not in appearance, then in its dependence on nearby cities and major employment centers for wages, goods and services. Market forces have worked to minimize economic growth in Merrimac and reinforce the town's residential character. Instead, neighboring Haverhill and Amesbury absorbed most of the commercial development that has occurred along Route 110 in the past 20 years. Access to public utilities, total market demand, the economic gains that businesses achieve by locating in close proximity to each other, and local development policies collectively account for the greater amount of business growth on either side of Merrimac.

Owing to the small size of Merrimac's business base and predominantly residential character, the town has neither a development office at town hall nor a Chamber of Commerce. Regional organizations – the Greater Haverhill, Greater Newburyport and Merrimack Valley Chambers – provide some companies in Merrimac with the services, news, and advocacy help that a Chamber typically brings to a community. In addition, the three-year-old Merrimack Valley Economic Development Council (MVEDC) promotes job growth throughout lower Merrimack Valley by bringing development resources into the region, helping to retain and recruit companies, and improving relationships between local government and business. MVEDC obtained an Economic Target Area (ETA) designation for Salisbury, Amesbury, Merrimac and Haverhill last year.

Employment

Local businesses play a very small role in the region's employment base. According to the Massachusetts Department of Employment and Training (DET), Merrimac's 122 business establishments employ 963 people, or less than one quarter of one percent of Essex County's overall employment.²⁴ The local workforce consists of 278 people (29%) in government jobs and 685 people in private-sector jobs. Manufacturing still represents the largest single generator of private employment in Merrimac, but in 1999, it accounted for just 212 workers and 22% of all jobs in the community. Merrimac's other employment sectors report very modest annual totals. Those employing more than 100 people include retail trade, personal and business services, and government.

In the past 15 years, town-wide employment seemingly grew by 299 jobs, or 45%. Public employment accounts for 128 of these jobs, but what appears to be public-sector job growth actually reflects a change in reporting methodology more than an increase in government employment.²⁵ Since 1990, the local economy has generated 126 private-sector jobs (about four per year) while 23 new businesses were formed, for a 23% increase in the number of employers and a ratio of 5.5 new jobs for every new business. Most of Merrimac's job growth has been in personal services, an industrial sector often characterized by lower-wage jobs. Together, the narrow base of business establishments, minimal job growth and the disproportionate growth of lower-paying jobs act as a mirror-image of Merrimac's residential character.

Manufacturing has declined in Merrimac just as it has throughout the Merrimack Valley labor market area. However, since 1985 the number of manufacturing jobs dropped less sharply in Merrimac than in other communities nearby: 5% locally, 19% regionally, and nearly 30% statewide.²⁶ The town's manufacturing establishments are unobtrusive – tucked away in wooden buildings like Lynn Sign, where Merrimac Tool operated until the company relocated to Amesbury, or set back from the road in low-rise facilities like Wolverine – and they do not lend an “industrial” image to the community.

²⁴ The employment statistics cited here exclude two categories of jobs. DET's employment data do not include self-employed individuals. In addition, employment in agriculture, forestry and fishing in Merrimac involves such a small number of people that DET classifies the job and wage data as confidential. The estimated number of jobs in this industry sector is 8 (963 total jobs reported by DET – 955 jobs accounted for in data released to the public).

²⁵ DET, February 2002.

²⁶ Ibid.

Across the primary employment-by-industry categories that state and federal economic agencies track, no particular sector typifies Merrimac because its overall job base is so small. In the main, Merrimac's economy is comprised of commercial concerns that serve a local rather than regional trade area, and small industries. More often than not, local residents must travel outside the community for goods and services – and clearly, for work. Since 1985, the average wage paid by Merrimac employers rose 92%, from \$15,588 to \$29,959, for an annualized increase of 6.1% per year. However, the average

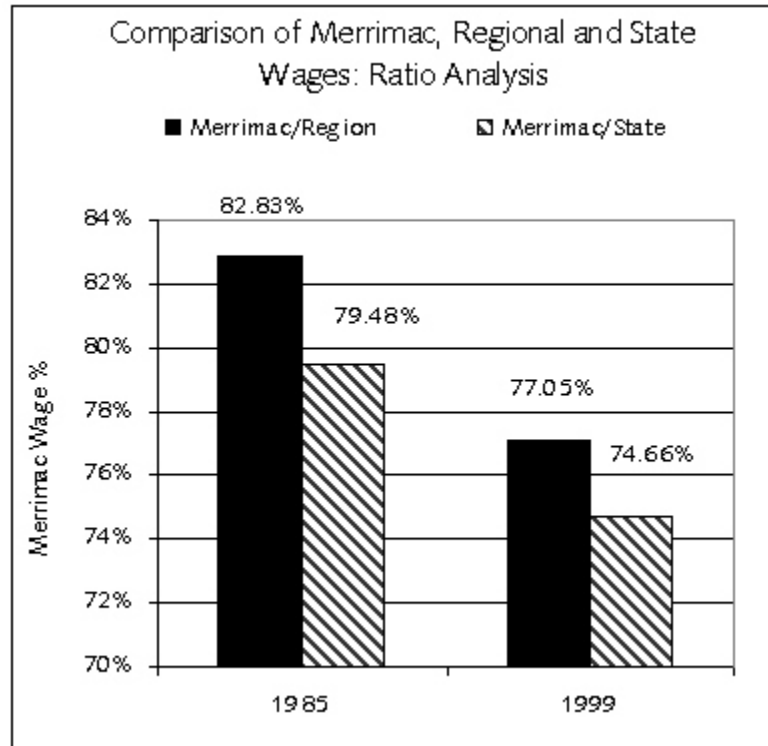


Figure 1

annual wage in Merrimac as of 1999 was only 75% of the statewide average of \$40,102 (see Fig. 1). Thus, while local wages have increased, they fall well below statewide norms. This is true not only for the average of all Merrimac wages, but also for average weekly wages paid in selected employment categories representing 68 business establishments.

Each spring, HUD releases new income limits for its subsidized housing programs. The income limits are calculated against the estimated median family income in each metropolitan statistical area (MSA) and the non-urban sections of counties. Although the Boston metropolitan area's median family income traditionally ranked at the top of the list statewide, last year's data indicate that the geographic distribution of wealth in Massachusetts may be shifting slightly. The Lowell MSA now exceeds Boston, and the Lawrence MSA ranks fourth, just below Nantucket County.²⁷ The upward movement of family incomes in and around Lowell and Lawrence suggest not only a trend toward greater affluence across Merrimack Valley, but also that the region's economy is strong enough to support an increasing number of high-paying jobs. Merrimac is one of 10

²⁷ U.S. Department of Housing and Urban Development (HUD), HUD Income Limits (29 March 2001), downloaded from the Internet at <<<http://www.huduser.org/datasets/il.html>>>, last updated 6 April 2001.

communities in the Lawrence MSA.²⁸ Between 1985-1999, average annual wages in the Merrimack Valley labor area, which includes all of Lawrence's and most of Lowell's MSA, grew by 107% while across the Commonwealth, wages grew by 105%. However, the average annual wages for jobs in Merrimac failed to keep pace with either regional or statewide change (92%).²⁹

The wage gap, the town's limited number of jobs, the types of businesses located in Merrimac, and the amount of vacant and underutilized commercial land all point to a small, relatively weak economy. They also illustrate a significant disparity between the cost of living in Merrimac and the economic value of the local employment base. Merrimac does not have a "primary" wage-earner economy, a fact reinforced by the 3.6-to-1 commuter-to-local employment ratio that exists in town today.

Labor Force

Merrimac's labor force consists of 3,404 people today.³⁰ Compared to the town's 1990-2000 population increase of 18.8%, the labor force grew more at a somewhat faster pace, 22.8%.³¹ Most of Merrimac's employed residents are commuters: people who leave town each morning and return at night, traveling anywhere from 15 minutes to more than an hour to their places of work. Although Census 2000 employment, education and workplace data are unavailable, the last decennial census and historical information from the federal Bureau of Labor Statistics (BLS) supply insights that merit review. Of the town's 2,770 employed people in 1990, 76% worked in Essex County, nearly 17% worked elsewhere in Massachusetts (mainly in and around Boston) and 7% held out-of-state jobs. That nearly 94% of the town's working people traveled by car or bus to out-of-town locations underscores that Merrimac residents were a labor force of commuters at the time, and the size of the present job base suggests that this condition holds true today. Ten years ago, 162 people (6% of all workers) either worked at home or they walked or bicycled to a local job.³² Possibly, more residents work locally today, but given the small number and relatively low

²⁸ HUD, "FY 2001 List of Counties and New England Towns Identified by Metropolitan and Non-Metropolitan Status," 10 April 2001.

²⁹ Statistics derived from DET ES-202 Series: "Employment by Place of Employment," updated April 2001.

³⁰ Ibid. Note: data not seasonally adjusted. Labor force count reflects conditions as of April 2001.

³¹ Bureau of the Census, Census 2000; DET, estimate as of April 2000.

³² Bureau of the Census, 1990. Note: labor force data reported by the federal Bureau of Labor Statistics (BLS) differ from the decennial census for several reasons. The 2,656 employed

wages of jobs in Merrimac compared to the cost to live in town, it seems doubtful that the trend toward out-of-town employment, which began in the 1940s, has reversed to an appreciable degree.

Merrimac's unemployment rate of 2.4% (April 2001) falls well below regional and state averages. Low unemployment often correlates with an educated and skilled population: people who can compete for primary wage-earner jobs in the regional labor market. Thus, the town's small, largely lower-wage economy has had no discernable impact on local unemployment and it appears to have little if any relationship to the economic well-being of most residents of Merrimac. A general disconnect exists between the structure and size of the local economy and the employment pursuits of local residents. While this condition characterizes countless suburbs, in Merrimac it represents a striking reversal of the local economy's role a century ago.

Since Merrimac's population is increasingly well educated, it stands to reason that many residents today compete successfully for higher-paying jobs in the region. A decade ago, 30% of the town's over-25 population held a college or graduate degree; more than half had completed high school and, in many cases, some years of college. Still, the town's labor force is not dominated by a class of elite workers. In 1990, Merrimac residents worked in a broad range of occupations, and yet the data also reinforce that townspeople have careers and skills which differ significantly from the jobs generated by local establishments. Since virtually all of Merrimac's post-1990 residential growth has consisted of single-family homes and the median housing sale price has risen considerably, it appears that the tendency toward non-local jobs for primary employment has at least held constant and may in fact have increased.

The economic, lifestyle, transportation and childcare consequences of job commutes have spawned a "work at home" movement nationally, and it takes two forms. One involves self-employment and the second is a significant increase in "telecommuting," or the practice of salaried employees working at home for all or a portion of the work week. Master plans often ignore self-employment (and home-based businesses in particular), focusing instead on the kinds of commercial and industrial development that bring jobs and tax revenue to municipalities. However, employment in the home may have substantial implications for zoning and the local economy, particularly in small towns like Merrimac.

residents identified by the Census Bureau in 1990 reflect conditions measured in March 1989. BLS collects and maintains monthly labor force and unemployment counts, which can vary significantly from month to month. BLS also reports annual data establishments and employment data, relying on information from employers covered by unemployment insurance laws. While BLS statistics exclude some job classes, e.g., self-employed persons with no employees and agricultural workers, the decennial census captures both.

There are no systematically collected data on the number of self-employed people in Merrimac, but residents report that local entrepreneurs are increasingly common.³³ Anecdotal evidence exists throughout town that professionals, artists and crafters, tradesmen, child care providers and others work full- or part-time out of their homes, thereby supplementing Merrimac's long-standing base of self-employment: the families that grow and sell local farm products. Personal property tax records, business cards left in local restaurants and stores, the community's telephone directory, the observations of bankers, and signs large or small, legal or illegal, posted outside homes and on the front of garages, barns and sheds all show that income-producing activity takes place in Merrimac in ways that conventional data sources do not capture.

If Merrimac is at all comparable to national trends, home-based business activity often contributes some but not all of a typical entrepreneur's income. A 1997 survey conducted by federal Bureau of Labor Statistics (BLS) shows that men and women are about equally represented among the nation's 4.1 million self-employed people who work from home. However, women conducting a home-based business are more likely than men to spend a majority of their work hours at home, and they also tend to work less than a 40-hour week. On average, women employed in a home occupation work 81% of their hours at home, and their average work week is 31 hours. Personal and business services constitute half of all home-based businesses nationally, and a plurality of all home-based businesses are owned by those in management and professional occupations.³⁴

According to the Merrimac Town Clerk's registry of business certificates, 155 people work for themselves at an in-town location – either at home or in commercial space. Approximately 20% are women operating a business from their homes. Home-based employment has increased modestly since 1990, but during the past three years, about 20 home occupations apparently ceased in Merrimac.³⁵ In some cases, the owners moved out of town. Others may have switched to wage or salary employment or a new venture, or pursued different activities. Fluctuations in the number of actively self-employed people in Merrimac underscore that establishing and running a profitable small business is difficult, a fact that partially explains the growing popularity of

³³ Peter Bearse for Master Plan Committee Economic Development Task Force, "Major Features of an Economic Development Strategy for Merrimac, MA," 27 May 2001.

³⁴ Bureau of Labor Statistics, *National Survey of Work at Home*, Table 5: Home-Based Businesses, Self-Employed Persons by Selected Characteristics, May 1997. The BLS study of home-based employment was carried out in tandem with the U.S. Census Bureau's 1997 Economic Census.

³⁵ Merrimac Town Clerk, "Business Certificates," unpublished database file last updated 9 February 2001. It is highly likely that more residents work as home-based entrepreneurs than the numbers contained in local records; for various reasons, some people do not file d/b/a certificates at a city or town hall.

“microbusiness incubators,” which offer low-cost space and shared facilities to emerging businesses and industry.

The advent of telecommuting and “e-business,” made possible by email, the Internet, fax and other technology, means that some residents who traditionally drove to out-of-town jobs each day now work out of their homes in Merrimac. In fact, they may constitute an increasing share of the town’s at-home workers, perhaps outpacing the growth of home-based businesses. During the 1990s, nationwide growth in the work-at-home labor force was far more pronounced among wage and salary workers than the self-employed, and 88% of all employees who work some of their hours at home hold white-collar jobs.³⁶ More than 20% of all people who work at home today, whether as salaried workers or self-employed individuals, have children under 18.

Tax Base

Commercial and industrial taxpayers account for 6% of Merrimac’s total assessed value and its property tax revenue today – down from 10% in 1989. According to local data, the commercial base consists of about 44 acres of developed land, located primarily in Merrimac Square, on Broad Street and along Route 110. The industrial base is comprised of 93 acres on East Main Street, Liberty Street and Federal Way. The town also has about 245 acres of vacant commercial and industrial land, although only 147 acres are assessed as developable. Although typically the percentage of tax revenue generated by land used for business and industry exceeds the percentage of commercial and industrial acreage in a community, in Merrimac this is not so. Of the 4,969 acres of land accounted for in the assessor’s records, nearly 383 acres are taxed as commercial and industrial property: 7.7%. The significantly low revenue yield of business-zoned property in Merrimac reflects both the amount of vacant land and a sustained pattern of underutilized land on Route 110. It is not a function of assessment practices or tax rate. Merrimac’s tax rate is at approximately the mid-point of tax rates in the immediate region.

It would be simple but misleading to characterize all of Merrimac’s remaining tax base as residential. In fact, the town has nearly 862 acres of agricultural land and buildings on the tax rolls, with a combined assessment of more than \$3.6 million – 17% of all taxable acreage and 1% of the town’s total assessed valuation.³⁷ About 40 parcels in Merrimac are classified as mixed-use properties; excluding farms, the combined assessment of land and buildings that support a

³⁶ BLS, “Work at Home in 1997,” (press release), March 1997.

³⁷ Assessment figures include farm buildings and adjacent land, and farmland taxed separately under M.G.L. c. 61A. Source: Assessor’s Parcel Data, and Massachusetts Department of Revenue (DOR), Municipal Data Bank.

business and a dwelling unit is \$7.4 million, or 2% of the town's total assessed valuation.³⁸ Despite the limited assessed value contribution of Merrimac's farms and old mixed-use buildings, they are an important element of the economy in a town that has chosen to remain small. Merrimac's largest taxpayers reveal the mix of small-scale economic activity that exists here today: real estate, residential, and agricultural uses, with a very limited industrial presence.³⁹



New homes set against rural landscape (February 2001)

Natural Resources

Steeply sloped land and wetlands comprise 9-10% of Merrimac's total land area and about 17% of its remaining vacant land. They have an important role as agents of preserving open space and rural character because they provide natural constraints against development. Features such as wetlands, open water and very steep hills historically influenced the location of Merrimac's roadways: the network of streets that run from the northern border to the Merrimack River, and the lateral routes connecting Amesbury to Merrimacport (Middle Road to River Road) and Haverhill (Route 110). The interplay of natural features and Merrimac's grid of colonial roads will continue to influence development, making them key considerations in any proposal to guide future development. Map 3 shows the general location of these and other key community resources.

Merrimac's valleys and large hills represent the essence of its open space. In Merrimac, "open space" means more than pockets of open and forested land. Rather, it encompasses broad valleys and active farmland, visually and physically bordered by hills and forests. Together, they form a natural enclosure that makes the local landscape a vital part of Merrimac's sense of place. Views from the road in northern Merrimac and the enduring presence of agricultural activity are critical land use characteristics. Arguably, some of the town's natural vistas have been altered, but in many areas the quintessential New England landscape endures here today. This significant resource is essential to understanding the problems and opportunities of growth in Merrimac.

³⁸ Ibid.

³⁹ Town of Merrimac General Obligation Bonds Prospectus, December 1999.

Among Merrimac's striking natural assets are its open water resources, notably the Merrimack River and Lake Attitash, one of the Commonwealth's Great Ponds. These large water bodies and their tributaries play a significant role in defining the town's scenic beauty and sense of place. They also provide recreational opportunities to residents and visitors. Over time, extensive development has occurred along the banks of the Merrimack River and in particular, the shores of Lake Attitash. Their capacity to withstand further development is a critical issue for Merrimac and neighboring communities, particularly the City of Amesbury, which occupies more than 50% of the shoreline and relies on Lake Attitash as a drinking water source.

Merrimack River

The Merrimack River runs along the entire southern edge of Merrimac and it has indelibly shaped the character of the town. Not only is the river a crucial environmental resource and a scenic gateway, but it also played a decisive role in the town's history and that of the greater Merrimack Valley. Merrimac is located along the final stretch of the river's 44-mile course from Lowell to Newburyport. The Massachusetts Division of Water Pollution Control classifies Merrimac's section of the Merrimack River as "Class B," or water quality adequate to support fishing and recreation. Here, the river may be used for recreational boating and swimming (but no public beaches exist), water skiing and fishing. While there is very little buildable land left on the riverfront, incremental development is likely to continue, along with private docks and floats. In Merrimac, public access is limited because most of the land is privately owned, including one private marina. The town owns several small parcels, including Creek Landing, Carey Memorial Park, Cottles Landing and the Duck Hole, but these sites provide only passive recreation opportunities. The closest boat ramps on the Merrimack River are in Amesbury and Haverhill.

Merrimac joins 23 other Massachusetts communities that occupy part of the Merrimack River watershed, and at least three of the town's streams flow directly or indirectly into the river. They include the East Meadow River, which drains into Haverhill and feeds the Millvale Reservoir, Cobbler's Brook, which runs through Merrimac's geographic center and empties into the Merrimack River, and the Back River on the Merrimac's eastern border, which empties into Lake Attitash.⁴⁰

Lake Attitash

Located in the northeast corner of Merrimac, Lake Attitash is a 360-acre natural lake in the Powwow River sub-watershed of the Merrimack River watershed. Over time, the shoreline of Lake Attitash has undergone moderate- to high-density levels of development in both Merrimac and Amesbury. Former summer cottages in Merrimac have been winterized and renovated into year-

⁴⁰ Town of Merrimac, Open Space Plan (Draft, 1997).

round homes, and new development continues incrementally on the remaining undeveloped parcels.

Lake Attitash provides scenic vistas and extensive recreational opportunities. In the summer, recreational boaters and shorefront property owners use Lake Attitash for swimming, fishing and water skiing. Winter activities include ice skating and ice fishing. A public boat ramp with a parking area, operated by the Massachusetts Department of Environmental Management (DEM), provides access for both Merrimac residents and non-residents. The other public access point is the town-owned Indian Head Park on the southern shore, which includes a parking lot and a swimming beach.

Intensive shoreline development and extensive public use have contributed to declining water quality at Lake Attitash. Although designated as Class A, Lake Attitash qualifies as hyper-eutrophic – where nutrient levels run very high – and its overall water quality has deteriorated in the past decade.⁴¹ Excess nutrients have resulted in the growth of nuisance aquatic plants and low dissolved oxygen levels. While the origin of nutrients has not been confirmed, the suspected cause is a collection of non-point sources, e.g., agricultural and residential run-off, and storm water discharges from overland flow and storm drains. Nutrient loading stands as the most serious threat to the lake's water quality as algae and aquatic weed growth continues.⁴² Ironically, the upgradient location of farmland near Lake Attitash presents an environmental management dilemma for Merrimac. Agriculture is a central part of the town's character and economy, but farm practices can also be harmful to surface and groundwater resources.

Since Lake Attitash serves as one of Amesbury's drinking water supplies, the city manages the lake in accordance with a Watershed Management Plan prepared by Camp, Dresser and McKee (1999). Amesbury needs to maintain an adequate supply of drinking water and a high water table, so the city controls the height of the lake, which in turn affects residential development along the shoreline. During periods of intense rain, many Lake Attitash properties become flooded. In addition, residential and agricultural development throughout the watershed, and particularly along the shore, has affected the lake's water quality. On both the Amesbury and Merrimac sides, storm water drainpipes from roadways discharge directly into Lake Attitash without any sedimentation or other treatment control. Extensive paving at DEM's boat ramp exacerbates the runoff problem. Furthermore, clear cutting for homes along the shoreline has removed vegetation that otherwise would provide a natural cleansing system for runoff from surrounding farms, homes and streets. In particular, runoff from fertilizers used on agricultural land and residential lawns may be a major contributor to the overgrowth of native vegetation and weeds. Boat

⁴¹ Camp Dresser & McKee, Town of Amesbury Lake Attitash Watershed Management Plan: Executive Summary (January 25, 1999).

⁴² Open Space Plan, 23.

propellers that are not cleaned before they enter Lake Attitash could also be introducing invasive or non-native species.

The City of Amesbury's Lake Attitash Watershed Management Plan includes provisions to control runoff and lower the lake to kill new plant growth, particularly in the winter. The city recently approved a bond issue to install water and sewer lines in the Meadowbrook area, where homes are currently serviced by private wells.

Cobbler's Brook

Merrimac's secondary waterways include numerous perennial streams and brooks, including Cobbler's Brook, the Back River, and Silver Brook. The quality and character of these resources vary due to historical development along their banks. Particular attention has been paid to water quality in Cobbler's Brook, a 3.7-mile perennial stream that flows from Red Oak Hill near the Newton boundary through the center of Merrimac to the Merrimack River. Development activity along Cobbler's Brook has been extensive, including residential areas and Merrimac's municipal landfill. The landfill, built during the early 1960s, was capped in 1997 but it is not lined. Periodic groundwater testing has been conducted to monitor for contaminants. In 1990, the Massachusetts Department of Environmental Protection (DEP) included Cobbler's Brook in a study of all unassessed waters in the Commonwealth. DEP rated Cobbler's Brook's overall water quality as Class B, but tests in a section downstream from the Mill Street Bridge revealed "unknown toxicity" where a small feeder stream carried discharge from an adjacent metal finishing company. DEP's study suggested further that storm water runoff may be a source of pollution to Cobbler's Brook.

More recently, the Massachusetts Watershed Initiative Program (MWIP) also examined conditions along Cobbler's Brook. MWIP, an arm of the Executive Office of Environmental Affairs (EOEA), conducted a review of the Merrimack River Watershed and any rivers and streams with potential pollution concerns identified earlier by DEP. The metal finishing company referenced in DEP's study has since connected to Merrimac's Wastewater Treatment Facility, but MWIP's "Stream Team" surveyed the entire length of Cobbler's Brook, documenting physical conditions and identifying issues such as trash, beaver dams, vegetation debris and overgrowth, water clarity, and erosion. The study also identified the Brook's assets, e.g., wildlife habitats and its scenic qualities. The results were compiled in a Shoreline Survey Report and Action Plan.⁴³

The "Stream Team" recommended a list of immediate, short-term and longer-range protective actions. Among the short-term actions are planning a public trail around Walker's Pond and water quality monitoring at five sites along Cobbler's Brook. The long-term actions include town-wide

⁴³ Massachusetts Watershed Initiative Program, Shoreline Survey Report and Action Plan for Cobbler's Brook in Merrimac (August 1999).

clean-up days and periodic checks on noted oily sheens and PVC storm pipes. Many of these steps have been or are being addressed. The report also recommends further investigations at Wallace Pond, where steep banks along Cobbler's Brook were highly unstable and algae growth and rusty scum indicate severe erosion problems.

Wetlands

The town's numerous streams, brooks and rivers all contain small areas classified as wetlands under M.G.L. c.131, §40. One important wetland community extends along the length of the Back River from the New Hampshire border to Lake Attitash. Another wetland area lies south of Lake Attitash near the town's well field, and to the west of Bear Hill Road. Between Red Oak Hill and Long Hill, there is also a large community of bordering vegetated wetlands around a tributary to Cobbler's Brook and Silver Brook. The vicinity of Veal's Pond on the Haverhill border and the southern portion of Long Hill also contain wetlands. The Merrimac Conservation Commission has obtained certification of two vernal pools.

Geology and Landscape Features

The topography of Merrimac is as character-defining as its water resources. Red Oak Hill, the highest point in town, peaks at 315 feet above sea level. Rolling hills and steeply sloped terrain extend throughout northern Merrimac, separated by open plains, meadows and pastures. This quintessential New England landscape is evident at virtually all of the town's gateways, although man-made changes and neglect sometimes degrade the scenic quality of these areas. Not surprisingly, the terrain is ideally suited to agricultural land uses and in most places, to residential development as well.

Merrimac has several drumlin (glacial) formations and glacial plains. Its soils fall into three types or associations: Hinckley-Windsor-Merrimac, Paxton-Woodbridge-Montauk, and Canton-Charlton-Sutton (see Fig. 6). The Hinckley-Windsor-Merrimac association runs generally from the Merrimack River to New Hampshire, in a band of about ½ mile in width along the eastern end of town, and in a smaller pocket near Brandy Brow Hill to the west. From the western shore of Lake Attitash to New Hampshire and in a stretch from Winter Street to the Merrimack River, there are two deposits of the Paxton-Woodbridge-Montauk association. Canton-Charlton-Sutton soils extend north from the Merrimack River through the center of Merrimac into New Hampshire. All of these soil classifications are reasonably well suited for developed land uses. Save for the location of wetland and water resources and the intrusion of steep slopes, there are few natural constraints against the community's future development.

Forested Land

Stands of mature forests in the northern and western sections of Merrimac are another important natural resource. While many of these groves are privately owned, one of the largest stands has been permanently preserved as the Town Forest, a 289-acre area between Highland and Birch Meadow Roads. Efforts to augment the Town Forest have continued over the years, and just recently Merrimac voters agreed to purchase another small, privately owned parcel. There are two formal entry points to the Town Forest, one off Winter Street, the other at the closed Town Landfill on Battis Road, but the land is open and generally accessible along Highland Street.

Cultural Resources

From the early 19th-century homes of Merrimacport to the Victorian-style commercial structures in Merrimac Square and the agricultural landscapes of northern Merrimac, the town has a wealth of historic resources that span more than 200 years and reinforce its unique cultural identity. Architectural styles, agricultural outbuilding locations and remnants of earlier industrial eras all signal the historical, social and economic evolution of the town into two distinct villages, Merrimacport and Merrimac Center, and a number of districts, e.g., Birch Meadow, Bear Hill, Highlands and Lower Corner.

Architectural Traditions

Originally settled in the early 18th century, Merrimacport is an exceptionally well-preserved village of Georgian, Federal, Greek Revival, and early Victorian-style buildings. Merrimac Center (which includes Merrimac Square) developed in response to the burgeoning carriage industry, which gained profitability in the latter half of the 19th century. The grand Victorian-style homes along West Main Street, with their extensive architectural embellishment, were built for owners and managers of the numerous carriage shops and they attest to the affluence that industry brought into Merrimac. Smaller-scale worker's housing, built on secondary roads, still exists here as well. The carriage industry further contributed to the commercial and civic development of Merrimac Square. Large three-story brick buildings that housed carriage findings businesses, such as the Poyen Block (1886) and the Little & Larkin Block (1882), remain today, as do several mill buildings from one of the town's first carriage businesses, Sargent, Harlow & Company. Collectively, these well-preserved buildings represent a unique collection of Victorian commercial architecture with decorative brickwork, including corbelled cornices and arched windows with keystones. The northern end of Merrimac retains the visual landmarks of its early agricultural

heritage, with its undeveloped fields, extensive vistas and several remaining farms with their associated buildings.

Institutions

Voters recently appropriated funds to build a new library, a move that will effectively decommission the historic 1929 Thomas H. Hoyt Memorial Library in Merrimac Square. The 1876 Sargent Hall, a well-preserved example of Gothic architecture, houses both the Town Hall and the Merrimac Museum. A unique historic and cultural resource, the Merrimac Museum dates to 1976, when local residents formed a non-profit group to manage a vast array of artifacts and ephemera documenting the social, economic and architectural development of the town. Sargent Hall was constructed with the financial support of William P. Sargent, the son of a carriage maker. In keeping with the building's history, the Museum holds an extensive collection from Merrimac's carriage and custom auto body industries. Actual carriages, industrial tools, marketing materials and building products are on display, along with materials depicting the post-Depression business ventures that replaced carriage production: the manufacture of diners and campers. The Museum also displays rare pieces of 18th-century redware pottery, agricultural tools, furniture, textiles and artifacts from the town's schools, military and social organizations.

Merrimac has another institution dedicated to preserving the community's heritage. The Old Sawyer House Museum, operated by the Town Improvement Society, is a historic house museum on East Main Street. Built between 1725-1757, the Sawyer House was purchased by the Merrimac Town Improvement Society in 1909. The Georgian-style home now serves as a house museum with local historic artifacts, including furniture and a loom that dates to c. 1675, spanning many styles and periods. It occupies a 17-acre parcel that abuts Cobbler's Brook. The Landing School, an 1857 one-room schoolhouse, is located on the same site. Originally built on Locust Street, the Landing School was relocated to the Sawyer House property in 1972.

Other Resources

Less obvious but important historic resources that contribute to Merrimac's cultural environment include cemeteries, parks, scenic roads, bridges, inland meadows, and heritage trees. Merrimac has three local burial grounds that are managed by an elected board of cemetery trustees and part-time staff. The Church Street and Lower Corner cemeteries are the earliest designated burial grounds and they display the community's oldest monuments. These two cemeteries receive little use today. Locust Grove Cemetery, a Victorian-era cemetery, is the most active and is expected to provide adequate burial space for many more years.⁴⁴ Heath Road Cemetery is a private family plot.

⁴⁴ Richard Fournier, Merrimac Cemetery Trustee.

While many of Merrimac's roads maintain their rural character, with narrow paving, winding routes and scenic vistas (particularly in northern Merrimac), River Road appears to be the only one that town meeting has designated as a Scenic Road. For local roads designated under the Massachusetts Scenic Road Act (M.G.L. c.40, §15C), the Planning Board is supposed to review the removal of any trees and stone walls located within the public way. In Merrimac, the Planning Board cannot exercise the same jurisdiction over tree or stone wall removal on other local streets because the town has not applied the Scenic Road Act to other parts of town. Another historic transportation route, the McLaren Trail, contributes to the community's sense of place by putting the original Boston & Maine railroad link to use as a recreational trail. Lack of maintenance and overuse has caused the trail to deteriorate, particularly at one of its most character-defining elements, the historic stone railroad bridge over Harriman Road.

Documentation

Merrimac conducted a partial historic resources survey in 1980. The inventory forms are stored in the Merrimac Museum and at the Massachusetts Historical Commission (MHC), which also has photographs. Although Merrimac has records of its historic buildings, the inventory is more than 20 years old and it lacks the historic, architectural and contextual documentation required today. Moreover, like other surveys conducted at the time, Merrimac's focused primarily on 18th- and 19th-century residential structures, omitting both non-residential buildings and sites and 20th-century resources. Merrimac has well-preserved examples of early 20th-century architectural styles, such as Craftsman-styled bungalows, and mid 20th-century objects such as the Skip's neon sign on East Main Street.

Historic agricultural vestiges such as outbuildings, barns, silos, stone walls and tilled fields also reinforce a town's sense of place, as do its open spaces and scenic landscapes. Merrimac has many landscapes that retain their agricultural character and naturally scenic qualities. These sites have not been surveyed or fully documented as part of the town's historic inventory. Most of the sites are unprotected from adverse development, but two parcels are protected permanently by Agricultural Preservation Restrictions (APR). One of them, Sargent Farm on Bear Hill Road, has been owned by the same family for at least seven generations and has been in operation for more than a century.

Voluntary private efforts to preserve historic buildings are evident throughout Merrimac, but formal public measures to identify and protect the town's architectural treasures have not been realized. No buildings in Merrimac are listed on the National Register of Historic Places, a federal listing of historic buildings, sites and objects. The town also has no local historic districts (LHD) pursuant to M.G.L. c. 40C. Finally, the absence of a demolition delay bylaw meant the town had no authority to intervene when the former American Legion Hall and the last remaining building of the Whittier Home School, both within Merrimac Square, were demolished.

Open Space

Merrimac has about 1,625 acres of open space: conservation land, recreation areas, water supply and school sites, parks, an assortment of town-owned land that serves general community needs, and farms. The town's most recent open space inventory is summarized in Table 2-6.

Approximately 60% of the open space in Merrimac today is owned or managed by various town departments, including the Conservation Commission, the Board of Water Commissioners, the Board of



Merrimack River – View from Merrimac to West Newbury (2001)

Selectmen, Playground Commission and others. Of the 957 acres of open space that Merrimac has acquired through purchase or gift, the 289-acre Town Forest and the 112-acre Perkins Conservation Area rank highest for size of holding. The Town Forest extends from Highland Road to Birch Meadow Road and provides a number of walking trails. Playing fields for youth sports are located at the Winter Street entrance to the Town Forest. The Perkins Conservation Area, accessible from Brush Hill Road and Highland Road, is located within the aquifer recharge area for Merrimac's northernmost water supplies and the watershed of Lake Attitash. Map 4 illustrates major areas of conservation interest in Merrimac today.

Unique Conditions

Several factors make Merrimac's open space inventory atypical. Chief among them: despite the town's Merrimack River location, Merrimac has very limited public access to the water. Moreover, unlike many towns, Merrimac has no open space owned by non-profit conservation groups. It also has no recreation land or facilities owned by private non-profit or for-profit organizations. Although non-profit charitable or religious organizations own property in Merrimac, their combined holdings are less than 24 acres and nearly half of the land belongs to The Harbor School on West Main Street. The absence of major conservation groups from Merrimac's roster of property owners means that today's record of open space protection owes almost entirely to a history of local initiative.

Table 2-6 Merrimac Open Space Inventory

Property	Acres	Inventory Notes
City of Haverhill Wells	77.3	Municipal
Town of Merrimac Wells	55.7	Municipal
McLaren Trail	45.9	Municipal
Merrimac Town Forest	286.2	Municipal
Indian Head Park/Town Wells	51.7	Municipal
East Main Street Cemetery	0.6	Municipal
Church Street Cemetery	5.0	Municipal
Training Field	0.5	Municipal
Cobbler's Brook	4.9	Municipal
Carriagetown Park	33.5	Municipal
Kimball Park	0.7	Municipal
Locust Grove Cemetery	12.5	Municipal
River Road Peninsula	0.8	Municipal
Carey Park	0.8	Municipal
Locust Street Landing	1.2	Municipal
Duck Hole Landing	0.3	Municipal
Sweetsir School	10.7	Municipal/School
Donahue School/Stevens Field	16.3	Municipal/School
Sawyer House Land	17.9	Historical
Lake Attitash Landing	0.4	Division of Fisheries and Wildlife
Perkins Conservation Area	12.7	Conservation Land
Merrimac Conservation Commission	26.5	Conservation Land
Becker Farm	43.0	Chapter 61A
Danareau Farm	55.3	Chapter 61A/APR
Hoyt Farm	149.6	Chapter 61A
Not Identified	47.0	Chapter 61A
Sargent Farm	497.7	Chapter 61A/Portion under APR
Smith Farm	120.1	Chapter 61A
Snow Farm	13.2	Chapter 61A
Inholdings	22.7	
Aubrey Land	15.0	Unprotected

Source: MassGIS.

Another unique condition in Merrimac is the Jay McLaren Trail, a 46-acre⁴⁵ stretch of abandoned rail bed that once enabled the transportation of custom carriages from Merrimac Center to the Boston & Maine Railroad. Reused today for passive recreation, the McLaren Trail forms a continuous open space corridor through northern Merrimac. It offers an unusually strong opportunity for linking public and private open space into a community-wide system. The town's most recent *Open Space Plan* (1997) anticipates using the McLaren Trail "as a backbone for future open space acquisitions."⁴⁶ Finally, Merrimac's enviable farmland inventory also distinguishes it from other communities. Approximately 920 acres – 17% of the town's land area – are devoted to agricultural uses. Portions of two large farms are permanently protected by Agricultural Preservation Restrictions (APR).

Level of Protection

Level of protection is an important open space planning standard. Just as the use of privately held land changes over time, so does the use of publicly owned land. Communities often want the flexibility to improve or expand municipal property so they can meet changing needs. Accordingly, vacant town-owned parcels become parks and ball fields just as buildings that become obsolete for their original use may be renovated to accommodate a community center, senior center or affordable housing. In most cases, the town's chief elected officials have jurisdiction over municipal property while school committees control land acquired for public schools. Municipal corporate land may be transferred by town meeting, subject to certain statutory requirements.

Conservation land is a protected class of open space, however. Properties that conservation commissions own in fee or in which they otherwise have an interest (e.g., through conservation restrictions) cannot be developed for active recreation use or for community facilities. The protected status of conservation land may be changed only by a special act of the legislature, a process that requires a petition from the host community and concurrence from the local conservation commission. It takes considerable effort to remove restrictions on conservation land. In Merrimac, few open space parcels qualify as permanently protected land and not all publicly-owned vacant land is considered open space. "Permanent protection" means that an open space *use* is protected in perpetuity. The term is used descriptively for land kept in a natural state, such as conservation land, and it refers to the following techniques:

- Ownership by a local conservation commission or a non-profit land trust.
- Deed restrictions, protective easements or covenants that run with the land in perpetuity.

⁴⁵ Acreage calculated from GIS file supplied by Merrimack Valley Planning Commission.

⁴⁶ *Open Space Plan* (1997), 12.

- Ownership by a state or federal agency with a conservation or parkland mandate.

Land uses secured by one of these protective techniques represent about 64% of all acres designated as open space in Merrimac, whether publicly or privately owned.⁴⁷ Several unprotected open space areas have been identified locally as candidates for some form of permanent protection. They include Creek Landing, Carey Memorial Park, Cottles Landing and the Duck Hole along River Road, Old Church Park and land under the Highway Department's jurisdiction on Broad Street, and a privately owned farm on Middle Road.⁴⁸ As a rule, "unprotected" municipal property means land that the town may develop for public use, transfer or sell if authorized by town meeting.

Recreational Open Space

A small amount of Merrimac's open space is devoted to outdoor recreation facilities. Taken together, recreation areas constitute less than 9% of all publicly owned land and only 5% of the entire open space inventory (see Table 2-7).⁴⁹ By definition, active recreation areas include land developed, managed and maintained as playgrounds, playing fields, game courts, skating rinks, public beaches, public swimming pools, and so forth. They may be quite large, such as a major multi-use community park or an athletic complex adjacent to an urban high school, or small neighborhood play lots accessible to families with young children.

The National Recreation and Park Association (NRPA) has established service area standards for parks and recreation facilities. The standards do not transfer readily to very small towns or major cities, but at 6,000 people, Merrimac falls within NRPA's population guidelines and its recreation facilities appear to be inadequate. For example:

- Merrimac has one double tennis court at Stevens Athletic Field adjacent to the Donahue School. PRSD maintains one outdoor basketball court at Donahue School. The combined inventory of town/school district game courts does not meet either the population size or distance criteria in the NRPA rating system.

⁴⁷ "Designated" refers to designation by local officials. Several vacant town-owned parcels are not included in the open space inventory.

⁴⁸ MPSC, Open Space and Recreation Task Force.

⁴⁹ Percentage is only an estimate because precise information about the amount of land actually used for park and playground space is unavailable. In most cases, the parcels are larger than the areas devoted to recreational use.

- Merrimac has two playgrounds for elementary school children but it does not have a play lot for pre-school children. For many families, the playgrounds at Sweetsir and Donohue Schools exceed the ½-mile access threshold for a neighborhood park.
- The Donahue School playground and adjacent Stevens Athletic Field may function as a community park, but individually or together, they lack the size and many of the amenities that constitute a community park by NRPA standards
- The Town Forest Park, which has two soccer fields, qualifies in most respects as a community playfield, but it is not within bicycle distance of many households in Merrimac. Moreover, only one of the soccer fields is a full-size facility.
- Carriagetown Park on Emery Street would qualify as a community playfield, but its service capacity is limited by distance to outlying households and the very poor condition of its two soccer fields.
- Merrimac has no neighborhood-level playgrounds.
- There is no urban green space in Merrimac Square.

Table 2-7 Outdoor Recreation Facilities in Merrimac

Type of Facility/Location	Est. Acres	Comments
Soccer Fields		
Town Forest Road (2)	15.0	1 short, 1 full-size; actively used
Emery Street (Carriagetown Park) (2)	17.9	1 short, 1 full-size; used only for practice
Baseball/Softball Fields		
Locust Street (Stevens Athletic Fields, 3)	14.0	Used by Little League, Babe Ruth
Locust Street (Stevens Athletic Fields, 1)		
Playgrounds		
Donahue School (1)		Equipped playground
Sweetsir School (1)	12.0	Equipped playground
Locust Street/Stevens Athletic Fields, (1)		Swing set, slide, jungle gym
Water Recreation		
Lake Attitash	6.3	
Lake Attitash (Indian Head Park)	7.5	Part of E. Main Well Property
TOTAL (ESTIMATED)	72.7	

Sources: Merrimac Open Space Plan (1997), James Hume, Merrimac Park Commissioner.

Merrimac's 1990-2000 population growth has been attended by a large increase in both young children and senior citizens. Census 2000 data validate Merrimac's decision to acquire and renovate an East Main Street building for a new senior center: the old center on School Street was too small for Council on Aging programs. The data also shed light on why Merrimac's baseball and soccer leagues find it very difficult to accommodate the number of children who want to participate in competitive field sports.

Traffic & Circulation

Merrimac's road network is comprised primarily of public ways -- on record, 29.67 miles⁵⁰ -- but numerous private ways also exist in Merrimac, mainly around Lake Attitash.⁵¹ The road system's basic form is a grid that has been etched into the landscape since colonial times, dictated generally by location of the Merrimack River. Route 110 bisects the town, running parallel to the river from Amesbury to Haverhill. Three roads that run south from the New Hampshire border complete the grid. They collect traffic from nearby, neighborhood-level streets, and deliver both local and non-local traffic to Route 110 and I-495. Merrimac is responsible for maintaining all town-accepted public ways. It has no responsibility for or jurisdiction over Route 110 except for the portion that lies within and immediately adjacent to Merrimac Square.

Transportation Routes

The most significant roads in Merrimac— I-495, Route 110 and River Road — follow an east-to-west pattern. Each represents a progression from a path along the river to the first regional highway through the village center and finally, to an interstate highway designed to carry high traffic volumes through the area. Although used more by out-of-town drivers than by local residents, I-495 has the highest profile of any transportation route in Merrimac. A six-lane, limited-access highway that runs along the entire southern end of town, I-495 carries an average of 60,000 vehicles per day under normal conditions and up to 80,000 vehicles per day in the summer. Local traffic accesses I-495 at the Broad Street interchange.

Route 110 is a two-lane, two-way rural highway that connects Merrimac to Amesbury on the east and Haverhill on the west, running parallel to I-495. It provides direct access to abutting residential, commercial, and industrial land uses and carries about 8,000 vehicles per day.

⁵⁰ Mass. Department of Revenue (DOR), "Kind of Community Report" (2001), based on data compiled for Chapter 90 and state aid distributions.

⁵¹ A public way is a road that has been accepted by Town Meeting.

Numerous north-south streets intersect with Route 110 and all of them operate under stop sign or yield control. Sidewalks and curbing exist within and adjacent to Merrimac Square, but not beyond the village area. Finally, River Road extends across the southernmost edge of town. This two-lane, two-way scenic road provides access to adjacent homes and nearby residential neighborhoods. On the eastern end of town, River Road provides access to Middle Road, which crosses under I-495 in Amesbury, while River Road continues along the river. River Road is generally eighteen-to-twenty-four feet wide with no sidewalks and variable shoulders, and it carries about 2,500 vehicles per day.

Three north-south roads supply cross connections that are critical to overall traffic circulation in Merrimac: Locust Street, Broad Street, and Emery Street. Their importance lies in the fact that they cross I-495. Broad Street provides the primary connection between River Road, I-495 and Route 110. It varies in width between twenty feet on the south to forty feet at the interchange. Locust Street and Emery Street are narrower, with widths of approximately 18 to 22 feet. There are no sidewalks along any of the streets leading up to the bridges that overpass I-495 even though there is room to accommodate them. Augmenting this framework are three north-south roadways through the northern two-thirds of town: Bear Hill Road on the east, Highland Street/Church Street/Winter Street in the middle, and Hadley Road/Birch Meadow Road on the west. These two-way, two-lane roadways, owned and maintained by the town, include centerline striping and limited signage, with widths ranging to about twenty-two and twenty-six feet. They provide access to land uses that are almost exclusively residential while also channeling local and non-local traffic to Route 110 and I-495. There are no sidewalks on these streets except on approach to the village along Winter Street and Church Street.

Key Traffic Locations

Merrimac has a number of critical traffic locations. Some are critical because of the amount of traffic that passes through them, others because their design contributes to driver discomfort or an above-average number of accidents. The most important is Merrimac Square, where roadway alignments evolved with the popularity of cars but stopped short of being modernized with an eye toward putting traffic flows ahead of business activity. The result is a desirable ambience and historic character, but less than ideal traffic and parking patterns. Since the vast majority of traffic through Merrimac Square is locally generated, most drivers know the area and manage to navigate through it. Unfortunately, the current layout is hazardous and inconvenient for pedestrians and it detracts from the positive aspects of an otherwise inviting village space. A safe pedestrian environment and parking access will be essential to preserving commercial activity in and around Merrimac Square.

Two other critical locations near the center of town are the Broad Street intersections at the I-495 interchange and Route 110. The diamond-type interchange at I-495 allows for left and right

turns on and off the ramps under stop-sign control. Since it is unlikely that traffic volumes will increase enough in the near future to warrant installing traffic signals, this interchange will remain in its current layout well into the future. Its layout is generous, with wide pavement widths and good sight lines. The interchange is critical more for its importance than for any concerns related to safety or congestion. As for the intersection of Broad Street and Route 110, it is critical because it provides a link between the interchange and the center of town. The intersection serves a large percentage of locally and regionally generated traffic moving through Merrimac, either along Route 110 or from the residential areas northwest of Merrimac and beyond. It is a simple T-intersection controlled by a stop sign, with a straightforward layout that may need signalization at some point in the future.

Both ends of Locust Street, Bear Hill Road at Route 110, and rural areas throughout Merrimac also qualify as critical traffic locations. Most have narrow approach lanes and/or unusual intersection angles that contribute to concerns for both safety and the rural character of the community. Traffic safety and operating conditions are problematic at many intersections along Route 110 and around Merrimac Square, notably for parking. Travel speeds are also a concern, especially along Church Street and Winter Street where commuters cut through town to reach Route 495. Trucks traveling to the industrial areas on the western portion of Amesbury sometimes use River Road, causing some concerns for the neighborhood. Another concern involves the use of River Road or Route 110 as a bypass during periods of heavy traffic on I-495. At such times, traffic can be impatient and aggressive, and as a result it is very disruptive to community traffic patterns.

Other transportation modes

Merrimac has a limited inventory of sidewalks and no designated bicycle paths. There are a number of walking trails, but not a fully interconnected trail system, through Merrimac's conservation land. Two modes of public transportation are available to Merrimac residents: commuter rail stations in Haverhill and Newburyport, and commuter bus service from Haverhill, Newburyport and Amesbury. There is no in-town public transit service.

Infrastructure and Utilities

Merrimac oversees and is responsible for maintaining a network of municipal infrastructure and utilities. These services are essential to the town's quality of life and its ability to achieve long-term development goals. In addition to maintaining nearly 30 miles of public streets, the town also owns and manages a water supply and distribution system, a wastewater collection

and treatment system, and a municipally owned light department. Each of these assets presents unique needs and challenges, today and in the future. At issue is not only the size and capacity of Merrimac's infrastructure components, but also how they are regulated, managed and financed. In the past five years (FY 1996-2000), Merrimac has witnessed a 51% increase in public works expenditures – mainly roads, water and sewer – while overall local spending rose by only 29%.⁵²

Water

The Merrimac Water Department supplies public water to about 90% of the community. Two tubular well fields, 19 miles of distribution mains, and two water storage tanks with a combined capacity of 1.65 million gallons (mg) comprise the physical plant of Merrimac's municipal water system.⁵³ Under the jurisdiction of an elected Board of Water Commissioners, the Water Department employs a department manager, pump station operators and a small crew. The Department essentially operates as a self-supporting entity, that is, the costs of operations and debt service are financed with user fees and other departmental revenue. Consistent with the town's land use pattern, the vast majority of public water customers are residents. Merrimac also sells a limited amount of water to Amesbury each year, but nearly all of the water pumped from Merrimac's small-yield wells goes to the 1,600 residential accounts on record.⁵⁴

Between 1995-2001, the number of residential service connections in Merrimac increased by 12%. However, homeowners constitute only 85% of the town's annual water demand (excluding water unaccounted for or lost to flushing mains and hydrants). Commercial, industrial, agricultural and institutional users consume the remaining 15%. Table 2-8 tracks water consumption trends in Merrimac since 1995. The data show that in terms of average-day demand, Merrimac is withdrawing water from its two small well fields at a rate that increasingly surpasses the amount authorized by the Massachusetts Department of Environmental Protection (MADEP) under the state's Water Management Program.

On a per capita basis, Merrimac residents are fairly conservative water users. Statistics maintained and reported by the Water Department each year indicate that residential consumption per capita

⁵² Mass. DOR, Municipal Data Bank. As reported by DOR, "public works" also includes the cost of cemeteries.

⁵³ Town of Merrimac, Public Water Supply Annual Statistical Report (to Mass. Department of Environmental Protection), 1999.

⁵⁴ Water Supply Report, 1999. Note: mobile home parks are treated as one residential account per development, which means that two of Merrimac's residential water accounts actually serve about 226 mobile home units. Multi-family and apartment buildings are usually classified as single-service properties as well.

averages 55-60 gallons per day (gpd). Computed as an estimate of household use per day, consumption in Merrimac is approximately 151 gpd, well below the national average. Despite modest rates of consumption, the water system in Merrimac is not without needs. Domestic pressure and fire flows are low in Merrimac's higher elevations and outlying areas where new development has begun to stress the water storage and distribution network's capacity.⁵⁵ During periods of peak-season demand, these problems intensify. At least two factors contribute to Merrimac's pressure weaknesses. The most obvious is storage: the town needs a third standpipe in order to improve hydraulic conditions throughout the distribution system. However, to maintain water levels in each tank, the town also needs to produce more water.

Table 2-8 Water Consumption in Merrimac, 1995-2001

Measure	2001	1999	1997	1995
Total Consumption (gallons)	168,925,000	173,261,000	154,455,000	147,469,550
MADEP Authorized Withdrawal Per Day (gpd)	360,000	360,000	360,000	360,000
Average-Day Demand	462,808	474,688	423,164	405,934
Ratio Average-Day Demand to Authorized Withdrawal Per Day	1.29	1.32	1.18	1.13

Source: Merrimac Water Department, Public Water Supply Annual Statistical Reports to MADEP.

For the past several years, the Water Department has conducted search-and-exploration tests to identify new water supply sites. That Merrimac does not have a high-yield aquifer within its own borders impedes the development of new wells.⁵⁶ Each of the town's existing well fields produces 175,000-275,000 gpd, making them low- to moderate-yield supplies. The Water Department's exploration work led to the discovery of a much higher yield well site that requires no land acquisition costs because it is located on a parcel of town-owned land off Bear Hill Road. Pump tests indicate that the site may yield up to 500 gallons per minute (gpm), which would more than double the town's production capacity.⁵⁷ However, developing a well at the proposed location will be difficult because it lies just over the New Hampshire border. As a result, obtaining a water withdrawal permit triggers approvals from two states, a situation that will likely delay source approval and involve higher development costs for the town. The site's anticipated yield and its

⁵⁵ Interview, Water Department Manager Linda Soucy, 21 January 2001.

⁵⁶ MassGIS, Aquifer Data.

⁵⁷ Interview, Soucy, May 2001.

proximity to the existing tubular well fields on Bear Hill Road make it a highly desirable choice. To date, the town has committed more than \$150,000 toward search, exploration and source approval costs.⁵⁸

Merrimac has taken some steps to protect the quality of its groundwater resources. The filtration plant at the East Main Street well field has proven successful when in full operation. Moreover, the town has adopted a Water Supply Protection District, an overlay zoning district that restricts land uses within the zones of contribution or recharge areas surrounding the water supply wells.

Public Sewer

Sewer service is available on Route 110 and in Merrimac Square, most of Merrimacport and Spring Hill Road, and areas around Lake Attitash. Built under a mandate from the federal Environmental Protection Agency (EPA), the Merrimac sewer system consists of a 450,000 gallon-per-day (gpd) wastewater treatment plant off Mill Street, 15 miles of collection mains, and nine lift stations.⁵⁹ The system has been expanded incrementally since the plant, the original interceptors and five lift stations were completed in 1980. Both new development and extensions into older neighborhoods have contributed to a gradual expansion of sewer service in Merrimac. The treatment plant can accommodate another 295 homes, yet about 395 homes within the existing service area are not connected to the system. Three factors determine how many properties can be served by the sewer system: treatment plant capacity, a local sewer bylaw that regulates connections inside the existing service area, and the Sewer Commission's approval of developer requests to extend sewer lines beyond the service area.

When the wastewater treatment facility was designed in the mid-1970s, the town intended to construct a system that could accommodate projected 20-year needs. Two years ago, the elected Board of Sewer Commissioners commissioned a facilities study to determine if the existing plant can meet Merrimac's sewer needs through 2020. The study was done for two reasons: first, the plant was approaching its 20th year in operation, and second, average influent flows had exceeded 80% of the treatment plant's design capacity.⁶⁰

Sewage treatment plants receive wastewater from three sources: sewage flows, i.e., wastewater generated by the residential, commercial and industrial customers of a sewer system, along with infiltration and inflow. Infiltration and inflow as a percentage of total flows to a sewer treatment plant increase with the age of the collection network –interceptors and lateral sewer mains. The

⁵⁸ FY 2002 Town Budget.

⁵⁹ Tata & Howard for Merrimac Sewer Commission, *Facilities Plan for the Merrimac Wastewater Treatment Facility* (December 1998).

⁶⁰ Ibid.

higher the percentage of infiltration/inflow, the lower the treatment plant's actual capacity to process sewage. Sewer system capital improvements become essential to assuring that a plant performs at its design capacity. Otherwise, it may become uneconomic to operate and rate payers absorb the cost of running an inefficient or unsanitary treatment plant.

The facilities master plan (1998) recommended a \$1.2 million investment in equipment, upgrades and testing to reduce the volume of infiltration/inflow and increase the treatment plant's efficiency. Studies conducted by the Sewer Commission's consultants indicated that residential and non-residential users of the sewer system generated about 66% of all wastewater reaching the plant. This has important consequences for the wastewater treatment plant's ability to accommodate future growth in Merrimac. The town has repaired lift stations, made small upgrades to the treatment plant and financed extensions of sewer service into existing neighborhoods since 1998, but the more substantial improvements described in the facilities master plan have not been initiated. However, Merrimac's Capital Plan (CP) presently carries a projected FY 2005 commitment of \$1.6 million toward sewer system improvements.⁶¹

Electric Light Service

Merrimac is one of several Massachusetts communities with a municipally owned electric utility. Controlled by an elected board of light commissioners, the Merrimac Light Department is a \$3.1 million operation that sells electricity to about 2,600 residential and non-residential customers.⁶² It maintains a town-wide distribution system and purchases power from the New England Power Co. Much like the town's Water and Sewer Departments, the Light Department is self-supporting but it differs in two key respects. First, its user rates are subject to control by the Massachusetts Department of Public Utilities. Second, the Light Department is a municipal enterprise: all of its income from user fees, investments and other sources, its expenditures, assets and liabilities are separate from the town's other government resources.

The Light Department may be likened to a small business in terms of its accounting procedures, but it is not a proprietary operation. Rather, it is a sole-source public service provider: in regulatory terms, a monopoly. Its income is restricted by the state's rate setting process and its customers are also constituents because they elect the department's governing body. Eventually, the Light Department and others like it will be affected by the electric industry's deregulation in Massachusetts. Electric companies classified as "transmission and distribution only" utilities – organizations like the Merrimac Light Department – are not subject to the deregulation rules that went into effect three years ago. However, competition among deregulated utilities will eventually

⁶¹ FY 2001 Capital Plan.

⁶² Measured in service meters.

affect small re-seller operations like Merrimac's. At some point in the future, Merrimac residents may opt to buy electricity from another utility company.

Community Facilities and Services

Town buildings

Five public buildings house nearly all of Merrimac's local government operations. The most substantial is Town (Sargent) Hall, an impressive brick building that anchors one end of Merrimac Square. Town Hall supports traditional municipal services: the town clerk, the finance and administrative staff, the offices of most town boards and committees, and the building inspector. On the second floor of Town Hall is the Merrimac Museum. The Merrimac Light and Water Departments are also located in Merrimac Square, operating from a small, wood-frame building on West Main Street. The Thomas H. Hoyt Memorial Library at the edge of Merrimac Square has housed the town's public library services since 1929. In addition, a low-rise, multi-purpose building on East Main Street, between Broad Street and Merrimac Square, supports the police, fire and highway departments. About one mile east of Merrimac Square is the new Senior Center, which formerly served as a Masonic lodge until the town acquired and remodeled the property.⁶³



Thomas H. Hoyt Library, Merrimac Square



Water Pump House, E. Main Street

Merrimac provides a basic complement of municipal services: public safety, public works, utilities and solid waste disposal, a public library, elder services, fiscal administration, and regulatory functions. A number of factors influence overall municipal service spending, but the primary factors are population – measured by current and recent rate of population growth, and density per square mile – along with land area, tax base, and population wealth. An intangible condition also shapes municipal spending: political culture. Despite statewide trends toward local government professionalism since the mid-1970s, most operations in Merrimac are carried out by citizen volunteers and a remarkably small complement of paraprofessional, technical and clerical staff, many of whom are part-time employees. As a result, Merrimac's municipal-side expenditures are quite low in comparison to other small towns across the Commonwealth.

⁶³ The town's other noteworthy public buildings include the former, now-vacant Senior Center on School Street, and the East Main Street water works plant.

Several years ago, the town modernized its approach to fiscal administration by establishing the position of finance director – an appointed professional who answers to the board of selectmen, directs all financial operations, and coordinates (but does not manage) other administrative functions. In addition to the finance director, Merrimac’s municipal offices are staffed by a limited number of full- and part-time personnel, and a number of part-time employees serve in more than one role. Across town government, part-time employment is more common than full-time employment, and volunteers are more prevalent than paid staff. While the cost of operations may be kept down by a system of service delivery that relies on volunteers and part-time employees, town governments that are decentralized and highly participatory have space needs that differ in some respects from the space needs of communities with professional, centralized modes of service delivery.

In Merrimac, space shortages are acutely obvious in the town’s lack of public meeting space: moderately-sized to large rooms that can accommodate boards, committees and citizens, close to records storage. However, the space deficiencies in Merrimac affect not only how boards and committees conduct their hearings, but also how full- and part-time employees function administratively and as public servants on a day-to-day basis. Nowhere is this more obvious than at Town Hall, where employees work under extremely difficult circumstances. Inadequate space, poor space utilization, and outdated electrical and mechanical systems make the Sargent Block a poor office building regardless of its architectural importance to Merrimac Square. Offices visible to the public through storefront-style entranceways – the town Clerk, Selectmen’s Office and Assessors – mask the congested, substandard conditions that characterize the rest of the first floor’s interior. Town Hall stands today as one of Merrimac’s most significant community needs. Local officials and residents rightly want to keep local services in Merrimac Square and preserve the Sargent Block as their Town Hall. To accomplish those ends, the town faces both a substantial capital investment and policy choices. Last year, voters agreed to spend \$192,000 on architectural and engineering services to design comprehensive improvements to Town Hall. The estimated cost of renovating the building, including office space expansion on the second floor, is \$2.85 million.⁶⁴

A second public building has been pressed into service far beyond its design capacity: the Thomas H. Hoyt Memorial Library. Like Town Hall, the library is a historically significant building that contributes to Merrimac Square’s sense of place. Inside, high ceilings and stained glass windows lend a sense of grandeur to the building while overflowing stacks, cramped arrangement of tables and chairs, and a congested circulation desk reveal the obvious: the library is trying to serve far more people, and a more diverse set of needs, than existed when it was built in 1929. Then,

⁶⁴ Finance Director Frank Messer (September 2001).

Merrimac's population was just shy of 2,400; now, it is 6,138.⁶⁵ The town recently applied for a state grant to build a new library on a site located about one mile west of Merrimac Square. Although Merrimac did not make the initial grant award list, it is on the state Board of Library Commissioners' roster of projects to be funded when the legislature authorizes a new bond issue for the program. The cost of the proposed library is \$3.2 million, of which \$2.3 million would be financed by local taxpayers.⁶⁶

By combining local funds with \$590,000 from the state's Community Development Block Grant (CDBG) program, Merrimac has been able to move its Council on Aging operations from a small building on School Street to a renovated facility with 6,062 square feet of finished space on East Main Street. Merrimac's decision to replace the old senior center with a new facility creates both opportunities and issues. First, federal regulations restrict the East Main Street building to use as a senior center for five years. By law, CDBG funds must principally benefit low- and moderate-income people – a definition that categorically includes the elderly. The state agency that administers federal CDBG funds, DHCD, has denied Merrimac permission to allocate a portion of the new senior center to general government use even though the town spent as much of its own funds on the project as the amount of its federal grant. Second, the new senior center increased Merrimac's public land holdings by about four acres.⁶⁷ The surplus land, that is, land not needed for senior center parking, may have recreation area potential, although there are no available studies to establish the land's suitability for playing fields. Third, the former senior center on School Street is available for other uses, but its inaccessible second floor and lack of on-site parking limit the building's reuse possibilities. The School Street building dates to 1885.

School Facilities

Nothing sways a community's image in the real estate market more than the reputation of its school system. However, no local budget is more sensitive to population growth than public schools. Across the Commonwealth, education constitutes about half of all local government expenditures, but statewide averages belie the experience of rapidly growing communities. In many towns along I-495 today, the combined cost of school operations and debt payments for new or expanded school buildings dwarfs aggregate municipal expenditures, creating serious challenges for local officials who must still meet demands for other, non-school services.

⁶⁵ MISER, Actual and Estimated Population Counts for Massachusetts Counties, Cities and Towns, 1930-1998; Bureau of the Census, Census 2000.

⁶⁶ FY 2002 Town Budget.

⁶⁷ Assessor's Parcel Data.

Merrimac qualifies as an above-average growth community in terms of population change and student enrollments, not as a high-growth community. However, growth and change nearby affect the cost of government in Merrimac because the regional school district to which it belongs has budgetary and capital needs that Merrimac taxpayers must partially absorb. The issue for communities like Merrimac is whether region-wide school facilities are adequate to accommodate region-wide growth.

Merrimac is part of the Pentucket Regional School District (PRSD), a three-town public school system that includes West Newbury and Groveland. Until 1993, each community managed its own K-6 schools and participated in the region for grades 7-12. Under an new agreement that took effect in FY 1994, participating communities are responsible for providing an elementary school facility but the school district controls and operates all of the region's public schools. The current and future adequacy of school buildings throughout PRSD has been a recurring source of controversy as voters brace themselves for one or more costly solutions to the region's school space needs.

Merrimac has two elementary schools, Sweetsir (K-2) and Donohue (3-6). Originally known as the Red Oak School, Sweetsir Elementary School was built in 1968 and expanded in 1994. Its present size is 53,600 square feet and it occupies a 12-acre site on Church Street. Sweetsir School houses children in grades K-2 and has a "planned operating capacity" of 404 students.⁶⁸ "Planned operating capacity" refers to the number of children a school building may serve according to school district class size policies. The Sweetsir School contains one pre-kindergarten and three kindergarten classrooms, and twelve classrooms that are interchangeable for the primary grades. It also has dedicated instructional space for art, music, and technology, core cafeteria and gymnasium facilities, a modern school library, and an assort of smaller rooms for administrative, instructional support, special education and other school uses. In FY 2000, the most recent year for which comparative enrollment data are available from the Massachusetts Department of Education, Sweetsir School housed 349 students in grades Pre-K-2.⁶⁹

The Donohue School, built in 1951, has undergone two expansion and alteration projects: 1963, and again in 1994. It serves Merrimac's older elementary students, that is, children in grades three through six. Under its current size and layout, the Donohue School's planned operating

⁶⁸ New England School Development Council (NESDC), *School Facilities Master Plan: Pentucket Regional School District* (October 1997).

⁶⁹ Mass. Department of Education (DOE), "School District Profiles" Series: Pentucket Regional School District (PRSD), Sweetsir School, Merrimac (FY 00 data). The K-2 enrollment only was 293 children.

capacity is 418 students.⁷⁰ In a trend evident since the early 1990s, the Donohue School has essentially reached its operating capacity. By FY 2000, the school was reporting a total enrollment of 413 students.⁷¹ The building consists of 58,300 square feet divided into nineteen classrooms, and much like the Sweetsir School, the Donohue School provides dedicated instructional space for art, music, technology, special education, core cafeteria and gymnasium facilities, and a library.

Merrimac's seventh and eighth grade students transfer to the Pentucket Regional Middle School in West Newbury. The Middle School is a one-story, 110,000 square foot facility that was built in 1967, with renovations and an expansion completed in 1996. It consists of 18 interchangeable classrooms and six devoted to science courses, a variety of auxiliary and support areas, and separate rooms for music and art and an auditorium with seating for 360 students. Some classrooms are assigned to non-middle school uses, such as a pre-school program, a class for students in the region's special education collaborative, and PRSD's administrative offices. When the building was renovated in 1996, the former music room became a multimedia center and a new music room was created in the expansion wing. The Middle School's planned operating capacity is 624 students. In FY 2000, it served 564 students.⁷²

Pentucket Regional High School and the Middle School occupy the same 30-acre site. Built in 1958, the High School is a 159,000 square foot complex with multi-level classroom wings. In addition to 27 interchangeable classrooms and seven science classroom/laboratories, the High School has typical core facilities - a cafeteria, gym, music and art rooms, media center, library and auditorium. Further, there are four resource rooms, space used for an alternative education program, and rooms equipped for home economics and technical education classes. The building serves grades 9-12, including students from the region's participating communities and "school choice" students from nearby towns. In 1996, PRSD completed a small expansion project at the High School, adding a media center, conference and office space, computer labs, a mini-gym with lockers, and more classrooms. Based on a space allocation formula that accounts for the scheduling realities of a high school, the planned operating capacity of Pentucket Regional High School is about 966 students. Its FY 2000 9-12 enrollment was 810 students.

Unlike the Middle School, Pentucket Regional High School has several problems. First, the high school is not fully accessible to persons with disabilities. Second, the auditorium has a seating shortage and its lighting and sound systems are deficient. Third, while new science classrooms in the 1996 addition are spacious and suitably equipped, the older ones are small and obsolete.

⁷⁰ NESDC, *Master Plan*.

⁷¹ Mass. DOE, School District Profiles.

⁷² NESDC, *Master Plan*.

Under estimates developed approximately two years ago, the cost of basic improvements and alterations at Pentucket Regional High School was \$1.6 million, of which nearly \$1 million represented high-priority work. Proposals for a new regional high school have triggered considerable resistance. The regional school committee's "Pentucket 2000" campaign to build the new high school failed last year, and at present, they are considering at least three other options, including a scaled-back high school project.

A recent update to PRSD's master plan forecasts an increase in elementary school enrollments of 19% in Merrimac, 22% in Groveland and 23% in West Newbury by 2010.⁷³ Although Merrimac's Sweetsir School and West Newbury's Page School have surplus space, Donohue School does not, and Groveland's Bagnall School has had to install portable classrooms to accommodate its present K-6 enrollment of 674 students. The 7th and 8th grade population is projected to rise by 29%, and the 9-12 population by 27%, in the same timeframe. Assuming that all six buildings house regular-day students only – i.e., no optional early childhood or pre-school programs and no substantially separate classrooms for moderate special needs students – that current class size policies and half-day kindergarten programming remain in effect, the aggregate space shortage is equal to about 330 pupils. However, early childhood education programs operate in several of PRSD's school buildings, and while all kindergarten classes are offered on a half-day basis today, full-day kindergarten looms on the horizon in Massachusetts. Grade reconfiguration is a reasonable short-term solution for meeting space distribution needs in public schools, in the long run PRSD's member communities seem destined to build new or significantly expanded school facilities.

Merrimac is also served by a second public school district, the 11-town Whittier Regional Vocational-Technical School in neighboring Haverhill. Approximately 50 students in grades 9-12 from Merrimac opt to attend Whittier instead of PRHS.

Structure & Capacity of Local Government

Merrimac operates under a Board of Selectmen-Open Town Meeting form of government, drawing from an assortment of general and special laws for its governing powers. Like many small towns, Merrimac relies heavily on volunteer boards and committees and employs a limited complement of paid staff. Its government is highly decentralized. In addition to the town's three-member board of selectmen, voters elect the town meeting moderator, school committee, board of assessors and board of health, planning board, tree warden, town clerk, library trustees and

⁷³ NESDC, Demography and Enrollment Projections for the Towns of Groveland, Merrimac, West Newbury and for the Pentucket Regional School District (May 2000).

cemetery trustees, housing authority, three constables, and the playground, water, light and sewer commissions.⁷⁴ These elected groups work in conjunction with a number of appointed boards and officials, including the finance committee, appeals board, conservation commission, council on aging, and other standing or ad hoc committees. The selectmen appoint many of the town's municipal employees, but the water, sewer, and light commissions, the board of assessors, library trustees and board of health all have independent power to appoint their own staff. About half of the town's workforce is represented by collective bargaining units.

By law, town meeting convenes annually to conduct business, and on other occasions to handle unforeseen needs or issues that arise during the fiscal year. A key component of the annual town meeting is the appropriations process. In Merrimac, voters adopt a general operating budget under one warrant article and they approve capital projects individually by appropriating funds under special articles. The fiscal year budget is available for expenditure from July 1-June 30. It is developed by the town's Finance Director, who assembles departmental requests and consolidates them into an omnibus budget for review by the Board of Selectmen and Finance Committee. Capital outlays and major projects requiring long-term debt involve a similar process, but the town's Capital Planning Committee compiles departmental requests and develops spending recommendations based on project selection criteria and available funds. Special article appropriations carry over from year to year unless town meeting rescinds the original authorization or transfers unused balances to the general fund.

The Pentucket Regional School District is the only form of regional government in which Merrimac participates. The town belongs to or is otherwise represented in other regional institutions and organizations, however. An example is Merrimack Valley Planning Commission (MVPC), which serves most of the Lower Merrimack Valley area.

Fiscal Policy and Administration

Since the early 1980s, Massachusetts cities and towns have been subject to a constitutional amendment that restricts how much they may raise from property taxes to support local government operations. Proposition 2 ½ regulates property tax growth in two ways. First, it establishes a maximum "levy ceiling," or 2.5% of a community's total assessed valuation (the sum of residential, commercial, industrial and personal property values). Second, it limits annual tax levy increases to 2.5% of the previous year's levy *plus* the value of "new growth," or tax revenue for new development added to the tax base. Municipalities may increase the levy by more than 2.5% limit or exempt certain appropriations if a majority of their voters consent at the polls. For example, by overriding Proposition 2.5% one year, voters increase the property tax levy by an amount that exceeds 2.5% and also cause a permanent adjustment in the base for subsequent years. However, an override cannot cause the tax levy to exceed 2.5% of total assessed valuation.

⁷⁴ By law, one member of the housing authority is appointed by the governor.

Debt service and capital outlay exclusions allow levy growth to exceed the annual 2.5% cap, but only by the amount required to cover the exempted debt service cost or capital appropriation, and the levy impact is temporary. Across the state, debt and capital exclusions have generally been successful; overrides have been relatively unsuccessful. During the 1990s, about 66% of all debt exclusion questions prevailed while only 36% of all override questions passed in the same period.⁷⁵ Merrimac's experience has been fairly typical: voters supported three of the six debt exclusion proposals they were asked to consider between 1982-1999, and one of eight overrides.⁷⁶

Less than a decade ago, the state embarked on a major overhaul of the Commonwealth's public schools. A rare display of executive-legislative branch harmony produced "education reform," which was designed to improve school systems across the Commonwealth by gradually increasing state-local education expenditures, targeting "Chapter 70" aid levels to the poorest (mainly urban) schools, and implementing school district performance standards. Since 1993, state aid for schools has been determined by a complicated formula that recognizes such factors as very high school enrollment growth, excessive school debt service, disproportionate numbers of low-income households, municipal revenue growth and centrally, EQV per capita. In simple terms, school growth burden and local wealth largely determine what a community receives – directly or through its regional school district.

Traditional public finance standards for measuring local wealth show that Merrimac is neither affluent nor particularly poor. Merrimac's per capita income of \$16,327 ranks 184 out of 351 cities and towns in the state, its household income of \$41,236 ranks 161, and its family income of \$46,276 ranks 163.⁷⁷ Equalized valuation (EQV) per capita falls considerably below that of most communities, however. The estimated EQV per capita for Merrimac today is \$61,758, for a state rank of 228.⁷⁸ The town's low EQV per capita seems to correlate with three economic

⁷⁵ Mass. Department of Revenue, City and Town 13 (January 2000): 3-5.

⁷⁶ Mass. Department of Revenue, Municipal Data Bank.

⁷⁷ Source of per capita, median household and median family income figures: Bureau of the Census, 1990. Income data from Census 2000 are not expected to be available at the county subdivision level until late 2002.

⁷⁸ DOR has not released EQV per capita calculations or rankings that reflect Census 2000 population counts. The estimate of \$61,758 is based on FY2000 EQV's approved by the legislature in May 2001, divided by Census 2000 population data. By way of comparison, Merrimac's FY 1998 EQV per capita – the last calculation developed and released by DOR – is \$53,645, for a state rank of 276. DOR developed FY 1998 EQV per capita figures by dividing the legislature's approved 1998 EQV's by the U.S. Census Bureau's 1998 population estimates for all cities and towns. The estimated population for Merrimac in 1998 was 5,996.

conditions: modest residential property values compared to the state as a whole, very weak commercial and industrial property values, and the prevalence of land assessed as farms under Chapter 61A.

Between FY 1995-2000, the per-pupil cost of education for Merrimac students rose from \$4,625 to \$6,188,⁷⁹ a 38% increase in six years. State aid increases to the Pentucket Regional School District and Whittier Vocational-Technical School reduced the town's actual costs to \$2,992 in FY 1995 and \$3,286 in FY 2000. Undeniably, state aid plays a large role in local government finance. While "cherry sheet" aid for public schools is the most generously funded source of all state aid programs, it is not the only one on which communities depend to finance the cost of town services.

The recession of the early 1990s led to a substantial drop in state aid to cities and towns across the Commonwealth, including Merrimac.⁸⁰ Non-school aid to Merrimac subsequently increased by 22.34% between 1996-2001, yet as a percentage of all revenue, state aid actually declined in the same period. The town's tax levy grew more slowly (15%), but as a percentage of all revenue, it also declined. The most significant growth occurred in local receipts, a category that includes such sources as water and sewer charges, motor vehicle excise taxes, building permit fees and interest on the town's investments. A combination of changing water and sewer rates, sheer growth in the number of rate payers, and trash sticker fees appears to underlie the successively greater contribution of local receipts to overall revenue in Merrimac.

Land Use & Town Finance

The town's relatively weak tax base, modest assessed values and low EQV rank help to explain why Merrimac receives somewhat more state aid per capita than many comparably sized communities, and why state aid as a percentage of all revenue sources in Merrimac exceeds the mid-point for the state as a whole. The same factors also affect the town's bond rating – directly or indirectly. After several years of a B-range rating from Moody's Investor Services, Merrimac advanced to an A3 in FY 2000.⁸¹ This stronger credit position qualifies Merrimac for a lower interest rate on long-term debt, a condition that will be advantageous when the town issues bonds for projects authorized but not yet activated. Still, in the municipal credit rating systems used by Moody's and Standard & Poor, an A3 bond rating signifies two important points: excellent probability of

⁷⁹ Mass. Department of Education, Per Pupil Cost Reports, 1995-1999.

⁸⁰ Another factor caused state aid revenue to decline in Merrimac: full regionalization of public schools. In FY 1994, "Chapter 70" and school transportation assistance that Merrimac had received to operate the Sweetsir and Donohue schools transferred to Pentucket Regional School District.

⁸¹ Mass. DOR, Municipal Data Bank: "Moody's Bond Rating, 1987-2000" (April 5, 2001).

debt repayment, but tax base and demographic characteristics make the community's fiscal health vulnerable in periods of economic downturn.

At present, Merrimac's indebtedness per capita is about \$1,470, which is on the low side of the "moderate" range for population debt burden.⁸² As debt service declined and unreserved revenue increased after FY 1995, overall government spending in Merrimac remained fairly low.

Conservative fiscal administration, small government, deferred capital improvements, state aid, and stable growth in property values have kept the cost of community services within reach of many households. Under existing conditions, Merrimac's residential development base is at about the "break-even" point – that is, the town and school services residents use are essentially offset by revenue from residential land uses. However, new growth creates additional, "marginal cost" impacts that underlie the demands for facilities and services in Merrimac today. The recycling of older homes sometimes culminates in the same kinds of marginal cost impacts, especially when *small* older homes are "reinvented" as large residences like those in new subdivisions. The perpetuation of single-family home development in Merrimac suggests that the marginal cost impacts of new growth will be significant, far-reaching and long-term, and that what is narrowly a "break-even" fiscal condition today will become a fiscally imbalanced condition tomorrow.

⁸² Standard & Poor, Municipal Credit Rating Indicators.