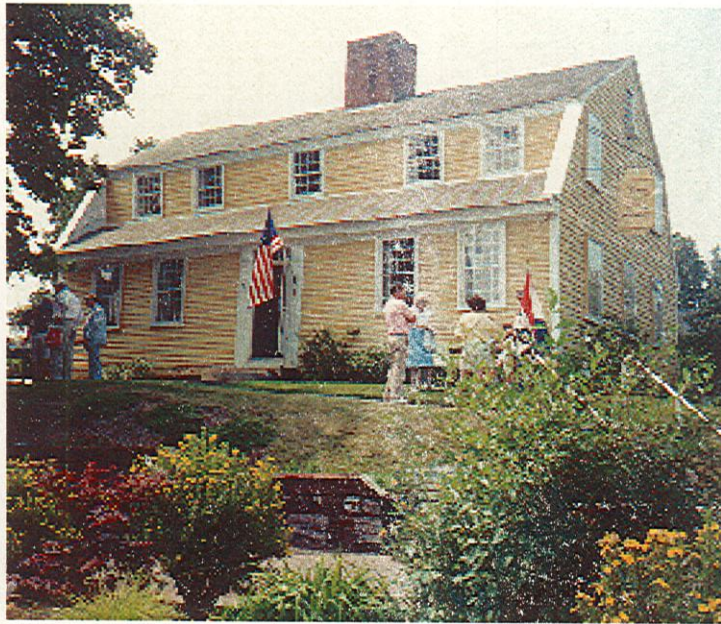


***TOWN OF MACHIAS MAINE***



**THE 2006 COMPREHENSIVE PLAN**

***DRAFT FOR PUBLIC REVIEW 11-17-06***

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from the office

# **THE TOWN OF MACHIAS MAINE**

## **2006 COMPREHENSIVE PLAN**

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## **A. EXECUTIVE SUMMARY**

### **Introduction**

The town of Machias has approached the Comprehensive Planning process several times in the past decade. An effort in the mid-1990s yielded a plan that was found inconsistent according to state law. Efforts in the late 1990s to update the plan and address those inconsistencies were never completed nor submitted for review by the state. A committee of volunteers stepped up to the task in 2005 to incorporate the new census information and the many changes that have taken place since 1995. The result is this document.

The vision developed in the original plan in the mid 1990s has not changed:

**Encourage and support growth and economic development which is compatible with the character of the community and does not adversely impact the resources of Machias**

This comprehensive plan was developed through the efforts of Machias residents and presents suggestions for the town to consider based on the existing inventory of our resources and trends in local and regional development. A comprehensive plan is not an ordinance; its suggestions are advisory and non-binding. Any ordinances the town would like residents to consider must be voted on separately.

This plan is only a vision and goal for the town to help plan for the future. It is a long term plan. The town is not obligated to implement any of the policies listed in the plan. Any ordinances that are developed will not take effect until voted on by the townspeople at a Town Meeting. The Comprehensive Plan includes only goals and objectives. The only constraint with respect to a future zoning ordinance is that it must be consistent with the plan (not including shoreland zoning). That does not mean that the town must enact zoning. It only means that if the town enacts zoning in the future it must be consistent with the plan.

### **History**

The history of Machias is based upon the natural resources that drove the local and regional economy, including rail travel, fishing, farming and, more recently, blueberries. The town of Machias has a wealth of historic and archaeological resources as a result of its location on the Machias River and its pivotal actions during the Revolutionary War. Many historic and archeological resources within the town are well known yet some remain undocumented and unprotected. The town will support further archaeological research and historic preservation.



business patrons brings an estimated additional 5000 people into the town. Population likely doubles in Machias when motel rooms and restaurants are busy and individuals from surrounding communities are shopping in Machias. Median household income in Machias is lower than all surrounding communities except Roque Bluffs, and is lower than in the County and the State. As the regional service center Machias provides services to residents in the surrounding towns who are not only of higher income but are contributing property taxes to towns other than Machias.

### **Natural Resources**

Machias currently offers protection to its natural resources with locally adopted shoreland zoning regulations. These ordinance provisions will be updated to be consistent with the requirements of State and Federal Regulations and reviewed for improvement to specifically protect the water resources in Machias. The town will continue to cooperate with the many local and regional organizations working to protect the natural resources within and surrounding Machias including the Machias River Watershed Councils, the Quoddy Regional Land Trust and neighboring communities. Regional efforts will focus on aquifer protection, watershed protection, and land conservation.

### **Economy**

The top two sectors of employment for Machias are 'Education, health and social services' and 'Retail trade'. The next two most important sectors comprising equal parts of the employment picture include 'Public Administration' and 'Arts, entertainment, recreation, accommodation and food services'. Washington County as a whole is supported by the same top sector: 'Education, health and social services' but followed by 'Manufacturing' as the second most important sector. Retail trade holds a higher share of the employment picture in Machias than in Washington County where 'Agriculture, forestry, and fisheries, mining' ranks third in its contribution to economic activity. Machias is an employment center for central Washington County. While the number of people who live and work in Machias has decreased since 1990 (651 in 2000; 782 in 1990), the number of people who live outside of the town and work in Machias has increased by almost 18 per cent.

Machias is a town whose economy has changed and continues to evolve. Machias is a regional employer but challenges remain to bring employment and sales to levels that will continue to sustain local employment. The policies and strategies in this Comprehensive Plan are diverse and extensive as a result. Primary among them is support for downtown revitalization efforts through implementation of recent downtown revitalization grants and creation of a Downtown Tax Increment Financing District; coordinated investment in public and private infrastructure; and support for the tourism that will bring visitors to the area.

To ensure a strong economy, minimize sprawl, encourage complementary activities, and work with the natural market forces, the Town is planning to encourage service related activities in the downtown, retail activities in the outskirts, and wholesale and low-impact industrial activities in the industrial park. The Town has identified vacant space in the downtown, as well as buildings with commercial or recreational potential in need of rehabilitation.

## **Housing**

Housing demand in Machias is closely linked to other towns in the region. Median household income in Machias is lower than all surrounding communities except Roque Bluffs, and is lower than in the County and the State. Machias also has the highest proportion (21.2%) of household earnings below \$15,000 compared to the county, State and surrounding communities. This creates a significant demand for affordable housing in the town.

Affordable housing is often defined as not costing more than 30% of household income. The data reviewed suggest that the cost of housing in Machias is affordable for most people in the community. However, the home price that could be afforded at the housing market median household income of \$27,671 was \$79,457. Thus only those with incomes above the median can still afford to purchase homes of the median sale price. The sales price of 53.3% percent of homes is above the median income in the Eastport/Machias housing market and the sales price of 80.0% percent of homes is above median income in Machias. Thus those with lower incomes are losing access to the housing market and the price of real estate in Machias is increasing. These residents provide much of the workforce for the Machias service center. Future housing construction, renovation and rehabilitation should therefore work toward supplying this market need.

The town participated in a regional affordable housing study in 2005 and has adopted several of the recommendations of that study in this Comprehensive Plan.

## **Recreation**

Machias has considerable natural resources available for recreational purposes, particularly the Machias River. Access to the Machias River is available to the public via the boat dock and ramp located on US Route 1. The Town also owns several recreational facilities including a park, softball field, basketball and tennis courts. The Town maintains a Recreation Department which runs a variety of programs throughout the year.

There are many historically and architecturally significant buildings located in Machias, one of which operates as a museum during the summer months. The University of Maine at Machias also provides opportunities for cultural performances. Some of the town's most important recreational resources rely on shorefront access, which we should seek to maintain and improve. Additional facilities and services are recommended to improve the amount and variety of recreational options for town residents of all ages.

## **Transportation**

Machias is a center of several crossroads in southern Washington County. Transportation linkages include US 1 and 1A, and State Routes 192 and 92. Our town is reliant on its road network as the primary means of transportation movement. Local roads should provide safe, reliable access to work, school, stores, and residences. Overall, Machias' roadways are in fair condition. Given limited funding and the significant expense, the town has done a noteworthy job of maintaining its roads. Continued proper and affordable maintenance of the road network in

Machias will be in the best interest of all residents. Since MDOT has jurisdiction over most main roads and seven bridges within Machias, the town will continue to communicate and cooperate with the department. The town requires all new roads to be constructed to specific standards.

The town has led recent efforts to relocate the existing regional airport. It is currently in Machias but a state funded analysis and site selection process has determined that it cannot be expanded to accommodate commercial traffic in its current location. The site selection process determined that a site in Jonesboro is the best among several analyzed in the region and it is being reviewed according to the federal National Environmental Policy Act.

### **Public Facilities and Services**

Machias has a wide variety of facilities and services provided by the public and private sectors. This is the heritage of a once much larger Town as well as a strong spirit of volunteerism and cooperation among citizens. It is also the result of prudent investments that will continue with the priorities set in this chapter and in the Capital Improvement Plan. Past efforts at regionalizing services will serve Machias well as costs drive towns to consider more cooperative ways to provide health care, education and emergency services to their communities.

### **Fiscal Capacity**

Machias has managed its finances well over the last five years and the mil rate has remained within a consistent range. Over the years, the town has dedicated reserves to cover new capital projects as well as maintenance and repairs on community facilities. This will provide a long-term commitment to preserving improvements through sustained, designated funding for maintenance of the downtown public infrastructure.

Through this Comprehensive Plan, the town is revising and updating a Capital Improvement Plan, as shown in Table I-8 above, to guide the town's capital investments. Infrastructure improvements are needed to upgrade public safety equipment, a new high school, water and sewer facilities, a regional airport, and to support downtown revitalization and waterfront development plans. These are included in the CIP.

### **Land Use**

Land use in Machias has changed significantly over the years. In 1900 the waterfront was active and the downtown was a vibrant part of the community. Main Street still exists as a commercial district and historical area, yet commercial activities have spread out along arterial streets. Most of the local population lives in a central district but subdivisions are developing outside of the traditional core.

The concentrated pattern of development, both commercial and residential, within the town center provides a walkable and accessible community. The proposed land use map in this Comprehensive Plan reflects existing patterns to a large degree. It also reflects the need to support downtown revitalization and development. This plan is intended to protect the town's character and to direct residential and commercial activities to appropriate areas. It also seeks to

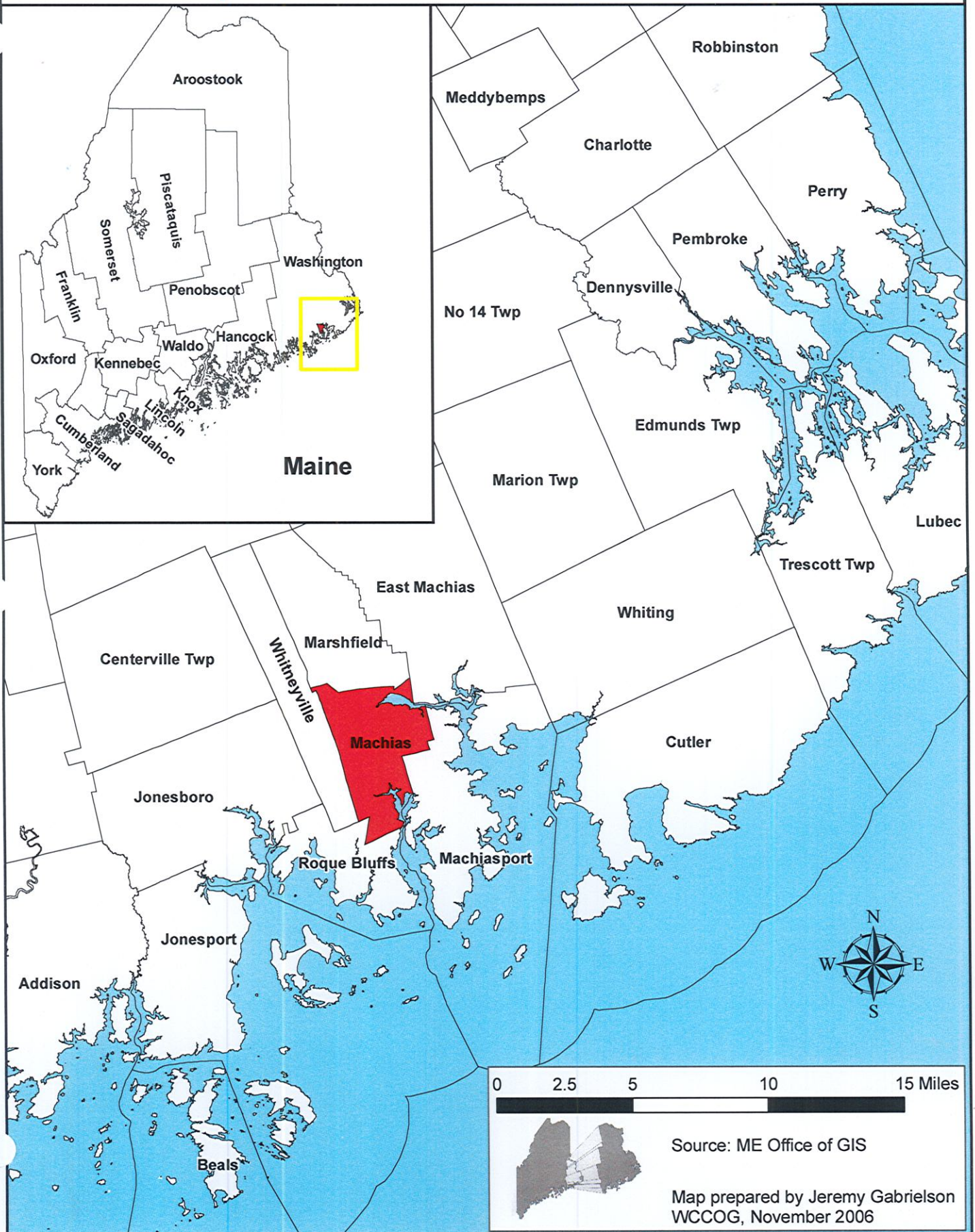
ensure that residents can continue to support themselves with a mixture of activities necessitated by seasonal and diverse rural livelihoods.

**Map Disclaimer:**

The information used to create the maps in this Comprehensive Plan has been derived from multiple sources. The map products as provided are for reference and planning purposes only and are not to be construed as legal documents or survey instruments. WCCOG provides this information with the understanding that it is not guaranteed to be accurate, correct or complete; that it is subject to revision; and conclusions drawn from such information are the responsibility of the user. Due to ongoing road renaming and addressing, the road names shown on any map may not be current. Any user of the maps accept same AS IS, WITH ALL FAULTS, and assumes all responsibility for the use thereof, and further agrees to hold WCCOG harmless from and against any damage, loss, or liability arising from any use of the maps.

# Machias Comprehensive Plan

## Map 1: Location





## **B. HISTORY**

The purpose of this section is to:

1. Outline the history of the Town of Machias;
2. Identify and profile the historic and archaeological resources of Machias in terms of their type and significance;
3. Assess current and future threats to the existence and integrity of those resources; and
4. Assess the effectiveness of existing measures to protect and preserve those resources.

### **Key Findings and Issues**

Machias has eight buildings listed on the National Register of Historic Buildings, and twelve others identified as being architecturally significant by the Sunrise Research Institute. The Maine Historic Preservation Commission (MHPC) has identified eight areas in Machias as having archaeological significance, and recommends further survey of areas along the river banks. A local historical society is being formed and the town has made financial gifts over the years in support of the Burnham Tavern and the Library. Due to the large number of significant historic structures, the Town could consider the establishment of a historic district or other special planning program to protect this resource.

### **Historic Record**

The Town of Machias was incorporated in 1784, the forty-second town to be incorporated in the State of Maine. At this time the Town of Machias included East Machias and Machiasport. After numerous years of various disagreements areas of what was originally Machias separated and formed independent towns that are now Machiasport, East Machias and Whitneyville.

The name Machias means “a bad run of water” or “bad little falls”. The area was explored in the late 1500s and early 1600s, with trading posts established at Cross Island and Birch Point before the Pilgrims arrived at Plymouth. The first to actually settle in the Machias area came in 1763, after the area had become safe for English occupancy. Severe drought in the southern sections of Maine attracted these early settlers to the region for salt marsh hay used to feed cattle. The presence of hay, along with stands of virgin white pine and water power prompted sixteen people from Scarborough, Maine, to establish the original settlement consisting of a double log house and later a mill at West Falls. By 1774, a larger business oriented central village had grown up around the original settlement at West Falls, and the first meeting house was built. In 1771, Reverend Lyon came to Machias to conduct church services.

Machias was the site of a 1775 naval battle, which occurred after townspeople refused to provide the British with lumber for barracks. The people of Machias initiated and won the first battle on the sea of the American Revolution by capturing the British ship *Margaretta*. The British arrived again in 1777 to subdue the rebellious Town, but they were quickly driven out.

The economy of Machias developed around natural resources industries, primarily the lumber industry. Dams were built at both Whitneyville and Machias to aid economic growth. The log drives along the Machias River ended in 1974.

As the county seat for Washington County, Machias provides services for much of the county through the University of Maine at Machias and many government offices. From the 1920s to the 1940s developments in transportation shifted the focus from water to land, in particular, construction of the Rim Bridge in Machiasport restricted ship passage up to Machias in the 1930s. What had once been an ideal location became remote, and the economy suffered.

Despite its status as the county seat and location along Route 1, the economy has changed considerably in the last 25 years. Economic activity has shifted from locally owned businesses located in the downtown to corporately owned businesses located primarily along Route 1 outside of the Main Street downtown corridor. Natural resources industries were formerly the foundation of the economy, but government services, social services and health care are more significant employers today. Several efforts are currently underway to diversify the base to provide stability including downtown revitalization, nature based tourism and business services.

**Table B-1 KEY DATES IN HISTORY 1600-1900 MACHIAS, MAINE**

Pre-1600s	Native American settlements and other activities
1605	DeMonts, a French explorer visits the general region
1633	Richard Vines sets up a trading post in Machias
1630 - early 1700s	French and English trading post established on Cross Island and Birch Point in Machiasport
1761-1762	Berry and Larrabee families move to Machias from Scarborough, Maine to take advantage of the significant salt marsh hay available
1763-1764	West Falls settlement established
1767	Lumber mill, called "Clam Year" built during a time of widespread drought and famine. Farmers from southern Maine travel Downeast to procure hay for their cattle.
1774	First meeting house built and Reverend James Lyons appointed as minister
1775	British ship "Margaretta", the first British ship captured by Americans, is accomplished by early settlers from Machias
1777	British Colonel Collier arrives to subdue Machias, burns mills and dwellings at West Falls
1836	Center Street Congregational Church built (now United Church of Christ)
1842	A railroad was completed between Whitneyville and Machiasport transporting lumber from the saw mills at the dam in Whitneyville
1853	Washington County Court House built by prominent architect Grindley Bryant
1892	Porter Library built
1903	Bangor Hydro Electric Company installs electric power plant at Machias
1910	Washington County State Normal school started, eventually to become the University of Maine at Machias
1974	Final year of the log drives in the Machias River
1990	Population 2,569 persons

### Identified Historic and Archaeological Sites

MHPC maintains an inventory of important sites in Machias, including buildings or sites on the National Registry of Historic Places (NRHP). MHPC inventory includes no pre-historic archaeological sites and eight historic archeological sites in Machias. For prehistoric archeological

sites they recommend further survey, inventory and analysis along the banks of the Machias River outside of heavily developed areas, and the shoreland zone of portions of Kennebec Bay. For historic archeological sites MHPC recommends that any future field work focus on agricultural, residential and industrial sites relating to the earliest Euro-American settlements of the Town, beginning in 1631. As of October, 2004, MHPC reported no professional surveys of this area. MHPC lists eight NRHP buildings in Machias listed on Table B-2, and recommends a comprehensive survey of Machias' above ground historic resources to identify other properties which may be eligible for nomination to the NRHP.

**Table B-2 NATIONAL REGISTER OF HISTORIC PLACES MACHIAS, MAINE**

Building	year built	Location
Burnham Tavern	1770	Main Street
Centre St. Congregational Church	1836-7	Centre Street
Washington County Court House	1853	Court
Machias Post Office and Custom House	1871-72	Main and Centre Streets
Porter Memorial Library	1893	Court Street
Clark Perry House	1868	Court Street
Washington County Jail	1858	Court Street
Machias Railroad Station	1898	East Main Street

Source: Maine Historic Preservation Commission, 2003

In addition to the eight buildings listed on the NRHP, the Sunrise Research Institute identified eleven buildings as valuable architectural resources of Washington County in the 1979 publication Sunrise County Architecture. Additional research and surveys may reveal other historic and architecturally significant resources. Downtown revitalization efforts will include public and business involvement in defining the location of the commercial and residential "downtown" as well as the limits of proposed historic districts.

**TABLE B-3 OTHER SIGNIFICANT STRUCTURES MACHIAS, MAINE**

Building	Year Built	Location
Heminway School (presently Machias Youth Center)	1863	Court Street
Obediah Hill House	1824	High Street
Rawson School (Sunrise Workshop)	1871	Bruce Street
Rufus K. Porter House	1825	Elm Street
Samuel Morse House	1810	Elm Street
Joseph Libby House	1820-1830	Route 92
S.W. Pope Store	1860	O'Brien Street
Fred Gilson House	1898-99	School Street

prehistoric and historic. Prehistoric archaeological resources are those associated with Native American archaeology and generally date prior to the 1600s. Historic archaeological resources are those associated with the earliest European settlers.

The Maine Historic Preservation Commission has indicated on a series of maps that some of Machias' coastline has sites that may prove to be archaeologically significant. There are no prehistoric archaeological sites known in Machias. MHPC indicates that there are many sites along river and coastal zone shorelines in East Machias and Machiasport where survey has been completed. But the only area in Machias that has been checked by a professional archeologist is the tip of Holway Point. They recommend that the banks and valley of the Machias River be professionally surveyed outside of heavily developed areas, and the shoreland zone portions of Kennebec Bay be surveyed as well.

There are eight known historic archaeological sites specifically identified by MHPC within Machias along the banks of the Machias River. These areas include ruins of an early trading post, a French settlement, an Afro-American cemetery, a shipyard, several wrecks of early vessels and a shell midden.

The historic archaeological sites located within Machias, according to the Maine Historic Preservation Commission (MHPC), are summarized below:

Site Name	Type	Site Number	Date
Allerton-Vines Trading Post	English trading post	ME256-001	17 <sup>th</sup> century
Magies Settlement	French settlement	ME256-002	17 <sup>th</sup> -18 <sup>th</sup> century
Shipyard	American shipyard	ME256-003	19 <sup>th</sup> century
"Flushing"	Unidentified wreck side-wheeler	ME256-004	19 <sup>th</sup> century
Atusville Cemetery	Afro-American cemetery	ME256-007	19 <sup>th</sup> -20 <sup>th</sup> century

The following historic archaeological sites are located on land (water) that was originally part of Machias before adjoining towns (Machiasport) separated from the town.

Site Name	Type	Site Number	Date
"Flushing"	Unidentified wreck side-wheeler	ME256-004	19 <sup>th</sup> century
"Nancy"	Unidentified wreck, schooner	ME256-005	19 <sup>th</sup> century
Holmes Point Shell Midden	Native American /French/Anglo-American contact	ME256-006	16 <sup>th</sup> -18 <sup>th</sup> century
"Sultan"	Canadian wreck, barque	ME256-008	19 <sup>th</sup> century

Maps of archaeological sensitive areas, provided by the MHPC, are available at the Machias Town office. In some cases the sites in the table above are known and MHPC can provide the specific location. In other cases, mostly shipwrecks, the sites are unknown; other information indicates that the site exists, for instance records of ships sinking. The MHPC notes that no professional survey for historic archaeological sites has been conducted to date in Machias. They recommend that future such fieldwork focus on agricultural, residential, and industrial sites relating to the earliest euro-American settlement of the town beginning in 1631. Many of the sites with archaeological potential are located within areas protected by shoreland zoning. The Machias Planning Board is aware of these locations

and recognizes the fact that any development of these areas should proceed with caution and should be reviewed by an archaeologist approved for contract archaeology.

### **Cemeteries**

There are several historic cemeteries in Machias noted below. They are depicted on Map 2 Public Facilities and Services and are named as follows:

1. West Kennebec Cemetery
2. East Kennebec Cemetery
3. O'Brien Cemetery
4. Longfellow Cemetery
5. Court Street Cemetery
6. Court Street Cemetery (Extension)
7. Attusville Cemetery
8. Reverend Lyon's Cemetery

### **Existing Protection Efforts**

The majority of the identified sites in Machias receive little or no formal protection or preservation efforts. However the town has made contributions to the Burnham Tavern and to the Library for restoration and preservation activities. Programs and efforts which currently provide protection include:

#### **National Registry of Historic Places (NRHP)**

Sites with national, State, or local significance are eligible for nomination to the NRHP. This registry protects sites only from intervention or development by a federal agency. Highway projects with federal funding, for example, may be challenged if they impact on registered sites. NRHP status is often erroneously assumed to protect the building from alteration or destruction. Machias has eight sites listed on the NRHP.

#### **Maine Historic Preservation Commission (MHPC)**

MHPC coordinates the National Registry as it affects Maine. MHPC also maintains an inventory of historic, archaeological, and coastal heritage sites in Maine, although the agency has no direct authority to protect sites. MHPC does, however, coordinate the distribution of available funds for preservation, restoration, and inventory. Such funds are currently extremely limited, but may become available with future appropriations or bonds. Archaeological sites are also protected by Maine State Antiquities Legislation. MHPC has recommended a comprehensive survey of Machias' historic above ground resources, and potential archaeological sites along the Machias Rivers, which may be eligible for further protection. The additional buildings identified by the Sunrise Research Institute may be eligible for the register.

#### **Private or Nonprofit Efforts**

Private individuals and groups play an important part in preserving Machias' historic resources. Presently, The Daughters of the American Revolution, a private non-profit corporation, maintains the Burnham Tavern and operates it as a museum during the summer



months. Many individual owners of properties, including churches and homes, also protect their properties through maintenance, deed restriction, or other protective covenants. Recent initiatives to preserve Machias history include protecting and obtaining grant funds for renovating the old Machias Railroad Station, genealogical and historic records research and a local historical society is being formed.

### **Rehabilitation Grants**

The Federal Historic Preservation Tax Incentives program rewards private investment to rehabilitate certified historic structures (building listed individually in the National Register of Historic Places or a building located in a registered historic district and certified by the Secretary of the Interior as contributing to the historic significance of the district). The building must currently be used or will be used for commercial, industrial, agricultural, or rental residential purposes, but not used exclusively as the owner's private residence. Under PL 99-514 Internal Revenue Code Section 47, tax incentives include:

1. A 20% tax credit for the certified rehabilitation of certified historic structures.
2. A 10% tax credit for the rehabilitation of non-historic, non-residential buildings built before 1936.

For both credits, the rehabilitation must be a substantial one. That is, during a 24-month period selected by the taxpayer, rehabilitation expenditures must exceed the greater of \$5,000 or the adjusted basis of the building and its structural components. And, the rehabilitation must involve a depreciable building. The National Park Service must approve, or "certify," all rehabilitation projects seeking the 20% rehabilitation tax credit. Owners seeking certification of rehabilitation work must complete the Historic Preservation Certification Application.

A Maine State taxpayer is allowed a credit equal to the amount of the Federal credit claimed by the taxpayer under section 47 of the Internal Revenue Code for rehabilitation of certified historic structures located in Maine. The credit is nonrefundable and is limited to \$100,000 annually per taxpayer.

### **Threats and Planning Implications**

Historic sites are threatened by a number of different factors. Archaeological sites are often altered due to development and construction, especially if the significance of the site is not known. Other archaeological sites are vulnerable to looting of artifacts. Historic buildings are threatened by disrepair, alteration, and development in the immediate surrounding areas. Downtown Machias and the immediate surroundings contain many buildings which may have historical significance. Some remain vacant and in disrepair. Historic sites are expensive to maintain, and owners are pressured economically to convert them to sustainable uses, or decrease their level of maintenance. Roadway improvements, finally, can be a threat to many of Machias' historic resources.

Few people would argue with the importance of protecting historic resources. One of the first steps toward protection is identification. There should be continued efforts in Machias to identify historic sites and assess their importance. Once sites are identified, they should be reviewed for nomination

to the register in order to obtain maximum protection. Owners of important sites should also be advised of possible private efforts to maintain the integrity of the sites.

## POLICIES AND IMPLEMENTATION STRATEGIES

<b>Goal 1:</b> In light of the findings of the Natural, Historical, and Critical Natural Resources chapters of the Comprehensive Plan, revise the Shoreland Zoning Ordinance and consider implementation of other land use ordinances to provide adequate protection using the new State guidelines and maps.			
<b>Goal 2:</b> Identify ways to protect and preserve the Town's historic resources.			
Policy	Implementation Strategy	Responsibility	Timeframe
Protect Machias' historic resources.	Encourage all privately owned historic resources to be registered in the National Register of Historic Places and maintained to the maximum extent feasible through landowner or nonprofit efforts or public acquisition and allowing access to preservation grants by owners or non-profit groups.	Board of Selectmen, Planning Board, and Code Enforcement Officer	Immediate
	Encourage Upgrading and installation of historic plaques on historic homes, buildings, and landmarks.	Board of Selectmen, Planning Board, and Code Enforcement Officer	Immediate
	Work with the Maine Historic Preservation Commission to determine the best way to preserve the historic resources in downtown Machias and develop a historic district, if warranted.	Board of Selectmen, Planning Board, and Code Enforcement Officer	Immediate
	Coordinate with the Maine Historic Preservation Commission to survey the banks of the Machias and Middle Rivers, focusing on the earliest British and French sites, as well as Native Americans	Board of Selectmen, Planning Board, and Code Enforcement Officer	Immediate
	Include in the future land use ordinance provisions specifying that development planned in archaeologically sensitive areas should be reviewed by a trained professional before construction can	Board of Selectmen, Planning Board, and Code Enforcement Officer	Immediate

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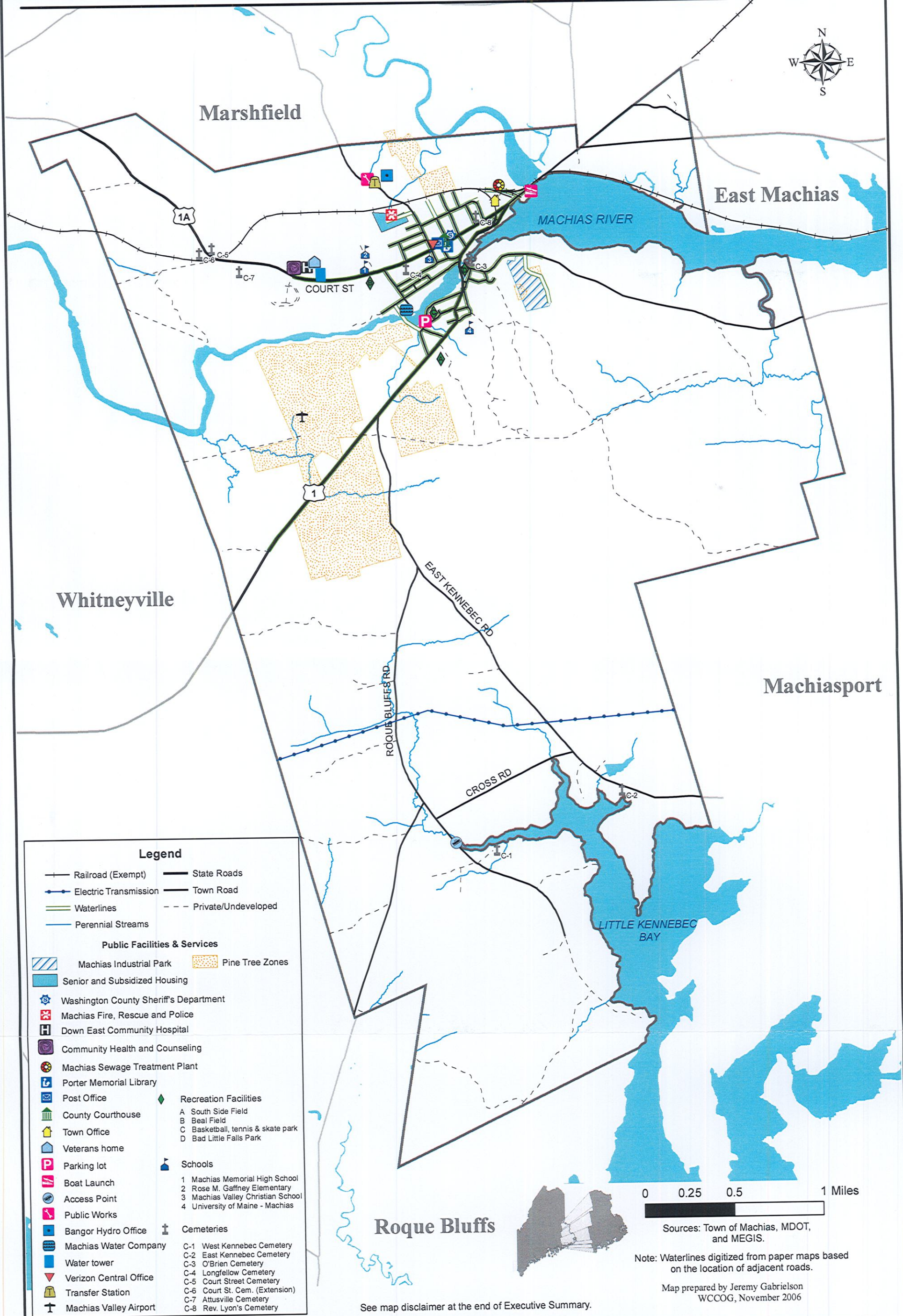
**Goal 2:** Identify ways to protect and preserve the Town's historic resources.

Policy	Implementation Strategy	Responsibility	Timeframe
	begin.		
Support effort to designate the Machias Valley area towns as an historic region.	With the areas of Eastport and Calais; and the areas of Milbridge and Cherryfield becoming distinct regions, the Machias Bay Towns with an Interlocal Agreement could become their own designated region for marketing purposes.	Economic Development, Selectmen, individual towns.	Immediate - Road signs needed this summer.
	Developing hiking or biking paths adjacent to the rail bed would be very beneficial to the local economy due to its tourism potential.		
	The current Machias Railroad Station reconstruction would provide a multi-modal facility for cyclists, walkers, bus service, snowmobilers, cross country skiers, as well as rail	Economic Development, Selectmen, individual towns.	Immediate -

## SUMMARY

The history of Machias is based upon the natural resources that drove the local and regional economy, including rail travel, fishing, farming and, more recently, blueberries. The town of Machias has a wealth of historic and archaeological resources as a result of its location on the Machias River and its pivotal actions during the Revolutionary War. Many historic and archeological resources within the town are well known yet some remain undocumented and unprotected. The town will promote further documentation of its archeological resources and appreciation of its cultural heritage.

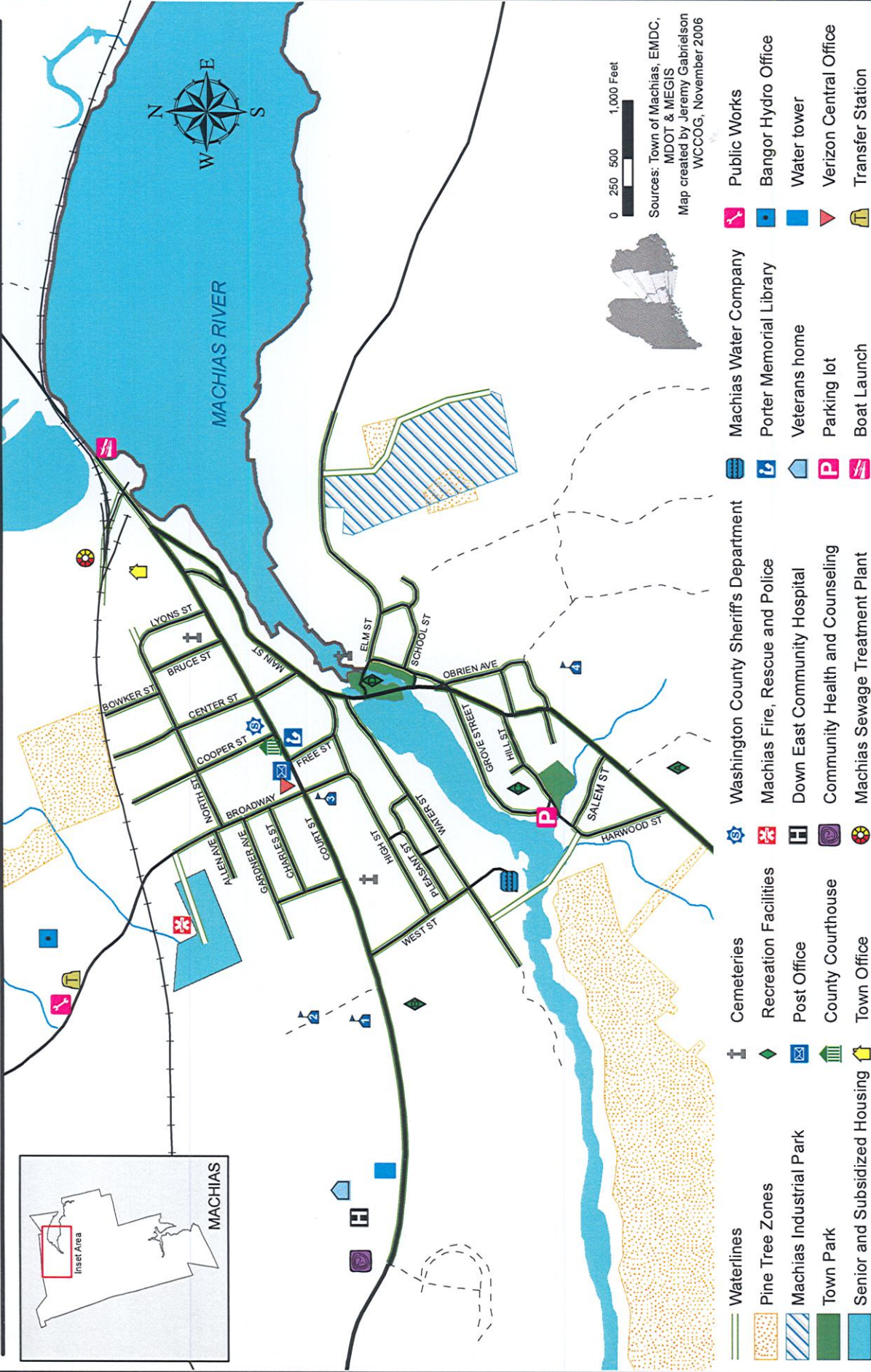






# Machias Comprehensive Plan

## Map 3: Public Facilities and Services (Inset)



See map disclaimer at the end of the Executive Summary.

**C: POPULATION**

The purpose of this section is to:

1. Describe the population and household characteristics of the Town of Machias and compare them with similar changes and patterns occurring in the region and the State;
2. Determine how population trends will influence the future demand for housing, land, and community facilities; and
3. Predict, for the next ten years, the size and significant characteristics of the population of Machias, and compare with similar projections for the region, and the State.

**Key Findings and Issues**

The year round population in Machias is 2,353 in 2000, a decrease of 8.4% since 1990. This rate of decline is higher than the County, which declined by 3.87%, and the State, which increased by 3.83%. The daily influx of commuters and business patrons brings an estimated additional 5000 people into the town. Population likely doubles in Machias when motel rooms and restaurants are busy and individuals from surrounding communities are shopping in Machias. The total projected population for Machias is 2,297 by 2015.

During the 1990s, Machias experienced an increase in median age and the elderly and a decrease in school age children. A continued increase in the elder population is anticipated. Household size in Machias is lower than East Machias, Machiasport, the County, and State averages. The number of households is decreasing slightly in Machias while it is increasing in both the County and the State. Communities surrounding Machias are growing. The highest percentage increases are seen in Roque Bluffs, Northfield and Marshfield.

Median household income in Machias is lower than all surrounding communities except Roque Bluffs, and is lower than in the County and the State. Machias also has the highest proportion (21.2%) of household earnings below \$15,000 compared to the county, State and surrounding communities. Per capita income is also lower than the State average. It is comparable to the County average and to most surrounding communities. These income levels are indicative of the demand for affordable housing in Machias. As the regional service center Machias provides services to residents in the surrounding towns who are not only of higher income but are contributing property taxes to towns other than Machias.

**Year-Round Population**

Machias' year-round population has increased slightly during the last century. The Town population was at its lowest in 1930, but gradually recovered by 1990. In the last decade the number of people in Machias declined by over 8 percent.

Table C-1 shows the historic population and rate of growth of Machias. Table C-2 compares recent population trends for Machias with surrounding towns, the County, and the State.

**Table C-1 YEAR-ROUND POPULATION AND RATES OF GROWTH MACHIAS: 1890-2000**

Year	Machias	
	Population	% Change
1890	2,035	-19%
1900	2,082	2%
1910	2,089	0.3%
1920	2,152	3%
1930	1,853	-14%
1940	1,954	6%
1950	2,063	6%
1960	2,614	27%
1970	2,441	7%
1980	2,458	0.7%
1990	2,569	5%
2000	2,353	-8.4%

Source: U.S. Bureau Census

**Table C-2 RECENT AND PROJECTED YEAR-ROUND POPULATION LEVELS AND RATES OF GROWTH FOR MACHIAS, SURROUNDING COMMUNITIES, WASHINGTON COUNTY, AND STATE OF MAINE: 1980-2000**

		1990	2000
<b>Machias</b>	<b>number</b>	<b>2569</b>	<b>2353</b>
	<b>% growth</b>	<b>-</b>	<b>-8.4%</b>
East Machias	number	1218	1298
	% growth	-	6.6%
Machiasport	number	1166	1160
	% growth	-	-0.5%
Marshfield	number	461	494
	% growth	-	7.2%
Northfield	number	99	131
	% growth	-	32.3%
Roque Bluffs	number	234	264
	% growth	-	12.8%
Whitneyville	number	241	262
	% growth	-	8.7%
Washington County	number	35,308	33,941
	% growth	-	-3.87 %
State	number	1,227,928	1,274,923
	% growth	-	3.83 %

Source: 1990 Census, 2000 Census

Machias is the employment and business center for southwestern Washington County with surrounding towns serving as bedroom communities.

### Age Distribution

Table C-3 shows the age distribution and rates of growth for Machias and the County. Proportionately, the size of the 0 to 4 and 5 to 17 age cohorts have dropped during the 1990s. The latter is a crucial cohort for the community, since education costs are such a large percentage of the Town budget. During the same period, the 18 to 44, 45 to 64, and the 65 and over age cohorts experienced growth and the median age has increased by 2.7 years. These data suggest that Machias has an aging population.

The age groups resemble those in Washington County. The proportion of the total population for each age group is roughly the same for Machias as it is for the County.

**Table C-3 AGE DISTRIBUTION - MACHIAS AND WASHINGTON COUNTY: 1990-2000**

Age Group 1990	Machias		Washington County		Age Group 2000	Machias		Washington County	
	Number	Percent	Number	Percent		Number	Percent	Number	Percent
Under 5	142	5.5%	2250	6.4%	Under 5	102	4.3%	1727	5.1%
5-17	386	15.0%	6790	19.2%	5-17	343	14.6%	6054	17.8%
18-24	475	18.5%	3177	9.0%	18-24	479	20.4%	2701	8.0%
25-54	873	34.0%	13827	39.2%	25-54	792	33.7%	13974	41.2%
55-64	213	8.3%	3557	10.1%	55-64	202	8.6%	3629	10.7%
65 and older	479	18.7%	5707	16.2%	65 and older	435	18.5%	5856	17.3%
Median Age	33.2	--	35.6	--		35.9	--	40.5	--

Source: 2000 Census

### Number and Size of Households

The number of households is decreasing slightly in Machias while it is increasing in both the County and the State. Communities surrounding Machias are growing. The highest percentage increases are seen in Roque Bluffs, Northfield and Marshfield. This trend can be partly explained by the decrease in household size summarized in Table C-5.

**Table C-4 NUMBER OF HOUSEHOLDS AND PERCENT GROWTH - MACHIAS, SURROUNDING COMMUNITIES, WASHINGTON COUNTY AND STATE OF MAINE: 1980-2000**

		1980	1990	2000
<b>Machias</b>	<b>number</b>	<b>823</b>	<b>943</b>	<b>939</b>
	<b>% growth</b>	<b>-</b>	<b>14.58%</b>	<b>-0.42%</b>
East Machias	number	453	469	540
	% growth	-	3.53%	15.14%
Machiasport	number	376	394	413
	% growth	-	4.79%	4.82%
Marshfield	number	135	166	196
	% growth	-	22.96%	18.07%
Northfield	number	40	41	61
	% growth	-	2.5%	48.78%
Roque Bluffs	number	84	96	118
	% growth	-	14.29%	22.92%
Whitneyville	number	86	95	105
	% growth	-	10.47%	10.53%
Washington County	number	12,222	13,418	14,118
	% growth	-	10%	5.2%
State	number	395,184	465,312	518,200
	% growth	-	18%	11.3%

Source: 1990 Census, 2000 Census

The size of households is decreasing in all cases. Decreasing household size leads to greater housing demand than might otherwise be indicated by population changes.



**Table C-5 HOUSEHOLD SIZE AND GROWTH RATE - MACHIAS, SURROUNDING COMMUNITIES, WASHINGTON COUNTY, AND STATE OF MAINE: 1980-2000**

Average Household Size and Growth Rate		1980	1990	2000
<b>Machias</b>	<b>Household Size</b>	<b>2.64</b>	<b>2.31</b>	<b>2.10</b>
	<b>% growth</b>	<b>-</b>	<b>-13%</b>	<b>-9.09%</b>
East Machias	Household Size	2.72	2.60	2.40
	% growth	-	-4%	-7.69%
Machiasport	Household Size	2.92	2.68	2.46
	% growth	-	-8.22%	-8.21%
Marshfield	Household Size	3.08	2.78	2.52
	% growth	-	-9.74%	-9.35%
Northfield	Household Size	2.2	2.41	2.15
	% growth	-	9.55%	-10.79%
Roque Bluffs	Household Size	2.9	2.44	2.24
	% growth	-	-15.86%	-8.2%
Whitneyville	Household Size	2.91	2.54	2.50
	% growth	-	-12.71%	-1.57%
Washington County	Household Size	2.86	2.55	2.34
	% growth	-	-11	-8.2 %
State	Household Size	2.85	2.56	2.39
	% growth	-	-10	-6.6 %

Source: 1990 Census, 2000 Census

### Household Income

Table C-6 shows the median household income for 1979, 1989 and 1999 for Machias, surrounding communities, Washington County, and the State. Median household income in Machias is lower than all surrounding communities except Roque Bluffs, and is lower than in the County and the State.

**Table C-6 MEDIAN HOUSEHOLD INCOME AND GROWTH PER YEAR - MACHIAS, SURROUNDING COMMUNITIES, WASHINGTON COUNTY, AND STATE OF MAINE: 1979-1989**

	1979	1989	1999	Growth per year 80-00	Growth per year 90-00
<b>Machias</b>	<b>\$11,916</b>	<b>\$19,406</b>	<b>24,318</b>	<b>5.20%</b>	<b>2.53%</b>
East Machias	\$11,431	\$21,094	28,073	7.28%	3.31%
Machiasport	\$9,569	\$24,412	29,531	10.43%	2.10%

Table C-7 shows the distribution of households by income category. Machias has the highest proportion (21.2%) of household earnings below \$15,000 compared to the county, State and surrounding communities.

**C-7 DISTRIBUTION OF HOUSEHOLDS BY INCOME - MACHIAS, SURROUNDING COMMUNITIES, WASHINGTON COUNTY, AND STATE OF MAINE: 1999**

Household Income																		
	Machias		E. Machias		Machiasport		Marshfield		Northfield		Roque Bluffs		Whitneyville		Wash. Co.		Maine	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
\$0-\$14,999	105	21.2%	57	14.8%	42	15.5%	12	7.9%	0	0.0%	29	31.5%	2	3.5%	1,784	19.2%	34,165	10.0%
\$15,000-\$24,999	60	12.1%	71	18.4%	49	18.1%	27	17.8%	0	0.0%	10	10.9%	10	17.5%	1,697	18.2%	41,479	12.1%
\$25,000-\$34,999	75	15.2%	81	21.0%	49	18.1%	25	16.4%	5	13.5%	15	16.3%	13	22.8%	1,619	17.4%	42,672	12.5%
\$35,000-\$49,999	103	20.8%	95	24.6%	64	23.6%	39	25.7%	9	24.3%	16	17.4%	5	8.8%	1,723	18.5%	69,045	20.2%
\$50,000 or more	152	30.7%	85	22.0%	67	24.7%	49	32.2%	23	62.2%	22	23.9%	27	47.4%	2,482	26.7%	150,070	43.8%

Source: U. S. Census

Machias has a high percentage of persons in the lower income categories. Per capita income, as shown in Table C-8, is also lower than the State average. It is comparable to the County average and to most surrounding communities but lower than per capita income in Marshfield, Northfield and Roque Bluffs. These income levels are indicative of the demand for affordable housing in Machias. As the regional service center Machias provides services to residents in the surrounding towns who are not only of higher income but are contributing property taxes to towns other than Machias.

**Table C-8 PER CAPITA INCOME AND PERCENT CHANGE - MACHIAS, SURROUNDING COMMUNITIES, WASHINGTON COUNTY AND STATE OF MAINE: 1979 to 1999**

	1979	1989	% change	1999	% change
Machias	4,961	9,756	97%	13,902	42.50%
East Machias	5,217	10,046	93%	13,254	31.94%
Machiasport	4,097	12,133	196%	13,727	13.14%
Marshfield	5,941	12,401	108.74%	15,969	28.77%
Northfield	5,217	13,774	164.02%	23,048	67.33%
Roque Bluffs	3,370	10,636	215.61%	15,610	46.77%
Whitneyville	4,579	7,565	65.21%	13,115	73.26%
Washington County	4,581	9,607	110%	14,119	46.97%

number increases during festivals by those using the 500-600 restaurant seats and approximately 120 motel rooms in Machias.

There are few accepted mechanisms to generate estimates of seasonal population. Seasonal residents in Machias supplement the economic base for the Town. According to the 2000 Census, there are 32 homes in Machias that are seasonal out of 190 that are considered vacant. With coastal development pressures increasing since 2000, this proportion may under represent those that are used seasonally.

### Population Projections

As the table and chart below depict, the State Planning Office predicts that the population of Machias will decrease to 2,302 individuals by 2005, to 2,297 in 2010 and then to remain the same by 2015.

**Table C-9 MACHIAS – STATE PLANNING OFFICE POPULATION PROJECTIONS**

Year	Machias		Washington County		Maine	
	Number	% Change	Number	% Change	Number	% Change
2015	2,297	0.0%	33,111	2.47%	1,300,000	-2.26%
2010	2,297	-0.22%	32,312	0.30%	1,330,117	-2.98%
2005	2,302	-2.17%	32,217	-5.09%	1,371,022	7.7%
2000	2,353	-8.4%	33,941	-3.87%	1,274,923	3.83%

Source: State Planning Office, 2003

The 2005, 2010 and 2015 numbers were projected by the State Planning Office and the 2000 information is an actual number from the U.S. Census.

Estimated 1990 to 2000 Population Trend & Projected 2000 to 2015 Population Trend



As noted above, the town's population has increased from 1930 to 1990 with a significant increase in the 1960s. The following analysis compares the analysis above provided by SPO with both a rate of growth calculation and linear regression analysis. The analyses that best reflect the SPO projection are those that base their estimates on the last 30-50 years of Machias' population fluctuations. During the 1990s, a decrease of 0.84% percent per year occurred. If that trend continued, Machias would decrease to 2,056 persons in 2015 (or 2,029 using linear regression). If, however, a lower annual rate of decline is observed (-0.12% percent per year) as occurred over the longer term from 1970 to 2000 then the population of the town would only decrease to a total of 2,311 persons by the year 2015 (or 2,409, using linear regression). However, if the average annual rate of growth of 0.28% from the period from 1950 to 2000 were to continue the population in 2015 would grow to 2,452 (or 2,569 using linear regression). Changes in land use including new year-round residential development will determine actual population growth over the next ten years. A slight to modest population increase is most likely to occur over the next ten-year period.

**Table C-10 POPULATION PREDICTIONS – ALTERNATE METHODS**

Timeframe on which prediction is based	Average Growth Per Year (Non-Compounded)	Machias Population Predictions for the year 2015	
		Using Average Growth Per Year (NC)	Using Simple Linear Regression
1950-2000	0.28%	2,452	2,569
1970-2000	-0.12%	2,311	2,409
1990-2000	-0.84%	2,056	2,029

Notes: Base population data from Census

## **POLICIES AND IMPLEMENTATION STRATEGIES**

Given the importance of understanding, planning for and meeting the needs of current and future residents, the town has developed the following policies and implementation strategies to monitor its population.

<b>Goal: Machias will use complete and current information about its population when making administrative and policy decisions for the city.</b>			
<b>Policy</b>	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Timeframe</b>
Machias will actively monitor the size, characteristics and distribution of its population.	In conjunction with the Washington County Council of Governments, the designated census information center for Washington County, the town will gather all available population estimates, census data and other information concerning the number and characteristics of the town's population.	Town Manager; School Board	Immediate

## **SUMMARY**

The total projected population for Machias is 2,297 by 2015. During the 1990s, Machias experienced an increase in median age and the elderly and a decrease in school age children. A continued increase in the elder population is anticipated. The daily influx of commuters and business patrons brings an estimated additional 5000 people into the town. Population likely doubles in Machias when motel rooms and restaurants are busy and individuals from surrounding communities are shopping in Machias. Median household income in Machias is lower than all surrounding communities except Roque Bluffs, and is lower than in the County and the State. As the regional service center Machias provides services to residents in the surrounding towns who are not only of higher income but are contributing property taxes to towns other than Machias.

## D. NATURAL RESOURCES

The Purpose of this section is to:

1. Describe the natural resources in Machias including farmlands, forestlands, critical natural resources, and water and marine resources in terms of extent, characteristics, and importance to the economy and character of the Town and region;
2. Predict whether the viability of important natural resources will be threatened by the impacts of future growth and development; and
3. Assess the effectiveness of existing measures to protect and preserve important natural resources.

### Key Findings and Issues

Machias is the second largest center in Washington County with a concentrated village at the head of the Machias River estuary. The Machias River is rated as high value for fresh water fisheries and it has the greatest production of Atlantic salmon young of any river in the United States. The Machias River estuary also supports significant wildlife and has historically provided productive clamflats. Access to the Machias River is available to the public via the boat dock and ramp located on US Route 1. Machias has many critical natural resources, most significantly wildlife habitat and one botanical feature listed under the State Natural Areas Program (last documented in 1935), which may require special planning consideration.

Information on natural resources is necessary to protect environmentally sensitive areas, and to identify opportunities and constraints for development. The natural resources of our town contribute greatly to our quality of life. They provide open space, habitat, and recreational opportunities such as fishing, boating, ATV, horse back riding, snowmobiling, hunting, canoeing, hiking, and cross-country skiing, as well as other activities.

### LOCATION, TOPOGRAPHY AND GEOLOGY

Located on the central coast of Washington County the town of Machias is situated approximately 90 miles southeast of Bangor. It is bordered on the east by the towns of Machiasport and East Machias, on the north by the town of Marshfield and on the west by the towns of Whitneyville and Roque Bluffs. The land area of the town is approximately 9,200 acres (see Map 6: Land Cover). See Map 4: Topography, Steep Slopes and Flood Zones at the end of this section for general contour elevations. The town has limited coastal frontage along the Machias River and around the upper reaches of Little Kennebec Bay.

Machias is located in a region of massive granite intrusion that was glaciated in the Wisconsin age. The glacier caused till (unsorted, poorly drained soil) to be deposited over the entire region. This poorly drained till formed bogs and ponds and altered the drainage pattern. The topography in these areas is generally a blanket deposit that conforms to the underlying bedrock topography. However, the underlying granite caused the till to be more thickly deposited on the northwest sides of ridges: on the southeast sides boulders were "plucked" and transported further south. Thick till deposits are also found in bedrock "valleys" and depressions. The weight of the ice (in some places a mile thick) caused the land to be depressed in relation to the level of the sea.



Marine sediments (silts and clays) were deposited in valleys and more sheltered locations. The release of pressure due to the melting allowed the land to rise slowly. This explains why silt and clay deposits can be found at elevations of 100 feet or more. See Map 4: Topography, Steep Slopes and Flood Zones at the end of this section for general contour elevations.

## **LAND SUITABILITY FOR DEVELOPMENT**

### **Soils**

The United States Department of Agriculture (USDA) Soil Conservation Service (SCS) has prepared soil classification maps for each state (STATSGO). Soil maps for STATSGO are often compiled by generalizing more detailed (SSURGO) soil survey maps. Where more detailed soil survey maps are not available, as is the case in Washington County, data on geology, topography, vegetation, and climate are assembled, together with Land Remote Sensing Satellite (LANDSAT) images. Soils of like areas are studied, and the probable classification and extent of the soils are determined. Map 4 – STATSGO Soils provides this level of information for Machias.

A soils map at 1:20,000 scale is useful in understanding and planning the soil resources of fields, farms, and communities, but it is not useful for planning small (less than 1 acre) plots. The pattern of soils is often very complex and, in some places, soils of one type grade imperceptibly into others. Soils in Machias are of several types: glacial till thinly deposited in the uplands; thick glacial till on northwest slopes and in bedrock depressions; marine silts and clays in the valleys and more sheltered locations, and glacial outwash or ice contact sands and gravels. Some of these types are not particularly well suited to septic sewage disposal. Some are well suited to both septic disposal and forestry. On-site investigations are needed to determine the suitability of a plot for any septic tank installation or larger development proposal.

The STATSGO and SSURGO soils map combinations are not the same map units as the paper copies of the soils maps that are available in the Machias office of the Soil and Water Conservation Service. In addition the paper maps are not available in digital format and are large (24" by 24"). They are therefore not reproduced in this plan but they are now housed in the Machias town office as well as in offices of the Washington County Soil and Water Conservation Service in Machias.

### **Soil Potential for Low Density Development (LDD)**

This last interpretation – rating of soil potential for low density urban development – is provided in the table below to guide the concentration of development in Machias. Under this system soil potentials are referenced to an individual soil within the county that has the fewest limitations to development (depth to water table, bedrock etc.). This reference soil is given a value of 100 points. Costs that are incurred to overcome limitations to development are developed for all other soils. These costs, as well as costs associated with environmental constraints and long term maintenance, are converted to index points that are subtracted from the reference soil. The result is a comparative evaluation of development costs for the soils in the county. The overall range is large with values between 0 and 100. These numerical ratings are separated into Soil Potential Rating Classes of very low to very high. Thus in the table a soil with a Very High rating has very good potential for development.

**Table D-1 MACHIAS – SOIL SUITABILITY FOR DEVELOPMENT POTENTIAL BY RATING CLASS**

*(prime agricultural soils indicated by italic font;  
all except Skerry fine sandy loam require drainage to be classified as Prime Farmland;  
those in italic bold print require irrigation to be classified as Prime Farmland)*

Map Unit	Soil Name	Septics	Dwellings	Roads	Development
29X	Udorthents – urban complex				
39P	Bucksport and Wonsqueak soils	Very Low	Very Low	Very Low	Very Low
216B	Adams Loamy sand, 3-8%	Low	Very High	High	Medium
<b>216C</b>	<b>Adams Loamy sand, 8-15%</b>	<b>Very Low</b>	<b>High</b>	<b>High</b>	<b>Medium</b>
<b>220B</b>	<b>Colton Gravelly Sandy Loam, 3-8%</b>	<b>Low</b>	<b>Very High</b>	<b>Very High</b>	<b>Medium</b>
221B	Colton Gravelly Sandy Loam, 0-8%, Very Bouldery	Low	High	High	Medium
221C	Colton Gravelly Sandy Loam, 8-15%, Very Bouldery	Very Low	High	Medium	Low
227B	Nicholville Very Fine Sandy Loam, 3-8%	Medium	High	High	Medium
230C	Buxton Silt Loam, 8-15%	Medium	Medium	Medium	Medium
232B	Lamoine-Buxton Complex 0-8%	Very low	Medium	Medium	Low
233A	Scantic Silt Loam	Very low	Very low	Very low	Very low
235B	Lamoine Silt Loam, 0-6%	Very low	Medium	Medium	Low
236A	Lamoine-Scantic Complex, 0-5%	Very low	Medium	Medium	Low
253B	Hermon-Monadnock Complex, 3-8%, very bouldery	High	High	Medium	Low
254B	Skerry Fine Sandy Loam, 3-12%	High	High	High	High
<b>262B</b>	<b>Tunbridge-Lyman Complex, 3-8%</b>	<b>Medium</b>	<b>High</b>	<b>High</b>	<b>High</b>
263C	Tunbridge-Lyman-Abram Complex, 3-15%, very stony	Medium	Medium	Medium	Medium
263E	Abram-Lyman Complex, 15-45%, very stony	Very Low	Very Low	Very Low	Very Low
266C	Becket Fine Sandy Loam, 8-15%, very stony	Medium	Medium	Medium	Medium
322C	Hermon-Colton-Abram Complex, 3-15 %, very bouldery	Very Low	Medium	Medium	Low
<b>323B</b>	<b>Sheepscot-Croghan-Kinsman Complex, 0-8%</b>	<b>Very Low</b>	<b>High</b>	<b>High</b>	<b>Medium</b>
329C	Tunbridge-Lamoine-Lyman Complex, 0-15%, very stony	Medium	Medium	Medium	Medium
330B	Lamoine-Tunbridge-Scantic Complex, 0-8%, very stony	Very low	Medium	Medium	Low
331B	Lamoine-Scantic-Colonel Complex, 0-8%, very stony	Very low	Medium	Medium	Low
332B	Lamoine-Buxton-Scantic Complex, 0-15%	Very low	Medium	Medium	Low
332C	Buxton-Lamoine Complex, 3-15%	Medium	Medium	Medium	Medium

**Highly Erodible Soils**

Special consideration should be given to the removal of surface vegetation from large areas to avoid soil erosion, which is a major contributor of pollution to surface waters. Soil composition affects its susceptibility to erosion but the combined effects of slope length and steepness are the greatest contributing factors when identifying highly erodible soils.

Most development and intensive land use can and should take place on areas with slopes of less than 15 percent (representing an average drop of 15 feet or less in 100 feet horizontal distance). On slopes greater than 15 percent, the costs of roads, foundations and septic, sewer and other utility systems rise rapidly. Map 4: Topography, Steep Slopes and Flood Zones identifies the location of steep slopes in Machias.

**FARM AND FOREST LAND**

The U.S. Department of Agriculture defines prime farmland as the land that is best suited to producing food, feed, forage, fiber, and oilseed crops. It has the soil quality, growing season, and moisture supply needed to produce a sustained high yield of crops while using acceptable farming methods. Prime farmland produces the highest yields and requires minimal amounts of energy and economic resources. It is also often targeted for low-density residential development due to the suitability of well drained soils for septic systems. Very few of the soils in Machias are listed as Prime Farmland, the exception being a type of Skerry fine sandy (see those soils in Table D-1 in italic print). Several others are classified as Prime Farmland but only if either drained or irrigated.

**Blueberry production**

Agriculture has never been a major commercial activity for the people of Machias. A few generations ago residents engaged in part-time farming and supplemented incomes from selling homegrown food products, providing food and grain for sustenance and use aboard ships. Only a few small farms remain in operation today. The most significant agricultural activity in Machias is blueberry production. There are approximately 400 acres in blueberry production none of which are irrigated. While the soils in Machias are not ideal for many agricultural uses, they are well suited for blueberry production and this activity provides some employment in town.

Machias has one major processing industry, Maine Wild Blueberry and one blueberry co-op giving the Town a large portion of the value added revenue from the area blueberry industry.

### Woodland Productivity

Maine's forests and forest industry still play a vital role in the state's economy, especially in Northern and Eastern Maine. Forested areas provide an abundant and diverse wildlife population for the use and enjoyment of all Maine citizens. Furthermore, the forest protects the soil and water and contributes to a wide variety of recreational and aesthetic experiences. The forest provides a wide variety of wildlife habitats for both game and non-game species. Loss of forestland can be attributed to development and to irresponsible harvesting techniques. When forestland ownership is fragmented, public access becomes more restricted due to increased land posting. To optimize forestland use, forests should be effectively managed and harvested.

Soils rated with a woodland productivity of medium or above are qualified as prime forestland soils. This designation does not preclude the development of these lands but only identifies the most productive forestland. These soils are rated only for productivity and exclude management problems such as erosion hazard, equipment limitations or seedling mortality. Important forest and farmland are shown on Map 6: Land Cover.

Timber harvesting is a relatively minor economic activity in Machias and is conducted mostly through selection harvest but also by shelter wood, and clearcut methods, see Table D-2.

**Table D-2 SUMMARY OF TIMBER HARVEST INFORMATION FOR THE TOWN OF MACHIAS**

Year	Selection Harvest, Acres	Shelterwood Harvest, Acres	Clearcut Harvest, Acres	Total Harvest, Acres	Change of Land use, Acres	Number of Timber Harvests
1992	80	-	92	172	29	4
1993	90	40	15	145	-	4
1997	449	-	13	462	13	9
1998	119	-	8	127	8	7
1999	92	1	-	93	-	6
2000	117	25	-	142	-	6
<b>Totals</b>	<b>947</b>	<b>66</b>	<b>128</b>	<b>1,141</b>	<b>50</b>	<b>36</b>

Source: Year End Landowner Reports to Maine Forest Service, 2003 (Note: to protect confidential landowner information, data is reported only where three or more landowner reports reported harvesting in the town)

### WATER RESOURCES

body. Development activities, such as house and road construction and timber harvesting, disturb the land that drains to a lake by streams and groundwater; thus these activities can pollute the watershed. Except for blueberry fields scattered along the major roads through town, the majority of Machias watersheds are forested.

The town of Machias shares the shoreline of Little Kennebec Bay with neighboring Machiasport. The center of population for the town is located at the head of the estuary of the Machias River.

Threats to water quality come from point and non-point discharges. Point source pollution is discharged directly from a specific site such as a municipal sewage treatment plant or an industrial outfall pipe. There is one point source discharge within the town of Machias at the sewage treatment plant. The Machias Sewage Treatment facility is licensed to discharge at two combined sewer overflows (CSO). Aeration upgrades are planned at the plant. The town has been working diligently to remove sources where surface water infiltrates the sewer system to reduce the number of times that CSO discharges are released to the Machias River. Stormwater is separated from sewage flow throughout the system but repairs are still needed, and on-going, to old failing pipes, faulty manholes and connections as well as removing illegal storm and roof drains.

Non-point source pollution poses the greatest threat to water quality in Maine communities and Machias is no exception. The most significant contributing source comes from erosion and sedimentation as well as excessive run-off of nutrients, particularly phosphorus. In excessive quantities phosphorus acts as a fertilizer and causes algae to flourish or “bloom”. Additional contributing factors include animal wastes, fertilizers, sand and salt storage, faulty septic systems, roadside erosion, dirt roads, leaking underground storage tanks, and hazardous substances.

### **Rivers, Streams, and Brooks**

The Town has approximately 4.5 miles of shore frontage along the Machias River. The Maine Rivers Study classifies the Machias River, which flows 72 miles from Fifth Machias Lake in Township 36 to Fort O’Brien Point at Machiasport into Machias Bay, as a class A river<sup>1</sup>. The study concluded that the Machias River had significant resource values in seven categories: inland fisheries, anadromous fisheries, backcountry canoe excursions, whitewater rapids, whitewater boating, bald eagle habitat, and as an undeveloped river corridor.

The breach of the last dam in 1972 made the Machias River one of the longest flowing wild rivers in the state, with a 30 mile undeveloped corridor. The waters of the Machias River are generally brown and slightly acidic due to the drainage of swamps and peatlands in the watershed. The Machias River Project Report states that the Machias River has the greatest natural production of Atlantic salmon young of any river in the United States. The Maine Legislature designated the upper portion of the Machias River as an Outstanding River Segment,

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<sup>1</sup> A class A river is any river possessing six resource values with regional, statewide or greater significance in a specific resource category, or possessing two or more resource values which are recognized to be some of the State’s most significant in a given resource category.



awarding it special protection (see critical natural resources). The lower segment has significant value as an estuary (see marine resources) and as an anadromous and inland fishery and supporting significant populations of brook trout and small mouthed bass. Eighty six percent of the Atlantic salmon habitat on the Machias River, *representing 20 % of the remaining wild Atlantic salmon spawning and nursery habitat in the entire country*, is protected from development through a working forest agreement with conservation minded harvesting.

The mean low water level in Machias is less than one foot. The Army Corps of Engineers (ACE) originally dredged the estuary channel in 1876, removing the middle rock ledge to a depth of half foot below mean low water, as well as several shoals below Machias to provide a channel six feet deep and at least 100 feet wide from the deep water near East Machias bridge to the wharves at Machias. The estuary was dredged again in 1972. In 1987, the ACE placed a rip-rap along a 250 foot section of the north bank of the Machias River, extending a 500 foot rip-rap that was previously installed by the Federal Disaster Assistance Administration Project for erosion control. Presently, there is a breached dam on the river in downtown Machias, and a fixed highway bridge with a clearance of 25 feet across the river about two miles below Machias.

A segment of the Middle River passes through Machias emptying into the Machias River. The Middle River is one of only three rivers between Bangor and Calais that is stocked with brook trout. The Route 1 bridge across the mouth of the Middle River has tide gates maintained by the Department of Transportation. Several smaller rivers, brooks, and streams also pass through Machias including Libby Brook, which supports brook trout, and the Eastern and Western Branches of Little Kennebec Bay. The headwater of the Western Branch of Little Kennebec Bay is Cale's Brook, which holds a high value brook trout population and contributes to an anadromous population of brook trout that inhabits the Western Branch of Little Kennebec Bay.

To assess what portion of Maine's rivers, streams, and brooks meet the goal of the Clean Water Act; MDEP uses bacteriological, dissolved oxygen, and aquatic life criteria. All river waters are classified into one of four categories, Class AA, A, B, and C as defined by legislation. Class AA is the highest classification with outstanding quality and high levels of protection. Class C, on the other end of the spectrum, is suitable for recreation and fishing yet has higher levels of bacteria and lower levels of oxygen. The following table provides the classifications for the waterways in Machias with definitions of all classifications in the footnotes:

Table D-3 MACHIAS WATER QUALITY CLASSIFICATIONS

Waterway	Waterway Segment	Classification <sup>2</sup>
Machias River, main stem	From a point 100 feet upstream of the Route 1A bridge in Whitneyville to tidewater.	Class B Further, the Legislature finds that the free-flowing habitat of this river segment provides irreplaceable social and economic benefits and that this use must be maintained.
Libby Brook, and the Eastern and Western Branches of Little Kennebec Bay.	All estuarine and marine waters lying within the boundaries of the State and which are not otherwise classified are waters.	Class SB
Machias River	All tributaries entering below Route 1A in Whitneyville	Class B

<sup>2</sup> 1. Class AA waters. Class AA shall be the highest classification and shall be applied to waters which are outstanding natural resources and which should be preserved because of their ecological, social, scenic or recreational importance.

A. Class AA waters shall be of such quality that they are suitable for the designated uses of drinking water after disinfection, fishing, recreation in and on the water and navigation and as habitat for fish and other aquatic life. The habitat shall be characterized as free flowing and natural. [1985, c. 698, § 15 (new).]

B. The aquatic life, dissolved oxygen and bacteria content of Class AA waters shall be as naturally occurs. [1985, c. 698, § 15 (new).]

C. There may be no direct discharge of pollutants to Class AA waters, except storm water discharges that are in compliance with state and local requirements. [1999, c. 243, § 8 (amd).]  
[1999, c. 243, § 8 (amd).]

2. Class A waters. Class A shall be the 2nd highest classification.

A. Class A waters shall be of such quality that they are suitable for the designated uses of drinking water after disinfection; fishing; recreation in and on the water; industrial process and cooling water supply; hydroelectric power generation, except as prohibited under Title 12, section 403; and navigation; and as habitat for fish and other aquatic life. The habitat shall be characterized as natural. [1985, c. 698, § 15 (new).]

B. The dissolved oxygen content of Class A waters shall be not less than 7 parts per million or 75% of saturation, whichever is higher. The aquatic life and bacteria content of Class A waters shall be as naturally occurs. [1985, c. 698, § 15 (new).]

C. Direct discharges to these waters licensed after January 1, 1986, are permitted only if, in addition to satisfying all the requirements of this article, the discharged effluent will be equal to or better than the existing water quality of the receiving waters. Prior to issuing a discharge license, the department shall require the applicant to objectively demonstrate to the department's satisfaction that the discharge is necessary and that there are no other reasonable alternatives available. Discharges into waters of this classification licensed prior to January 1, 1986, are allowed to continue only until practical alternatives exist. There may be no deposits of any material on the banks of these waters in any manner so that transfer of pollutants into the waters is likely. [1989, c. 890, Pt. A, § 40 (aff); Pt. B, § 62 (amd).]  
[1989, c. 890, Pt. A, § 40 (aff); Pt. B, § 62 (amd).]

3. Class B waters. Class B shall be the 3rd highest classification.

A. Class B waters shall be of such quality that they are suitable for the designated uses of drinking water supply after treatment; fishing; recreation in and on the water; industrial process and cooling water supply; hydroelectric power generation, except as prohibited under Title 12, section 403; and navigation; and as habitat for fish and other aquatic life. The habitat shall be characterized as unimpaired. [1985, c. 698, § 15 (new).]

B. The dissolved oxygen content of Class B waters shall be not less than 7 parts per million or 75% of saturation, whichever is higher, except that for the period from October 1st to May 14th, in order to ensure spawning and egg incubation of indigenous fish species, the 7-day mean dissolved oxygen concentration shall not be less than 9.5 parts per million and the 1-day minimum dissolved oxygen concentration shall not be less than 8.0 parts per million in identified fish spawning areas. Between May 15th and September 30th, the number of *Escherichia coli* bacteria of human origin in these waters may not exceed a geometric mean of 64 per 100 milliliters or an instantaneous level of 427 per 100 milliliters. [1985, c. 698, § 15 (new).]

C. Discharges to Class B waters shall not cause adverse impact to aquatic life in that the receiving waters shall be of sufficient quality to support all aquatic species indigenous to the receiving water without detrimental changes in the resident biological community. [1985, c. 698, § 15 (new).]  
[1985, c. 698, § 15 (new).]

4. Class C waters. Class C shall be the 4th highest classification.

A. Class C waters shall be of such quality that they are suitable for the designated uses of drinking water supply after treatment; fishing; recreation in and on the water; industrial process and cooling water supply; hydroelectric power generation, except as prohibited under Title 12, section 403; and navigation; and as a habitat for fish and other aquatic life. [1985, c. 698, § 15 (new).]

2. Class SB waters. Class SB waters shall be the 2nd highest classification.

A. Class SB waters shall be of such quality that they are suitable for the designated uses of recreation in and on the water, fishing, aquaculture, propagation and harvesting of shellfish, industrial process and cooling water supply, hydroelectric power generation and navigation and as habitat for fish and other estuarine and marine life. The habitat shall be characterized as unimpaired.

**Shorelands and Floodplains**

Shorelands are environmentally important areas because of their relationship to water quality, their value as wildlife habitat and travel, and their function as floodplains. Development and the removal of vegetation in shoreland areas can increase runoff and sedimentation leading to an increase in the amount of nutrients and other pollutants that reach surface water. This can lead to algal blooms and degraded water quality. The Shoreland Zoning Ordinance, with revisions adopted by Machias in 1995 is designed to provide protection to shorelands.

Floodplains serve to accommodate high levels and large volumes of water and to dissipate the force of flow. A floodplain absorbs and stores a large amount of water, later becoming a source of aquifer recharge. Floodplains also serve as wildlife habitats, open space and outdoor recreation without interfering with their emergency overflow capacity. Flooding can cause serious destruction of property and activities that increase paved or impervious surfaces and/or that change the watercourse on floodplains increase the quantity and rate of runoff that can intensify flooding impacts downstream.

The 100-year floodplains within Machias have been identified by the Federal Emergency Management Agency (FEMA) for administration of the Federal Flood Insurance Program. A 100-year flood is a flood that has 1 chance in 100 of being equaled or exceeded in any 1-year period. Local flood plain areas fall into two major categories: areas prone to flooding and velocity zones or areas susceptible to damage from wind-driven water. One hundred year floodplains, shown on Map 4: Topography, Steep Slopes and Flood Zones, are associated with the shorelines of the Machias River and Smelt Brook. Machias is currently updating its Floodplain Management Ordinance to meet the requirements of federal law. It will include construction standards to minimize flood damage within the 100-year floodplain.

Severe flooding in Machias is limited to two reaches on the Machias River: upstream from the Route 1 bridge for about two miles, and from the Machias-Machiasport corporate limits to the Route 1 bridge. Flooding above the bridge generally occurs in the spring months from rapid runoff caused by heavy rains combined with snowmelt and, less frequently, as a result of hurricanes. Flooding below the bridge is caused by ocean surges at times of extremely high tides.

Repeated damage to bridges and other important structures in the floodplains of the Machias River have occurred upstream of Machias village during such floods as those that occurred in 1950, 1954, 1961, 1973, and 1976. The 1950, 1954, 1961, 1973, and 1976 floods have recurrence intervals estimated to be 30, 25, 100, 25, and 35 years, respectively.

Wetlands are important to the public health, safety and welfare because they act as a filter, absorb excess water, serve as aquifer discharge areas, and provide critical habitats for a wide range of fish and wildlife. They are fragile natural resources. Even building on the edge of a wetland can have significant environmental consequences. Some wetlands have important recreational and educational value providing opportunities for fishing, hunting, and environmental education.

The U.S. Fish and Wildlife Service has identified wetlands located within Machias, as illustrated on Map 7: Water Resources. These wetlands were identified as wetlands by aerial photo interpretation. Interpretations were confirmed by soil mapping and other wetland inventories. Field verification of the location and boundaries of the wetlands should be undertaken prior to development. The Maine DEP has jurisdiction over freshwater and floodplain wetlands under the Natural Resources Protection Act (NRPA)/Wetland Protection Rules and Site Location of Development Act and the Mandatory Shoreland Zoning Law provides protection to mapped non-forested wetlands. It is also important to verify wetland extent for specific development proposals as aerial photography interpretation and field spot samples are educated guesses and random samples. Review by wetland professionals should be encouraged when the need arises.

### **Fishery Resources**

The Maine Department of Inland Fisheries and Wildlife (IFW) have rated the waters in Machias regarding their value as fisheries habitat. Each water body is rated as to whether it receives cold water or warm water fisheries management. Cold water management supports salmonid species such as salmon and trout, while warm water management supports black bass, chain pickerel, and perch. Some lakes have a combination of both coldwater and warmwater fisheries management.

Cale and Libby Brooks both have high value fisheries because of the presence of native brook trout and anadromous rainbow smelt. They also have anadromous brook trout and catadromous American eel populations and they are considered to have high value brook trout habitat. The unnamed tributary that flows into the Western Branch of Little Kennebec Bay that crosses the Cross Road between the East and West Kennebec Roads has a run of anadromous rainbow smelts. MDIFW will be conducting inland fish population inventories in the summer of 2007 at the unnamed tributary as well as at the unnamed tributary located by the Machias Regional airport to ascertain whether or not these waters contain high value brook trout populations and habitats. The Machias and Middle Machias Rivers both have high value because of the presence of native brook and the endangered species listed Atlantic salmon.

Land use activities that directly affect water quality can significantly alter or destroy the value of these areas for fish. Land clearing or development in the adjacent upland habitat, or “riparian zone”, can also degrade a fishery. Riparian habitat functions to protect water quality, wildlife habitat and fisheries habitat values by filtering out excessive nutrients, sediments, or other pollutants leaching in from upland areas, by maintaining water temperatures suitable for aquatic life, and by contributing vegetation and invertebrates to the food base. Recent beaver population increases has led to increased water impoundments, dams, this in turn has contributed to the warming of the water temperature on a significant scale. This in turn lessens the favorable habitat for cold water fish (Atlantic salmon) and increases the favorable habitat for lesser sought after

species of fish, pickerel, perch, chubs, etc. Therefore fish traditionally called “trash” fish are on the increase because their amount of favorable habitat is increasing.

### Groundwater - Sand and Gravel Aquifers

Aquifers may be of two types: bedrock aquifers and sand and gravel aquifers. A bedrock aquifer is adequate for small yields. A sand and gravel aquifer is a deposit of coarse-grained surface materials that, in all probability, can supply large volumes of groundwater. Boundaries are based on the best-known information and encompass areas that tend to be the principal groundwater recharge sites. Recharge to these specific aquifers, however, is likely to occur over a more extensive area than the aquifer itself.

The Maine Geological Survey has identified extensive sand and gravel aquifers within Machias, as shown on Map 7 - Water Resources. There are three aquifers with potential yields of 10-50 gallons per minute in Machias. The largest is located south of the Machias River, straddling Route 1 on the west side of the town, and includes a large area with potential yields in excess of 50 gallons per minute. The other two are smaller and depicted on Map 7 – Water Resources. According to the Maine Department of Human Services, Bureau of Health, Division of Health Engineering, Drinking Water Program there is one Public Water Supply Source in Machias.

**Table D-4 PUBLIC WATER SUPPLY IN MACHIAS**

Water System Name	Public Water Supply Type <sup>3</sup>	Source Name	Source Type
Machias Water Company	Community	GRAVEL WELL; Gp Well 42', 1965	Groundwater

Source: Maine Drinking Water Program 2003

Map 7 can be used to identify surface sites that are unfavorable for storage or disposal of wastes or toxic hazardous materials. It is important to protect groundwater from pollution and depletion. Once groundwater is contaminated, it is difficult, if not impossible, to clean. Contamination can eventually spread from groundwater to surface water and vice versa. Most aquifer and surface water contamination comes from non-point sources including faulty septic systems, road salt leaching into the ground, leaking above ground or underground storage tanks, auto salvage yards, and landfills.

<sup>3</sup> The Maine Rules Relating to Drinking Water (Chapter 231) define a "public water system" as any publicly or privately owned system of pipes or other constructed conveyances, structures and facilities through which water is obtained for or sold, furnished or distributed to the public for human consumption, if such a system has at least 15 service connections, regularly serves an average of at least 25 individuals daily at least 60 days out of the year or bottles water for sale.

1. Community Water System: A public water system which serves at least fifteen service connections used by year-round residents or regularly serves at least twenty-five year-round residents.

2. Non-Community Water System: A public water system that is not a community water system. There are two types of Non-Community Water Systems. These are:

a. Non-Transient, Non-Community Water Systems: A Non-Community water system that serves at least 25 of the same persons for six months or more per year and may include, but is not limited to, a school, factory, industrial park or office building, and

b. Transient Non-Community Water Systems: A Non-Community water system that serves at least 25 persons, but not necessarily the same persons, for at least 60 days per year and may include, but is not limited to, a highway rest stop, seasonal restaurant, seasonal motel, golf course, park or campground. A bottled water company is a transient, non-community water system.



TABLE D-5 RISK Assessment Matrix for Public Water Supplies in Machias

Risk of Contamination due to:	Machias Water Company Gravel Well: Gp Well 42', 1965	Risk Assessment is based on:
well type and site geology	Moderate	Well type; Gravel Well Overburden thickness (feet): 42
existing risk of acute contamination	Low	No Coli form test; no nitrate test greater than 5 ppm.; no septic systems within 300' of well;
future risk of acute contamination	Moderate	Status of land control; No legal control of 150 foot radius around well; and no legal control of 300 foot radius of property around the well
existing risk of chronic contamination	Moderate	No detection of Chronic Chemical Contaminant. Total No. Potential Sources of Contamination within WHPA <sup>4</sup> : 7. Distance to nearest "Significant Potential Source of Contamination": No distance data reported. Name of nearest "Significant Potential Source of Contamination": Unknown.
future risk of chronic contamination	High	Land Ownership/Control. No legal control of Entire Wellhead Protection Area. No Legal control of 2500 Phase II/V Waiver Radius <sup>5</sup> .

Source: Maine Drinking Water Program 2003

According to risk assessment prepared by the Maine Drinking Water Program the potential for future contamination potential to the only water supply in Machias is high due to lack of legal control over the wellhead protection area. The town and water company should pursue means to secure this control through easements and or land acquisition.

## MARINE RESOURCES

The Machias River Estuary comprises the area from the head of the tide in Machias and East Machias Rivers winding six miles south to its seaward limit between from Randall Point west to Fort O'Brien Point, but the estuarine channel extends into Machias Bay. The head to the estuary on the Machias River is shallow and shoals, followed by gently sloping mud flats fringed with salt marsh. The estuary is well mixed and rapidly flushed, with salinity varying from fresh at the head of the tide in Machias to full strength seawater at Randall Point. The average tidal range at Machias Town center is 13 feet. According to the 1991 Maine Coastal Program Estuary Series, most of the upper Machias Estuary is closed to shellfish harvesting because of pollution from municipal discharges, storm runoff, and discharge from a food processing plant.

Clamming has been a mainstay of Washington County's economy for many years despite periodic long term fluctuations in yield. The clam harvest in Washington County comprises roughly a third of the State total harvest. Due in part to low salinities at both the headwaters of the Machias River and the Little Kennebec Bay area, shellfish and shellfish harvesting in these areas are negligible. Forced system overflows from the Machias Wastewater Treatment Plant have eliminated the shellfish resource that once existed in the Randall Flats area. Many of the mud flats in the Kennebec Bay area are considered important feeding grounds for waterfowl, produce sea worms, and serve as bald eagle habitat. The estuary also supports runs of Atlantic salmon, shad, smelt, alewife, blueback herring, striped bass, sea-run brook trout and eels.

<sup>4</sup> WHPA—Well Head Protection Area

<sup>5</sup> 2500 Phase II/V waiver radius—with control of land out to 2500' the Public Water Supply is waived from performing the full range of Phase II/V water quality tests—a significant savings for the operator.

Many Machias residents rely on other coastal resources for their livelihood. The following tables describe an increasing number of license holders, a decreasing harvest of lobsters among these harvesters, and the species (scallop, sea urchin, seaweed, and crab) that make up the difference.

**Table D-6 COUNT OF MACHIAS RESIDENTS HOLDING MARINE FISHING LICENSES**

Type	License Year				
	1998	1999	2000	2001	2002
Dealers	4	2	3	3	4
Harvesters	83	73	81	93	100

Source: Maine Department of Marine Resources, 2003

**Table D-7 COUNT OF LOBSTER TRAPS FISHED BY MACHIAS RESIDENTS**

Year	1998	1999	2000	2001	2002
Total Trap Tags	4040	5195	3735	3120	3255

Source: Maine Department of Marine Resources, 2003

**Table D-8 COUNT OF MARINE RESOURCE LICENSES HELD BY MACHIAS RESIDENTS**

License Type	1998	1999	2000	2001	2002
30 DAY URCHIN DIVING TENDER	0	1	0	0	1
COMMERCIAL FISHING SINGLE OPERATOR	4	7	1	8	10
COMMERCIAL FISHING WITH CREW	1	0	2	2	1
COMMERCIAL SHELLFISH	24	27	29	43	42
EEL (ELL POT/HOOP NET)	1	0	0	0	0
ELVER-1 FYKE NET	1	1	0	0	1
ELVER-2 FYKE NET	3	6	4	0	0
ELVER-3 FYKE NET	1	0	0	0	0
ELVER-4 FYKE NET	0	1	0	0	0
ELVER-5 FYKE NET	1	0	0	0	0
ELVER-DIP NET	1	0	0	0	0
ELVER-DIP NET-1 FYKE	2	2	0	0	0
ELVER-DIP NET-2 FYKE	4	1	0	0	0
ELVER-DIP NET-3 FYKE	2	1	0	0	0
ELVER-DIP NET-5 FYKE	3	0	0	0	0
LOBSTER/CRAB APPRENTICE UNDER 18	4	3	2	1	1
LOBSTER/CRAB APPRENT	2	1	5	3	7
LOBSTER/CRAB CLASS 1	19	16	13	10	13
LOBSTER/CRAB CLASS 11	6	7	9	15	11
LOBSTER/CRAB CLASS 111	0	0	1	0	0
LOBSTER/CRAB NON-COMMERCIAL	4	6	17	18	25
LOBSTER/CRAB OVER AGE 70	2	2	2	1	1
LOBSTER/CRAB STUDENT	4	3	3	5	6
MARINE WORM DIGGING	4	7	3	3	1
MUSSEL- HAND	1	0	0	0	0
QUAHOG (MAHOGANY)	2	3	2	2	3
RETAIL SEAFOOD	4	2	3	3	4
SCALLOP-DIVER	4	2	0	2	2
SCALLOP-DRAGGER	9	5	7	8	10
SCALLOP-TENDER	0	0	1	0	0
SCALLOP, NON-COMMERCIAL	2	2	4	1	0
SEA URCHIN- DIVER	4	4	5	4	3
SEA URCHIN-DRAGGER	5	4	4	4	3
SEA URCHIN/SCALLOP TENDER	3	1	0	2	1
SEAWEED	2	1	0	1	0
SEAWEED SUPPLEMENTAL	0	0	1	0	0

Source: Maine Department of Marine Resources, 2003

## CRITICAL NATURAL RESOURCES

### Maine Natural Areas Program

The Natural Areas Program is administered by the State Department of Conservation whose job it is to document Rare and Unique Botanical Features. These include the habitat of rare, threatened, or endangered plant species and unique or exemplary natural communities. There are no such species or communities documented in Machias today. Table D-11 describes one species documented historically (1935) in Machias.

**Table D-9 RARE OR EXEMPLARY BOTANICAL FEATURES DOCUMENTED IN THE TOWN OF MACHIAS**

Scientific Name (Common Name)	Last Seen	State Rarity	Global Rarity	Legal Status	Habitat Description
MIMULUS RINGENS VAR COLPOPHILUS (ESTUARY MONKEY FLOWER)	1935	S2	G5T2Q	SC	Shores, meadows and wet places
<p>S1 - Critically imperiled in Maine because of extreme rarity (5 or fewer occurrences or very few remaining individuals or acres) or because some aspect of its biology makes it especially vulnerable to extirpation from the state.  S2 - Imperiled in Maine due to rarity (6 - 20 occurrences or few remaining individuals or acres) or other factors making it vulnerable to further decline.  S3 - Rare in Maine (on the order of 20-100 occurrences).  S4 - Apparently secure in Maine.  S5 - Demonstrably secure in Maine</p> <p>G1 - Critically imperiled globally because of extreme rarity (5 or fewer occurrences or very few remaining individuals or acres) or because some aspect of its biology makes it especially vulnerable to extirpation from the State of Maine.  G2 - Globally imperiled due to rarity (6 - 20 occurrences or few remaining individuals or acres) or other factors making it vulnerable to further decline.  G3 - Globally rare (on the order of 20 - 100 occurrences).  G4 - Apparently secure globally.  G5 - Demonstrably secure globally.  T indicates subspecies rank, Q indicates questionable rank  Note: Global ranks are determined by The Nature Conservancy.  SC – SPECIAL CONCERN: Rare in Maine, based on available information, but not sufficiently rare to be considered Threatened or Endangered  T – THREATENED: Rare and, with further decline, could become endangered; or federally listed as Endangered.  E - ENDANGERED: Rare and in danger of being lost from the state in the foreseeable future; or federally listed as Endangered.</p>					
Source: State of Maine Department of Conservation, 2004					

### Wildlife Habitats

Conserving an array of habitats and their associated wildlife species will help in maintaining biological diversity and ensuring that wildlife and human populations remain healthy. To feed and reproduce, wildlife relies on a variety of food, cover, water, and space. Development often has negative impact on these, resulting in the loss of habitats and diversity, habitat fragmentation and loss of open space, and the loss of travel corridor.

The richest wildlife diversity in Machias is avian. There is Bald eagle (*Haliaeetus leucocephalus*) habitat along the Machias River estuary and its tributaries. There are extensive areas of waterfowl and wading bird habitat and one deer wintering area. See Map 8 - Critical Habitat.

Immediately to the south and west of the Machias town line is a Focus Areas of Statewide significance in Roque Bluffs, appropriately named the Roque Bluffs Focus Area. This area includes the Englishman River Marsh (roughly 230 acres), the Black Head Bogs, Hanscom Heath and Great Cove Heath. It includes intact peatlands and tidal marsh in close proximity to one another with an extensive mixing zone of fresh and salt water. The resulting "bracking tidal marsh" supports a range of species including two rare plants, a saltmarsh sedge (*Carex recta*) and Gaspe arrow-grass (*Triglochin gaspense*). In addition, of 30 Downeast salt marshes surveyed for diurnal bird use by MIDFW I 1999, the Englishman River Marsh was second only to the Pleasant River Marsh in species richness, with 22 species detected.

**Essential Wildlife Habitats** - Essential Wildlife Habitats are defined under the Maine Endangered Species Act as a habitat "currently or historically providing physical or biological features essential to the conservation of an Endangered or Threatened Species in Maine and which may require special management considerations". According to MDIFW, Machias has several sites of essential wildlife habitat, all supporting bald eagles, including nesting territory that is occupied during at least one of the three most recent years and intact for two consecutive years. See Map 8 – Critical Habitat.

**Significant Wildlife Habitat** - Significant Wildlife Habitat, as defined by Maine's Natural Resources Protection Act (NRPA), is intended to prevent further degradation of certain natural resources of state significance. NRPA-defined Significant Wildlife Habitats in Machias are illustrated on Map 8 - Critical Habitat and include waterfowl/wading bird habitat as well as tidal waterfowl and wading bird habitat.

In addition to the habitats that have been mapped by IF&W and mentioned above, other notable wildlife habitats in Machias include riparian habitats and vernal pools. Riparian areas offer habitat for many plants and animals and can serve as wildlife travel corridors, as well as playing an important role in protection of water quality, as noted in the plan.

**Atlantic Salmon** - In December 1999, the State of Maine banned angling for Atlantic salmon statewide. In November 2000, the National Marine Fisheries Service and the US Fish and Wildlife Service officially declared as endangered the Atlantic salmon populations in eight Maine rivers (Dennys, East Machias, **Machias**, Pleasant, Narraguagus, Ducktrap and Sheepscot rivers and Cove Brook).

Accordingly, it is unlawful to angle, take or possess any Atlantic salmon from all Maine waters (including coastal waters), and it is a federal offense to take fish in the above-mentioned eight Maine rivers. Any salmon incidentally caught, must be released immediately, alive and uninjured. At no time should the Atlantic salmon be removed from the waters. Salmon angling was once an important part of the local economy as it brought significant numbers of sports fisherman to our town. The loss of this revenue to our town and to local businesses has not been

replaced.

In an attempt to preserve Atlantic salmon habitat, the state is actively purchasing lands in applicable watersheds, as well as seeking conservation easements and stricter state regulations in these areas. Control of non-point sources of pollutants, principally nutrients and sediments, through the use of local ordinances is one means by which Salmon habitat can be protected without removing parcels from the assessment rolls when they are purchased for conservation.

## **PUBLIC ACCESS POINTS**

Within the town, there are two public accesses to the Machias River. They are depicted on Maps 2 and 3, Machias Public Facilities and Services (and inset). There are other additional traditional access points that traverse private land. A complete discussion of these accesses is provided in Chapter G – Recreation, Scenic Resources and Open Space.

## **STATE PARKS AND PUBLIC RESERVED LANDS**

There are no state parks or public reserve lands in Machias.

## **NATURAL RESOURCE PROTECTION**

There is a variety of laws and legal incentives that protect the natural resources in Machias. Those of greatest significance are summarized below.

### **Pertinent Federal and State Laws:**

- Maine Natural Resources Protection Act (NRPA) – which regulates activities in, on, over or adjacent to natural resources such as lakes, wetlands, streams, rivers, fragile mountain areas, and sand dune systems. Standards focus on the possible impacts to the resources and to existing uses.
- Maine Storm Water Management – regulates activities creating impervious or disturbed areas (of size and location) because of their potential impacts to water quality. In effect, this law extends storm water standards to smaller-than Site Law-sized projects. It requires quantity standards for storm water to be met in some areas, and both quantity and quality standards to be met in others.
- Maine Site Location of Development Law – regulates developments that may have a substantial impact on the environment (i.e., large subdivisions and/or structures, 20 acre-plus developments, and metallic mineral mining operations. Standards address a range of environmental impacts.
- Maine Minimum Lot Size Law – regulates subsurface waste disposal through the minimum lot size requirement for a single-family residence of 20,000 square feet and shoreland frontage requirement of 100 feet. The requirements for multi-family and other uses are based on the amount of sewage generated.



- Maine Endangered Species Act – regulates the designation and protection of endangered species including disallowing municipal action from superceding protection under the Act.
- The Forest Practices Act - regulates the practice of clear cutting by setting regeneration and clear cut size requirements.

**Pertinent Local Laws** - At the local level, Machias has adopted minimum shoreland standards, as required by the State Mandatory Shoreland Zoning Act. Surface waters in Machias are also protected through the Plumbing Code and a local Subdivision Ordinance. Machias last revised its shoreland zoning ordinance in 1995. Machias has also adopted a minimum lot size law. This Comprehensive Plan recommends the adoption of a Zoning Ordinance to provide further protection to the water resources.

**Pertinent Tax Incentive Programs:** A variety of programs provide financial incentives for landowners to keep land undeveloped and managed for long term productivity. They include the following:

- Farm and Open Space Tax Law - (Title 36, MRSA, Section 1101, et seq.) encourages landowners to conserve farmland and open space by taxing the land at a rate based on its current use, rather than potential fair market value.

Eligible parcels in the farmland program must be at least five contiguous acres, utilized for the production of farming, agriculture or horticulture activities and show gross earnings from agricultural production of at least \$2,000 (which may include the value of commodities produced for consumption by the farm household) during one of the last two years or three of the last five years. In 2005, Machias had two parcels totaling 26 acres enrolled in farmland and open space tax status.

The Open Space portion of this program has no minimum lot size requirements and the tract must be preserved or restricted in use to provide a public benefit by conserving scenic resources, enhancing public recreation opportunities, promoting game management or preserving wildlife habitat.

- Tree Growth Tax Law - (Title 36, MRSA, Section 571, et seq.) provides for the valuation of land classified as forestland on the basis of productivity, rather than fair market, value.

According to municipal records for fiscal year 2005, Machias had 25 parcels totaling 2013 acres in tree growth tax status.

These programs enable farmers and other landowners to productively use their property at a property tax rate that reflects farming and open space rather than residential development land valuations. If the property is removed from the program, a penalty is assessed against the property based on the number of years the property was enrolled in the program and/or a percentage of fair market value upon the date of withdrawal.

## POLICIES AND IMPLEMENTATION

In order to protect and preserve the natural resources within the town of Machias, the town will continue to update local land use regulations to maintain consistency with the minimum State of Maine requirements. The Town has adopted shoreland zoning regulations which protect the lakes, ponds, wetlands and aquifers within the borders of Machias. The town has developed the following policies and implementation strategies to further protect and preserve the natural resources:

<b>Goal: Machias will protect and preserve the natural resources on which its economy and quality of life depend.</b>			
<b>Policy</b>	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Timeframe</b>
<b>Water Quality and Water Resources</b>			
Protect water quality	Update Shoreland Zoning Regulations and prepare a Zoning Ordinance to maintain compliance with State and Federal regulations and reflect the local needs of the community.	Planning Board; Selectmen	2006-2007
	Continue to promote the use of Best Management Practices for Stormwater Management and for Erosion and Sedimentation Control through education of the Planning Board and Code Enforcement Officer.	Planning Board; Selectmen	On-going
	Revise local Subdivision regulations to incorporate use of Best Management Practices for Stormwater Management and for Erosion and Sedimentation Control.	Planning Board; Selectmen	2006
	Make application, where eligible, to the Small Community Grant Program to upgrade any failing septic systems.	Planning Board/ Selectmen	On-going
Ensure that water quality is sufficient to provide for the protection and propagation of fish and wildlife, and provide for recreation in and on the water.	Expand water quality-testing programs for the town's rivers and streams. Give the highest priority to those water bodies most important for recreation and for fisheries and wildlife.	DEP Volunteer Program; Machias River Watershed Association	On-going
	Encourage replacement of malfunctioning septic systems. Establish a recommended replacement and pumping schedule. Educate the public about the importance of maintaining and replacing on-site systems.	Code Enforcement Officer/DEP	On-going
	Continue dialogue and exchange of information on watershed planning issues with neighboring communities.	Planning Board/ WCCOG/ Watershed Councils	On-going
Protect drinking water supplies	Pursue land protection and other means to obtain legal control over wellhead protection area surrounding town water supply.	Selectmen/ Water Company	Immediate and on-going
	Pursue a controlling interest in the Water Company; pursue replacement of aging water mains.	Selectmen	Short term
<b>Land Suitability</b>			

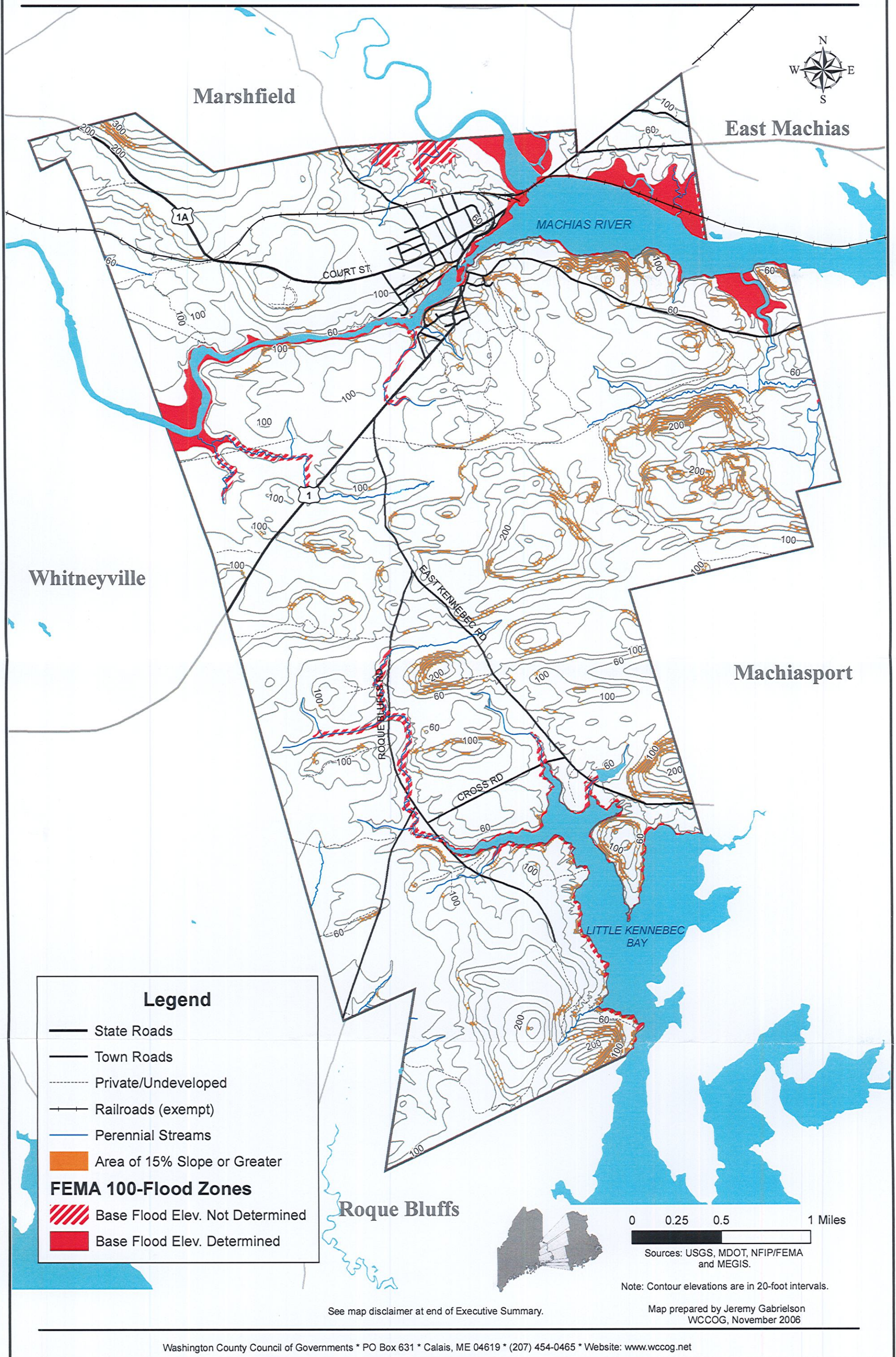
<b>Goal: Machias will protect and preserve the natural resources on which its economy and quality of life depend.</b>			
<b>Policy</b>	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Timeframe</b>
Ensure that development is located on land that is capable of supporting on-site water and septic systems.	Require a soil evaluation test prior to the issuance of a building permit in accordance with state regulations to require that developers demonstrate that soils are adequate for the intended purpose, that their projects will not be located on wetlands, on slopes of 20 percent or greater, or on floodplains.	Planning Board/ Selectmen	On-going
	Direct development to areas with appropriate soils, slopes, and drainage conditions.	Planning Board	On-going
	Prevent/discourage development on steep slopes.	Planning Board	On-going
Ensure that new development preserves, to the greatest extent possible, the natural and cover and vegetation.	Require in local Ordinances that applicants demonstrate that their projects will be compatible with the existing topography, and will preserve land cover and natural vegetation, to the greatest extent practical.	Planning Board/ Selectmen	Short term
<b>Floodplains</b>			
Avoid problems associated with floodplain development and use along the town's Shorelands.	Update and maintain the Floodplain Management Ordinance to regulate new residential, industrial, commercial and other significant development within 100 year floodplains to required standards.	Planning Board/ Selectmen	On-going
<b>Fish and Wildlife Habitat</b>			
Protect all currently mapped Essential Habitat or Significant Habitat.	Establish protection provisions in local Regulations to ensure early consultation with a Maine Department of Inland Fisheries and Wildlife Biologist when development is proposed in or near the site of Essential or Significant Habitats.	Planning Board; Code Enforcement Officer	Short-term (within 2 years)
	Make available the most recent data on rare plants, animals, and natural communities and important wildlife habitats provided by the Beginning with Habitat program of the Department of Inland Fisheries and Wildlife, included on maps in this document.	Planning Board	On-going
	Protect the high and moderate fisheries habitats in accordance with Shoreland Zoning regulations around these habitats. Consider increasing setback distances for large (>10 lots) new development proposals.	Planning Board	Short-term (within 2 years)
	Use land protection options (land trusts, purchase with Land for Maine's Future funds) to conserve land to protect critical habitat.	Selectmen	2006
	Encourage landowners to protect and preserve wildlife habitat, and utilize conservation programs to preserve undeveloped land.	Selectmen/ Planning Board	On-going
<b>Forest Resources</b>			
Support long term sustainable forest management within Machias.	Consider tax incentives or other regulatory preferences to support value-added forest-product manufacturing.	Selectmen/ Planning Board	On-going
	Seek input into transfers of large land ownerships and request a seat at the table in conservation transactions where possible to ensure traditional accesses and uses	Selectmen/ Planning Board	On-going

<b>Goal: Machias will protect and preserve the natural resources on which its economy and quality of life depend.</b>			
<b>Policy</b>	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Timeframe</b>
	are retained.		
	Refer landowners to MFS district foresters and provide information about Tree Growth programs (lobby legislators to fully fund the program).	Town Clerk/ Selectmen	On-going
	Support timber management in rural areas of Machias.	Selectmen/ Planning Board	On-going
	Limit residential growth in areas of high timber value through subdivision regulations that encourage cluster designs, minimize forest fragmentation and limit road extensions for residential use.	Selectmen/ Planning Board Maine Forest Service	Short-term (within 2 years)
<b>Scenic Resources</b>			
Preserve important scenic resources.	Adopt zoning provisions that encourage the preservation of scenic resources such as ridgetops, mountains and islands.	Planning Board	Short Term
<b>Education and Traditional Use</b>			
Ensure that traditional use of lands and access to water are protected as development pressures increase.	Identify areas in need of additional access.	Selectmen	Immediate (within two years)
	<p>Respect private property rights but seek to maintain traditional uses of any private roads or rights of way to the water. Negotiations with private land owners to secure these accesses will include:</p> <ul style="list-style-type: none"> <li>• Acknowledgement/celebration of landowners who continue the centuries old practice of allowing public use of their lands;</li> <li>• Informal agreements allowing public use of lands;</li> <li>• More formal agreements allowing public use of lands until and unless problems arise from disrespectful use of private land (eg. Leaving gates open, littering, vandalism);</li> <li>• Providing property tax incentives to property owners who grant written, revocable rights of public access across their property;</li> <li>• Obtaining rights of first refusal for access points or property of critical importance to the public;</li> <li>• Purchasing permanent easements or fee title to access points or property of critical importance to the public.</li> </ul>	Selectmen; Planning Board	Immediate (within 2 years)
Educate residents and visitors about important habitat and water quality values.	Develop informational signs and brochures (maps) in critical habitat and public accesses, eg. Machias River public accesses.	Selectmen/ Watershed Associations	2006-2008

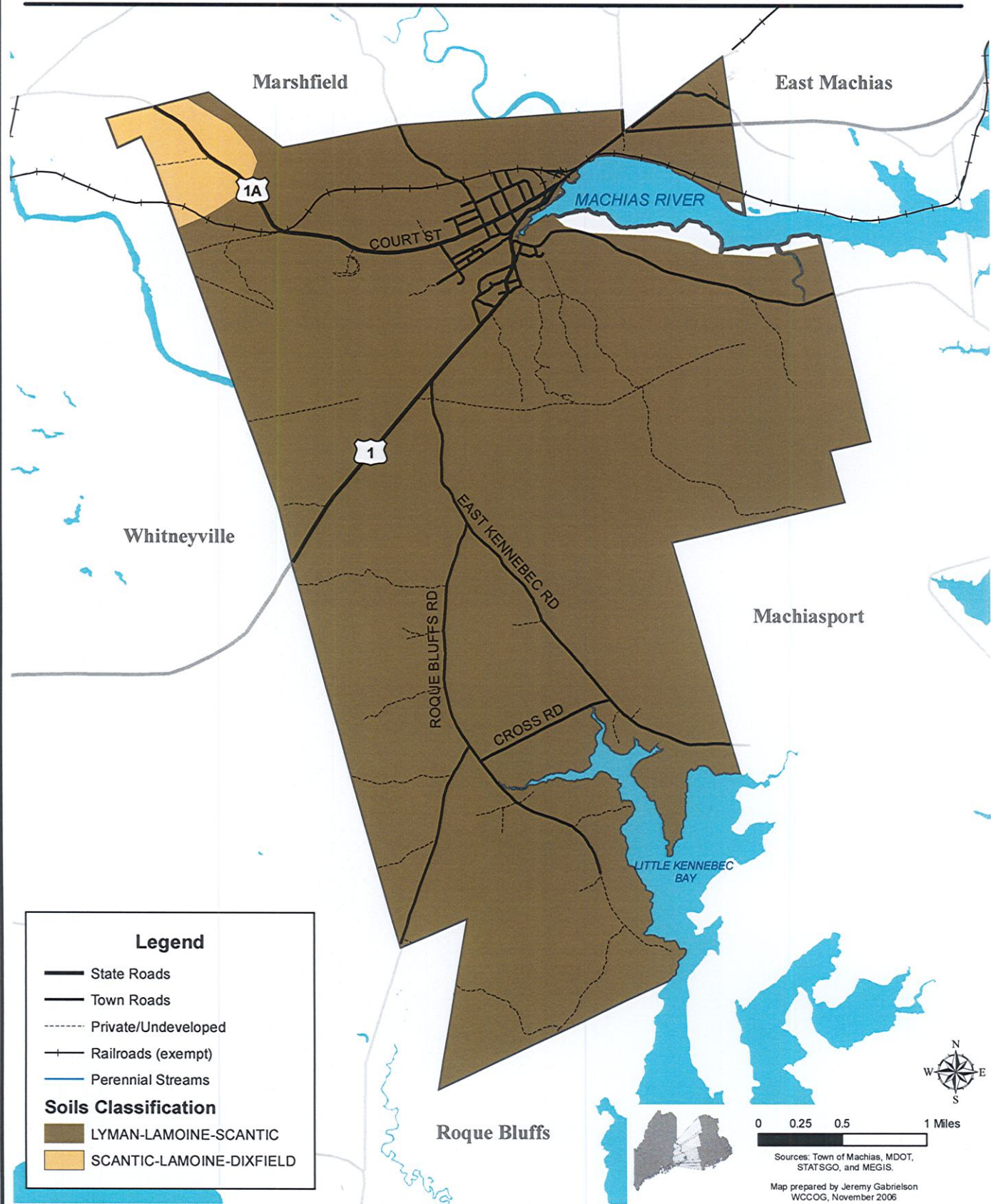
**SUMMARY**

Machias currently offers protection to its natural resources with locally adopted shoreland zoning regulations. These ordinance provisions will be updated to be consistent with the requirements of State and Federal Regulations and reviewed for improvement to specifically protect the water resources in Machias. The town will continue to cooperate with the many local and regional organizations working to protect the natural resources within and surrounding Machias including the Machias River Watershed Councils, the Quoddy Regional Land Trust and neighboring communities. Regional efforts will focus on aquifer protection, watershed protection, and land conservation.



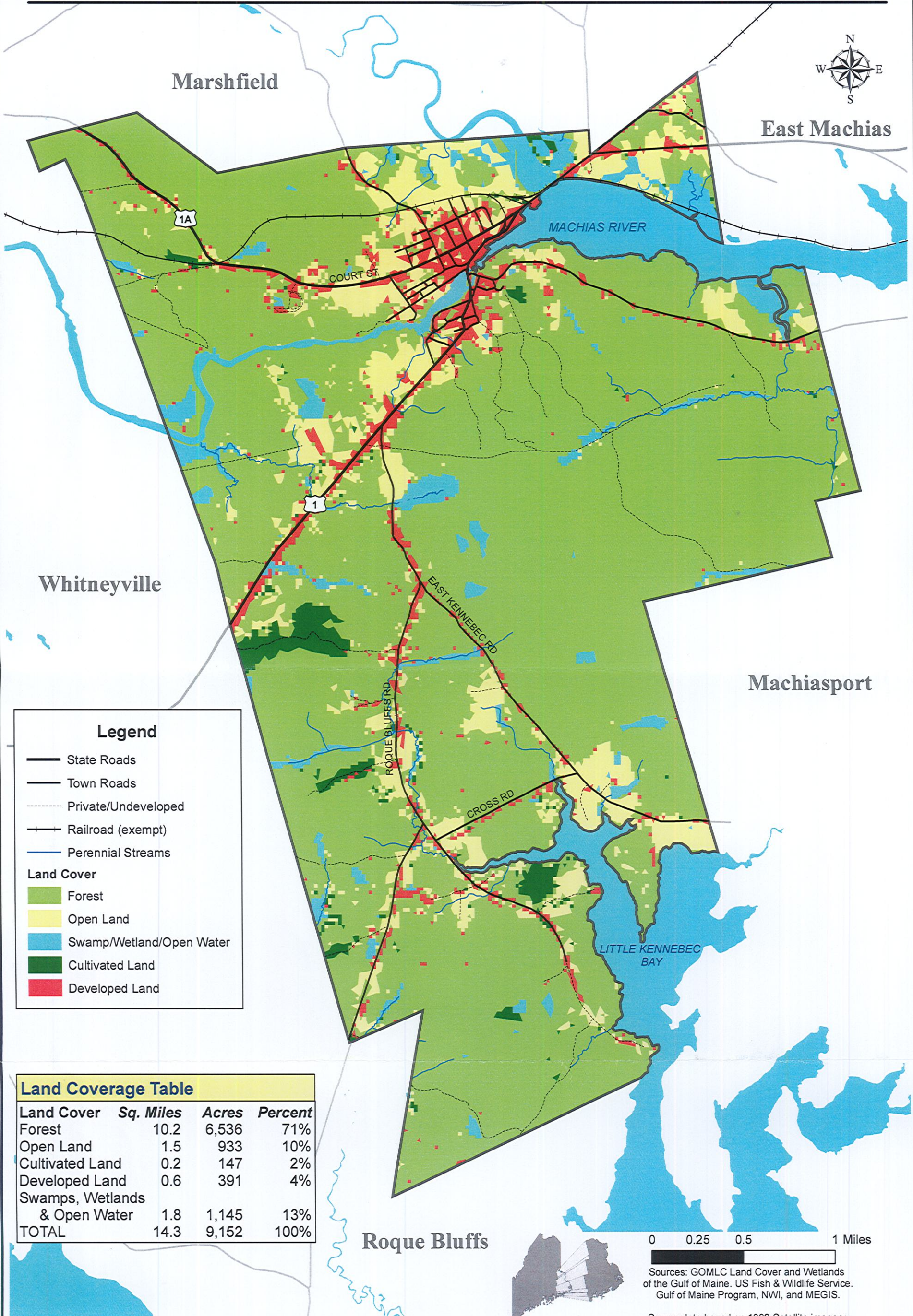






See map disclaimer at the end of the Executive Summary.





Legend

- State Roads
- Town Roads
- Private/Undeveloped
- Railroad (exempt)
- Perennial Streams
- Land Cover**
  - Forest
  - Open Land
  - Swamp/Wetland/Open Water
  - Cultivated Land
  - Developed Land

Land Coverage Table

Land Cover	Sq. Miles	Acres	Percent
Forest	10.2	6,536	71%
Open Land	1.5	933	10%
Cultivated Land	0.2	147	2%
Developed Land	0.6	391	4%
Swamps, Wetlands & Open Water	1.8	1,145	13%
TOTAL	14.3	9,152	100%

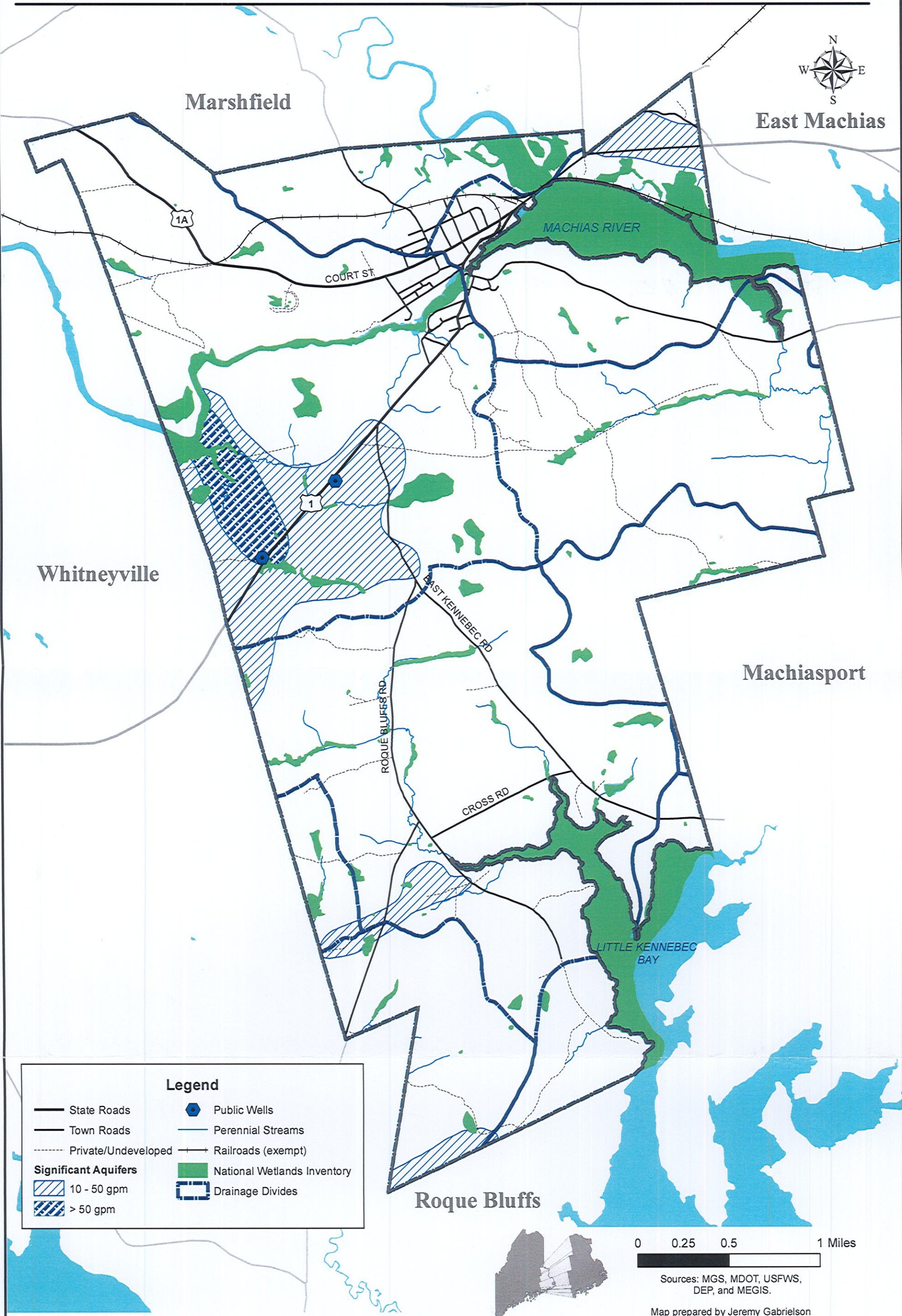
Sources: GOMLC Land Cover and Wetlands of the Gulf of Maine. US Fish & Wildlife Service. Gulf of Maine Program, NWI, and MEGIS.

Source data based on 1992 Satellite imagery.

See map disclaimer at the end of the Executive Summary.

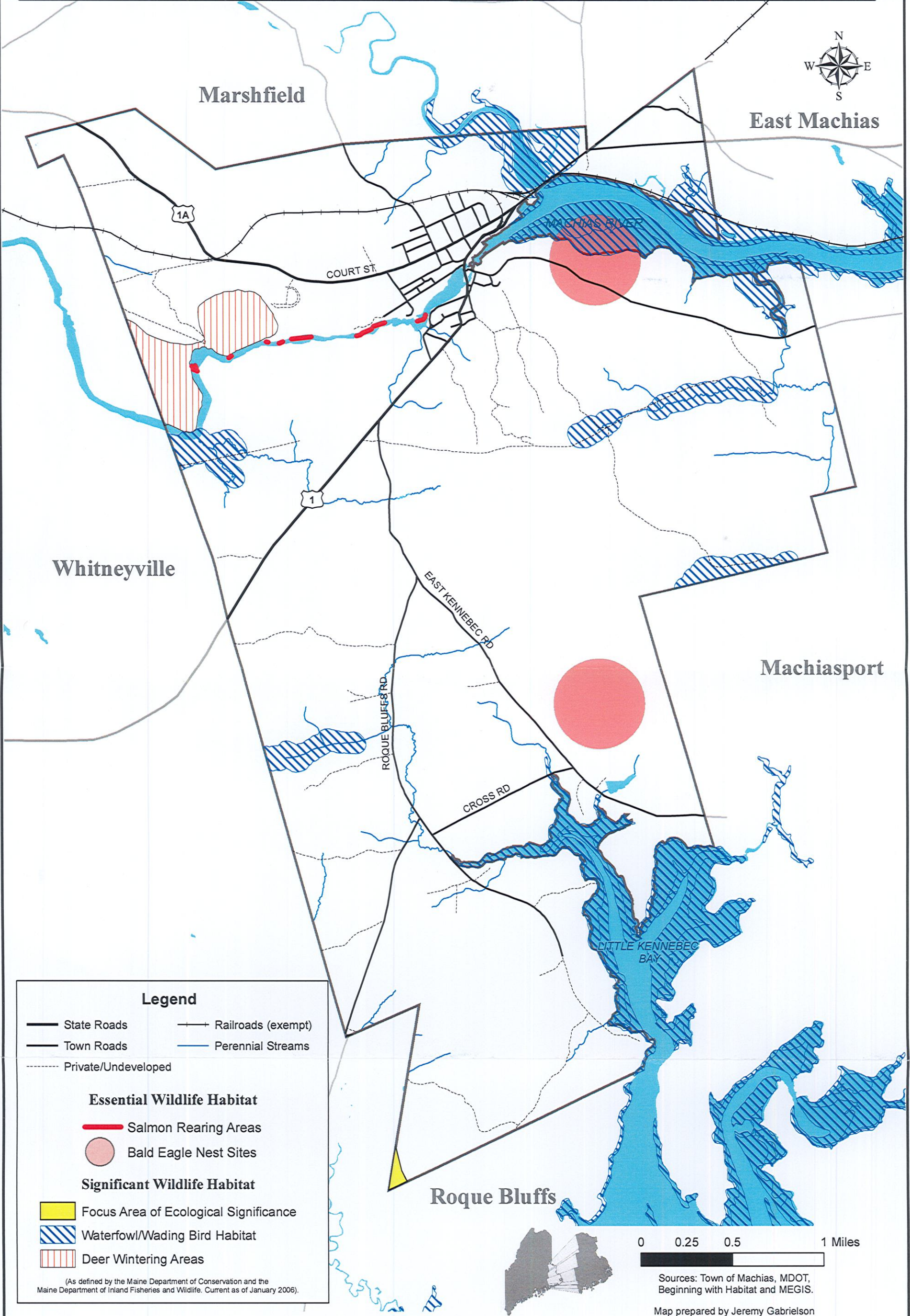
Map prepared by Jeremy Gabrielson  
WCCOG, November 2006





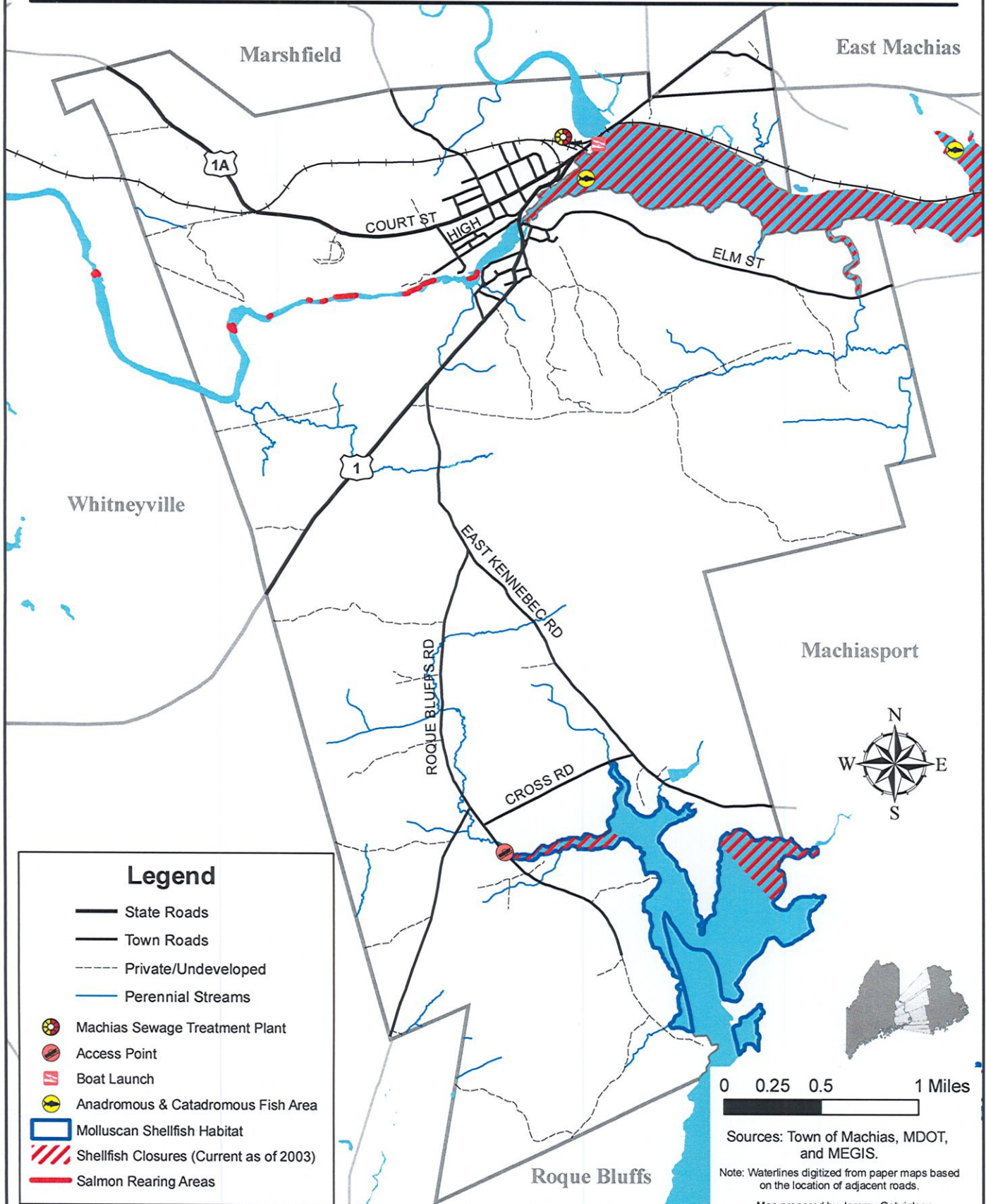
See map disclaimer at the end of the Executive Summary.





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See map disclaimer at the end of Executive Summary.

## **E. EMPLOYMENT AND ECONOMY**

The purpose of this section is to:

1. Describe the labor force, economic activity, and economic changes in Machias and Washington County;
2. Identify economic links between the Town and region; and
3. Project for the next ten years the outlook for the employment, economic vitality, and economic development of Machias.

### **Key Findings and Issues**

Historically, the economy of Machias was closely tied to the natural resources which have traditionally defined the region. With only five percent of residents now working in the agriculture, forestry, fisheries, and mining sector, this tie has more to do with a tourism and second home market seeking to enjoy the uncongested natural beauty of the region than with actual production from the land or sea. Today, thirty-nine percent of Machias employed civilians hold professional and managerial occupations, such as financial, marketing, general managers, and top executives, as well as accounting, engineering, and computer science. A large proportion (32%) of Machias residents work in administrative or sales positions.

Sales activity in Machias has increased in the past decade, but the Machias downtown suffers from a lack of private investment, as commercial growth has moved to the outskirts of Town or elsewhere.

### **Historical Commerce and Industry**

The role of the seas has been an important one in the history of the Machias area, providing several major occupations revolving around fishing, fish processing, shipbuilding and shipping. Seamen were involved in coastal trade and deep-water voyages. The coastal trade, or “coasting”, was the main source of transportation for people and the supply of goods until rail service was initiated in the late 1800s. Many in Machias depended on coasting for their living. Excellent water power in the Machias area, plus use of the river to transport logs to market, provided the stimulus for many logging enterprises. The timber industry and the mills along the Machias, East Machias and Middle Rivers were the basis for early settlement and employment.

Early migrants were attracted by the abundance of marsh hay in places like Machias. Plentiful codfish also brought settlers from Martha's Vineyard and Cape Cod during the late 1700s and early 1800s.

In 1818, Machias had three manufacturers of long and short lumber; one carriage manufacturer, printer, blacksmith, and wheelwright; one manufacturer of monuments, tablets and headstones; one contractor and builder; one manufacturer of sails, awnings and tents; one carriage manufacturer and repairer; three general merchants; five dry goods and grocery merchants; one dealer in pianos and organs.



In 1910, there were a brick yard, hardwood mill, boat building establishment, starch factory, building and loan association, electric power plant, creamery, greenhouse and florist market garden, fertilizer plant, pulp and paper mill, hospital, concrete block plant, 100 farmers, a spring water bottling plant, woolen mill, and furniture, shoe, moccasin, knitting, cigar, and kindlingwood factories.

In 1920, there were four large saw mills, a sash, blind and molding factory, modern box mill, large grist mill, iron factory, machine shop, three steam mills, two granite and marble shops, water company, electric company, insurance companies, four churches, thirty stores of various kinds, three hotels, several boarding houses and three banks.

### **MACHIAS BUSINESS AND EMPLOYMENT TODAY**

Today there is less diversity in local economic enterprise than existed years ago. Local businesses provide many goods and services. However various essential items must be obtained from larger merchandisers in Bangor, Calais, and Ellsworth. When residents travel to these larger centers they purchase many other goods and services that are available in Machias creating a drain on the local economy.

Machias offers a variety of employment opportunities including an abundance of seasonal occupations in the areas of clamming, lobstering, worming, wreathing, blueberry raking and tourism. Blueberries continue to provide the most significant agricultural product in the region. They also spawn a popular festival drawing many to the region in August.

The economy of the Town of Machias is somewhat more stable and diversified than that of the surrounding communities, with employment at the University of Maine at Machias, several hospital, health and continuing care related services, School Union 102, blueberry processing facilities, and various other larger commercial enterprises.

#### **Downtown Revitalization**

The community has water, sewer, and three-phase power. Machias is the area's service center community with all the amenities. The downtown is visually attractive but lacking some vitality. The University of Maine in Machias is located in close proximity to the downtown. Like most downtowns, development has occurred on the outskirts along Route 1.

Machias is currently embarking on a riverfront development and downtown revitalization project. Reconstruction of the bridge over the Bad Little Falls on the Machias River in the center of the village area was completed in 2004. Other infrastructure improvements (under and above ground) were also completed in the last couple of years and several new businesses have opened along Main Street. The town has obtained funds from a variety of sources to assist with these improvements. They are summarized below:

<b>Project</b>	<b>Grant Amount</b>	<b>Source of Funds</b>
Porter Memorial Library	\$100,000	CDBG – Historic Preservation
Sunrise Scholarship Fund	\$50,000	CDBG – Public Service
UMM Childcare Center	\$50,000	CDBG – Public Service
Sewer Infiltration Project	\$250,000	STAG – Federal Funding
Sewer Infiltration Project	\$400,000	CDBG – Public Infrastructure
Emergency Response Equipment	\$14,400	Homeland Security Funds
Emergency Responder Grant	\$14,984	Homeland Security Funds
Snow Storm Reimbursement	\$5,500	FEMA Storm Funding
Small Harbor Improvement Grant	\$13,500	State MDOT

In addition the town has participated in several other studies and projects of direct support to downtown vitality including an upgrade to aeration systems, and thus overall capacity, at the sewage treatment plant, purchase of the new town office building, installation of sidewalks and parking lot on Water Street, Route 1 paving, street lights, a Small Harbor Improvement Grant to upgrade the pier on Route 1 and participation in a regional housing assessment and a regional telecommunications assessment.

There is an active Chamber of Commerce and many community members are involved in efforts to create areas for outdoor recreation, entertainment, a rail-trail and visitor center and other amenities. The town has applied for received a CDBG Planning Grant to help pay for a Downtown Master Plan and many businesses are also contributing time and funds to the effort.

### **Employers**

Machias is an employment center for central Washington County. While the number of people who live and work in Machias has decreased since 1990 (651 in 2000; 782 in 1990), the number of people who live outside of the town and work in Machias has increased by almost 18 per cent (see Table E-1 below). This is especially true for residents of Pembroke and Calais. There were no Calais residents commuting to Machias in 1990, in 2000 there were 43. Many more are commuting from Northfield and there are more individuals commuting from outside of the county perhaps indicative of greater telecommuting and branch office opportunities.

**Table E1 - PERSONS LIVING OUTSIDE MACHIAS AND WORKING IN THE TOWN**

<b>Community</b>	<b># 1990</b>	<b># 2000</b>
Addison	51	38
Alexander	7	8
Baileyville	2	11
Baring plantation		6
Beals	23	12
Calais		43
Centerville	3	2
Charlotte	3	5
Cherryfield	24	30
Columbia	18	37
Columbia Falls	28	28

Community	# 1990	# 2000
Cooper		12
Crawford	4	
Cutler	59	55
Danforth		6
Dennysville	2	11
East Central Washington UT Washington Co.	14	40
East Machias	273	243
Eastport	11	15
Grand Lake Stream		3
Harrington	15	44
Jonesboro	103	92
Jonesport	61	82
Lubec	29	50
Machiasport	191	163
Marshfield	142	156
Meddybemps		5
Milbridge	7	17
Northfield	38	54
North Washington UT Washington Co. ME	10	2
Passamaquoddy Pleasant Point Res.		2
Pembroke	7	39
Perry	14	19
Princeton	3	5
Robbinston		11
Roque Bluffs	45	45
Steuben	5	9
Topsfield	2	
Wesley	13	2
Whiting	15	54
Whitneyville	55	54
Residence outside of Washington County	85	91
<b>Total</b>	<b>1362</b>	<b>1601</b>

SOURCE: U.S. Census

The largest employers in Machias include the Down East Community Hospital, Washington County Psychotherapy, Marshall's Health Care Facility, Maine Wild Blueberry Co., Shop 'n Save, and Machias Savings Bank. Numerous other smaller businesses employ residents and the regional population (see Table E-2).

**Table E2 - EMPLOYERS IN MACHIAS**

Employers in Machias	Industry	Location or Mailing Address	Approx # or range of Employees
Curves	Exercise	Main St	
Downeast Creative Services	Bookstore and Web Design, Printing	Main St	2
Quiznos	Restaurant	Main St	10
Designs by Aaron	Jewelry	14 East Main St	2
Calais Federal Bank	Bank	Route 1	
St. Croix Credit Union	Bank	Route 1	
J.R. Pizza	Restaurant	14 East Main	
Maine Veteran's Home	Hospital	1 Veteran's Way	

Employers in Machias	Industry	Location or Mailing Address	Approx # or range of Employees
Middle River Antiques	Antiques	Dublin St	1-4
U.S. Cellular	phone	East Main St	
Wayne's Barber Shop	Barber	East Main St	1
Sue's Consignment shop	Used clothing	Dublin St	
Court Street Coffee Shop	Restaurant	Court Street	
Shake Pit	Take out restaurant and ice cream	East Main Street	4-10
Computer Outpost		Rte 1 Dunkin Donuts Plaza	1-5
Broadway Inn B&B	B&B	14 Broadway	2-4
Inn at Schoppee Farm	B&B and catering	Rte 1	2-4
Horace Mann Insurance	Insurance	Stackpole Drive	
MacKenzie-Sprague Mobil Park	Rentals	R.R.1	2
Machias Bay Realty and Rentals	Real estate	1 Main Street	
Points East Real estate	Real estate	Route 1	
ReMaxA1-Assoc.	Real estate	Dublin St	
Holm Inspection	Real estate	School Street	
Whitney's Tool Shed	Equipment rental	Dublin Street	
Fat Cat Deli	Restaurant	28 Main Street	
Bluebird Motel	Hotels & Motels	RR 1 Box 45	5-9
Machias Motor Inn	Hotels & Motels	26 E Main St	10-19
Margaretta Motel	Hotels & Motels	48 Route 1	1-4
Seagull Motel	Hotels & Motels	4 E Main St	1-4
Murphy's Pizza	Pizza	50 Main St	1-4
A J's Bar & Grill	Restaurants	21 Main St	1-4
Blue Bird Ranch	Restaurants	3 E Main St	20-49
Helen's	Restaurants	28 E Main St	20-49
Hing Garden	Restaurants	15 Main St	10-19
MC Donald's	Restaurants	RR 1	20-49
Subway Sandwiches & Salads	Restaurants	19 E Main St	10-19
Artist's Cafe	Caterers	3 Dublin St	5-9
Wilcox Waste Removal & Recycling	Waste Disposal	Main ST	5-9
Washington County Soil & Water	Soil Conservation Service	51 Court St	5-9
Eagle Lanes	Bowling Centers	HC 70 Box 79	5-9
Down East Fairground Assn	Fairgrounds	Old County Rd	1-4
Wright Morgan Builders	Building Contractors	26 Main St	1-4
Steeple People	General Contractors	W Kennebec Rd	1-4
Machias Town Highway Dept	Parking Area/Lots Maintenance & Marking	70 Court St	1-4
Machias & East Machias Sheds	Water Pollution Control	51 Court St	1-4
Dave's Electric	Electric Contractors	Route 192	1-4
E Pellon Co	Plumbing Contractors	RR 1	1-4
J L Huntley Plumbing & Heating	Plumbing Contractors	50 Dublin St	10-19
L P Mallar & Sons Inc	Plumbing Contractors	RR 1 Box 348A	5-9
East Coast Marine	Marine Contractors & Designers	4 Pleasant Blvd	1-4
University of Maine at Machias	Schools-Universities & Colleges Academic	O'Brien Ave	20-49
Machias Memorial High School	Schools	109 Court St	20-49
Machias Regional Voc Ctr	Schools	12 E Main St	1-4
Machias Special Education	Schools	12 E Main St	1-4
Machias Superintendent-Schools	Schools	12 E Main St	1-4
Machias Valley Christian School	Schools	6 Broadway	10-19
Rose M Gaffney School	Schools	99 Court St	50-99
Dance Studio	Dancing Instruction	RR 1	1-4
Western Union	Money Transfer Service	18 E Main St	1-4
Bangor Savings Bank	Banks	1 Center St	5-9
Bar Harbor Banking & Trust Co	Banks	20 Main St	5-9
Machias Savings Bank	Banks	4 Center St	50-99
Northwestern Mutual Financial	Insurance	89 Dublin St	1-4
Patricia Rier Insurance	Insurance	49 Water St	1-4
Varney Agency	Insurance	Main ST	5-9
Vernon M Lord Insurance	Insurance	17 Main St	1-4
Childrens Health Insurance	Medical & Surgical Plans	11 Broadway	1-4
Community Health & Counseling	Home Health Service	RR 1 Box 339A	20-49

Employers in Machias	Industry	Location or Mailing Address	Approx # or range of Employees
Sunrise County Homecare SVC	Home Health Service	11 Broadway	20-49
Dorr Charles H, DDS	Dentists	Marshfield Rd	1-4
Machias Dental Care	Dentists	75 Court St	5-9
Vachon Nicholas S, DPM	Podiatrist	77 Court St	1-4
Knowles Peter J, DC	Chiropractors DC	19 E Main St	1-4
Barbee Karen D	Social Workers	26 Main St	1-4
Marie Alex J	Psychotherapists	3 North St	5-9
Hallowell & Mac Mmannis	Optometrists OD	Lower Court St	5-9
Mac Mannis Robert A, OD	Optometrists OD	Lower Court St	1-4
Bay View Physical Therapy	Physical Therapists	5 Stackpole Rd	1-4
Down East Health Care	Physicians & Surgeons	Larson Bldg	1-4
Downeast Healthcare Foundation	Physicians & Surgeons	Upper Court St	1-4
Downeast Whole Health Assoc	Physicians & Surgeons	3 North St	5-9
Dr. Gray	Physicians & Surgeons	Upper Court St	5-9
Lichauco Marcario F, MD	Physicians & Surgeons	152 Court St	1-4
Machias Medical Assoc	Physicians & Surgeons	Highway 1	5-9
Maliuanag Perry, MD	Physicians & Surgeons	RR 1	1-4
Dr. Tan	Physicians & Surgeons	Upper Court St A	1-4
Down East Aids Network	Aids Information & Testing	5 Water St	1-4
Downeast Health SVC	Health Services	71 Court St	5-9
County Ambulance Inc	Ambulance Service	Machias, ME 04654	1-4
Down East Community Hospital	Hospitals	Upper Court St	250-499
Regional Medical Center at Lubec	Home Health--Counseling	11 Broadway	
Care & Comfort	Mental Health Services	Old County Rd	1-4
Washington County Psychotherapy	Mental Health Services	E Kennebec Rd	100-249
Marshall's Health Care Facility	Nursing & Convalescent Homes	9 Beal St	50-99
WHCA Machias Community Care	Child Care Service	4 Free St	5-9
Rapid Response Program	Crisis Intervention Service	Old County Rd	10-19
Beckman Carol	Marriage & Family Counselors	26 Main St	1-4
Catholic Charities Maine	Social Service & Welfare Organizations	Old County Road	1-4
Child Development SVC	Social Service & Welfare Organizations	9 Cooper St	5-9
Community Health & SVC	Social Service & Welfare Organizations	2 Lincoln St	1-4
Families United of Wa County	Marriage & Family Counselors	100 Court St	10-19
Family Counseling SVC	Marriage & Family Counselors	1 Stackpole Rd	5-9
Family Planning Project	Family Planning Information Centers	71 Court St	5-9
Protea Behavioral Health	Marriage & Family Counselors	8 Pleasant Blvd	1-4
Sunrise Opportunities	Social Service & Welfare Organizations	66 Hadley Rd	10-19
Washington County Childrens	Social Service & Welfare Organizations	12 Free St	20-49
Maineline Net	Internet Service	76 Main St	5-9
Porter Memorial Library Assn	Libraries-Public	52 Court St	1-4
Bangor Daily News	Newspapers (Publishers)	17 E Main St	5-9
Machias Valley News Observer	Newspapers (Publishers)	31 Broadway	5-9
PCT Communications	Communications	17 E Main St	1-4
Superlative Technologies	Communications	34 Center St	20-49
Machias Bancorp MHC	Holding Companies (Bank)	4 Center St	unknown
Gardner & Johnson	Generators-Electric-Manufactures	157 Upper Cork St	1-4
Machias Auto Parts Inc	Machine Shops	Dublin St	5-9
Maine Wild Blueberry Co	Frozen Fruit, Fruit Juices/Vegs (Mfrs)	50 Elm St	100-249
H F Pinkham Inc	Kitchen Cabinets & Equipment-Household	Dublin St	10-19
Machias Valley Baptist Church	Churches	Broadway	4
Butler & Berry Monuments	Cut Stone & Stone Products (Mfrs)	Lower Court St	1-4
Fundy Bay Printing	Printers	9 E Main St	1-4
American Legion	Veterans' & Military Organizations	16 Court St	1-4
Machias Bay Chamber of Commerce	Chambers of Commerce	12 E Main St	1-4
Centre St Congregational Church	Churches	7 Center St	1-4
Church of Jesus Christ of Lds	Churches	100 Court St	1-4
Cutler United Methodist Church	Churches	3 Drisko St	1-4
Machias Community of Christ	Religious Organizations	North St	1-4
ST Aidan's Episcopal Mission	Churches	36 Hill St	1-4
Bragdon Kelley Campbell Funeral	Funeral Directors	6 Cooper St	5-9
Machias Cleaners & Laundry Ctr	Laundries-Self Service	9 Water St	1-4

Employers in Machias	Industry	Location or Mailing Address	Approx # or range of Employees
Machias Cleaners & Laundry Inc	Laundries-Industrial & Commercial	96 Main St	10-19
Heald Hair Design	Beauty Salons	9 Gardiner Ave	1-4
Nail Salon	Beauty Salons	14 E Main St	1-4
Shear Perfection	Beauty Salons	RR 1	1-4
Ultimate Image Hair Salon	Beauty Salons	Dublin St	1-4
Alternate Pathways to Health	Massage Therapists	34 Elm St	1-4
Gary's Auto Ctr	Automobile Body-Repairing & Painting	RR 1 Box 40	1-4
Smith's Service Station	Automobile Repairing & Service	1 Prescott Dr	1-4
Midtown Auto Repair	Automobile Inspection Stations-New/Used	29 Main St	1-4
C & D Spa & Pool Svc	Hot Tubs & Spas-Service & Repair	HC 71 Box 229L	1-4
H & R Block Tax Svc	Tax Return Preparation& Filing	Water St	5-9
CES	Surveyors-Land	29 Dublin St	5-9
Good Mary Jane	Attorneys	23 Broadway	1-4
Graves Alan D	Attorneys	66 Water St	1-4
Irving Rebecca	Attorneys	38 Broadway	1-4
Leonard Michael R	Attorneys	24 Center St	1-4
Norman P Toffolon Law Office	Attorneys	5 Bruce St	1-4
Pine Tree Legal Assistance	Attorneys	1 School St	1-4
Talbot & Talbot	Attorneys	32 Center St	1-4
Levine Stephen	Paralegals	23 Broadway	1-4
Machias Animal Hospital	Veterinarians	RR 1	5-9
Labor Dept	State Government-Licensing & Inspection	15 Prescott Dr	unknown
Labor Dept-Jobs Training Act	State Government-Licensing & Inspection	14 Free St	10-19
Natural Resources Conservation	Federal Government-Conservation Depts	46 Court St	unknown
US Consolidated Farm SVC Agency	Federal Government-Conservation Depts	49 Court St	1-4
Veterans Service	State Government-Veterans Affairs Admin	70 Main St	1-4
Human Services Dept	State Government-Social/Human Resources	13 Prescott Dr	50-99
Machias Town Clerk	Town Government-Executive Offices	70 Court St	20-49
Machias Town Manager	Town Government-Executive Offices	70 Court St	1-4
Machias Town Ambulance	Government Offices-Town, Village & Twp	47 Court St	20-49
Machias Waste Water Facility	Government Offices-Town, Village & Twp	Lower Main St	1-4
Recycling Center	Government Offices-Town, Village & Twp	RR 192	1-4
State of Maine	Government Offices-State	34 Center St	unknown
Washington County Commissioner	Government Offices-County	47 Court St	1-4
Washington County Management	Government Offices-County	47 Court St	50-99
Washington County Registrar	Government Offices-County	47 Court St	1-4
Washington County Rgstr-Prbt	Government Offices-County	47 Court St	1-4
Washington County Territories	Government Offices-County	Court St	1-4
Sunrise County Economic	County Government-General Offices	1 Stackpole Rd	1-4
Corrections Dept	State Govt-Correctional Institutions	15 Prescott Dr	unknown
District Court	State Government-Courts	47 Court St	1-4
Superior Court	State Government-Courts	47 Court St	1-4
Machias Ambulance Svc	Fire Departments	PO Box 418	1-4
Machias Fire Dept	Fire Departments	47 Court St	20-49
Washington County Dist Atty	County Government-Legal Counsel	12 Cooper St	1-4
Probation & Parole	Probation Services	Outer Broadway	1-4
Machias Police Dept	Police Departments	Outer Broadway	10-19
Sheriff's Dept	Sheriff	47 Court St	20-49
Washington County Sheriff-Jail	Sheriff	47 Court St	10-19
US Army Recruiting	Recruiting-US Armed Forces	26 Main St	unknown
Jack Marshall Assoc Inc	Apartments	31 Gardiner Ave	1-4
Marshall's Assisted Living	Boarding Houses	110 Court St	10-19
Ridgeview Associates	Boarding Houses	9 Valley View Rd	1-4
Sunrise Opportunities	Boarding Houses	2 North St	10-19
Sunrise Village Apartments	Apartments	31 Gardiner Ave	1-4
Trust	Apartments	14 E Main St	1-4
Douglass III Guy J	Real Estate	Court	1-4
Eastland Realty	Real Estate	17 Cooper St	1-4
Roundabout Inc	Real Estate	26 Main St	1-4
Sunrise Realty	Real Estate	40 Main St	5-9
VIP Realty Inc	Real Estate	Dublin St	1-4

Employers in Machias	Industry	Location or Mailing Address	Approx # or range of Employees
U-Haul Cc	Truck Renting & Leasing	RR 1	1-4
Riverview Video	Video Tapes & Discs-Renting & Leasing	18 E Main St	1-4
Coffin's True Value Hardware	Hardware-Retail	RR 1	10-19
Downeast Glass	Glass-Auto Plate & Window & Etc		1-4
EBS Building Supplies	Lumber-Retail	11 R E Court St	10-19
Machias Glassworks Inc	Glass-Auto Plate & Window & Etc	Main	1-4
Machias Hardware Co	Plumbing Fixtures & Supplies-New Retail	26 Main St	1-4
Wall TV Appliances & Home Furn	Appliances-Household-Major-Dealers	12 E Main St	5-9
Radio Shack	Electronic Equipment & Supplies-Retail	Dublin St	1-4
Coastal Computer Consulting	Computer & Equipment Dealers	76 Main St	5-9
Machias One Stop-On the Run	Convenience Stores	8 Main St	10-19
Tom's Mini Mart	Convenience Stores	21 Dublin St	10-19
Shop 'n Save	Grocers-Retail	Dublin St	50-99
Machias Valley Furniture	Furniture-Dealers-Retail	RR1	1-4
Lloyd Hill Flooring	Carpet & Rug Dealers-New	Kennebec Rd	1-4
Machias Irving	Service Stations-Gasoline & Oil	RR 1	1-4
J C Penney Co	Department Stores	18 E Main St	1-4
Sears Roebuck & Co	Department Stores	11 Prescott Dr	1-4
Whole Life Natural Market	Health & Diet Foods-Retail	80 Main St	1-4
Rite Aid Pharmacy	Pharmacies	86 Dublin St	10-19
Jordan Gardens-Florist	Florists-Retail	34 Water St	1-4
Parlin Flowers & Gifts	Florists-Retail	34 Harwood St	5-9
Party Palace	Party Supplies	18 E Main St	1-4
Office	Office Supplies	48 Main St	1-4
Woodwind Custom Framers	Picture Frames-Dealers	62 Dublin St	1-4
Fernwood Artworks of ME	Art Galleries & Dealers	HC 71 Box 262A	5-9
Bags O Rags	Thrift Shops	40 Main St	1-4
Main Street Discount	Antiques-Dealers	27 Main St	1-4
Carquest Auto Parts	Automobile Parts & Supplies-Retail-New	Main Route 1	1-4
Machias Mobil	Tire-Dealers-Retail	56 Main St	10-19
Cranberry Motors Co	Automobile Dealers-New Cars	Dublin St	10-19
Hatt's Used Cars	Automobile Dealers-Used Cars	Jonesboro Rd	1-4
Pro Tech Motors	Automobile Dealers	58 Dublin St	1-4
Whitney Originals	Wreaths	5 Bridge St	5-9
Ara Food Svc	Food Service-Management	9 O'Brien Ave	20-49
Gingham	Fabric Shops	RR 1	1-4
Smitty's Trading Post	Guns & Gunsmiths	W Kennebec Rd	1-4
US Post Office	Post Offices	51 Court St	10-19
Machias Valley Airport	Airports	Town Offices	1-4
Machias Water Co	Water & Sewage Companies-Utility	1 West St	1-4
Machias Home Health	Hospital Equipment & Supplies (Wholesale)	RR 1 Box 54	1-4
Jonesboro Sand & Gravel	Sand & Gravel (Wholesale)	46 Main St	1-4
Bad Little Falls Redemption	Recycling Centers (Wholesale)	Main	1-4
Country Kitchen-Lepage Bakery	Bakers-Wholesale	RR 1	1-4
Irving Heating Oil	Oils-Fuel (Wholesale)	RR 1	1-4

Source: Maine Dept. of Labor (4<sup>th</sup> Quarter of 2000), and Maine 2001 Manufacturing Guide; input from Machias Comprehensive Plan Committee and local research, 2005

### Light Industry and Services Sector

There are many services available in Machias from a range of banking and professional offerings, local, County and State government offices, fuel distribution, car dealerships and automotive servicing, a diverse range of health professionals and treatment opportunities, and an equally diverse range of educational options.



Light industry in Machias is currently limited to seasonal operations including blueberry processing and wreath assembly. The town has proposed three sites for inclusion in the new "Pine Tree Zone" structure created by the State for taxation purposes. These include two parcels (~5 acres) in the Machias Industrial Park; 13 acres behind Bangor Hydro on Route 192; and approximately 480 acres surrounding the existing airport on both sides of Route 1. Several potential opportunities for PTZ development have been considered and all sites remain to be developed.

If the regional airport is constructed in Jonesboro, as is currently proposed, the current airport site has good access to Route 1 and is close to existing services. The area will be redeveloped as a growth area for such options as business/commercial/industrial uses, recreation and community services use, institutional use or a mixture of uses (residential/recreation for example).

### **Retail Trade**

Machias has realized good success in the retail trade and visitor services sector in the last several years. This conclusion is borne out by the 89 percent increase in general merchandise sales in Machias since 1997 while the county realized an overall increase of almost 50 per cent (see Table E-11 below).

The largest retail operations in Machias include several building supply or hardware businesses, the Shop 'n Save grocery store and Rite Aid. Most retail businesses have traditionally been year-round operations although tourism based businesses are subject to seasonal fluctuations.

The downtown buildings were constructed when the Machias economy was booming and pedestrian traffic was a way of life. Then, local people were dependent on the downtown retail stores and Machias also served as a regional shopping hub. In the downtown core there is a mix of offices, banking and professional services, discount retail, restaurants and apartments above stores and offices. While some businesses have remained for many years others have had difficulty given problems associated with building age, size, layout and lack of parking.

Downtown revitalization is an increasing priority for local residents and the town, with special emphasis placed on how the historic downtown and riverfront could attract people, both visitors and residents, and contribute to generating jobs and investment. Recent improvements to the bridge, trails and park at Bad Little Falls are particular attractions to downtown. A downtown revitalization plan was funded in 2005 and will be completed in 2006. Opportunities exist for visitor attractions such as bike rentals, kayak launching and other riverfront access opportunities.

Policies and implementation measures to revitalize the downtown area are discussed below.

### **INFRASTRUCTURE**

The downtown infrastructure, public and private, requires restoration and rehabilitation and on-going maintenance. As noted earlier, a series of downtown public improvement projects is underway, funded by a series of Community Development Block Grants.

The restoration, rehabilitation and maintenance of privately owned, downtown buildings present more difficult issues. Other incentives, programs, and methods of supporting private, infrastructure investment must be identified and implemented, among those establishing a TIF district in the downtown (discussed below). Long term, improvements to and maintenance of private buildings depend on creating an environment favorable to investment.

Additional infrastructure investments are underway throughout the community through a variety of funding sources including the following:

Regional Airport Environmental Study	\$380,000	FAA- Federal Funding
Regional Airport Environmental Study	\$10,000	State – MDOT
Housing Assessment	\$15,000	CDBG – Planning
WWTP Aeration System	\$400,000	CDBG – EDI
WWTP Sewer Infiltration	\$350,000	STAG – Federal Funding

## TAX INCENTIVES

TIF (tax increment financing) allows a municipality to return a portion of any new property investments to the owner over a pre-determined period (up to 30 years). A TIF district exists in downtown along Main Street and in the municipal parking lots. The TIF works when one or more property owners choose to make substantial improvements to their properties. Within pre-defined rules of the TIF district, a portion of the additional tax revenue generated by those investments may be returned to the owner to assist with improvement costs or be directed by the municipality to improve local infrastructure.

Under the Machias TIF the full amount of the TIF benefits is going to downtown businesses for the first few years (given town requirements for development that is consistent with historical architecture). In future years, the remaining additional tax revenues generated can be directed for use in the downtown marketing, infrastructure and development programs. The additional valuation generated by the property investment is not considered by the State when calculating the county tax, general revenue sharing, or school aid formula for the life of the TIF – providing a tax shelter for the town.

## REGIONAL ECONOMY

Traditionally, Washington County has been one of the most depressed counties in New England. Nearby in recent years, portions of Waldo County and Southwest Penobscot County have experienced deeper economic depression as a result of the closure of traditional manufacturing industries in those areas. Washington County continues as an economically depressed area because of its distance from other sections of the State, and reliance on a seasonal economy (blueberries, wreaths and Christmas trees, fishing and clamming, wood harvesting, etc.).

According to the Eastern Maine Economic Strategy, prepared by the Eastern Maine Development Corporation in 2002, the Machias-Eastport Labor Market Area (LMA) lost population in the last

20 years (-1.6% 1980-1990; -2.9% 1990-2000). This decline was greatest among two age groups - the school aged, and those aged 25-44 - who could contribute to the regional economy now and in the future. This out migration is reflected in drastically declining school enrollment figures in Washington County (-26.2%) as well as an increase in the dependency ratio within households. The dependency ratio is a figure that essentially adds the elder and youth population together and then divides that sum by those of working age. It is a rough measure of a community's ability to generate income to support its needs. The ultimate impact of this decline in a working age population is a poverty rate in the Machias-Eastport LMA of 19.8% in 2001 representing an increase of 6.0% since 1990.

Economic sectors in the Machias-Eastport LMA that saw the largest growth in employment from 1998-2000 were Depository Institutions (banks), Health Services and Wholesale Trade and Non-Durable Goods. Of the three, only Health Services saw employment growth of greater than 10% and moderate wages (between \$371-\$491/week). Depository Institutions saw moderate growth (5-10%) in employment and supported moderate wages (between \$371-\$491/week) but Wholesale Trade, Non-Durable Goods had moderate growth in employment (5-10%) but low wages (<\$378/week). While Special Trade Contractors experienced only stable or declining growth in employment, they do earn a moderate wage (between \$371-\$491/week). All other significant industry sectors in the Machias-Eastport LMA (Automotive Dealers and Service Stations, Eating and Drinking Places, Educational Services, Food and Kindred Products, Food Stores, Social Services) show stable or declining growth in employment and low wages (<\$378/week).

Note that in 2005 the Eastport-Machias Labor Market Area was redefined due to changes in commuting patterns observed in the 2000 census. It was renamed the Machias Labor Market Area and now includes the area previously encompassing the Jonesport-Milbridge LMA and the city of Eastport is included in the Calais LMA.

Some Machias residents commute to jobs located in surrounding communities. With a mean travel time to work of 13.8 minutes Machias residents are not traveling as far as the Washington County average (19.2 minutes; see Table E-3) nor have their commuting times increased much in the past decade (mean commuting time to work in 1990 was 11.1 minutes). According to the Census, the Machias workforce commutes primarily by private vehicle (74%). The second largest segment (10%) commutes by carpools, less than the average for the county (12.1%). The third largest segment walks or rides a bicycle to work.

**Table E3 - MACHIAS COMMUTING TO WORK: 2000**

Commuting to Work: 2000	Machias		Washington County	
	Number	Percent	Number	Percent
<b>Workers 16 Years and over</b>	910	100.0	13,743	100.0
<b>Drove alone</b>	671	.74	10,444	76.0
<b>In carpools</b>	92	.10	1,657	12.1
<b>Using public transportation</b>	2	.002	64	0.5
<b>Using other means</b>	14	.02	162	1.2
<b>Walked</b>	71	.08	722	5.3
<b>Worked at home</b>	60	.07	694	5.0

Commuting to Work: 2000	Machias		Washington County	
	Number	Percent	Number	Percent
Mean travel time to work (minutes)	13.8	--	19.2	--

Source: US Census

As seen from the Table listing employers in Machias many of the major Washington County regional employers are located in Machias. In addition many Machias residents commute to employment in other parts of Washington and Hancock Counties.

**Table E4 - PERSONS LIVING IN MACHIAS AND WORKING ELSEWHERE**

Community	# -1990	# - 2000
Ellsworth city Hancock Co.	3	10
Sorrento Hancock Co.		3
Mount Desert town Hancock Co.	2	
Sullivan town Hancock Co.	3	
Augusta city Kennebec Co.		3
Waterville city Kennebec Co.		3
Camden town Knox Co.		2
Bangor city Penobscot Co.	4	7
Milford town Penobscot Co.		2
Millinocket town Penobscot Co.		1
Belfast city Waldo Co.		6
Baileyville town Washington Co.	4	3
Beals town Washington Co.		5
Calais city Washington Co.	3	11
Cherryfield town Washington Co.	3	2
Columbia town Washington Co.	7	
Columbia Falls town Washington Co.	21	4
Crawford town Washington Co.	2	
Cutler town Washington Co.	19	29
Danforth town Washington Co.		2
East Machias town Washington Co.	40	26
Eastport city Washington Co.	5	4
Harrington town Washington Co.	3	3
Jonesboro town Washington Co.	22	12
Jonesport town Washington Co.	5	19
Lubec town Washington Co.	7	14
Machiasport town Washington Co.	33	34
Marshfield town Washington Co.	18	3
Meddybemps town Washington Co.	3	1
Milbridge town Washington Co.	3	2
Passamaquoddy Indian Twp. Res. Washington Co.	2	
Pembroke town Washington Co.		7
Perry town Washington Co.	3	2
Roque Bluffs town Washington Co.	4	
Steuben town Washington Co.		2
Wesley town Washington Co.	2	
Whiting town Washington Co.	2	
Whitneyville town Washington Co.	1	

Source: US Census

Regional employers are shown in Table E-5.

Table E5 – REGIONAL EMPLOYERS

Business	Industry	Location	Approx. # of Employees (or range of employees)
Domtar (formerly Georgia Pacific)	Paper Mill	Baileyville	554
Atlantic Rehab and Nursing Cent	General Medical	Calais	75
Calais Regional Hospital	General Medical and Surgical Hospital	Calais	203
Calais School Dept.	Public School	Calais	136
Thomas Di Cenzo, Inc.	General Contractors	Calais	100-249
Calais Children's Project	Groups Homes and Counseling	Calais	100-249
Eastern Maine Electric Co-op	Electric Services	Calais	100-249
Wal-Mart	Dept. Store	Calais	181
Shop 'N Save	Grocery Store	Calais	100-249
School Union 104	Public Schools	Eastport	129
School Union 107	Public Schools	Baileyville	100-249
Regional Medical Center at Lubec	General Medical	Lubec	140
Ocean View Nursing Home	Skilled Nursing Care	Lubec	56
Washington Academy	Private School	East Machias	48
Tex-Shield	Specialized Garment Manufacture	Eastport	50-99
Washington County Community College	College	Calais	50-99
Mingo's Evergreen Products Inc.	Retail Nurseries, Lawn and Garden Shop	Calais	20-49
State of Maine	Various Departments/ Government Services	Jonesboro/ Machias/ Cherryfield/Washington County	40-99
Down East Community Hospital	General Medical and Surgical Hospital	Machias	249
School Union 102 Machias.	Public Schools	Machias	137
Maine Wild Blueberry Co	Food Processing	Machias	100-249
Marshall's Health Care Facility	Skilled Nursing Care	Machias	113
Shop 'N Save	Grocery Store	Machias	100-249
University of Maine at Machias	University	Machias	163
Worcester Industries	Crafts/Peat&Power Plant/Sales	Harrington	100-249
Wymans	Agriculture, Food Processing	Cherryfield	58
Cherryfield Foods	Agriculture, Food Processing	Cherryfield	125
SAD 37	Public School	Milbridge /Cherryfield/ Harrington	40-99
Narraguagus Bay Health Care	Skilled Nursing Care Facilities	Milbridge	100-249
Dorr Lobster Co.	Seafood	Milbridge	100-249
Sunrise County Evergreens	Manufacturing Industries	Milbridge	100-249
Mardens	Dept. Store	Ellsworth	50-100
Maine Coast Memorial Hospital	General Medical and Surgical Hospital	Ellsworth	100-249
Walmart	Dept. Store	Ellsworth	100-249
Jackson Labs	Biotech	Bar Harbor	1179

Source: Maine Dept. of Labor (4<sup>th</sup> Quarter of 2000), Maine 2001 Manufacturing Guide and telephone surveys.

## LABOR FORCE AND EMPLOYMENT STATISTICS

The labor force is defined as all persons who are either employed or are receiving unemployment compensation. Table E-6 shows the distribution of persons aged 16 and above who are in or out of the workforce in Machias and Washington County. The distribution of the labor force in Machias is similar to the county as a whole except that 9.7 percent of the town's residents were unemployed, while countywide 8.5% were unemployed. The Census figure for the town, however, may underestimate the unemployment rate. Underestimated rates can in part be explained by the greater reliance on seasonal and craft based work in rural areas. The seasonal nature of such work is less likely to be reported in census data. In fact, a significant informal economy exists, especially in natural resource based jobs, in which residents supplement reported incomes with seasonal wages.

**Table E6 - LABOR FORCE STATUS: 2000**

<b>Labor Force Status: 2000</b> Subject	<b>Machias</b>		<b>East Machias</b>		<b>Machiasport</b>		<b>Washington County</b>	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Persons 16 years and over</b>	<b>1984</b>	<b>100.0</b>	<b>1,090</b>	<b>100.0</b>	<b>899</b>	<b>100.0</b>	<b>27,214</b>	<b>100.0</b>
In labor force	1090	54.9	684	62.8	454	50.5	15,500	57.0
Civilian labor force	1084	54.6	682	62.6	453	50.4	15,354	56.4
Employed	979	49.3	637	58.4	446	49.6	14,042	51.6
Unemployed	105	9.7	45	6.6	7	1.5	1,312	8.5
Armed Forces	6	.03	2	0.2	1	0.1	146	0.5
Not in labor force	894	45.1	406	37.2	445	49.5	11,714	43.0

Source: US Census

Labor force generally increases with population, and also when a larger percentage of the population works or looks for work. The labor force has increased by almost 11% in Washington County between 1980 and 2000 while the population remained substantially the same or decreased. Machias' labor force has increased by 4 percent during the same time period. Unemployment has also increased in Machias, and in May of 2005 was just under the average unemployment rate in Washington County (8.7 % not seasonally adjusted). Seasonal fluctuations in unemployment are characteristic of resource-based economies such as those found in Washington County and in Machias. During July and August, unemployment drops substantially as summer-season employment opportunities multiply.

The employed population for Machias and Washington County is described in Table E-7 by industry. The top two sectors of employment for Machias are 'Education, health and social services' and 'Retail trade'. The next two most important sectors comprising equal parts of the employment picture include 'Public Administration' and 'Arts, entertainment, recreation, accommodation and food services'. Washington County as a whole is supported by the same top sector: 'Education, health and social services' but followed by 'Manufacturing' as the second most important sector. Retail trade holds a higher share of the employment picture in Machias than in Washington County where 'Agriculture, forestry, and fisheries, mining' ranks third in its contribution to economic activity.

Table E7 - EMPLOYMENT CHARACTERISTICS: 2000

Employment Characteristics: 2000	Machias		Washington County	
INDUSTRY	Number	Percent	Number	Percent
TOTAL	979	100%	14,042	100.0%
Agriculture, forestry, and fisheries, mining	53	5	1,531	10.9
Construction	46	5	944	6.7
Manufacturing	31	3	1,968	14.0
Wholesale trade	17	2	384	2.7
Retail trade	129	13	1,521	10.8
Transportation, warehousing, utilities	20	2	581	4.1
Information	12	1	146	1.0
Finance, insurance, and real estate	31	3	433	3.1
Professional, scientific, management, administrative, and waste management services	23	2	438	3.1
Education, health and social services	377	39	3,694	26.3
Arts, entertainment, recreation, accommodation and food services	95	10	779	5.5
Other services (except public administration)	43	4	642	4.6
Public administration	102	10	981	7.0
CLASS OF WORKER				
Private wage and salary workers	631	64.4%	9,225	65.7
Government workers	270	27.6%	2,882	20.5
Self-employed workers	74	7.6%	1,886	13.4
Unpaid family workers	4	.4%	49	0.3

Source: US Census

Employment opportunities in rural areas are affected by the availability of public transportation for residents without reliable transportation living on the margin. Residents of service centers like Machias can more readily walk or carpool to work. However, without a car, some residents are not able to get to work, and when unemployed or underemployed in a minimum wage job, some cannot maintain a vehicle particularly for severe winter conditions.

Another regional labor force issue for business expansion in Washington County is relatively widespread substance abuse. Even if individuals affected by it overcome difficult personal situations and are motivated to work they often cannot pass drug screening tests to get employment and/or they lack the support network necessary to stay sober and employed. These are regional labor force issues that will require leadership and cooperation among many partners to address.

## INCOME

The median household income in Machias increased (25.31%) since 1990 while median income in the county and state have risen by just below and just above 30% respectively. Median income



in Machias was comparable with the county in 1989 and is now slightly lower than the county as a whole (additional detail on household income is included in Chapter C – Population). Median household income projections, provided by a linear regression analysis of 20-year trend data are for a modest decrease over the next few years. See Tables below.

**Table E8 - MEDIAN HOUSEHOLD INCOME**

	U.S. Census		Forecast <sup>1</sup>	2015 Projection
	1989	1999	2002 Est.	
Machias	\$19,406	\$24,318	\$26,523	\$33,774
Washington County	\$19,967	\$25,869	\$26,008	\$36,984
Maine	\$27,896	\$37,240	\$37,592	\$62,911

Source: U.S. Census

Sources of income for residents of Machias and Washington County in 1999 are derived primarily from wage and salaried positions. Wage and salary income includes wages, salary, commissions, tips, piece-rate payments and cash bonuses earned before tax deductions were made. Wage and salary employment is a broad measure of economic well-being but does not indicate whether the jobs are of good quality. In the 2000 Census 7.6% of Machias residents report self-employment income (see Table E-7), about half the county average. A slightly lower percentage of residents in Machias collect social security income (almost 31.8%) than do residents of the county (34.0%), reflecting the large retiree population in the County. Over 9% of Machias residents received public assistance, more than the county average. Public assistance income includes payments made by Federal or State welfare agencies to low-income persons who are 65 years or older, blind, or disabled; receive aid to families with dependent children; or general assistance.

**Table E9 - INCOME TYPE IN 1999**

Income Type in 1999 (Households often have more than one source of income, as seen here)	Machias		Washington County	
	Number	Percent	Number	Percent
<b>Households</b>	<b>934</b>	<b>100</b>	<b>14,119</b>	<b>100</b>
With wage and salary income	646	69.2	10,162	72.0
With Social Security Income	297	31.8	4,795	34.0
With Supplemental Security income	51	5.5	949	6.7
With public assistance income	91	9.7	910	6.4
With retirement income	204	21.8	2,382	16.9

Source: U.S. Census

In 2000, the average poverty threshold for a family of four persons was \$17,050 in the contiguous 48 states (U.S. DHHS). Over 15 percent of Machias families were listed as having incomes

<sup>1</sup> \*2014 Estimates are based on a twenty-year period (1980-2000 or 1979-1999) using linear regression analysis. These estimates are not based on percent growth per year (% GPY). Longer trend analysis should be conducted for comparison and to provide a range of possible projections that might better account for unique local circumstances.

below the poverty level, which included 77 families. This is higher than for the entire county and almost 34% of these families have children who are under 5 years of age.

**Table E10 - POVERTY STATUS IN 1999**

Poverty Status in 1999 Below poverty level	Machias		Washington County	
	Number	Percent	Number	Percent
<b>Individuals</b>	<b>474</b>	<b>23.5</b>	<b>6,272</b>	<b>19.0</b>
Persons 18 years and over	366	22.9	4,524	17.8
Persons 65 years and over	91	23.6	1,076	19.2
<b>Families</b>	<b>77</b>	<b>15.6</b>	<b>1,319</b>	<b>14.2</b>
With related children under 18 years	55	22.9	861	20.3
With related children under 5 years	35	33.7	312	23.5

Source: U.S. Census

## SALES

Taxable sales are one of the few available indicators of the actual size, growth, and character of an economic region. Table E11 presents information on taxable sales of consumer goods by sector in Washington County and the total amount of taxable sales for Machias. All figures are in real dollars, not adjusted for inflation, and represent only taxable sales.

Machias had an increase in total taxable sales (27.1%) for the period of 2000 to 2005 while the county saw an increase of just under 14%. Increases in taxable and consumer sales were fueled primarily by increases in business operating and business supplies with solid gains in auto transportation, general merchandise, and restaurant and lodging.

**Table E11 - TAXABLE SALES (in thousands of dollars)**

Selected Retail Sectors	Washington County			Machias		
	Annual Total Sales 2000	Annual Total Sales 2005	2000- 2005 % Chg	Annual Total Sales 2000	Annual Total Sales 2005	2000- 2005 % Chg
Business Operating	13,713.9	16,959.5	23.7%	1101	1623.3	47.4%
Building Supplies	22,453.1	32,778.2	46.0%	6737.8	10580.2	57.0%
Food Store	34,172	33,462.6	-2.1%	7930.9	8222.7	3.7%
General Merchandise	50,521.9	55,283.7	9.4%	3126.8	3913.5	25.2%
Other Retail	10,706.1	13,324.4	24.5%	3346.5	4050.3	21.0%
Auto Transportation	27,441.6	29,211	6.4%	3797.2	4931.5	29.9%
Restaurant/Lodging	23,358.9	26,612.9	13.9%	6420.5	7928.2	23.5%

	Washington County			Machias		
Selected Retail Sectors	Annual Total Sales 2000	Annual Total Sales 2005	2000- 2005 % Chg	Annual Total Sales 2000	Annual Total Sales 2005	2000- 2005 % Chg
Total Consumer Sales	168,653.6	190,672.8	13.1%	31359.7	39626.4	26.4%
Total Taxable Sales	182,367.5	207,632.3	13.9%	32460.7	41249.7	27.1%

Source: Maine Revenue Service, 2006

Below are the definitions of each retail sector:

Consumer Retail Sales:	Total taxable retail sales to consumers.
Total Retail Sales:	Includes Consumer Retail Sales plus special types of sales and rentals to businesses where the tax is paid directly by the buyer (such as commercial or industrial oil purchase).
Building Supply:	Durable equipment sales, contractors' sales, hardware stores and lumberyards.
Food Stores:	All food stores from large supermarkets to small corner food stores. The values here are snacks and non-food items only, since food intended for home consumption is not taxed.
General Merchandise:	In this sales group are stores carrying lines generally carried in large department stores. These include clothing, furniture, shoes, radio-TV, household durable goods, home furnishing, etc.
Other Retail:	This group includes a wide selection of taxable sales not covered elsewhere. Examples are dry good stores, drug stores, jewelry stores, sporting good stores, antique dealers, morticians, bookstores, photo supply stores, gift shops, etc.
Auto Transportation:	This sales group includes all transportation related retail outlets. Included are auto dealers, auto parts, aircraft dealers, motorboat dealers, automobile rental, etc.
Restaurant/Lodging:	All stores selling prepared food for immediate consumption. The Lodging group includes only rental tax.

## REGIONAL COOPERATION

Machias serves as the economic hub of the central coastal section of Washington County. Residents from all of the surrounding Towns commute in to work, shop, access services, and go to school. US Route 1, which serves as Machias Main Street, is the primary travel route for downeast Maine. There is a multi-jurisdictional committee advocating for upgrading of Route 1, addition of appropriate signage, and designation as a "scenic highway." The abandoned railway that goes through Machias has potential for re-establishing rail service to the region. Several Machias residents and public officials are working on the Management Plan for re-use of the rail for a multi-use trail while retaining the option of conversion back to rail if feasible in the future. Developing hiking or biking paths adjacent to the rail bed would be very beneficial to the local economy due to its tourism potential. The current Machias Railroad Station reconstruction would provide a multi-

modal facility for cyclists, walkers, bus service, snowmobilers, cross country skiers, as well as rail.

The new site for the Machias Valley Regional Airport is in Jonesboro near the Machias and Whitneyville town lines on Route 1 with its long term development anticipated over the next decade. The air strip improvements will expand commercial air traffic and enhance public safety issues.

A priority goal for Machias is the creation and retention of jobs. The town believes in regional cooperation for development and is an active participant in the Washington County Council of Governments, the Sunrise County Economic Council, the Machias Bay Area Chamber of Commerce and the Machias Regional Airport Authority.

## POLICIES AND IMPLEMENTATION

The economic development goal for the town of Machias is to promote an economic climate that increases job opportunities and the overall well being of Machias.

The economic sectors that will help Machias reach those goals are development associated with the Machias Regional Airport, light industry, and tourism, tied closely to concentrated downtown revitalization efforts. This section provides the policies and implementation measures that Machias will follow toward its goal.

<b>GOAL: Promote an economic climate that increases job opportunities and the overall well being of Machias.</b>			
<b>Policy</b>	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Timeframe</b>
<b>Overall Economic Development</b>			
Ensure appropriate land use, compatible residential, commercial, and industrial growth	Establish town wide zoning ordinances and site plan review process for the Town of Machias including provisions for: <ul style="list-style-type: none"> <li>• Natural resource protection</li> <li>• Adequate public service capacity</li> <li>• Attraction of environmentally conscious commercial and industrial activities to designated areas.</li> <li>• Discouragement to strip development</li> <li>• Minimizing conflicts between existing residential land uses and development of commercial and industrial uses.</li> <li>• Attractive entrance design recommendations.</li> </ul>		
	Designate areas where commercial and industrial growth is encouraged.		

<b>GOAL: Promote an economic climate that increases job opportunities and the overall well being of Machias.</b>			
Policy	Implementation Strategy	Responsibility	Timeframe
Expand existing business and industries, and attract new business and industry with the goal of creating good quality jobs for Machias residents.	Work with regional business development organizations (EMDC <sup>2</sup> , SCEC, Coop Ext'n, IWW, Chambers) on providing assistance to new and existing business owners on how to better manage their businesses. This assistance could include newsletters, seminars, and open forums.	Town Staff	Ongoing
	Work with the Planning Board and other town bodies to assure that the town's permitting process is quick and the effective. Work with new and existing business owners to guide them through the permitting process as quickly as prudently possible.	Town Staff/ Planning Board	On-going
	Participate in the programs and opportunities available through the Washington County Pine Tree Development Zones and other regional economic development efforts, as appropriate.	Town Staff/ Selectmen	Ongoing
	Seek other outside sources of funding for economic development, including grant/loan programs to assist business and industries public and financing to support the facilities. Possible sources of funding include, but are not limited to, Community Development Block Grants and Economic Development Administration Grants	Town Staff/ Selectmen	Ongoing
	Establish a Community and Economic Development Committee consisting of business owners, civic groups, club members, residents, Town Officials, and others.	Town Manager	2006
Allow for the development of home occupations in Machias	Include home-occupations performance standards in the future zoning ordinance with standards ensuring they are compatible with residential use and not infringe upon the neighborhood or the environment.		
	Publicize/market micro loan availability for such home occupations.		
Coordinate with neighboring communities and regional entities on development opportunities and	Lead effort to obtain land and funds to implement recommendations of airport siting decision.	Town Staff; WCCOG, EMDC, MDOT	2006

<sup>2</sup> EMDC – Eastern Maine Development Corporation  
 SCEC - Sunrise County Economic Council  
 Coop Ext'n – University of Maine Cooperative Extension  
 IWW - Incubators without Walls (Washington Hancock Community Agency)  
 SEA - St. Croix Economic Alliance

<b>GOAL: Promote an economic climate that increases job opportunities and the overall well being of Machias.</b>			
Policy	Implementation Strategy	Responsibility	Timeframe
risks associated with the new Regional Airport.			
	Investigate other techniques for stimulating commercial and industrial growth that are being used successfully in other communities.	Town Staff	Ongoing
<b>Existing Businesses</b>			
Retain and acknowledge present businesses in Calais by focusing on industry appreciation, education and technical assistance, where possible.	Continue to support the Chamber of Commerce.	Town Staff/Selectmen	Ongoing
	Work through the Pine Tree Development Zone and regional economic development groups to provide business assistance and improve access to financial resources.	Town Staff/Selectmen	Ongoing
	Support the farmers market and efforts to expand its operations.	Town Staff/Selectmen	2006
<b>Industrial Park</b>			
Actively pursue full development of the existing industrial park by entering into negotiations with developers who are planning to develop in the very near future.	Any new buyers of industrial park land should show a commitment to build. Exhibit flexibility and permit creative financing in negotiations.	Town Staff	Ongoing
	Attract new industry to the industrial park by working through the Pine Tree Development Zone, Chamber of Commerce and Local Realtors.	Town Staff	Ongoing
	Explore additional Industrial zoning designations within Pine Tree Zone designated areas throughout the town.	Town Staff; Selectmen; Planning Board	2005
	Market the tax increment financing to make improvements to the Industrial Park as additional tenants locate there.	Town Staff	Ongoing
<b>Downtown Revitalization</b>			
Encourage further economic growth in the downtown by continuing the revitalization efforts.	Integrate Comprehensive Plan and Ordinance development with Downtown Revitalization and Riverfront Development efforts	Town Staff/Selectmen	2005-2006
	Explore various financial options including tax increment financing, to complete the revitalization of the downtown.	Town Staff/Selectmen	2006
	Revitalize the traditional commercial center, coordinating grant funds with private investments.	Town Staff/Selectmen/ Chamber of Commerce	2006
	Develop a resources database with listings of available buildings and acreage and details regarding utilities, parking, Town amenities, etc.		



<b>GOAL: Promote an economic climate that increases job opportunities and the overall well being of Machias.</b>			
<b>Policy</b>	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Timeframe</b>
	Work to maintain the downtown's infrastructure and overall appearance in good condition.	Public Works/ Chamber of Commerce	Ongoing
<b>Tourism</b>			
Enhance tourism by promoting Machias downtown retail businesses historic character, outdoor recreational amenities and scenic beauty.	Participate in regional tourism promotion efforts.	Town Staff; Chamber of Commerce, State Tourism Office, Historical Society, Maine DOT, WCCOG	Ongoing
	Encourage the use of blue travel directory signs from MDOT to signal restaurants, shopping, lodging and/or "gas ahead".	Town Staff/Selectmen	Ongoing
	Encourage residents and business to take pride in their community and property in order to present Machias "at its best".	Town Staff/Selectmen	Ongoing
<b>Job Training and Education</b>			
Strengthen commercial and industrial development capacity through training and educational programs for area residents.	Work with the School Department and the Regional Vocational Center to meet area job training and education needs.	Town Staff/Selectmen	Ongoing
	Encourage the Washington County Community College and the University of Maine at Machias to provide training and education programs that will support local and regional business and industry.	Town Staff/Pine Tree Development Zone	Ongoing
<b>Site Plan Review</b>			
Ensure high quality commercial and industrial development through the site plan review process.	Develop site plan review ordinance for the review of commercial and industrial development. Include review standards for the preservation of the landscape, access to the site, erosion and sedimentation control, open space preservation, surface water drainage, topographic and architectural compatibility, ground water protection, water supply, swage disposal, advertising, outdoor storage areas, lighting, emergency vehicle access and waste disposal.	Selectmen/Planni ng Board	On-going
	Promote vehicular and pedestrian connections among adjacent properties in commercial districts.	Selectmen /Planning Board	2006

## SUMMARY

The top two sectors of employment for Machias are 'Education, health and social services' and 'Retail trade'. The next two most important sectors comprising equal parts of the employment picture include 'Public Administration' and 'Arts, entertainment, recreation, accommodation

and food services'. Washington County as a whole is supported by the same top sector: 'Education, health and social services' but followed by 'Manufacturing' as the second most important sector. Retail trade holds a higher share of the employment picture in Machias than in Washington County where 'Agriculture, forestry, and fisheries, mining' ranks third in its contribution to economic activity. Machias is an employment center for central Washington County. While the number of people who live and work in Machias has decreased since 1990 (651 in 2000; 782 in 1990), the number of people who live outside of the town and work in Machias has increased by almost 18 per cent.

Machias is a town whose economy has changed and continues to evolve. Machias is a regional employer but challenges remain to bring employment and sales to levels that will continue to sustain local employment. The policies and strategies in this Comprehensive Plan are diverse and extensive as a result. Primary among them is support for downtown revitalization efforts through implementation of recent downtown revitalization grants and creation of a Downtown Tax Increment Financing District; coordinated investment in public and private infrastructure; and support for the tourism that will bring visitors to the area.

To ensure a strong economy, minimize sprawl, encourage complementary activities, and work with the natural market forces, the Town is planning to encourage service related activities in the downtown, retail activities in the outskirts, and wholesale and low-impact industrial activities in the industrial park. The Town has identified vacant space in the downtown, as well as buildings with commercial or recreational potential in need of rehabilitation.

## F. HOUSING

The purpose of this section is to:

1. Describe the characteristics and changes of the housing stock and its demand and affordability in Machias and the region;
2. Identify the relationship between housing characteristics and demand in Machias and the region; and
3. Predict the size, characteristics, and affordability of housing needed to meet the demands of the future population.

### Key Findings and Issues

In 2000, there were 1,043 year-round homes in Machias. The town expects a modest increase to 1,058 homes by 2015. The number of seasonal homes in Machias is small, representing approximately three percent of the housing stock. The number of year-round housing units increased at a higher pace than population growth between 1990 and 2000. Falling household size is the principal reason for this difference in growth rates.

The median value of housing in Machias is increasing at a faster rate than the median household income, making it harder to purchase a home, especially for first-time homebuyers and single parent households. Within Machias there are many low to moderate income rentals and many properties valued in the moderate price range. However demand for moderately priced housing for purchase or rent exceeds the current supply.

## HOUSING UNITS

### Number of Units

The number of year-round housing units in Machias increased by almost 8 percent between 1990 and 2000, less than the growth of year-round units experienced in the County (almost 15%) and the State (11.5%), see Table F-1. Most of the growth in housing units in Machias is a result of the decrease in household size (see Table C-5). While population has decreased by 8.4 percent between 1990 and 2000, the number of new housing units has increased by 8.7 percent during this time period, supporting the changes in household size recorded in Table C-5.

**Table F-1 TOTAL NUMBER OF HOUSING UNITS 1980 - 2000**

	1980	1990	% Change	2000	% Change
<b>Machias</b>	<b>898</b>	<b>1043</b>	<b>16%</b>	<b>1125</b>	<b>7.9%</b>
East Machias	659	635	-4%	793	24.9%
Machiasport	489	516	6%	559	8.3%
Marshfield	166	183	10.2%	242	32.2%
Roque Bluffs	166	209	25.9%	259	23.9%
Whitneyville	105	114	8.6%	140	22.8%
Washington County	18,149	19,124	5%	21,919	14.62%
Maine	501,333	587,045	17%	651,901	11.05%

Source: U.S. Census

The number of seasonal units is minimal in Machias and accounted for roughly three percent of all housing units in 2000 (see Table F-2). Seasonal units constitute a far greater proportion of the housing stock in neighboring communities, particularly coastal portions of East Machias, Machiasport and Roque Bluffs.

**Table F-2 TOTAL NUMBER OF SEASONAL UNITS 1980 - 2000**

	1980	1990	% Change	% of Total Units (1990)	2000	% Change	% of Total Units (2000)
<b>Machias</b>	<b>10</b>	<b>24</b>	<b>14%</b>	<b>2%</b>	<b>32</b>	<b>33.3%</b>	<b>2.8%</b>
East Machias	158	123	12%	19%	181	47.2%	22.8%
Machiasport	71	69	-2%	14%	81	17.4%	14.5%
Marshfield		5	-	2.7%	15	200%	6.2%
Roque Bluffs		100	-	47.8%	92	-8%	35.5%
Whitneyville		5	-	4.4%	18	260%	12.9%
Washington County	2,723	4,046	49%	21%	5,374	32.8%	24.5%
Maine	73,716	88,039	19%	21%	101,470	15.3%	15.6%

Source: U.S. Census

### Structure Type

Mobile homes make up a decreasing proportion of new housing in Machias (see Table F-3) and this pattern is also seen in neighboring towns and the County. Machias has a far greater, and increasing, number of multi-family housing units – about 30 percent of the total number of housing units – than in neighboring towns and the county.

**Table F-3 HOUSING UNITS IN STRUCTURE**

	Machias		East Machias		Machiasport		Marshfield		Roque Bluffs		Whitneyville		Washington County	
	1990	2000	1990	2000	1990	2000	1990	2000	1990	2000	1990	2000	1990	2000
	Num.	Num.	Num.	Num.	Num.	Num.	Num.	Num.	Num.	Num.	Num.	Num.	Num.	Num.
	%	%	%	%	%	%	%	%	%	%	%	%	%	%
One-unit	578 55.4%	630 56%	503 79.2%	651 82.1%	418 81%	471 84.3%	152 83.1%	206 85.1%	177 84.7%	226 87.3%	90 78.9%	93 66.4%	14,397 75.3%	17080 78.0%
Multi-unit	287 27.5%	347 30.8%	11 1.7%	35 4.4%	1 0.2%	2 0.4%	1 0.5%	4 1.7%	0 0%	0 0%	2 1.8%	5 3.6%	1,473 7.7%	1,931 8.8%
Mobile Home trailer	155 14.9%	144 12.8%	101 15.9%	105 13.2%	78 15.1%	86 15.4%	26 14.2%	32 13.2%	28 13.4%	33 12.7%	21 18.4%	38 27.1%	3,254 17.0%	2,786 12.7%
Total units*	1043 100%	1125 100%	635 100%	793 100%	516 100%	559 100%	183 100%	242 100%	209 100%	259 100%	114 100%	140 100%	19,124 100.0%	21,919 100%

Source: U.S. Census

Note: \* Total units includes: boat, RV, van, etc., not itemized in table

**Housing Stock**

Maine's housing stock reflects the state's history and climate. Nationwide, Maine ranks first in the proportion (35%) of the housing stock that was built prior to 1940. Almost 40 percent of the housing stock in Machias was constructed before 1939. The proportion of homes built prior to 1939 is a good indicator of the quality of the housing stock. A smaller proportion of the town's housing stock was built in the 1980s and 1990s compared to the county and the state. Generally newer housing is in better condition than older housing and the condition of housing stock is important to the health and welfare of the community. Deteriorating housing is usually more expensive to heat and more likely to have safety hazards than housing which is maintained or improved.

**Table F-4 YEAR STRUCTURE BUILT**

Years	Machias		Washington County		Maine
	Number	%	Number	%	%
1990 to March 2000	105	9.3	3,145	14.4	14.6
1980 to 1989	175	15.6	3,203	14.6	16.0
1970 to 1979	243	21.6	4,038	18.4	15.9
1940 to 1969	164	14.6	4,359	19.9	24.4
1939 or earlier	438	38.9	7,174	32.7	29.1
Total housing stock	1125	100.0	21,919	100.0	100.0

Source: U.S. Census

Table F-5 shows the proportional make up of housing unit by general physical condition of Machias for the most recent years for which this information is available.

**Table F-5 HOUSING CHARACTERISTICS**

	Number	Percent
<b>Total housing units in 2000</b>	<b>1125</b>	<b>100.0%</b>
<b>ROOMS in 2000</b>		
1 room	10	0.9%
2 rooms	57	5.1%
3 rooms	199	17.7%
4 rooms	242	21.5%
5 rooms	200	17.8%
6 rooms	167	14.8%
7 rooms	121	10.8%
8 rooms	72	6.4%
9 or more rooms	57	5.1%
<b>SELECTED CHARACTERISTICS in 2000</b>		
Lacking complete plumbing facilities	6	0.5%
Lacking complete kitchen facilities	7	0.6%
No telephone service	9	0.8%
<b>HOUSE HEATING FUEL</b>		
Utility gas	0	0%
Bottled, tank, or LP gas	72	6.4%
Electricity	90	8%
Fuel oil, kerosene, etc.	737	65.5%
Coal or coke	0	0%
Wood	39	3.5%
Solar energy	0	0%
Other fuel	0	0%
No fuel used	0	0%

Source: U.S. Census

**HOME OCCUPANCY****Tenure**

Home ownership is a good indicator of the overall standard of living in an area. One way to trace home ownership change over time is to compare owners and renters as a proportion of total occupied housing, as illustrated in Table F-6. Machias has a lower rate of owner-occupied housing than in neighboring communities and the county – see Table F-6 – reflecting its role as a service center and the higher proportion of lower income people in its population (see Tables C-6, C-7 and C-8). Between 1990 and 2000, the proportion renter-occupied housing units in Machias, neighboring towns and the county all increased. These increases generally reflect a rising number of seasonal units in neighboring towns and a rising number of multi-family units in Machias.

Table F-6 HOUSING TENURE

Tenure	Machias		East Machias		Machiasport		Marshfield		Roque Bluffs		Whitneyville		Washington County	
	1990	2000	1990	2000	1990	2000	1990	2000	1990	2000	1990	2000	1990	2000
	Num. %	Num. %	Num. %	Num. %	Num. %	Num. %	Num. %	Num. %	Num. %	Num. %	Num. %	Num. %	Num. %	Num. %
Occupied housing units	943 100%	939 100%	469 100%	540 100%	394 100%	413 100%	166 100%	196 100%	96 100%	118 100%	95 100%	105 100%	13,418 100%	14,118 100%
Owner-occupied housing units	578 61.3%	527 56.1%	402 85.7%	432 80%	333 84.5%	331 80.1%	155 93.4%	170 86.7%	92 95.8%	110 93.2%	82 86.3%	89 84.8%	10,568 78.8%	10,969 77.7%
Renter-occupied housing units	365 38.7%	412 43.9%	67 14.3%	108 20%	61 15.5%	82 19.9%	1x1 6.6%	26 13.3%	4 4.2%	8 6.8%	13 13.7%	16 15.2%	2,850 21.2%	3,149 22.3%

Source: U.S. Census

## VACANCY RATE

In 2000, almost 17 percent of the town's total housing units were vacant and almost 17 percent of these vacant units were for seasonal or recreational use. Countywide in 2000, 68 percent of vacant units were for seasonal or recreational use. According to the 2000 Census the rental vacancy rate for Machias was 11.8 percent, compared to 13.3 percent for Washington County, and up from almost 6% in 1990. While the data appears to suggest an adequate supply of housing for purchase and for rent, the available units are predominantly not affordable to those who need them. The Coastal Washington County Affordable Housing Assessment, completed in October of 2005, includes regional data on the housing market and a case study of the Machias housing market in particular. The data and interviews conducted as part of that study indicate a far tighter housing market for affordable units in Machias than the census figures suggest. This case study is included in Appendix C and general conclusions are included in the section of housing affordability below.

Table F-7 HOUSING OCCUPANCY

Tenure	Machias		East Machias		Machiasport		Marshfield		Roque Bluffs		Whitneyville		Washington County	
	1990	2000	1990	2000	1990	2000	1990	2000	1990	2000	1990	2000	1990	2000
	Num. %	Num. %	Num. %	Num. %	Num. %	Num. %	Num. %	Num. %	Num. %	Num. %	Num. %	Num. %	Num. %	Num. %
All Housing Units	1043 100%	1129 100%	635 100%	776 100%	516 100%	576 100%	183 100%	239 100%	209 100%	226 100%	114 100%	139 100%	19,124 100%	21,919 100%
Occupied housing units	943 90.4%	939 83.2%	469 73.9%	540 69.6%	394 76.4%	413 71.7%	166 90.7%	196 82%	96 45.9%	118 52.2%	95 83.8%	105 75.5%	13,418 70.2%	14,118 64.4%
Vacant housing	100 9.6%	190 16.8%	166 26.1%	236 30.4%	122 23.6%	163 28.3%	17 9.3%	43 18%	113 54.1%	108 47.8%	19 16.7%	34 24.5%	5,706 29.8%	7,801 35.6%

Source: U.S. Census



## **HOUSING AFFORDABILITY**

The affordability of housing is of critical importance for any municipality. High costs are burdensome to individuals, governments, and the economy. Excessively high housing costs force low and moderate-income residents to leave the community, thus reducing labor force size.

Many factors contribute to the challenge of finding affordable housing, including: local and regional employment opportunities, e.g., in-migration to job growth areas; older residents living longer lives at home; more single parent households; and generally smaller household sizes than in previous years. Those Mainers most often affected by a lack of affordable housing include: older citizens facing increasing maintenance and property taxes; young couples unable to afford their own home; single parents trying to provide a decent home; low income workers seeking an affordable place to live within commuting distance; and young adults seeking housing independent of their parents.

The State Planning Office requires that comprehensive plans show the, “proportional make-up of housing units by affordability to very low income, low income, and moderate income households (municipality and region) - for the most recent year for which information is available (est.).” Gathering this data is not as straightforward as it may seem, as several factors help explain. First, data from the Census on housing values is not disaggregated by the State categories of income levels (very low, low and moderate income), which the state sets for each county. Second, the Census provides only housing values of specified housing units, not the entire owner-occupied housing stock of our town. Third, the value of a house based on tax assessment almost always misestimates its purchase price. Fourth, and more important, at any given time, most homes are not for sale, and so their value does not reflect their availability for purchase. Fifth, town assessment records do not differentiate between year round homes and camps, cottages and vacation homes that are not presently suited for year round occupancy, and would require major investment to make them year round housing, if environmental conditions would permit such use.

Given these data limitations, we attempt to show housing affordability by examining the income distribution of our town and county by state category, and relate this to the average selling price of homes recently sold in Machias, as well as average rents in town. Additionally, we show the percentages of households who pay more than 30 percent of their income on housing, which is a measure of unaffordable housing as defined by the State. We show Maine State Housing Authority (MSHA) affordability index data for the housing market to which Machias belongs. In addition, the town participated in the Coastal Washington County Housing Assessment completed in the summer of 2005 and incorporates the findings of that report in the Comprehensive Plan. Importantly, we demonstrate that the town has met its obligation under the Growth Management Act for ensuring that a certain percentage of new housing is affordable and lay out strategies for increasing the percent of affordable housing to our housing stock.

### Definitions of Affordability

Affordable housing means decent, safe, and sanitary living accommodations that are affordable to very low, low, and moderate-income people. The State of Maine defines an affordable owner-occupied housing unit as one for which monthly housing costs do not exceed approximately 30% of monthly income, and an affordable rental unit as one that has a rent not exceeding 30% of the monthly income (including utilities). The kinds of housing that are affordable at these income levels are often small homes on smaller lots and can include manufactured housing, multi-family housing, government-assisted housing, and group and foster care facilities. Increased density and reduced frontage requirements can contribute to a community's affordable housing stock.

Based on MSHA figures, in 2003 the median household income was \$28,087 in Washington County. Using state guidelines, three income groups are considered in Machias for 2003:

**Table F-8 INCOME AND AFFORDABLE MONTHLY HOUSING PAYMENTS IN MACHIAS**

Households by Income	Income Range	Percent of Households	Affordable monthly rent or mortgage payment
Extremely Low and Very Low income	Up to \$13,067	28.5%	Up to \$327
Low income	\$13,067 to \$20,906	13.4%	\$327 to \$523
Moderate income	\$20,906 to \$39,200	25.0%	\$523 to \$980

Source: Maine State Housing Authority, 2004

### House Selling Prices

Table F-9 shows the affordable selling prices for extremely low, very low, low, and moderate-income groups for Machias and Washington County.

**Table F-9 HOUSEHOLD INCOME DISTRIBUTION & AFFORDABLE HOUSING SELLING PRICES, 2004**

Households by Income	Percent of Households		Affordable Selling Price	
	Machias	Washington County	Machias	Washington County
Extremely Low and Very Low Income	28.5%	24.7%	\$37,717	Up to \$58,451
Low Income	13.4%	16.8%	\$60,345	up to \$93,522
Moderate Income	25.0%	29.1%	\$113,150	up to \$126,427

Source: Maine State Housing Authority, 2004

**Table F-10 VALUE IN 2000: SPECIFIED OWNER-OCCUPIED HOUSING UNITS**

	Machias	East Machias	Machiasport	Marshfield	Roque Bluffs	Whitneyville	Washington County	Maine
	Number (%)	Number (%)	Number (%)	Number (%)	Number (%)	Number (%)	Number (%)	Number (%)
Less than \$50,000	41 (10.8%)	67 (22.6%)	22 (11.6%)	0 (0%)	13 (14.1%)	22 (41.5%)	1,945 (27.7%)	21,959 (8.6%)
\$50,000 to \$99,999	258 (67.7%)	174 (58.6%)	115 (60.8%)	91 (74%)	41 (44.6%)	24 (45.3%)	3,825 (54.4%)	108,736 (42.7%)
\$100,000 to \$149,999	61 (16%)	44 (14.8%)	30 (15.9%)	22 (17.9%)	5 (5.4%)	7 (13.2%)	741 (10.5%)	69,554 (27.3%)
\$150,000 to \$199,999	19 (5%)	10 (3.4%)	10 (5.3%)	2 (1.6%)	11 (12%)	0 (0%)	294 (4.2%)	27,431 (10.8%)
\$200,000 to \$299,999	2 (0.5%)	0 (0%)	6 (3.2%)	4 (3.3%)	17 (18.5%)	0 (0%)	171 (2.4%)	17,337 (6.8%)
\$300,000 or more	0 (0%)	2 (0.7%)	6 (3.2%)	4 (3.3%)	5 (5.4%)	0 (0%)	54 (0.8%)	9,849 (3.9%)
Median (dollars)	\$79,000	\$73,900	\$76,700	\$83,000	\$91,100	\$57,500	\$68,700	\$98,700

Source: U.S. Census

Additional data on housing affordability is available at the housing market level. Machias is part of the Eastport/Machias Housing Market and the MSHA reports that the housing affordability index for the year 2003 was 0.91 (under 1.00 equals unaffordable; while over 1.00 equals affordable).

In 2003, the median home sale price was **\$87,500** in the Eastport/Machias Housing Market, while the median income was \$27,671 in this housing market and the median income in Machias was \$26,133. The home price that could be afforded at the housing market median household income of \$27,671 was \$79,457. Thus only those with incomes above the median can still afford to purchase homes of the median sale price. The sales price of 53.3% percent of homes is above the median income in the Eastport/Machias housing market and the sales price of 80.0% percent of homes is above median income in Machias. Thus those with lower incomes are losing access to the housing market.

The Statewide Multiple Listing Service (SMLS) recorded 37 house sales for Machias from 1999 through 2003. The median sales price for these homes is noted in Table F-11 showing the steadily rising trend in prices.

**Table F-11 MEDIAN HOME SALE PRICE – MACHIAS 1999-2003**

Type of Home	1999	2000	2001	2002	2003
	Median # (%)	Median # (%)	Median # (%)	Median # (%)	Median # (%)
All	0	\$62,000	\$60,450	\$80,500	\$87,500

monthly owner costs of 30 percent or more of their household income. This data suggests that housing affordability affects a sizable minority.

**Table F-12 SELECTED MONTHLY OWNER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME IN 1999 FOR MACHIAS**

Percentage of Household Income	Owner Occupied Housing Units
Less than 20 %	240
20 to 24 %	36
25 to 29 %	30
30 to 34 %	12
35 % or more	59
Not computed	4
Total units	381

Source: U.S. Census

### Renter Occupied Housing Affordability

Table F-13 shows rental costs as a percentage of household income. Only year round rentals are considered, as seasonal housing rentals are not reported. The rents shown are reported by the tenants and take into account the subsidies many receive in the form of the federal Section 8 housing subsidy to low income residents. MSHA reports that in 2003 there were 239 project-based and 19 non-project based Section 8 Vouchers issued for rental housing in Machias. For 149 renter occupied units (37% of all renter occupied units), more than 30% of household income was spent on housing costs, indicating that rental housing is unaffordable to an even higher number of households as owner occupied housing in Machias.

**Table F-13 GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME IN 1999 FOR MACHIAS**

Percentage of Household Income	Renter Occupied Housing Units
Less than 20 %	120
20 to 24 %	56
25 to 29 %	52
30 to 34 %	33
35 % or more	116
Not computed	31
Total units	408

Source: U.S. Census

For the 408 year round rental units reported in the 2000 Census almost all were affordable to those in the moderate income group. More than 80 percent of the units were affordable to those in the low-income group, and about 35 percent of the units were affordable to those in the extremely low and very low-income group. However these percentages include 25 units (6 percent) that reported no cash rent, a situation that may not be available to everyone in the lower income groups. This is further indication that the rental market is rising beyond the reach of many lower income individuals. See Table F-8 for affordable rent figures.

**Table F-14 GROSS RENT IN 1999 FOR MACHIAS**

Rent	Number of Rental Units
Less than \$200	110
\$200 to \$299	31
\$300 to \$499	157
\$500 to \$749	75
\$750 or more	10
No cash rent	25
Median	\$380

Source: U.S. Census

The Coastal Washington County Affordable Housing Assessment (October, 2005) analyzed a similar set of data as the tables above as well as additional regional data from all Washington County Coastal towns. That study came to the following general conclusions about housing in the three case study communities (Eastport, Harrington, Machias):

- Rising waterfront property values are having some effect – mostly in terms of higher valuations -- on each community's real estate market.
- Population loss in the three towns as recorded in the 2000 Census has had some limited impact on the housing situation but seems to have been largely offset by the increasing number of retirees who are living in the communities at least part of the year.
- A reduction in the average household size in each community has had little or no impact on the housing market.
- Although Eastport has an adequate supply of affordable rental units – at least in terms of the definition of “affordable” used by the federal government -- Machias and Harrington do not.
- Eastport and Harrington both need more workforce housing for middle income earners.
- Mobile homes play an important role in all three communities in providing affordable housing, but many existing mobile homes (particularly in Machias and Harrington) are in fair to poor condition.
- More subsidized housing is needed in Machias where the demand is strongest.
- Eastport and Machias have comprehensive plans that address housing; Harrington does not have a comprehensive plan.
- Machias, as home to the University of Maine at Machias, has some unique housing challenges because of faculty and student housing needs.

### **Affordability and the Growth Management Act**

The Maine Growth Management Act requires that every municipality “...shall seek to achieve a minimum level of 10% of new residential development, based on a five-year historical average of residential development in the municipality, meeting the definition of affordable housing.” During the five-year period from 2000 to 2004, 41 permits were issued for residential housing construction – see Table F-15. Machias meets the requirement of the Act if the town sought to provide 4-5 low-income units in this period. Within this period, affordable housing was built in the form of mobile/modular housing (18 units or 44 % of all residential housing permits). There was no significant increase in conversions from single to multiple family homes and the mobile homes were built according to current standards.

Table F-15 RESIDENTIAL BUILDING PERMITS (TYPE OF CONSTRUCTION)

Year	Stick-built Houses	Mobile	Modular Homes	Total New Home Construction	Wood sheds/ Decks/garages/ Additions	Marine Structures (Wharves, pounds, sheds, fish shacks)	Total (all permits)
2000	5	2	0	7	13	0	20
2001	0	5	0	5	12	0	17
2002	6	2	0	8	18	0	26
2003	10	2	0	12	17	0	29
2004	3	4	2	9	13	0	22
Total	24	16	2	41	73	0	114

Source: Machias building permits

### Seasonal and Year Round Housing Differences

There are effectively two housing markets in Machias: seasonal and year round. Seasonal housing is spread throughout town with some clustering along waterfront areas, particularly the Kennebec District. These units tend to be larger, 3000 square feet or greater and while they are seasonal and function primarily as vacation homes for non-residents, they are built for year round occupancy.

### Affordable Housing Remedies

While meeting the letter of the Growth Management Act has not proved difficult for the town of Machias, there is a desire by residents to maintain and provide affordable housing, as needed, beyond the state minimums. The State offers traditional recommendations that towns consider to help meet this need. Some of these measures (noted in *italics*) could be adopted by the city though some are already in effect including:

1. *Relaxed zoning ordinances and building code requirements that tend to increase building costs.* At present, the town has no zoning but recognizes the contribution that mobile and modular homes make toward provision of affordable housing. In order to ensure that such housing meets basic public safety requirements the town will only allow the siting of new mobile homes that are no older than 10 years and require slabs, pitched roofs and skirting around their foundations.
2. *Take steps to allow mobile homes and modular homes in more areas.* At present, these types of units are allowed anywhere in Machias with the same lot size and setback standards as for single family homes
3. *Provide town sewer, water and roads to new parts of the city thus "opening up" land for new homes.* Machias is undergoing rehabilitation of water and sewer in several areas of town at considerable expense.

The town will also encourage accessory apartments, so-called 'mother-in-law' apartments, second and third floor apartments in the downtown core, and will put language in ordinances and building codes as needed to do so.

Large lot sizes, while seemingly protecting the rural character of the community, can create the

potential of driving land prices higher, thus housing costs higher, thereby reducing the affordability of housing in the community. Smaller lot sizes are proposed in the growth area proposed in the Land Use section of the plan.

### **Elderly and Subsidized Housing**

There are several federally assisted housing projects in Machias with 274 subsidized or affordable units. These include 82 family assisted units, 105 elderly assisted units, 60 disabled assisted units and 27 special needs assisted units. Assistance for these units is provided through Housing and Urban Development, the Maine State Housing Authority and USDA Rural Development. The town also assists needy residents with housing related costs, principally heating and energy bills. Subsidized Housing Units in Machias, as of 2005, included (needs to be updated):

- 1) Louise Gardner Apartments (FmHA) - elderly units, low income
- 2) Riverside Apartments (FmHA) - elderly units, low income
- 3) Valley View Apartments (FmHA) - elderly units, low income
- 4) Ridgeview Apartments (FmHA) - elderly units, low income
- 5) Shiretown Apartments - elderly units, low income
- 6) Sunrise Village (HUD/MSHA) - family units, low income
- 7) Sunrise Group Home (HUD) - elderly units, low income
- 8) Jerrold's Place (HUD) – family units, low income

According to the Coastal Washington County Affordable Housing Assessment there appears to be sufficient elderly housing in Machias. It is families who are not adequately served by available affordable rentals.

**Table F-16 AGE OF HOUSEHOLDER**

2000 Machias AGE OF HOUSEHOLDER	Number	Percent
Occupied housing units	939	100%
15 to 24 years	115	12.2%
25 to 34 years	122	13%
35 to 44 years	155	16.5%
45 to 54 years	162	17.3%
55 to 64 years	132	14.1%
65 years and over	253	26.9%

Source: U.S. Census

### **Housing Programs**

In addition to ensuring that local ordinances do not significantly increase construction costs, the town will also compile information on affordable housing programs for residents to consult at the town offices. This resource will be updated on a regular basis and will include such programs as those offered through the Maine State Housing Authority, e.g. Rental Loan Program, Section 8, SHARP, Supportive Housing, and Vouchers, DEP septic and wells grants, and USDA Rural Development, among other organizations.



Local, state, and federal governments have a number of different means of subsidizing housing costs for eligible citizens. In most cases the efforts of the different levels of government are integrated, with funding and operation and jurisdictional fields overlapping.

The United States Department of Housing and Urban Development (HUD) is the primary federal agency dealing with affordable housing. Rural Development (RD), formerly Farmers Home Administration (FmHA), part of the United States Department of Agriculture (USDA), also deals with affordable housing. The Maine State Housing Authority (MSHA) is the State's agency for such issues. The town of Machias does not have a local housing authority and but does have public welfare personnel to oversee general assistance.

Subsidized units are built with state or federal monies for the express purpose of providing housing to lower income individuals and families. A housing project or development may be entirely formed by subsidized units, or the project may be of mixed uses. Subsidized units are typically available to individuals below certain income guidelines, and residents are expected to pay a fixed percentage of their income as rent.

Housing is also subsidized through certificates and vouchers. Especially when subsidized units are not available, the MSHA will provide monies for citizens to use as payment for rent for non-public units. The town is also reimbursed by the State for general assistance money that may be given to citizens with short-term immediate needs for housing. Finally, low interest loans through the federal or state governments are also a form of subsidy.

### **Housing Projections**

The State Planning Office projects that the total number of housing units in Machias will rise from 1023 (551 owner<sup>1</sup>; 472 renter<sup>2</sup>) in 2005 to 1058 (572 owner; 486 rental) in 2015. This is consistent with the modest projected increase in population over the same time period. As noted above the sales price of 53.3% percent of homes is above the median income in the Eastport/Machias housing market and the sales price of 80.0% percent of homes is above median income in Machias. These residents provide much of the workforce for the Machias service center. Future housing construction, renovation and rehabilitation is needed therefore to work toward supplying this market need.

### **Regional Housing Links**

Housing demand in Machias is closely linked to other towns in the region. Median household income in Machias is lower than all surrounding communities except Roque Bluffs, and is lower than in the County and the State. Machias also has the highest proportion (21.2%) of household earnings below \$15,000 compared to the county, State and surrounding communities. This creates a significant demand for affordable housing in the town.

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<sup>1</sup> "Owner Units" presents the numbers of housing units in each municipality either owned on April 1, 2000 by their occupants or vacant and for sale on that date and the numbers projected for the years 2001 through 2015.

<sup>2</sup> "Renter Units" presents the numbers of housing units in each municipality either rented on April 1, 2000 by their occupants or vacant and for rent on that date and the numbers projected for the years 2001 through 2015.

As the regional service center Machias provides services to residents in the surrounding towns, many of whom are of higher income but contribute property taxes to towns other than Machias. Machias does not have as much shore frontage (nine miles) when compared to most of the other nearby coastal communities, thus little seasonal housing growth is expected within the community. Both factors increase the burden on Machias to provide services without contributing to its ability to pay for them.

The region's non-seasonal economy will have to be strengthened substantially in order to supplement its tax base and enlarge the capacity of its lower income residents to purchase a modest priced home.

## POLICIES AND IMPLEMENTATION

In order to encourage and promote affordable, decent housing opportunities for Machias residents, the town has developed the following policies and implementation strategies:

<b>Goal: Machias will encourage and promote affordable, decent housing opportunities for Machias residents.</b>			
<b>Policy</b>	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Timeframe</b>
<b>Programs and Grants</b>			
Pursue programs and grants that can assist in ensuring that at least 10% of new residential development meet the definition of affordable housing.	The town will compile information on programs and grants (CDBG housing assistance and rehabilitation programs) for the use of residents.	Town Clerk	Immediate
	The town will welcome and encourage participation in programs, grants and projects, within the town or the region to insure sufficient, affordable housing options for its elderly citizens	Selectmen	Immediate
	The town will utilize the Affordable Housing Tax Increment Financing Program to assist in the construction of affordable housing in Machias.	Selectmen; WHCA, developers	2005-2006
Create opportunities for housing where infrastructure exists to support it.	Inventory available space in serviced areas and promote development for affordable housing.	Selectmen; EMDC; WCCOG	2006
	The town will recommend to the University of Maine at Machias that they pursue policies that will make use of their dormitories at full capacity	Selectmen	Immediate

<b>Goal: Machias will encourage and promote affordable, decent housing opportunities for Machias residents.</b>			
<b>Policy</b>	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Timeframe</b>
Pursue programs and grants that can assist in rehabilitation of substandard housing.	Eliminate or seek to reduce extreme health and safety situations in mobile homes through assistance from CDBG and Rural Development programs	Selectmen	2006
	The town will welcome and encourage participation in programs, grants and projects for the construction and rehabilitation of subsidized housing whether within the town or the region including grants to homeowners for improvements to energy efficiency, habitability.	Selectmen; WHCA; EMDC	Immediate
	Continue to refer citizens to the RD 504 Repair Program (Target 12-15 homes/year)	Town office staff	On-going
Provide financial incentives for developers to build affordable housing	Eliminate, where appropriate, any existing ordinance requirements that may be unnecessary. Continue to include the following provisions in the subdivision regulations to reduce the cost of developing affordable housing: <ul style="list-style-type: none"> <li>• allow development without curbs</li> <li>• allow one-piece, rolled curbs</li> <li>• allow natural drainage systems</li> <li>• allow curvilinear storm pipes</li> <li>• allow plastic pipes</li> <li>• allow road widths to vary with traffic volume</li> </ul>	Planning Board/Town Council	On-going
	Continue to implement time limits for review and approval of subdivisions	Planning Board/	On-going
	Consider providing a density bonus (such as 25%) if a certain percentage of units are affordable (such as 20%).	Planning Board	2006
	Explore opportunities with developers to provide land and infrastructure for affordable housing.	Planning Board/City Council	On-going
Promote the construction of elderly housing, including congregate care facilities, through a flexible approach to siting and other mechanisms to encourage this type of housing.	Permit congregate care units and accessory apartments for elderly family members in the growth area.	Planning Board	On-going
<b>Codes and Regulation</b>			
Ensure that local codes and	Ensure that the code enforcement	Selectmen;	Immediate

<b>Goal: Machias will encourage and promote affordable, decent housing opportunities for Machias residents.</b>			
<b>Policy</b>	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Timeframe</b>
ordinances are enforced for the public health, safety and welfare.	officer (CEO) works to address reported violations of local ordinances and State laws and regulations that affect health, safety or community conditions.	Code Enforcement Officer	
	Work with the planning board to address any need for modification to the existing land use regulations that may be appropriate.	CEO; Planning Board; Selectmen	On-going
	Work to correct all known failed or inadequate subsurface sewage disposal systems.	LPI; Selectmen	On-going
The zoning ordinance will not preclude the development of affordable housing	The town will continue to encourage affordable housing opportunities by allowing a mixture of housing types, including accessory apartments.	Selectmen; Planning Board	Short-term (within 2 years)
	Identify a new location for a mobile home park within the growth area	Selectmen; Planning Board	Short-term (within 2 years)
	Update the mobile home ordinance.	Selectmen; Planning Board; WCCOG	Short-term (within 2 years)
	Create opportunities for the use of second and third stories for decent affordable rental housing through rental rehabilitation grants and other incentives.	Selectmen	2006
	Encourage senior citizen housing opportunities and provide residential areas that allow single and multi-family dwellings, as well as manufactured housing.	Planning Board	On-going

**SUMMARY**

Housing demand in Machias is closely linked to other towns in the region. Median household income in Machias is lower than all surrounding communities except Roque Bluffs, and is lower than in the County and the State. Machias also has the highest proportion (21.2%) of household earnings below \$15,000 compared to the county, State and surrounding communities. This creates a significant demand for affordable housing in the town.

Affordable housing is often defined as not costing more than 30% of household income. The data reviewed suggest that the cost of housing in Machias is affordable for most people in the community. However, the home price that could be afforded at the housing market median household income of \$27,671 was \$79,457. Thus only those with incomes above the median can still afford to purchase homes of the median sale price. The sales price of 53.3% percent of homes is above the median income in the Eastport/Machias housing market and the sales price of 80.0% percent of homes is above median income in Machias. Thus those with lower incomes are losing access to the housing market and the price of real estate in Machias is increasing. These residents provide much of the workforce for the Machias service center. Future housing construction, renovation and rehabilitation should therefore work toward supplying this market need.

The town participated in a regional affordable housing study in 2005 and has adopted several of the recommendations of that study in this Comprehensive Plan.

## G. RECREATION

The purpose of this section is to:

1. Describe the characteristics and use of recreation resources in Machias and the surrounding region;
2. Assess the adequacy of open space and recreation resources in meeting current and projected demand;
3. Determine the adequacy of open space and scenic resource protection in Machias; and
4. Assess the options and costs of providing needed recreational additions and improvements.

### Key Findings and Issues

Machias has considerable natural resources available for recreational purposes, particularly the Machias River. Access to the Machias River is available to the public via the boat dock and ramp located on US Route 1. The Town also owns several recreational facilities including a park, softball field, basketball and tennis courts. The Town maintains a Recreation Department which runs a variety of programs throughout the year.

There are many historically and architecturally significant buildings located in Machias, one of which operates as a museum during the summer months. The University of Maine at Machias also provides opportunities for cultural performances. Scenic Resources have little or no protection other than through Shoreland Zoning, which may not be adequate to guarantee long range preservation. Therefore consideration of scenic protection options should be considered.

### RECREATION PROGRAMS

Machias no longer has a Recreation Committee and no longer employs a recreation director.

### LOCAL RECREATIONAL FACILITIES

The Maine Department of Conservation has published guidelines for recreational facilities that municipalities should seek to develop and maintain. The guidelines are based upon a town's population. In the table below those guidelines and the facilities and services found locally are shown, as well as the condition and brief description of those facilities.

**Table G-1: RECREATIONAL FACILITIES**

Guidelines for Recreation and Park Services for Municipalities with Populations between 2,500 and 5,000	Located In Machias ?	Condition	Description/Location/Capacity
<u>I. Administration</u>			
A. Recreation & Park Board or Committee	No	n/a	
B. Community Education/Recreation Combined	No	n/a	School run activities and the town oversees

Guidelines for Recreation and Park Services for Municipalities with Populations between 2,500 and 5,000	Located In Machias ?	Condition	Description/Location/Capacity
School/Town Rec. Dept.			soft ball field and tennis court scheduling
<u>II. Leadership</u>			
<i>Summer Program:</i>			
Swimming Instructors	Yes	n/a	Lifelong Learning Center (UMM facilities)
Summer Recreation Director	Yes	n/a	At Machias Memorial High School
<i>Winter Program:</i>			
One Skating Rink Supervisor for each area	No	n/a	Tennis courts flooded by Fire Department
One general Program Supervisor (part time)	No	n/a	
<i>Year Round Program:</i>			
Full-time Recreation Director	Yes	n/a	At Machias Memorial High School
Part-time or Contractual Program Specialist	No	n/a	
<u>III. Program</u>			
Swimming Instruction	Yes	n/a	Lifelong Learning Center (UMM facilities)
Supervised Playground Program	Yes	n/a	At Rose M. Gaffney Elementary School - Day camps
Senior Citizen Club	No	n/a	
Teen Program	No	n/a	
Skiing Instruction Program	No	n/a	
Ice Skating	No	n/a	
Community-wide Special Events	Yes	n/a	Blueberry Festival; Halloween walk; Christmas parade; Margaretta Days; 4 <sup>th</sup> of July
Organized Community Music Group	Yes	n/a	Machias Community Band; Washington County Children's Choir; Machias Bay Chamber Concerts; Community Chorale
Arts & Crafts Programs	Yes	n/a	At Schools and UMM; and in conjunction with Chamber Concert series
Evening Adult Education & Recreation Programs	Yes	n/a	Downeast River Theater Co.; University of Maine at Machias; at Machias Memorial High School
Organized Dance Group	No	n/a	
Day Camp Program	Yes	n/a	See above – Supervised Playground Program
<u>IV. Facilities (to include school areas)</u>			
<i>Outdoor Facilities:</i>			
Neighborhood Playground, 2-10 acres; w/in 1/2 mile of each housing concentration of 50+ homes; playground, basketball court, playfield, etc.	Yes	D; B; B	Machias Recreation Area; Rose M. Gaffney Elementary School; UMM Early Education Center
Community Recreation Area, 12-25 acres w/ball fields, tennis courts, swimming, ice skating, etc.	No		
Softball/Little League Diamond (0.75 per 1,000 pop.)	Yes	B; C	2 - South Side and Beal Little League Field
Basketball Court (0.50 per 1,000 pop.)	Yes	D; D	Machias Recreation Area; Rose M. Gaffney Elementary School
Tennis Court (0.67 per 1,000 pop.)	Yes	D	Machias Recreation Area 2 courts



Guidelines for Recreation and Park Services for Municipalities with Populations between 2,500 and 5,000	Located In Machias ?	Condition	Description/Location/Capacity
Multi-purpose field: football, soccer, field hockey (0.50 per 1,000 pop.)	Yes	B; B	Southside Field: 1 field; parking for 50 Machias Memorial High School: 1 baseball field, 1 soccer field; 1 half court basketball; trail
Swim area to serve 3% to 5% of town pop.	No		
Pool –27 sq. ft./water per user or Beach 50 sq. ft./water, 50 sq.ft./beach per user	Yes	A	UMM
Ice Skating (5,000 s.f. per 1,000 pop.)	Yes		Pond at University of Maine at Machias
Playgrounds (0.50 per 1,000 pop.)	Yes		See above
Horseshoe Courts	No	n/a	
Shuffleboard Courts	No	n/a	
Picnic Areas w/tables & grills (2 tables per 1,000 pop.)	Yes	B	Bad Little Falls Park (need grills); State-owned island (former Plantes Store); beside boat launch
Outdoor Education Area or Nature Center	Yes	A	Bad Little Falls Park (parking for 20, picnic tables, benches, garden, trail); Blacks Woods Nature Trail behind Rose M. Gaffney School; UMM trails
<i>Indoor Facilities:</i>			
School Facilities Available for Public Use	Yes	n/a	Elementary and High School; UMM
Gym or Large Multi-Purpose Room (0.20 per 1,000 pop.)	Yes	B; C	Rose Gaffney School: 1 playground. 1 gym Machias Memorial High School
Auditorium or Assembly Hall	Yes	C; C	1 - High School; 1 - UMM
Arts & Crafts Shops	No		Some stores sell Arts and Crafts Supplies
Teen Center	No		Lyfords Building a potential youth center
Senior Citizens Center	Yes	B	Common rooms within Senior Housing complexes
Game Rooms	Yes		American Legion; bar and grill; restaurants;
Public Library	Yes	A	
<u>V. Finance</u> (funds spent for operation and maintenance - not capital expenditures)			
Minimum \$6/capita for part-time program	Yes		\$20/capita
<u>VI. Other town, state, non-profit and private recreation facilities or potential recreation sites in the area</u>			
Non-Profit – Burnham Tavern – Daughters of the American Revolution			
Non-profit – Machias Grange Hall			
Non-Profit – area churches			Gyms and recreation halls; community meeting rooms
Municipal – Machias River Access			1 paved ramp and 1 floating dock
Private - Snowmobile Trails			The ----- Club maintains an extensive network of snowmobile trails, including a section of the International Trail System,
State/Private – Career Center			

Guidelines for Recreation and Park Services for Municipalities with Populations between 2,500 and 5,000	Located In Machias ?	Condition	Description/Location/Capacity
State/Private – Maine Cooperative Extension			Boys and Girl Scouts
Private – Machias Savings Bank Community Room			Meeting room
Private – Carter Banquet Center			Conference Center
Private – Area Restaurants			Meeting rooms
Private – University of Maine at Machias			Performing arts center, art gallery; library
Private – 4H Club			Agricultural and leadership activities for children

### Condition Classification System:

#### Grade Classification

- A Relatively new facility, lifetime expected in excess of 20 years (with proper maintenance)
- B Facility is a few years older and has been well cared for, lifetime expected to be in excess of 10 years
- C Older facility that may not be in the best of shape and may need minor improvements within 5 years
- D Old facility that needs considerable maintenance within 2 years and/or significant renovation
- F Very old facility that has outlived its usefulness, or is in severe disrepair. This facility (or equipment) is unsafe or unusable and should be attended to very soon. Replacement may or may not be necessary (based on need assessment).

## TOWN RECREATION

As noted in the above table and in the Public Facilities chapter, the town has the following recreational resources:

### ***River Access***

The Machias River and other smaller rivers and streams in Machias provide a variety of recreational opportunities including fishing, boating, and bird watching. The Maine Rivers study rated the Machias River as having high resource values for backcountry canoe excursions, whitewater rapids and boating, inland and anadromous fishing, bald eagle habitat, and as an undeveloped corridor. The Middle River, which drains into the Machias River estuary, is stocked with brook trout each spring. Access to the water is discussed below.

### ***Town Parkland***

Bad Little Falls Park, in the center of downtown, includes a pedestrian foot bridge, scenic platform, garden, picnic area, and short riverfront trail. Beal Field is located near the Town's schools and has a softball field. Southside Field is on the west side of the river north of Route 1. The elementary and high schools provide additional playgrounds, baseball, basketball, and soccer fields for the town. Additional town recreation facilities include a playground, two tennis courts, and a basketball court.

The University of Maine at Machias has an outdoor skating rink and nature trail, as well as a gym, soccer field, and picnic area.

### ***Trails***

There are extensive forestlands in Machias and trail systems for snowmobiling, cross country skiing and walking. Additional trails include the path at Bad Little Falls Park leading to the cemetery and beyond, the UMM nature trail, and a short half mile loop built by the Boy Scouts behind the High School. The system of railroad tracks is also extensively used for walking and skiing. The town is participating with the Maine Department of Transportation in the development of a management plan for use of the Calais branch of the rail road (from Ellsworth to Ayers Junction) as a multi-use trail with the option for the corridor to revert to rail use in the event that this becomes economically feasible.

### ***Historic Sites***

Machias is home to over 20 historically or architecturally significant buildings, eight are on the National Register of Historic Places including Burnham Tavern, run by the non-profit Daughters of the American Revolution, which operates as a museum during the summer months.

### ***Festivals***

The Machias Blueberry Festival has been run by the Center Street Congregational Church every year since 1975. This event is held in late August as a celebration of the blueberry harvest, activities and crafts from around the region. The Downeast River Theater Company performs various musicals during the summer months. Also during the summer the Machias Bay Chamber Concert Series runs every Tuesday for six weeks. The University of Maine at Machias is the cultural center for the area, with an art gallery and performing arts center. UMM also holds a small homecoming parade and winter carnival and parade. The town hosts a Fall Festival in conjunction with the UMM Homecoming celebration. Other festivals include Margareta Days, a Halloween festival, a Memorial Day parade and a Holiday festival and parade near Christmas.

### ***Recreation Clubs***

Machias has many active clubs for residents of all ages. They include:

- Girl and Boy Scout Troops
- 4H Club
- Snowmobile/ATV Club
- Machias Valley Sportsman Club
- Civil Air Patrol
- Fencing
- Chess Club
- Cribbage Club

## **REGIONAL RECREATION**

Recreational resources in Washington County have an impact on the local and regional economy. Tourist-related businesses that rely on the recreational opportunities are significant sources of

income to some towns in the area. In Machias, some businesses benefit in part from an influx of tourists to the region, especially during the summer.

Regional recreation facilities accessible to Machias residents and to visitors include wildlife refuges, parks, golf courses, picnic areas, public access to surface waters, and hiking and snowmobile trails. Major regional recreational resources include:

1. Cobscook Bay State Park in Edmunds: 888 acres; more than 100 - campsites and shelters are on the water's edge; boating; hot showers; picnic area; hiking and groomed cross-country ski trails, hiking trails.
2. Cobscook Trails: Local network of hiking trails.
3. Cutler Coast Public Reserved Land, Bold Coast Trails: maintained by the State, contains ten miles of hiking trails and three walk-in campsites.
4. Edmunds boat landing.
5. East Plummer Island Preserve and the Mistake Island Preserve in Jonesport, both managed by the Nature Conservancy.
6. East Quoddy Lighthouse and Mulholland Lighthouse in Campobello, N.B.
7. Gleason's Cove Town Park in Perry: picnic sites, beach, fishing weirs, boat launch.
8. Great Cove Golf Course in Roque Bluffs: 9-holes, 1,700 yards long.
9. Great Wass Island Preserve in Beals: 1540 acres of boreal forest, peat bogs, and coastline managed by the Nature Conservancy.
10. Herring Cove Provincial Park, Campobello, N.B: golf course, campground, playground, beach, hiking trails.
11. Jonesboro Wildlife Management Area: 726 acres.
12. Jasper Beach in Buck's Harbor, Machiasport.
13. Lubec Municipal Marina.
14. Machias Seal Island, seabird nesting site with puffin colony, boat tours from Cutler, Jonesport and New Brunswick.
15. Moosehorn National Wildlife Refuge: 16,000 acres west of Calais, 6,700 acres in Edmunds. Migratory birds, big game and 50 miles of trails.
16. Petit Manan National Wildlife Refuge in Steuben: 3,335 acres on the mainland with hiking trails, several islands, and a variety of birds
17. Quoddy Head State Park in Lubec: 532 acres, easternmost point in the U.S., high rocky cliffs with extensive walking trails and views of Canada. The park features 4.5 miles of hiking trails, extensive forests, two bogs, diverse habitat for rare plants, and the red-and-white striped lighthouse tower of West Quoddy Head Light.
18. Reversing Falls Town Park in Pembroke: 140 acres, trails and picnic area.
19. Robbinston Boat Landing and Picnic area.
20. Roque Bluffs State Park: 2300-foot beach, picnic tables, grills, trails and playground.
21. Roosevelt-Campobello International Park in Campobello, N.B. A 2,800-acre park that includes the cottage and the grounds where Franklin Roosevelt and his family vacationed, as well as a large natural area with many nature trails and look-out points. The Island also has a Provincial tourist information center.
22. Shackford Head State Park in Eastport. A 90-acre undeveloped peninsula with protected coves, a bold headland, and hiking trails.

23. St. Croix Country Club and Golf Course in Calais.
24. St. Croix Island International Historic Site at Red Beach in Calais. Overlooks St. Croix Island, site of historic French settlement in 1604.
25. Devil's Head, Calais; hiking, overlooks of St. Croix River and St. Croix Island.
26. Coastal and nature tours are available by Kayak and motor vessels in nearby towns.

## **PUBLIC ACCESS TO SURFACE WATER**

Within the town of Machias, there are two public access sites to the Machias River, one hand carry south of the US Route 1 Bridge (Bad Little Falls Park) and a second before the causeway where the Middle River empties into the Machias River. This site is owned by the Town and consists of a paved ramp and a floating dock. An additional access to Little Kennebec Bay exists off West Kennebec Road at the drainage just north of the end of West Kennebec Road. These accesses are depicted on Map 2 and 3 Machias Village Public Facilities and Public Access. There is one public mooring located in the Machias River behind the Machias Motor Inn. There are some private moorings in Little Kennebec Bay. More detailed information on commercial fishing access is provided in the Natural Resources Chapter, Access to the Marine Resource.

A traditional access is used off the East Kennebec Road at the west side of the East Kennebec Cemetery. Other accesses that would provide good recreational access include the north side of the Dyke (to Middle River) and opening up Munson Pitch Road providing access to the Machias River. The latter requires coordination with the town of Whitneyville and research to determine the extent of public interest in the right of way.

There are several shore access points, which are not public but have been used for clamming and picnicking by the local population for decades. These places provide access for commercial and recreational users and are important to the community but do not currently provide legal access to the public. Some landowners accept foot travel for those seeking water and shore access but, increasingly, others do not. Knowledge of these rights of way is by word of mouth and the public is trusted in these cases to observe common courtesies about parking, treatment of property and checking with the landowner.

With so few town shore access points, the town should enhance current public accesses and negotiate for additional ones.

## **LAND USE OPTIONS TO PRESERVE OPEN SPACE**

Open space is an important part of recreational assets of a community. In some cases the advantage is that the land is particularly scenic, or used for recreation and access. A number of options can be used to protect open space, including government purchase of private land, donation, non-profit ownership, voluntary deed restrictions including conservation easements, or regulations like zoning and subdivision ordinances that seek to reserve open areas in new developments. In addition, the Tree Growth Tax Law program, and Farm Land and Open Space

Tax Law can serve to protect open space. In 2005 there were 25 parcels totaling 2013 acres enrolled in the Tree Growth Tax Law program and 3 parcels totaling 107 acres enrolled in the Farm and Open Space Tax Law Program.

Machias's ordinances do not contain provisions for open space or cluster development, yet incentives or requirements for preservation are found in the ordinances of other towns. Traditionally, local attitudes have been that unimproved land is often seen as a shared resource, e.g. for hunting, four-wheeling, and though privately owned, the land can be used by the residents because everyone knows each other. This notion has changed, especially in the past decade, due in part to the influx of people from away. As more and more residents restrict the use of their land, it is harder to sustain the illusion that large amounts of private land are available for public use. This makes the limited amount of public access provided on town-owned lands increasingly important to residents.

Open space can only be protected through a relatively few means such as: a) outright acquisition by gift or purchase; b) dedicated easements obtained by gift or purchase; c) regulation: use of zoning or subdivision regulations to obtain reserved open areas in new developments.

## SCENIC AREAS

Similar tools are used to preserve scenic resources as those used to preserve open space. Without town commitment of resources or the willingness to impose regulation, there is no guarantee that protection will be provided.

The town in its entirety is a scenic river valley including numerous views of rivers, streams, embayments as well as views from surrounding ridgetops of the town itself. Most notable viewpoints are from Bad Little Falls Park and the shores of the Machias River.

## Input from Public Meetings

## POLICIES AND IMPLEMENTATION

In order to improve the provision of recreational opportunities, the town has developed the following policies and implementation strategies:

Goal: Machias will maintain, improve and emphasize access to recreational opportunities particularly water access and trails development.			
Policy	Implementation Strategy	Responsibility	Timeframe
<b>Capacity</b>			
Increase town capacity for recreation program delivery.	Hire a recreation director and re-establish the Recreation Committee.	Selectmen	Immediate
	Pursue funding and develop recreational	Recreation Director	Short-term

**Section G DRAFT FOR PUBLIC REVIEW3/6/-6 Recreation, Scenic Resources and Open Space**

<b>Goal: Machias will maintain, improve and emphasize access to recreational opportunities particularly water access and trails development.</b>			
<b>Policy</b>	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Timeframe</b>
	opportunities that enhance programs for the youth and elderly.	and Recreation Committee (to be hired and re-formed)	(within 2 years)
	Coordinate programs and facilities of schools, town, clubs, organizations, university, etc.	Recreation Director	Short-term (within 2 years)
<b>Public Access</b>			
Encourage recreational opportunities and increase public access to surface water.	Fund improvements on town owned land, including landing facilities, as described in the Capital Improvement Plan.	Selectmen	Immediate
	Secure Grove Street river view turnout for public use and add facilities for picnicking and a playground.	Selectmen	Short term and as funding allows
	Identify public right-of-ways providing access to the Machias River.	Town Manager	Long Term
	Pursue clearing and maintenance of the right-of-ways for public access.	Selectmen or their designee	Long Term
	Pursue development of a swimming hole along the Machias River.	Selectmen or their designee	Long Term
Secure public access to the water including deep water facilities and maintaining traditional accesses to shellfishing areas.	Pursue the wide variety of available measures to secure such accesses. These could include: landowner negotiations, cooperation with local land trusts, accepting donations of land or easements, purchase of easements or land, use of Land for Maine's Future funds	Selectmen	On-going and as funding allows
	The town will educate itself on the legalities of public access to the shore and stay up to date on changes in case law that could affect it over time.	Selectmen	On-going
<b>Activities</b>			
Support recreational opportunities for Machias residents.	Develop and coordinate Town-offered activities with surrounding communities, as well as with other organizations such as the YMCA, Boys and Girls Clubs, 4-H, Scouts, and other public recreation departments in the area.	Town Manager	Immediate
	Develop plan for a community and recreation center and seek funding to implement.	Town Manager	Immediate
	Repair and enhance existing facilities including a skate park.	Town Manager	Immediate
	Organize recreational activities which focus on preschool-aged children, teens, adults, seniors and families.	Town Manager	Immediate
<b>Open Space</b>			
Encourage the preservation of open space.	Land use ordinance will include provisions that will require major new residential developments reviewed by the planning board to present recreational and open	Selectmen and Planning Board	Short-term (within 2 years)

<b>Goal: Machias will maintain, improve and emphasize access to recreational opportunities particularly water access and trails development.</b>			
<b>Policy</b>	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Timeframe</b>
	space areas in their plans.		
<b>Education</b>			
Encourage and support traditional uses of land and sea.	Develop educational materials describing traditional uses and practices, including issues such as shore access, hunting, working waterfront and commercial fishing, and community institutions.  Similar materials explaining value of regulations to retain and protect traditional ways of life.	Selectmen or their designee	Short-term (within 2 years)

## **SUMMARY**

Machias has many recreational opportunities because of the vast natural resources of the town, the region, and several important municipal recreational facilities. Some of the town's most important recreational resources rely on shorefront access, which we should seek to maintain and improve. Additional facilities and services are recommended to improve the amount and variety of recreational options for town residents of all ages.



## **H. TRANSPORTATION**

The purpose of this section is to:

1. Identify and profile Machias' roadway and transportation systems in terms of extent, capacity, and use;
2. Assess the adequacy of those systems in handling current use demands; and
3. Predict whether transportation improvements will be needed to adequately accommodate the demands generated by projected increases in population and development within Machias and Washington County.
4. Estimate the general costs of providing the necessary transportation system improvements.

### **Key Findings and Issues**

Machias has 27 miles of roadway, made up of 13 miles of local roads, 4 miles of arterial roads, and 10 miles of collector roads. This is a small total mileage when compared with the population of the Town. The small amount of road frontage will limit the amount of additional development that can be undertaken without the construction of additional roads.

The major traffic flows in Machias are to be found on US Route 1, where just west of State Route 92, through traffic and local circulating traffic combined to produce an Annual Average Daily Traffic (AADT) flow of 10,400 vehicles/day in 2004. The town questions whether the AADT counts on Route 1, Dublin Street and Court Street are valid and would like to see additional actual count data. This is necessary for the town to accurately recommend improvements and development controls in the busiest sections of town. In addition, capacity limitations are encountered on several local roads throughout the working week day as local traffic combines with those commuting to regional service businesses and institutions.

There are also twenty-nine high crash locations in Machias particularly concentrated on US Route 1, Main Street and Court Street.

The Town's roads are generally in fair condition.

### **ROADS INVENTORY**

The majority of roads in Machias originated in the early days as pathways or carriage trails. These roads followed the easiest routes and were not concerned with sight distances, sharp corners, the weight load of trucks, or intersection design. Some of our roads were improved over the years to accommodate increased traffic, higher speeds and larger vehicles. In the last decade, the Maine Department of Transportation (MDOT) through its Local Roads Assistance Program has attempted to assist municipalities in improving further these roads to meet state and national safety design standards.

Roads can be divided into three classifications by function: arterial, collector, and local.

1. Arterials are roadways that serve long distance, high-speed through-traffic between communities, and are maintained by the state. The most important travel routes in the state, state highways, are arterials. Interstate highways may function as arterials. Arterials are major roadways which serve long distance through-traffic. Access to adjacent land is often provided.
2. Collectors gather and distribute traffic to and from arterials and generally provide access to abutting properties. Collectors serve places with smaller population densities, are often some distance from main travel routes, and often are maintained in part by the state. Collector roads are roadways which connect local streets to arterials, and generally provide access to adjacent land.
3. Local roads are all roads not in the arterial or collector classification. Local roads are maintained by municipalities, provide access to adjacent land areas and usually carry low volumes of traffic.

Machias has 27 miles of roadway, made up of 13 miles of local roads, 4 miles of arterial roads, and 10 miles of collector roads. In addition, there are a number of private roads with no public maintenance. A listing of all roads within the Machias with their classification, length, maintenance responsibility and overall condition can be found in Table 1, their geographic location is illustrated on Map 2: Machias Streets and Public Facilities. The Maine Department of Transportation (MDOT) is responsible for 14 miles of road, which include; US Routes 1 and 1A, State Routes 92, 192, Hadley Lake Road, and the Roque Bluffs Road. The MDOT's jurisdiction includes permitting of curb cuts, summer and winter maintenance, and traffic flow and safety decisions such as traffic signals, signs, reconstruction and widening.

**Table H-1: ROADWAY INVENTORY**

Route/Street	Arterial, Collector, Local, Public Easement, or Private	Length in Miles to nearest tenth	Owned by	Maintained by	Surface	Condition
Route 1A Marshfield TL-Court St.	Arterial	1.69	State	State	Paved	Fair
Court Street	Arterial	1.16	State	State	Paved	Fair
Route 1 Whitneyville TL – East Machias TL	Arterial	4.03	State	State	Paved	Good
Route 92, Elm Street	Arterial	2.16	State	State	Paved	Good
Hadley Lake Rd.	Collector	.14	State	State	Paved	Good
Kennebec Rd	Collector	3.58	State	State	Paved	Good
Main St	Collector	.14	State	State	Paved	Good
Broadway	Collector	.92	State	Town/State	Paved	Good
Route 192	Collector	1.06	State	State	Paved	Good
Davis Rd.	Local	.26	Town	Town	Paved	Fair
Cross Rd	Local	.86	Town	Town	Paved	Poor
Duck Cove Rd.	Local	0.5	Town	Town	Paved	Good
West Kennebec Rd.	Local	1.75	Town	Town	Paved	Poor
Hoyttown Rd.	Local	.36	Town	Town	Paved	Fair
Old County Rd.	Local	.38	Town	Town	Paved	Poor
East Kennebec Rd.	Local	2.20	Town	Town	Paved	Good

Route/Street	Arterial, Collector, Local, Public Easement, or Private	Length in Miles to nearest tenth	Owned by	Maintained by	Surface	Condition
Free St.	Local	.07	Town	Town	Paved	Fair
High St.	Local	.26	Town	Town	Paved	Fair
Charles St.	Local	.14	Town	Town	Paved	Fair
Gardiner Ave	Local	.44	Town	Town	Paved	Good
North St.	Local	.34	Town	Town	Paved	Good
School St.	Local	.10	Town	Town	Paved	Fair
Bartlett St.	Local	.07	Town	Town	Paved	Fair
Lincoln St.	Local	.06	Town	Town	Paved	Fair
West St.	Local	.21	Town	Town	Paved	Fair
Drisko St.	Local	.11	Town	Town	Paved	Fair
Cooper St.	Local	.27	Town	Town	Paved	Fair
Center St.	Local	.28	Town	Town	Paved	Poor
Bruce St.	Local	.12	Town	Town	Paved	Good
Lyons St.	Local	.11	Town	Town	Paved	Good
Bowker St.	Local	.08	Town	Town	Paved	Fair
Allen Ave.	Local	.07	Town	Town	Paved	Poor
Water St.	Local	.53	Town	Town	Paved	Poor
Spring St.	Local	.20	Town	Town	Paved	Poor
Nelson St.	Local	.04	Town	Town	Paved	Poor
Pleasant St.	Local	.03	Town	Town	Paved	Fair
Grove St.	Local	.29	Town	Town	Paved	Poor
Freemont St.	Local	.22	Town	Town	Paved	Fair
Salem St	Local	.13	Town	Town	Paved	Fair
Harwood St.	Local	.16	Town	Town	Paved	Fair
Berry St.	Local	.11	Town	Town	Paved	Poor
Bedford St.	Local	.05	Town	Town	Paved	Good
Preston Rd.	Local	.17	Town	Town	Paved	Poor
Hudson Blvd.	Local	.85	Town	Town	Paved	Fair
Stackpole Rd.	Local	.35	Town	Town	Paved	Good
High St. Ext.	Local	.05	Town	Town	Paved	Good
Hill St.	Local	.05	Town	Town	Paved	Good
DMR Dr.	Local	.33	Town	Town	Paved	Good
Dupont St.	Local	.14	Town	Town	Paved	Fair
Short St.	Local	.06	Town	Town	Paved	Good
Valley View Rd.	Local	0.13	Town	Town	Paved	Fair
Prescott Dr.	Local	0.22	Town	Town	Paved	Good
Louise Gardner Dr.	Local	0.03	Town	Town	Paved	Fair

## MAINTENANCE

Overall, the public roadways in Machias are in fair condition. However there are several town owned roads that will need to be reconstructed or have substantial drainage improvements over the next 10 years. These include the West Kennebec Road, the Old County Road, Allen Avenue, Cross Road, Grove Street, Davis Road and other side roads in areas of older housing developments. The town has a public works department that oversees road services. The town works diligently with limited resources to maintain local roads.

The damage that does occur to our roads is largely the result of inadequate road design, base material and drainage. A combination of harsh weather, frost, spring thaw and truck activity is another cause of road deterioration. Roads are most vulnerable to the weight of trucks and other heavy vehicles during the spring thaw, which is also a time of year when many natural resource-based products are transported to market.

MDOT is responsible for all the non-local roads. Their authority includes permitting of driveways and entrances, curb cuts, summer and winter maintenance, and traffic flow and safety decisions such as traffic signals, signs, reconstruction and road widening.

The town conducts its own snow plowing, salting and sanding each year for town and State-aid roads. The cost is covered from tax appropriations. The state reimburses the town for about 98 percent of the actual costs to the town for the State-Aid Roads that the town is mandated to maintain. Total yearly payment to Machias from DOT is \$20,664.00 (local road 12.78 miles + state aid minor collector miles 4.78 x 1200.00/mile = \$21,072.00). The amount from DOT does not add up exactly when calculated according to actual road lengths and the formula for reimbursement because all towns got a reduction when the legislature reduced the appropriation in fiscal year 1999. The reimbursement to each town will not drop below the amount received in 1999, which for Machias was \$17,964.00.00.

The Maine DOT Local Roads Center provides a “Road Surface Management for Maine Towns” training program, including Road Surface Management System (RSMS)<sup>1</sup> software to identify which road maintenance techniques should be considered for individual roads or streets in a local street network. Introduced in 1990, it is being used by many communities to inventory their road network, record road surface condition data, interpret the surface distress information gathered, and “defend” their road maintenance budgets. The system is generic and provides an objective tool that a municipality can “customize” with its own repair techniques and local costs. The town of Machias has obtained the RSMS software and will be creating a record of road surface data in the future.

The MDOT prepares a Six-Year Plan, updated every two years, to link their policy based Twenty-Year Plan to the project based and fiscally constrained Biennial Transportation Improvement Program (BTIP). The most recent Six-Year Plan was issued in 2003 covering the period 2004-2009. The BTIP’s are issued every fiscal biennium. Other state agencies and business interests use the Six-Year Plan as they develop public and private investment strategies.

MDOT has proposed two bridge replacement/rehabilitation projects in Machias in the Six-Year Transportation Improvement Plan for 2004-2009 including replacement of the bridge over Smelt Brook on Roque Bluffs Road and PCE-C for replacement of the dyke on US 1 and the former rail road over Middle River. There are also three Machias projects included in the FY04-05 Biennial Transportation Improvement Plan shown in the following table.

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<sup>1</sup> **Road Surface Management System (RSMS)** is a road network pavement management system implemented using a computer based software package. RSMS provides information on the condition, traffic, and importance of roads in a network to create a long-term maintenance program. This helps municipalities apply limited budget resources where they will provide the greatest road quality benefits.

Project Type	Functional Class Route #/Road Name Length	Description	Estimated Cost/ Fund Source
Passenger Transportation Programs / Airport Miscellaneous Improvement	n/a	Relocate terminal area and clear runway approach obstructions, Machias Municipal Airport.	<b>\$200,000</b> Federal Aviation Administration State Bond Local/Other
Regional Programs / Guardrail Improvements	Major Collector Route 92 0.16 Miles	Guardrail Replacement: located at various locations between Machias and Machiasport.	<b>\$78,000</b> State
Regional Programs / Maintenance Paving (Hot Mulch)	Major Collector Route 92 10.00 Miles	Beginning at Route 1 and extending easterly 10.00 miles.	<b>\$203,150</b> State

## TRAFFIC VOLUMES AND PATTERNS

Although the population of Washington County has decreased modestly during the 1990s, MDOT states that the total number of vehicle miles traveled in our County has increased by over 13 percent. MDOT estimates the average annual daily traffic volume (AADT) of most state and state aid roadways. Traffic counts taken every few years help the state calculate changes in traffic volume so that road improvements can be designed and built accordingly to handle those changes. AADT volumes do not reflect seasonal variations in traffic or daily peak traffic volume. Instead, AADT volumes help us understand the overall growth or decline of traffic on a roadway and the pattern of traffic on our road networks.

Transportation linkages in Machias consist primarily of State Route 1 which cuts through the northern half of the town in an east-west corridor, State Route 1A which connects Machias to Whitneyville to the west, and State Route 192 which connects Machias to Marshfield and State Route 9 to the north. Two other minor arterials connect Machias to its neighbors. Route 92 provides access to the south side of the Machias River and the town of Machiasport and the Roque Bluffs Road provides access to the western half of Machiasport and the town of Roque Bluffs along the coast. Table 2 shows AADT counts for the most recent year (2004) for which data is available. Traffic counts are not available for other roads in our town. The volumes shown below represent both through traffic and local activity.

The town questions whether the AADT counts on Route 1, Dublin Street and Court Street are valid and would like to see additional actual count data. This is necessary for the Planning Board to accurately recommend improvements and development controls in the busiest sections of town. In addition, capacity limitations are encountered on several local roads throughout the working week day as local traffic combines with those commuting to regional service businesses and institutions.

**Table H-2 TRAFFIC VOLUMES (AVERAGE ANNUAL DAILY TRAFFIC VOLUME – AADT)**

<b>Road</b>	<b>Location</b>	<b>AADT04</b>
0001A	US 1A (Court St) W/O US 1 (Main St)	3610
0001A	US 1A (Court St) W/O SR 192 (Broadway)	3330
0001A	US 1A (Court St) W/O Medical Center Ent	2030
0001X	US 1 (Dublin St) SW/O Harwood St @ Compact Urban Line	9760
0001X	US 1 (Main St) SW/O US 1A (Court St)	7680
0001X	US 1 (Court St) @ Compact Urban Line	10030
0001X	US 1 (Dublin St) SW/O SR 92 (Elm St)	10400
0001X	US 1 SW/O IR 319	4330
0001X	US 1 E/O IR 916 (Old County Rd)	8220
00092X	SR 92 (Elm St) NE/O O'Brien Ave #1	1760
00317	IR 317 )Hadley Lake Rd) N/O US 1	1570
00319	IR 319 SW/O IR (W Kennebec) @ Bridge#5544	900
00319	IR 319 S/O US 1	1800
00443	IR 443 (W Kennebec Rd) SE/) IR 352@Bridge#5674	290
00916	IR 916 (Old County Rd) NE/O US 1	600
0092X	SR 92 (Elm St) NE/O School St	1560
0092X	SR 92 (Elm St) E/O Stackpole Rd@ Compact Urban Line	860
00971	IR 971 SE/O IR 319	340
01253	Grove St W/O US 1 (Dublin St)	250
01256	Harwood St N/O US 1 (Dublin St)	240
0192X	SR 192 (Broadway) @ Culvert	1950

Source: Maine Department of Transportation, 2004

## LEVEL OF SERVICE

Traffic congestion can lower a roadway's level of service (LOS). There are six levels of service, given letter designations from A to F. LOS A represents the best operating conditions, while LOS F represents the worst. LOS E is defined as the maximum flow or capacity of a system. For most purposes, however, a level of C or D is usually used as the maximum acceptable volume. As an annual average, however, LOS does not reveal the increased congestion during the tourist season. And so, for planning purposes, a seasonally adjusted LOS should be used when analyzing the need for local traffic management improvements.

In Machias heavy traffic volumes are associated with the morning and afternoon commute and with the lunch time movements. Heavy traffic also contributes to congestion in the summer months with visitor traffic and various events and festivals. Accordingly, MDOT has noted an LOS of E on Route 1 at the bridge over the Machias River, a LOS of C on Route 1 just east of the downtown core and a LOS of C on Route 1 through downtown and along Route 1 to the East Machias town line and west as far as the East Kennebec Road. All other roads within the town are rated an LOS of A (see Map 8 Transportation).

## ACCESS MANAGEMENT

Access Management is the planned location and design of driveways and entrances to public roads to help reduce accidents and prolong the useful life of an arterial. While arterial highways



represent only 12% of the state-maintained highway system, they carry 62% of the statewide traffic volume. Maintaining posted speeds on this system means helping people and products move faster, which enhances productivity, reduces congestion-related delays and environmental degradation. By preserving the capacity of the system we have now, we reduce the need to build costly new highway capacity such as new travel lanes and bypasses in the future.

MDOT has established standards, including greater sight distance requirements for the permitting of driveways and entrances for three categories of roadways: mobility arterial corridors<sup>2</sup>, retrograde arterials<sup>3</sup>, and all other state and state-aid roads. Due to the low volume of traffic on our roadways, our town has no roads in the retrograde category of roadways, which come under stricter access management standards. Routes 1, 192 and 1A are considered mobility corridors. To maintain and improve traffic flows, the Land Use section of this plan and future Land Use Ordinances should include access management performance standards that are in accordance with current law.

## DANGEROUS INTERSECTIONS AND STRETCHES OF ROADS

MDOT rates accidents according to a Critical Rate Factor (CRF), which corresponds to the number of times the actual accident rate exceeds the expected (average) accident rate. Generally, a CRF of 1.0 or more indicates a higher than usual number of accidents at that specific intersection or stretch of road. According to MDOT's most recent data, Machias has twenty-nine of these high crash locations – see Table H-3.

**Table H-3 HIGH CRASH LOCATIONS**

Primary Road	Street Name	Critical Rate Factor	Crash Year	Crash Type
US 1		1.02	2000	Deer
RD INV 01179 29	NORTH ST	1.66	1998	Intersection movement
ST RTE 0192	BROADWAY	1.11	1999	Intersection movement
US 1A	COURT ST	1.34	1997	Intersection movement
US 1A	COURT ST	1.25	2000	Ran off road
RD INV 01212 29	CENTER ST	2.22	1997	Intersection movement
US 1	MAIN ST	3.09	1997	Intersection movement
US 1A	COURT ST	1.42	2002	Intersection movement
ST RTE 0092	ELM ST	1.81	1999	Intersection movement
US 1A	COURT ST	4.17	2001	Deer
RD INV 01252 29		2.11	1997	Head-on/sideswipe
MAINT C415J DIV 2		1.71	1997	Ran off road
RD INV 00319 29	KENNEBEC RD.	1.70	2002	Intersection movement

<sup>2</sup> A Mobility Arterial is a non-compact arterial that has a posted speed limit of 40 mph or more and is part of an arterial corridor located between Urban compact Areas or Service Centers that carries an average annual daily traffic of at least 5,000 vehicles per day of at least 50% of its length or is part of a Retrograde Arterial Corridor located between Mobility Arterials.

<sup>3</sup> A Retrograde Arterial is a Mobility Arterial where the access related crash-per-mile rate exceeds the 1999 statewide average for Arterials of the same-posted speed limit.

Primary Road	Street Name	Critical Rate Factor	Crash Year	Crash Type
RD INV 00443 29	WEST KENNEBEC RD.	3.83	1999	Ran off road
ST RTE 0092	ELM ST	1.01	2002	Ran off road
US 1A	COURT ST	1.08	1997	Rear end/sideswipe
US 1A	COURT ST	1.68	2002	Ran off road
US 1A	COURT ST	1.08	2002	Ran off road
ST RTE 0192	BROADWAY	1.30	2001	Deer
US 1		1.10	2002	Rear end/sideswipe
US 1		1.47	1997	Rear end/sideswipe
US 1	DUBLIN ST	1.38	1998	Rear end/sideswipe
US 1	MAIN ST	1.19	1999	Rear end/sideswipe
US 1	MAIN ST	1.69	1997	Rear end/sideswipe
US 1	COURT ST	3.04	1999	Rear end/sideswipe
RD INV 00916 29	OLD COUNTY	1.45	1998	Intersection movement
US 1		1.26	1997	Rear end/sideswipe
US 1	DUBLIN ST	2.05	1997	Intersection movement
US 1		1.26	1999	Rear end/sideswipe

Source: Maine Department of Transportation, 2004

Additional dangerous intersections than are noted by the MDOT data include the following intersections and roadways.

**Table G-4 LOCALLY IDENTIFIED TRAFFIC HAZARD AREAS**

Intersection/Road	Safety Issue	Cause of Safety Issue	Possible Solutions
Water Street and Route 1	Poor visibility and speed of traffic	Building limits visibility	<ol style="list-style-type: none"> <li>1. A controlled entrance and exit to Fosters (west entrance; east exit)</li> <li>2. Road divider from bridge entrance to Center St. with pedestrian passageways.</li> <li>3. Require right turn only onto Route 1 from Water St</li> <li>4. Make Colonial Way as one way street going north</li> </ol>
Colonial Way and Route 1	Poor visibility to the west; speed and congestion	Building limits visibility	
Court Street and Route 1	Confusing intersection	Turning traffic; speed	Create a 90 degree intersection and a green space island with pedestrian walkway
Center Street and Route 1	Congestion; turning traffic; bottleneck	Inability to turn left onto Route 1 during periods of high traffic	Traffic light

Source: Machias Comprehensive Plan Committee, 2006

## TRAFFIC CONTROL DEVICES

There are no traffic control devices in Machias. The first one that may be needed in the next several years is anticipated on Route 1 (Dublin St.) related to commercial development at several large retail establishments (Hannafords, Rite Aid, other retail). Another traffic signal may be the solution for congestion and bottleneck of traffic at Center Street and Route 1 downtown.

## SHOULDERS

Route 1 has well constructed wide shoulders on both sides of the road. The shoulders along the majority of Routes 192, 92 and 1A are soft and unpaved. Paved shoulders make the road safer, allow an area that is more useful for temporary maintenance of vehicles, provide increased opportunities for faster vehicles to pass slow-moving vehicles, offer safer opportunities for pedestrian travel, and allow easier and safer travel for the increased numbers of bicyclists touring the town. Machias will have an increased need for paved shoulders as the community grows and as traffic on these minor arterial roads increases.

## BRIDGES

The town's road commissioners (Selectmen) are responsible for inspecting, maintaining culverts/bridges and inspecting its roadways. Machias has seven bridges, six of which the State is responsible, and one that is maintained by the town. The bridge information in Table H-4 below describes these bridges but does not reflect the complete reconstruction of the three bridges (Covered East, Covered West, Covered Center) that span the Machias River on Route 1. In addition the minor span over Smelt Brook has been recently replaced and is therefore in satisfactory condition. Thus, the bridges and culverts in town are in generally good condition.

**Table H-4 BRIDGES IN MACHIAS**

Bridge Name	Location	Capital Responsibility/ Maintenance Responsibility	Feature Under	Structure Class	Condition Ratings
Smelt Brook	100 ft S of W. Kennebec Rd.	MDOT/MDOT	Smelt Brook	Minor Span on State Aid Road	Substructure: fair Superstructure: serious Deck: N/A Wearing surface: N/A
Covered East	0.1 mile S of 1A&192	MDOT/MDOT	Machias River	Bridge on State Highway	Substructure: fair Superstructure: very good Deck: fair Wearing surface: fair
Covered Center	0.1 mile S of 1A&192	MDOT/MDOT	Machias River	Bridge on State Highway	Substructure: fair Superstructure: poor Deck: serious Wearing surface: good
Dyke	0.4 mile East of town line	MDOT/MDOT	Middle River	Bridge on State Highway	Substructure: fair Superstructure: fair Deck: N/A Wearing surface: N/A

*Replaced  
2008*

Bridge Name	Location	Capital Responsibility/ Maintenance Responsibility	Feature Under	Structure Class	Condition Ratings
Covered West	0.1 mile S US1A and 192	MDOT/MDOT	Machias River	Bridge on State Highway	Substructure: satisfactory Superstructure: satisfactory Deck: fair Wearing surface: poor
Libby Brook	0.2 mile W of town line	MDOT/MDOT	Libby Brook	Minor Span on Town Highway	Substructure: good Superstructure: good Deck: good Wearing surface: fair
Smelt Brook No. 2	2.4 miles S Jct US 1	Municipal/Municipal	Smelt Brook	Minor Span on Town Highway	Substructure: poor Superstructure: N/A Deck: N/A Wearing surface: N/A

## PARKING FACILITIES

There are several municipal parking lots in town including a 15 space lot on Colonial Street, a 30 space lot on the waterfront behind the hardware store and a 22 space lot on Water Street. There is also parking along the causeway, in several large commercial lots serving downtown, and along roadways and within driveways. Parking areas are also associated with the schools and the recreation areas.

More parking is needed in the downtown to accommodate expanding businesses especially at high tourism season and during major events. On Center Street, the roadway should be redesigned to remove a portion of the Congregational Church steps (now very close to the traveled way) and add raised sidewalks. This could add 5 feet of additional road width to a narrow right of way and improve safety on both sides of the street. In this area parking should be limited to the west side of Center Street. Consideration for additional parking should also be included in future commercial development planning.

## PEDESTRIAN FACILITIES

There are sidewalks along both sides of Route 1, Main Street, Court Street, and many of the small side streets north of the river. Sidewalks were recently (2002-2004) reconstructed on Route 1 from Kennebec Road to the new bridge. This project included road reconstruction, sewer replacement, handicapped sidewalk accessibility, granite curbing and sidewalks on both sides of the new bridge.

Main Street sidewalks were renovated during 1986. However, despite its pleasing appearance, there are some serious deficiencies which deter pedestrians such as sidewalk curbs are too high for comfort, and the positioning of drop curbs and ramps is poor. Toward its eastern end, the sidewalks are interrupted by uncontrolled driveway accesses which also deter pedestrians. Only two of the three streets linking Main Street with Court Street have sidewalks (Free Street and Center Street), (Court Street has a sidewalk along its north side from the High School to Lyons Street, a distance of 3/4 mile). Some general maintenance (overlay) has been done to the main traffic section but the entire length should be reconstructed.

Although much improved, the sidewalks in Machias should be extended to provide access to limited areas, with a high priority assigned to extend the sidewalk from Lyon Street along the northerly side of Court Street to the intersection with Short Street. Additional sidewalks are needed on Grove Street to provide access to the recreation area and extending along Harwood to Route 1.

## **PUBLIC TRANSPORTATION**

There are no public transit facilities in town. The Washington Hancock Community Agency (WHCA) provides scheduled van and door-to-door on demand transportation from our town to Calais, Ellsworth and Bangor for clients referred to them by the State of Maine Department of Human Services. These services are provided to income-eligible persons and are typically children in state custody, welfare clients, Medicaid patients with medical appointments, the elderly and disabled, or people needing transportation to Meals for Me. Most of the longer trips are for medical services: shorter trips are to local doctors, pharmacies and groceries. Users of this service are mostly families living below poverty level, people with mobility limitations, people with one or no available vehicles, and the elderly. WHCA also provided transportation from September 2001 to August 2002 under the Demand Response Program.

West Coastal Connection Bus Service offers daily service from Calais to Bangor, round trip. West also operates services three times weekly, connecting coastal communities to Ellsworth and coordinating its schedule with other service providers. Pick-up points are at various locations throughout the county.

## **AIRPORTS**

Machias is home to a municipal airport which has a 2900-foot runway and is used by private plane owners and in an emergency, by air ambulance services. It has a beacon, but no fueling services and was last rated by the state in good condition. As noted in the Public Facilities chapter the town is leading an effort to relocate the airport to a location within the region to allow construction of a 5000 foot runway thereby accommodating business/corporate general aviation aircraft. Other regional airports include:

1. Bangor International Airport, provides national and international commercial passenger and freight services, as well as civil defense operations. 11,441-foot main runway. Car rental services are available.
2. Deblois Flight Strip, off State Route 193, has a 4,000-foot runway but no beacon or fueling services. Last rated by the state in poor condition.
3. Eastport Municipal Airport has a 4000-foot runway and provides limited charter and instructional services. Beacon and fueling services. Last rated by the state in good condition.
4. Hancock County - Bar Harbor Airport in Trenton is the nearest airport with regularly scheduled passenger commercial service. In addition to daily commuter service to Boston, Massachusetts, charter service is offered. Car rental services are available.

5. Lubec Municipal Airport has a 2032-foot gravel/turf runway, with beacon, but no fueling services. Last rated by the state in good condition.
6. Princeton Municipal Airport has two runways, the larger of which is 3999 feet, and is used primarily by private businesses and recreational fliers. Beacon, but no fueling services. Last rated by the state in poor condition.

## RAILROAD FACILITIES AND RAIL SERVICES

Abandoned rail lines stretch across Washington County and are generally in poor condition, as passenger service stopped nearly fifty years ago and freight service stopped in the mid-1980s. The Maine Central Railroad track that runs through Machias is to be removed. In an effort to maintain the right of way the corridor will be used as a multi-use recreational trail until and unless rail is economically feasible. Some rail line rights-of-way may be used by the East Coast Greenway, a bicycle and walking trail, to complete its route planned to extend from Key West, Florida to Calais, Maine.

## PORTS

There are no port facilities in our town. The deep water Port of Eastport is the closest port. It has two piers, three berths, with a low tide depth of 40 feet, and over 75,000 square feet of covered storage. The outer berth can accommodate a ship up to 900 feet in length.

## POLICIES AND IMPLEMENTATION

In order to encourage, promote and develop efficient and safe transportation facilities and services that will accommodate our town's anticipated growth and economic development we have developed the following policies and implementation strategies:

<b>Goal: Machias will encourage, promote and develop efficient and safe transportation facilities that will accommodate our town's anticipated growth and economic development.</b>			
<b>Policy</b>	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Timeframe</b>
The town will plan for optimum use, construction, maintenance and repair of roads.	The town will develop a road maintenance schedule using the Road Surface Management System software obtained through the MDOT Local Roads Center. Include provisions to protect wildlife habitat: <ul style="list-style-type: none"> <li>▪ Size new/replacement culverts for stream and wetland crossings to accommodate aquatic invertebrate, fish and riparian travel</li> </ul>	Selectmen/Road Commissioners; assistance from Beginning with Habitat and Maine DOT	On-going
	When Routes 192, 92 and 1A require reconstruction or repair the town will request that shoulders be added to improve public safety.	Selectmen/Road Commissioners	Long Term



<b>Goal: Machias will encourage, promote and develop efficient and safe transportation facilities that will accommodate our town's anticipated growth and economic development.</b>			
<b>Policy</b>	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Timeframe</b>
The town will ensure that new development does not negatively impact the capacity or safety of existing roadways.	The town will consider a local roads ordinance that harmonizes the access of driveways and entrances with the state access management regulations. The new state regulations will be available at the town office for property owners.	Selectmen	Long Term
	Continue to express concerns to MDOT regarding several high accident locations and the need to improve these areas.	Selectmen/Road Commissioners/Town Manager	Immediate
	The town will seek accurate AADT count data from MDOT to recommend improvements and development controls in the busiest sections of town.	Planning Board	Immediate
	Consider additional parking requirements in future commercial development planning.	Planning Board	Short Term
	The town will consider increasing center line setbacks on collector roads outside of the village area from 35 feet to 50 feet to accommodate future drainage, utility and safety concerns.	Selectmen/ Planning Board	Short Term
Create a pedestrian friendly downtown and elsewhere.	Provide more visible crosswalks through the use of signs or other means, especially in Winter when road markings are not visible, especially for Cross Street, Main Street, and Dublin Road.	Planning Board	Immediate
	Extend sidewalks to provide access to limited areas, with a high priority assigned to extend the sidewalk from Lyon Street along the northerly side of Court Street to the intersection with Short Street. Additional sidewalks are needed on Grove Street to provide access to the recreation area and extending along Harwood to Route 1.	Selectmen	Short Term
	Review, lower, and enforce speed limits on Court Street.	Planning Board	Immediate
Establish an integrated transportation plan	Develop a comprehensive transportation plan to include traffic flow, pedestrian links, sidewalk, scenic turnoff, and river walk, etc.	Selectmen or their designee	Short term
	Develop a sidewalk/trail improvement program by evaluating existing systems, identifying the needs of the residents, establishing priorities for improving and maintaining existing sidewalks/trails, and developing a program for sidewalks/trails improvements.	Selectmen or their designee	Short term
	Develop river walk trail connecting causeway to Bad Little Falls, across the river, then to Stillman Street; include botanical and interpretive elements	Eye on Machias Committee	Immediate

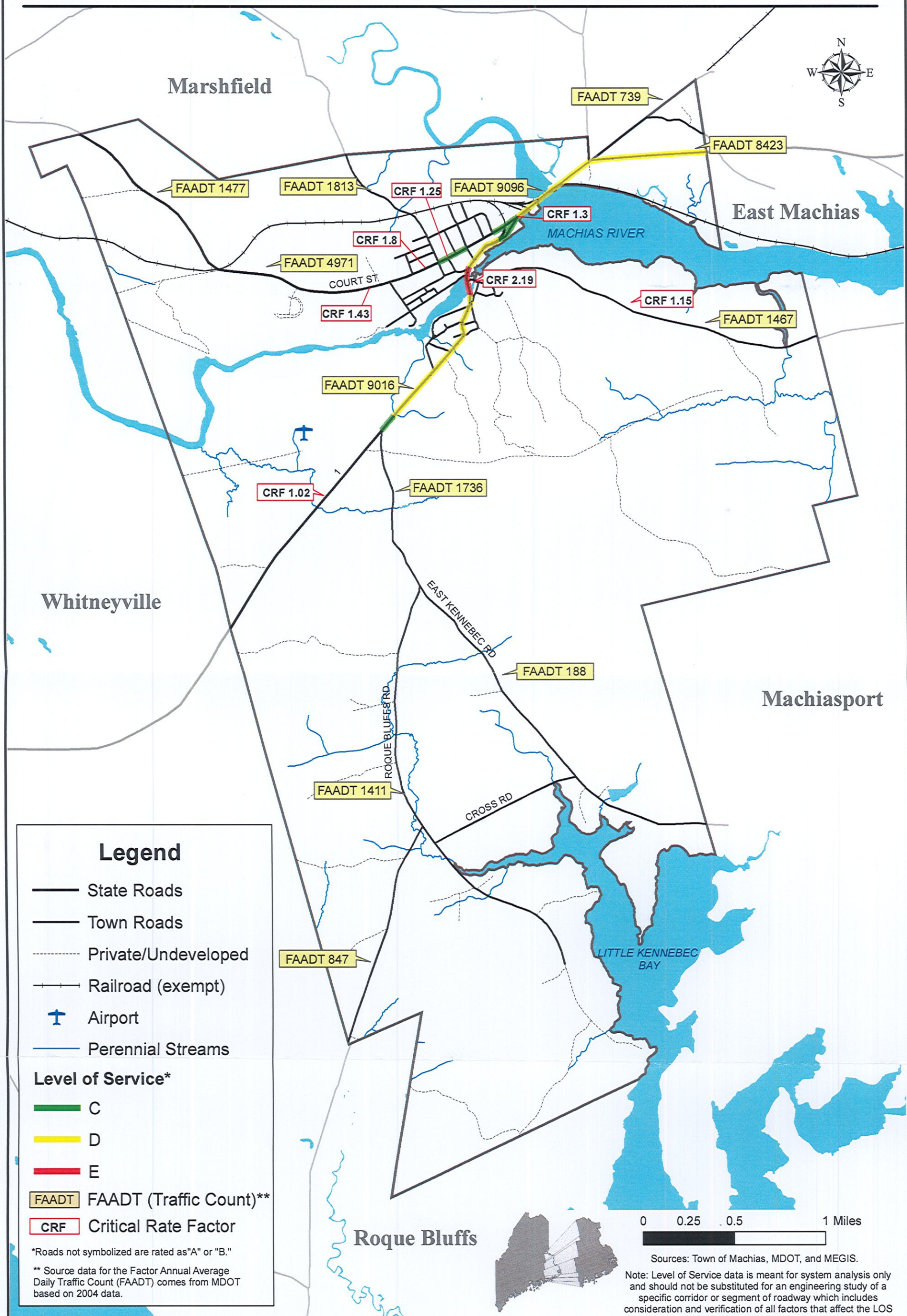
<b>Goal: Machias will encourage, promote and develop efficient and safe transportation facilities that will accommodate our town's anticipated growth and economic development.</b>			
<b>Policy</b>	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Timeframe</b>
	Promote Machias Rail Station (1898) to include park and ride, bus stop, taxi service, walking and cycling trails	Selectmen; Chamber of Commerce	Short term
The town will cooperate in the development of regional transportation policy.	The town will participate in CEDS (Community Economic Development Strategy) Transportation sub-committee policy committee.	Selectmen	On-going

## **SUMMARY**

Machias is a center of several crossroads in southern Washington County. Transportation linkages include US 1 and 1A, and State Routes 192 and 92. Our town is reliant on its road network as the primary means of transportation movement. Local roads should provide safe, reliable access to work, school, stores, and residences. Overall, Machias' roadways are in fair condition. Given limited funding and the significant expense, the town has done a noteworthy job of maintaining its roads. Continued proper and affordable maintenance of the road network in Machias will be in the best interest of all residents. Since MDOT has jurisdiction over most main roads and seven bridges within Machias, the town will continue to communicate and cooperate with the department. The town requires all new roads to be constructed to specific standards.

The town has led recent efforts to relocate the existing regional airport. It is currently in Machias but a state funded analysis and site selection process has determined that it cannot be expanded to accommodate commercial traffic in its current location. The site selection process determined that a site in Jonesboro is the best among several analyzed in the region and it is being reviewed according to the federal National Environmental Policy Act.





See map disclaimer at the end of the Executive Summary.



## **I. PUBLIC FACILITIES AND SERVICES**

The purpose of this section is to:

1. Identify and describe Machias's public facility and service systems in terms of their extent, capacity, and use;
2. Assess the adequacy of those systems in handling current demands;
3. Predict whether public facility or service system additions and improvements will be needed to accommodate the demands of the projected population; and
4. Estimate the general costs of providing the needed public facility and service system additions and improvements.

Budgetary information is presented in Chapter I - Fiscal Capacity. The locations of key public facilities are shown on Maps 2 and 3.

### **Key Findings and Issues**

Machias has invested heavily in its infrastructure in the past decade. While there are improvements still needed and recommended in areas of town considerable improvements have been made in sewer line replacement, sewage treatment, bridges, sidewalks, road reconstruction and public facilities including the town office.

## **GENERAL GOVERNMENT**

The government of the town of Machias consists of a five-member Board of Selectmen and a Manager system governed by a Town Charter. The town was incorporated in 1784 and became the shire town of Washington County in 1790. The Town Manager, as directed by the Selectmen, is responsible for general administration of the town. A single appointed assessor carries out property tax assessment. Town administrative functions are located at the new Municipal Building at 27 East Main Street.

The Selectmen appoints long term, short term and project committees as needed.

### **Appointed Boards/Committees**

Board of Assessment Review  
Zoning Board of Appeals  
Comprehensive Plan Update Committee  
Planning Board  
Spirit Committee  
Airport Committee

### **Elected Boards**

Board of Selectmen  
Budget Committee  
School Committee

The **Zoning Board of Appeals** hears grievances, variance requests, and administrative appeals.

The town's **Planning Board** consists of five members and two alternates, some of these individuals have served in this capacity for many years. Monthly meetings are held to review subdivisions and site plans for any development proposals. The Planning Board also reviews shoreland zoning and wetland's issues for compliance with state and local regulations.

The responsibilities of town government are divided into the following departments:

School Union 102	Superintendent
Police	Chief
Fire	Chief
Ambulance	Chief
Public Works	Director
Wastewater Treatment	Chief Operator
Recreation	Director

## MUNICIPAL BUILDINGS, FACILITIES AND SERVICES

Town offices are located in the new Municipal Building at 27 East Main Street. A list of town owned buildings is provided in Table H-1.

**Table I-1 MACHIAS MUNICIPAL BUILDINGS**

Building	Street Address	Construction	Year Built	# Stories	Square Feet
Municipal Building	East Main Street	Wood	1949	2	4339
Public Works	Route 192	Wood	1975	1	
Public Works Storage	Route 192	Wood	1975	1	150
Public Safety (Ambulance, Police and Fire)	Valleyview Road	Wood	1984 (Police Stn. added 1991)	1	
Telebusiness Center	Stackpole Road	Wood	1998-2000	2	8800
Wastewater Treatment Plant	Kilton Way	Brick	1976	1	
Syphon chamber	Lincoln St.	n/a			
Pump Station	Route 192	Cement Block			
Rose Gaffney Elementary School	Route 1A	Wood/Brick			
Machias Memorial High School	Route 1A	Brick			
Machias Memorial High School Gymnasium	Bulldog Drive	Wood			
Superintendents Office (40% interest)	Route 1A	Wood	1998	1	
Airport	Airport Road	n/a		n/a	
Airport Building	Airport Road	Wood		1	
Station 98	Route 1	Wood	1898	1	828
Transfer Station	Route 192	Wood	1994	1	
Recycling Center	Route 192	Metal	1994	1	
Source: Town Manager's Office					

The Ambulance, Police and Fire Departments are housed in the Public Safety building. The building is adequate for current needs. However additional bays are needed for future demands.

The town of Machias exempts a significantly higher proportion of its valuation (32%) than the average for Washington County (17%), or the State of Maine (16%). This limits the town's capacity to fund the projects and services that its citizens need and desire, and the necessary expenses for the town's status as county seat and regional employment center. The town should undertake a study to assess the feasibility of developing an equitable system of charges for

services to tax exempt property owners, including county and state entities.

**Table H-2 MACHIAS TAX EXEMPT PROPERTY 2005**

Property Owner	Parcel #	Full Assessment	Assessment Exemption	Residual Assessment	Description
UNITED PENTECOSTAL CHURCH	008-006-A-T1	\$23,200.00	\$20,000.00	\$3,200.00	Parsonage
MACHIAS COMMUNITY OF CHRIST	001-055	\$20,000.00	\$20,000.00	\$0.00	Parsonage
METHODIST PARSONAGE	014-015	\$55,500.00	\$20,000.00	\$35,500.00	Parsonage
NNE DIST COUNCIL ASSEMBLIES OF GOD	011-006	\$82,800.00	\$20,000.00	\$62,800.00	Parsonage
ROMAN CATHOLIC BISHOP/PORTLAND	011-127	\$70,200.00	\$20,000.00	\$50,200.00	Parsonage
MACHIAS, TOWN OF	005-046	\$224,800.00	\$224,800.00	\$0.00	Airport
CHERRYFIELD FOODS, LESSEE	012-034	\$2,535,300.00	\$144,000.00	\$2,391,300.00	Pollution Control
MACHIAS MASONIC CORP.	011-146	\$79,000.00	\$79,000.00	\$0.00	Lodges
AMERICAN LEGION POST #9	015-018	\$76,000.00	\$76,000.00	\$0.00	Veterans Assoc.
D.A.R	011-077	\$47,200.00	\$47,200.00	\$0.00	Scientific & Lieterar
UNIVERSITY OF MAINE	009-063	\$18,937,000.00	\$18,937,000.00	\$0.00	Scientific & Lieterar
UNIVERSITY OF MAINE	009-062	\$15,600.00	\$15,600.00	\$0.00	Scientific & Lieterar
PORTER MEMORIAL LIBRARY ASSN	011-151	\$230,100.00	\$230,100.00	\$0.00	Scientific & Lieterar
MACHIAS VALLEY BAPTIST CHURCH	011-095	\$78,300.00	\$78,300.00	\$0.00	Church
CENTRE ST CONGREGATIONAL CHURCH	011-152	\$8,100.00	\$8,100.00	\$0.00	Church
CENTRE ST CONGREGATIONAL CHURCH	011-149	\$58,800.00	\$58,800.00	\$0.00	Church
MACHIAS VALLEY BAPTIST CHURCH	011-112	\$131,300.00	\$131,300.00	\$0.00	Church
MACHIAS COMMUNITY OF CHRIST	014-080	\$101,800.00	\$101,800.00	\$0.00	Church
ROMAN CATHOLIC BISHOP	011-131	\$19,300.00	\$19,300.00	\$0.00	Church
ROMAN CATHOLIC CHURCH	011-127-A	\$170,900.00	\$170,900.00	\$0.00	Church
EPISCOPAL MISSION	009-001	\$88,000.00	\$88,000.00	\$0.00	Church
CENTRE ST CONGREGATIONAL CHURCH	011-153	\$228,900.00	\$228,900.00	\$0.00	Church
UNITED PENTECOSTAL CHURCH	008-006-A	\$79,300.00	\$79,300.00	\$0.00	Church
CHURCH OF LATTER DAY SAINTS	010-024-A	\$341,700.00	\$341,700.00	\$0.00	Church
CATHOLIC CHURCH	014-053	\$82,100.00	\$82,100.00	\$0.00	Church
WASHINGTON HANCOCK	011-121	\$65,300.00	\$65,300.00	\$0.00	Charitable & Benevolent
FAMILIES UNITED OF WASH COUNTY	013-001-C	\$236,800.00	\$236,800.00	\$0.00	Charitable & Benevolent
COMMUNITY HEALTH & WASHINGTON COUNTY RESIDENCES	013-004-A	\$86,000.00	\$86,000.00	\$0.00	Charitable & Benevolent
	015-060	\$78,900.00	\$78,900.00	\$0.00	Charitable & Benevolent



Property Owner	Parcel #	Full Assessment	Assessment Exemption	Residual Assessment	Description
WASHINGTON COUNTY ASSOC.	015-063	\$22,500.00	\$22,500.00	\$0.00	Charitable & Benevolent
WASHINGTON-HANCOCK CMTY AGENCY	011-008	\$55,300.00	\$55,300.00	\$0.00	Charitable & Benevolent
SUNRISE RESIDENCE	015-076	\$525,100.00	\$525,100.00	\$0.00	Charitable & Benevolent
REGIONAL MEDICAL CTR AT LUBEC	014-087	\$122,300.00	\$122,300.00	\$0.00	Charitable & Benevolent
WASHINGTON COUNTY ASSOC.	015-037	\$55,600.00	\$55,600.00	\$0.00	Charitable & Benevolent
WASHINGTON-HANCOCK COMMUNITY AG	006-013	\$67,700.00	\$67,700.00	\$0.00	Charitable & Benevolent
WASH CO ASSN OF RETARDED CITIZENS	016-004-A	\$501,700.00	\$501,700.00	\$0.00	Charitable & Benevolent
MAINE, STATE OF	009-054	\$3,600.00	\$3,600.00	\$0.00	State of Maine
STATE OF MAINE	011-034	\$26,500.00	\$26,500.00	\$0.00	State of Maine
STATE OF MAINE	009-031	\$15,000.00	\$15,000.00	\$0.00	State of Maine
STATE OF MAINE	011-183	\$11,700.00	\$11,700.00	\$0.00	State of Maine
STATE OF MAINE	005-031	\$1,000.00	\$1,000.00	\$0.00	State of Maine
STATE OF MAINE	005-055	\$25,000.00	\$25,000.00	\$0.00	State of Maine
STATE OF MAINE	007-018	\$3,300.00	\$3,300.00	\$0.00	State of Maine
STATE OF MAINE	009-051	\$36,600.00	\$36,600.00	\$0.00	State of Maine
STATE OF MAINE	005-030	\$1,000.00	\$1,000.00	\$0.00	State of Maine
STATE OF MAINE	011-030	\$10,000.00	\$10,000.00	\$0.00	State of Maine
STATE OF MAINE	011-051-A	\$15,000.00	\$15,000.00	\$0.00	State of Maine
STATE OF MAINE	011-033	\$2,000.00	\$2,000.00	\$0.00	State of Maine
STATE OF MAINE	011-162	\$17,900.00	\$17,900.00	\$0.00	State of Maine
STATE OF MAINE	011-044-B	\$2,500.00	\$2,500.00	\$0.00	State of Maine
GENERAL SERVICES ADM.	014-089	\$517,600.00	\$517,600.00	\$0.00	U.S.A.
MACHIAS, TOWN OF	013-014	\$3,536,100.00	\$3,536,100.00	\$0.00	Town Owned
MACHIAS, TOWN OF	015-068	\$14,400.00	\$14,400.00	\$0.00	Town Owned
MACHIAS, TOWN OF	011-035-A	\$4,000.00	\$4,000.00	\$0.00	Town Owned
MACHIAS, TOWN OF	06A-016	\$14,400.00	\$14,400.00	\$0.00	Town Owned
MACHIAS, TOWN OF	012-015	\$40,000.00	\$40,000.00	\$0.00	Town Owned
MACHIAS, TOWN OF	015-092-B	\$5,000.00	\$5,000.00	\$0.00	Town Owned
MACHIAS, TOWN OF	06A-012	\$10,700.00	\$10,700.00	\$0.00	Industrial Park
MACHIAS, TOWN OF	06A-009	\$7,500.00	\$7,500.00	\$0.00	Industrial Park
MACHIAS, TOWN OF	009-046	\$6,700.00	\$6,700.00	\$0.00	Town Owned
MACHIAS, TOWN OF	011-035	\$7,000.00	\$7,000.00	\$0.00	Town Owned
MACHIAS, TOWN OF	06A-015-A	\$12,300.00	\$12,300.00	\$0.00	Industrial Park
MACHIAS, TOWN OF	007-026	\$8,000.00	\$8,000.00	\$0.00	Town Owned
MACHIAS, TOWN OF	06A-014	\$15,800.00	\$15,800.00	\$0.00	Industrial Park
MACHIAS, TOWN OF	06A-015	\$17,000.00	\$17,000.00	\$0.00	Industrial Park

Property Owner	Parcel #	Full Assessment	Assessment Exemption	Residual Assessment	Description
MACHIAS, TOWN OF	06A-018	\$16,100.00	\$16,100.00	\$0.00	Industrial Park
MACHIAS, TOWN OF	06A-017	\$16,400.00	\$16,400.00	\$0.00	Industrial Park
MACHIAS, TOWN OF	015-086	\$138,900.00	\$138,900.00	\$0.00	Town Owned
MACHIAS, TOWN OF	007-005	\$145,100.00	\$145,100.00	\$0.00	Town Owned
MACHIAS, TOWN OF	06A-008	\$16,500.00	\$16,500.00	\$0.00	Industrial Park
MACHIAS, TOWN OF	012-023-A	\$39,600.00	\$39,600.00	\$0.00	Town Owned
SCHOOL UNION 102	007-021	\$135,000.00	\$135,000.00	\$0.00	Town Owned
MACHIAS, TOWN OF	007-013	\$5,000.00	\$5,000.00	\$0.00	Town Owned
MACHIAS, TOWN OF	011-099	\$43,800.00	\$43,800.00	\$0.00	Town Owned
MACHIAS, TOWN OF	011-108-A	\$3,000.00	\$3,000.00	\$0.00	Town Owned
MACHIAS, TOWN OF	011-151-A	\$26,000.00	\$26,000.00	\$0.00	Town Owned
MACHIAS, TOWN OF	009-020-A	\$60,000.00	\$60,000.00	\$0.00	Town Owned
MACHIAS, TOWN OF	014-055-B	\$352,100.00	\$352,100.00	\$0.00	Town Owned
MACHIAS, TOWN OF	06A-001	\$433,900.00	\$433,900.00	\$0.00	Industrial Park
MACHIAS, TOWN OF	06A-010	\$9,900.00	\$9,900.00	\$0.00	Industrial Park
MACHIAS, TOWN OF	015-089-A	\$1,216,000.00	\$1,216,000.00	\$0.00	Town Owned
MACHIAS, TOWN OF	011-036	\$7,600.00	\$7,600.00	\$0.00	Town Owned
DOWN EAST COMM HOSPITAL	007-017	\$16,400.00	\$16,400.00	\$0.00	Hospital
DOWN EAST COMMUNITY HOSPITAL	013-004	\$3,223,400.00	\$3,223,400.00	\$0.00	Hospital
COUNTY OF WASHINGTON	007-011-A	\$12,900.00	\$12,900.00	\$0.00	County
COUNTY OF WASHINGTON	014-104	\$15,200.00	\$15,200.00	\$0.00	County
COUNTY OF WASHINGTON	014-105	\$4,344,600.00	\$4,344,600.00	\$0.00	County
<b>Total</b>		<b>\$40,267,400.00</b>	<b>\$37,724,400.00</b>	<b>\$2,543,000.00</b>	

Source: Assessor's Office, Town of Machias

## Sewer System and Treatment Plant

The town's Wastewater Treatment facility consists of five miles of sewer collection system piping, two pumping stations and a treatment facility with the capacity to treat 370,000 gallons of wastewater per day.

During the early 1980s the sewer system was upgraded to separate stormwater drainage from sewage flows, and to reduce groundwater infiltration into the sewers. However, groundwater/stormwater infiltration remains an ongoing concern. Efforts have been made to reduce inflow by requiring that sump pumps and cellar drains not discharge into the sewer system. There is also a continuing effort to identify leaking sewers and replace them.

The sewage treatment plant was upgraded and a pretreatment plant was constructed to reduce the

Biological Oxygen Demand of the flow from a blueberry processor, before discharge into the sewer system. During 2003-2004 the town obtained funding to address combined sewer overflow problems, to reduce infiltration, and to upgrade the sewage treatment plant aeration system. Once completed these projects will improve current conditions and increase capacity for future users.

### **Public Works Department**

The public works department undertakes sewer line work, ditching, grading, culvert and drain line work, replacement of guardrail, mowing, and patching road surface. In addition, the department is responsible for some construction, repairs, and maintenance activities, at town-owned facilities. The department also plows and sands town roads during the winter.

The department has three full time staff positions and one part time on-call employee during the winter. The department has the following equipment:

- |   |      |
|---|------|
| 1. John Deere 310G Backhoe  | 2003 |
| 2. John Deere Skid Steer with broom, snow blower, pallet forks and bucket attachments   | 2003 |
| 3. Ford F350 Pickup with an 8ft. fisher plow  | 2003 |
| 4. John Deere riding lawn mower, John Deere push mowers and 2 John Deere grass trimmers | 2003 |
| 5. Big Tex 6.5 x 12 utility trailer   | 2003 |
| 6. International plow truck   | 2002 |
| 7. f550 plow truck  | 2001 |
| 8. International Truck  | 1988 |
| 9. Case W-18 loader   | 1979 |
| 10. Snow blower/sweeper   | 1985 |

The department operates out of the Public Works Garage. This facility is inadequate for present purposes as it has insufficient space to house equipment and lack of sand/salt storage. The Department proposes a cost analysis to plan for a new wing on the Public Works garage. They also suggest creation of a salt priority program to reduce time spent on spring cleaning.

The Maine Department of Environmental Protection has designated Machias's salt sand pile as a Priority 5, which means that it must be contained and covered by 2003. It was approved for 2,000 cubic yards. The Town has set some money aside to fund this project.

### **Solid Waste**

Solid waste is handled at the transfer station. The Town landfill was closed in 1995. The transfer station serves Machias, Marshfield, Whitneyville, and Roque Bluffs. It handled approximately 1,227.44 tons of municipal solid waste in 2003. Construction Demolition Debris is put in a 50 yard open roll-on container. The transfer station is licensed to burn clean wood. White goods are recycled with the rest of the metals. In 2003 the town recycled 407.63 tons of material and 450 tons of metal for a recycling rate of 43.50% (including a returned bottle credit

of 5%).

### **Machias Valley Airport**

The town-owned airport is located between US Route 1 and the Machias River, to the west of town. It has one of the higher small aircraft usage rates in the State, because of its use as an aerial spraying base. Machias Valley Airport is a general aviation airport, serving small utility type aircraft. Expansion of this facility is constrained by the short runway (2,900 ft), the Machias river, US Route 1, and wetlands.

The region, under the town's leadership, is currently pursuing a regional airport at a different site that would allow construction of a 5000 foot runway thereby accommodating business/corporate general aviation aircraft to land. Consultants are currently conducting environmental studies for the new site in order to update the Machias Valley Airport Master Plan.

### **Machias Water Company**

The Town is a minority (48%) stock holder in the water company. The extent and quality of its services have a direct bearing on the future development of Machias. A safe and sufficient water supply is vital for drinking water and for fire fighting. This is especially critical in areas of relatively high population density, such as the central area of Machias where private wells are not an option.

As a result of deteriorating quality of the water drawn from the Machias River, the Water Company had to find a replacement source of water. In 1965 the Water Company developed a production well (432,000 gallons per day) on the north side of US Route 1 approximately 2.5 miles from the Whitneyville town line. In 1999 the water company constructed a replacement standpipe (500,000 gallon capacity) on Court Street to increase storage capacity and pressure and in 2003 another well was developed (one million gallons per day). Current demand in Machias is 210,000 gallons per day. Therefore supply and storage issues are fully addressed for the foreseeable future. Future needs include replacing infrastructure (water mains) however the Water Company reports no pressing need at this time.

Water pressure in the Machias Water system is excellent. The minimum permissible fire hydrant pressure is 20 psi. Water pressure in Machias ranges from 40psi to 90psi depending on location and there are no areas of the town where the water pressure is below 20 psi. There may be a need to replace old water lines in older areas of the town where there is leakage or the potential for it.

### **Public Boat Ramp**

A public boat ramp gives public access to the Machias River near Helen's Restaurant. The public works department maintains the area and launches and retrieves the sectional wooden ramp seasonally.

## **PUBLIC SAFETY**

### **Police Department**

The police department is housed in the Public Safety Building (completed 1991), which also contains the fire department and the ambulance service. There are four full-time police officers, and eight reserve police officers. There is one part time secretary to provide administrative assistance. The police department has two cruisers (2006 and 1999).

The department has completed recent upgrades to computerize their records and to provide wireless networking and remote surveillance capabilities. The department responded to 1960 calls for service in 2005. This is a 12.8% increase from the previous year. The Chief of Police reports that the most significant areas influencing demand for police action involve alcohol and drug consumption and abuse as well as domestic violence, theft and fraud.

### **Fire Department**

The six-bay fire station has the following equipment:

1. Sterling Pumper Truck     2004    1,000 gallon tank; 1,500 gallon pumping capacity
2. Freightliner Pumper Truck   1994    2,500 gallon tank; 1,250 gallon pumping capacity
3. International Rescue Truck   1994    Includes jaws of life
4. Thermal Imaging Camera    2001

To fight fires outside the area served by fire hydrants, the department has to depend on the equipment of neighboring fire departments under mutual aid agreements. Machias has mutual aid agreements with Jonesboro, Machiasport, East Machias, and Marshfield. Also through mutual aid, the fire department has access to a Cascade air tank refilling system, stationed at Jonesboro and East Machias. The Cutler navy base also has one of these systems. A "Cascade" is a mobile system that allows fire fighters' air tanks to be refilled at the scene of a fire. The fire department is equipped with a "jaws of life" and a thermal imaging camera.

If the fire department were at full strength, it would have 30 personnel. However at present there are 26 volunteers including two full-time staff. Demands upon the fire department fluctuate over the years. In 1987, there were 87 calls; in 1993, there were 142, and by 2005 there were 112 which the Fire Chief attributes to improvements in fire prevention efforts.

Future requirements for the Fire Department include the need to reconfigure the space within fire station so that the ambulance can fit relative to the existing heating system. In addition the department needs a "Quint" ladder/pumper truck to provide access to upper stories. Volunteers raise significant sums of money for fire department equipment including \$45,000 for the jaws of life, \$11,000 toward the thermal imaging camera and, currently \$14,000 for a ventilation system for the fire station.

### **Ambulance Service**

The ambulance service is housed at the same location as the fire department and the police department. It has two ambulances; a van type, and a Type 3 box style. The van type ambulance will need to be replaced within 5 years, with another box style ambulance. The service added a defibrillator to its equipment in 1993.

The service is staffed by 16 volunteers, including the chief. Three hold Intermediate emergency Medical Technician licenses from the State, the rest have basic licenses. As it has more qualified personnel, the Machias Ambulance Service assists ambulance services in Jonesport and Dennysville, which have only basic licensed personnel. The ambulance service also has mutual aid agreements with Petit Manan Ambulance Service (based in Milbridge), and Lubec Ambulance Service.

The service covers the Town of Machias, and other areas under contract: Bucks Harbor, Cutler, East Machias, Holmes Bay section of Whiting, Jonesboro, Machiasport, Northfield, Roque Bluffs, Whitneyville, the Down East Correctional Facility, and the University of Maine-Machias. The service responded to 1,000 calls in 2005 level with the number of calls in 2004.

## **CULTURAL SERVICES**

### **Porter Memorial Library**

Porter Memorial Library was originally established as a Library Society in the early 1800's and opened to the public on September 15, 1893. It is housed in an historic building on Court Street and administered by the board of trustees of the Library Association. Henry Homes Porter, a Chicago businessman and son of Rufus King Porter, donated \$10,000 in 1891 for a library to be built and named in honor of his father.

The building is constructed of Marshfield granite. The mantel of the fireplace in the Reading Room is made from a slab of rare black granite, quarried in Addison, Maine. The first naval battle of the Revolutionary War was fought nearby, and the ballast stones from the captured British warship Margareta are also incorporated in the base of this fireplace.

The Porter Library is supported by the Town and private donations. A full program of library activities for both adults and children is undertaken and recent renovations were supported by a CDBG Historical Preservation grant.

### **Burnham Tavern**

This pre-revolutionary war building houses a museum and is administered by the Daughters of the American Revolution.



**Recreation**

The Town owns tennis courts, and a softball field. There is an extensive program of activities, including programs for both adults and children. The University of Maine at Machias collaborates in several of the programs through their Recreation Management faculty. Student volunteers have been valuable in assisting in the programs.

The scope of the recreation program is limited by the few facilities that are available, especially during the winter.

**PUBLIC UTILITIES AND SERVICES**

**Mail Delivery.** The Machias Post Office (04654) is located on Court Street in the United States Post Office building. Mail is delivered through use of post office boxes and by carrier.

**Electrical Service.** Bangor Hydro

**Telephone Service.** Verizon

**Television, Cable, and Radio**

WLBZ - Channel 2 (NBC affiliate) Bangor  
WABI - Channel 5 (CBS affiliate) Bangor  
WVII - Channel 7 (ABC affiliate) Bangor  
Maine PBS- Channel 13 (PBS affiliate) Calais  
Adelphia Cable  
WQDY (92.7 FM) Calais simulcast with WALZ (95.3) Machias  
WCRQ (102.9) Calais  
WMED (89.7 FM) (NPR affiliate) Calais  
St. Stephen Information Radio (96.5)  
International Border information

**Newspapers**

Bangor Daily News (daily) Downeast Edition  
Calais Advertiser (weekly)  
Downeast Coastal Press (weekly) Cutler  
Ellsworth American (weekly)  
Lubec Light (monthly)  
The Moneysaver (weekly advertising supplement)  
Machias Valley Observer (weekly)  
Quoddy Tides (twice-monthly) Eastport  
Downeast Times (weekly) Calais

**Internet Providers.** There are a number of Internet service providers with the local access numbers. The town is actively involved in efforts to improve telecommunications infrastructure in Washington County with the Washington County Council of Governments.

**HEALTH CARE**

DOWNEAST COMMUNITY HOSPITAL, <http://www.dech.org> DECH, is located in Machias 45 miles to the south and west of Calais. It is a 36-bed 24-hour acute care facility and has an active medical staff of 25 practitioners.

MAINE VETERANS HOME. Completed in 2005, this facility is attached to the Downeast Community Hospital and provides 30 beds for veterans needing assisted living facilities.

CALAIS REGIONAL HOSPITAL, <http://www.calaishospital.com>, serves a population of approximately 14,000 from Topsfield to the North, Wesley to the West and Eastport to the south. Calais Regional is licensed by the State of Maine as a Critical Access Hospital and as such is licensed for 15 acute care beds and 10 swings beds and has a 24-hour physician staffed emergency department. CRH will begin construction of a replacement facility in 2005 and plans to welcome its first patient into the new facility by the summer of 2006.

ATLANTIC REHAB is a privately owned, 60 bed nursing and rehabilitation facility licensed by the State of Maine, located across the street from the Calais Regional Hospital. The nursing home offers an intermediate level of long term care including medical coverage, nursing and personal care, social services, and individual activity programs. Atlantic Rehab provides a home-like atmosphere for people who require nursing care. Next door is another facility, Washington Place, that provides an assisted living environment for 24 individuals.

WASHINGTON COUNTY PSYCHOTHERAPY ASSOCIATES provides behavioral health services in Washington, Hancock and Penobscot Counties including crisis services, in-home counseling, outpatient counseling, geriatric assessment and consultation, children's crisis residential services and children's residential treatment services.

DOWNEAST HEALTH SERVICES is a local, non-profit agency that serves families in Hancock and Washington County. The major programs include the Women, Infants and Children nutritional program (WIC), Family Planning, the Preventive Health Program (PHP), a maternal and child health nursing home visit program (MCH), and a social service program for pregnant and parenting adolescents (SSA).

The EASTERN AGENCY ON AGING (EAA) makes it possible for persons 60 and older to remain in their home longer and more comfortably. To meet that goal, the Agency provides a variety of services that are available to Machias residents. Through a contract with Washington/Hancock Community Agency, EAA provides transportation in Machias and the vicinity. Many senior citizens rely on this service for transportation to medical appointments.

COMMUNITY HEALTH AND COUNSELING SERVICES (CHCS) provides a variety of physical and mental health services in Calais and surrounding communities. The Machias branch offers counseling for individuals, couples and families, and information and education to the general public about mental health issues. All counselors are legally qualified to be practicing through licensure, registration, or certification. Workshops and courses that address many topics are provided by CHCS.

SUNRISE COUNTY HOMECARE SERVICES has offices in Machias, Lubec and Calais. They provide and coordinate home care services such as visiting nurses; home health aides; physical, occupational and speech therapy; senior companions; homecare telemedicine, medical social work; and homemaker services.

The DEPARTMENT OF HUMAN SERVICES administers several programs to assist low income residents in Machias and the surrounding area. Recipients of services provided by this department must meet low income guidelines to qualify for the following programs: AFDC, food stamps, Medicaid.

EASTERN MAINE MEDICAL CENTER, <http://www.emh.org>, is a 411 bed facility and one of only three trauma centers in the state. It is located in Bangor, one hundred-twenty miles away. Their 300 physicians provide primary care hospital services, as well as specialty and intensive services. There are other medical facilities available in Bangor, including St. Joseph's Hospital.

DIALYSIS CENTER. Fresenius Medical Care opened a dialysis center in 2003 on the site of the former Gates Fiber Extrusion plant in Eastport. Formerly patients in the area had to make the grueling trip back and forth to Bangor up to four times a week. Making this level of care available on the local level is a huge step for the dialysis patients in the region.

DISCOVERY HOUSE. Scheduled to be opened in 2005, Discovery House will provide an out-patient center for substance abuse on Beech Street and is planned to serve 300 clients.

## **EDUCATION**

The town of Machias is a member of School Union 102 which includes the towns of Machias, Wesley, Whitneyville, Marshfield, Northfield and Jonesboro. Each town has elected school boards and a joint board that oversee school affairs. Jonesboro, Machias, and Wesley have elementary schools, but only Machias has a high school. Some high school students from Union 102 attend Washington Academy, in East Machias. The town owns and maintains the buildings except for the Elementary Schools in Wesley and Jonesboro. There are approximately 18 Union 102 employees including any staff involving a shared cost among all schools. The bulk of other employees are teachers within individual schools and these numbers are included in the Economics chapter.

Grades K-8 attend the Rose Gaffney Elementary School on Garfield Street, and grades 9-12 attend the Machias Memorial High School, which is located on Route One A.

ROSE M. GAFFNEY ELEMENTARY SCHOOL. The Machias Elementary School: Rose M. Gaffney, was expanded in 1986 and improvements were completed in recent years including a new roof and a new ventilation system. By the early 1990s the school experienced overcrowding. Since then the number of students has declined however enrollment has increased by 10 percent in the last 3 years. The facility is adequate for current and projected enrollments.

MACHIAS MEMORIAL HIGH SCHOOL. Constructed in 1954, the high school has recently received cosmetic improvements but is inadequate by modern standards. The student body increased during the 1990s reaching a peak of almost 210, during 1994-95. The number of students declined during the next ten years to 130 in 2005 as the smaller class sizes from the elementary level pass through into the high school and other Union 102 towns exercise their right to school choice. This trend has relieved pressure on the school facilities, but the high school still needs to be modernized. Machias Memorial High School is ranked 12<sup>th</sup> in the state for new construction funds.

Table I-3 PUBLIC SCHOOL ENROLLMENT OF MACHIAS RESIDENTS

School Year	Elementary	Secondary	Total
October, 2005	311 Total enrollment	130 Total enrollment	430 Total enrollment
October, 2005	217	56	273
October, 2004	186	70	256
October, 2003	177	70	247
October, 2002	187	84	271
October, 2001	200	94	294
October, 2000	216	109	325
October, 1999	209	90	299
October, 1998	227	87	341
October, 1997	214	89	303
October, 1996	219	100	319
October, 1995	223	108	331

Source: Department of Education

Maine State Planning Office population projections suggest that there will be a 12.1 percent decrease in the number persons between the ages of 5 and 17 between 2004 and 2015. Currently, there are 2 teachers per grade (pre-K-8 level) and teachers are departmentalized between grades 9 to 12. There is an average student/teacher ratio of 8 to 1 at Machias Memorial High School and an average student/teacher ratio of 10 to 1 at the Rose M. Gaffney Elementary School.

Census figures show that the number of Machias residents who are high school graduates (81.9%) is higher than that of Washington County (79.9%) but lower than the State of Maine average (85.4%). However, the town ranks higher in college graduates (23.5%) than the County (14.7%) and the State (22.9%).

During the 2004-05 school year, the high school dropout rate was 3.73% and it remains stable in the current year. Machias Memorial High School has a very high graduation rate.

State financial support of local education has declined over this period and additional local funds will be required just to maintain the present level of instruction. Education accounts for the largest percentage of local budgets. As enrollment declines, communities may not be able to continue funding education at the necessary level of service to support important programs.

### **Learning Results**

The Maine State Legislature adopted the State of Maine *Learning Results* in 1996, establishing learning standards for all Maine students educated at public expense. The legislation also required that a new system for assessing student progress be established.

The assessment system has both State and local components. The State component includes the Maine Educational Assessment (MEA) that is given to students in grades 4, 8, and 11. The MEA has been aligned with the Learning Results, with individual student scores being reported in five

content areas. State initiatives also include assisting educators in clarifying standards for local assessment systems, developing and evaluating performance tasks and student portfolios, serving as a clearinghouse for exemplary local assessment practices, and developing a framework for alternative assessments to ensure that all Maine students reach high standards.

#### MEA Average Score Scale

(561-580)	Exceeds the Standards
(541-560)	Meets the Standards
(521-540)	Partially meets the Standards
(501-520)	Does not meet the Standards

#### Maine Educational Assessment (MEA) Results 2001-2002

Subject	Shead High School	Lubec	Machias Memorial	Washington Academy	State
Reading	537	544	536	537	540
Writing	529	539	533	529	536
Math	523	523	524	524	528
Science	524	529	529	526	527
Social Studies	524	530	532	529	530
Visual / Performing Arts	519	527	529	523	525
Health	535	536	536	535	538

#### Other Educational Opportunities

HEAD START is a comprehensive program for three to five year old children and their families. The Machias Head Start Program provides developmentally appropriate classrooms which encourage self-selection and problem-solving through educational and social experiences for children. Services are offered to parents and families in the areas of health, nutrition and social services. Twenty children are currently enrolled in this center. Head Start classrooms run four days a week for four hours a day 32 weeks a year. The program follows the public school calendar beginning in September and ending in May.

UNIVERSITY OF MAINE AT MACHIAS (UMM). <http://www.umm.maine.edu> This 1,000 student branch of the University of Maine System is less than an hour from Calais, and offers Bachelor and Associate degrees in a wide range of subjects including business education and administration, recreation management, biology, environmental studies, English, and history. Many of its students are "non-traditional" (older persons returning for their degrees). The University is linked to all the other branches of the system by inter-active TV. Associate degrees in Science, Business Administration, Liberal Arts, and other subjects may be earned without entering a "traditional" university classroom. ITV is funded by a grant and administered through the University of Maine in Augusta.



The University of Maine system also offers a wide range of daytime and evening classes at its Calais Center, located at the Unobskey School on Main Street downtown. Enrollment at the center varies from semester to semester. Approximately 120 students are currently enrolled at the Calais Center.

The Washington County Vocational Institute was established in 1969 and became WASHINGTON COUNTY COMMUNITY COLLEGE in 2003. The Calais campus is situated on 400 acres of land overlooking the St. Croix River. Washington County Community College is one of seven institutions in the Maine Community College System. Thirty-six of WCCC's 38 catalog programs are located in Calais, training students for employment in several diverse occupations - from construction and mechanical trades to food service and business studies. Several of these programs articulate into degree programs at other colleges and Universities. The College has the capacity for 500 full-time students, while the Continuing Education Division serves an additional 400 part-time students at sites throughout Washington County.

The Training and Development Corporation's High School Equivalency Program has been active for eight years. The TDC provides classes and counseling services to people who have not completed high school. They also provide a broad range of services to both program participants and area employers. This organization provides services only to clients who meet the Program eligibility requirements. The Training and Development Corporation also administers the Migrant and Seasonal Farmworker Job Training Program.

WASHINGTON COUNTY COMMUNITY COLLEGE/MARINE TECHNOLOGY CENTER <http://www.wctc.org> (Until recently named the Marine Trades Center, and also known as the "boat school") is the Eastport campus of the Washington County Community College, which has its main campus at Calais. The MTC offers high quality unique courses in commercial fishing, aquaculture, marine mechanics, boat building technology, and marine and industrial coatings (specializing in "high tech" finishes). The school's modern and well-equipped classrooms and shops are located at Deep Cove. The MTC owns and operates multi-purpose fishing vessels that are used for instructional purposes. The facility attracts students from around the world with enrollment of 40-50. The school also provides support services to the area's expanding aquaculture industry. The school's small, self-contained waterfront on Deep Cove, featuring a boatyard and marine-lift, is the site of cage constructing, work boats hauling for repair or maintenance, and the comings and goings of fish-farmers, fishermen, and marine researchers.

## POLICIES AND IMPLEMENTATION STRATEGIES

Goal: Machias will plan for, finance and develop an efficient system of public facilities and services to accommodate anticipated growth and economic development.			
Policy	Implementation Strategy	Responsibility	Timeframe
<b>Local Facilities and Services</b>			
Ensure that Machias' public facilities continue to meet the needs of the community.	Amend the Subdivision, Zoning and Street Design Ordinances, as necessary, to assure that developers are required to provide adequate facilities for their developments.	Selectmen	On-going



<b>Goal: Machias will plan for, finance and develop an efficient system of public facilities and services to accommodate anticipated growth and economic development.</b>			
<b>Policy</b>	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Timeframe</b>
Assure that development does not overtax community services and facilities, and that it pays its share of the cost of capital improvements needed to serve that development.	Consider requiring a service payment in lieu of taxes from non-profit properties who regularly require public services.	Selectmen	Short Term
	Assess the feasibility of developing an equitable system of charges for services to tax exempt property owners, including county and state entities.		
Local facilities will be maintained or replaced to address immediate community needs with priority assigned systematically.	The Town will address future capital funding needs for replacement items through the Capital Improvement Plan	Town Manager; Selectmen; Budget Committee	Short-Term (2-5 years)
	Improve coordination with the appropriate agency (e.g. Water Department) to give an opportunity to review and comment on proposed major developments (defined in Site Plan Review Ordinance).	Planning Board; Selectmen	Immediate
	Consider development of an impact fee to support the additional tax burden of new/expanded services for major developments if they cannot be accommodated by existing capacity	Selectmen; Water and Sewer Departments, Planning Board	Short-Term (2-5 years)
The Town will develop maintenance plans for existing and future facilities.	Maintenance plans to include Town building; public works; water department, sewer plant and schools.	Town Manager; Selectmen/ School Committee; School Department	On-going
	Support and encourage training for full-time public employees	Town Manager and Board of Selectmen	On-going
	Funds will be appropriated yearly to adequately maintain facilities to minimize need for more expensive replacement	Selectmen; Finance Committee	On-going
Local facilities maintenance and replacement will be coordinated with Downtown Revitalization efforts.	Coordinate storm/sanitary separation with road improvements and any Waterfront Development improvements.	Selectmen; Town Staff	Immediate
<b>Water Supply</b>			
Assure that the Town's water supplies remain clean.	Develop a Wellhead Protection Ordinance	Planning Board/ Selectmen	Immediate

<b>Goal: Machias will plan for, finance and develop an efficient system of public facilities and services to accommodate anticipated growth and economic development.</b>			
<b>Policy</b>	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Timeframe</b>
	Amend the Zoning and Subdivision Ordinance to require that in areas where homeowners obtain their water from wells, developers of the subdivisions demonstrate that the developments will have no adverse impacts on the quantity or quality of well water on adjacent properties (part of wellhead protection ordinance).	Planning Board/ Selectmen	Short-Term (1-2 years)
	Pursue a controlling interest in the Water Company; pursue replacement of aging water mains.	Selectmen	Short term
<b>Sewage Treatment and Disposal</b>			
Continue to upgrade and maintain the sewage treatment system as mandated by Federal and State law.	Complete efforts to reduce infiltration of stormwater into sanitary sewers	Selectmen/ Town Staff	On-going
Ensure that rural development is located on land that is capable of supporting on-site water and subsurface sewage disposal systems	Include language in the Zoning Ordinance to require that, for structures involving subsurface sewage disposal, a plumbing permit be obtained prior to a building permit.	Planning Board/ Selectmen	Immediate
<b>Solid Waste Management</b>			
Provide adequate solid waste disposal for the citizens of Machias.	Form a recycling committee and develop a strategy for recycling in Machias.	Town Manager	Short –term
	Educate school children and the general public on the importance of recycling, reduction and reuse.	School Dept.	On-going
<b>Emergency Services</b>			
Ensure that police, fire and ambulance services are adequate.	Annually review the Machias' fire, police and ambulance capabilities to determine whether they are meeting the Town's needs, and make changes as appropriate.	Town Manager and Department Heads	On-going
	Review Police Department and Fire Department staffing levels and operations.	Town Manager and Department Heads	On-going
	Implement Town street naming and building numbering according to E911 system by end of 2006 (DONE?)	Town Manager	Immediate
	Continue to coordinate regional ambulance Services	Selectmen/Police Chief	On-going
	Continue to participate in the regional approach to emergency response for hazardous materials and chemicals spills.	Fire & Police Departments/ Town Manager/Wash Co.	On-going
	Amend the Zoning and Subdivision Ordinance to require that in areas not served by the Water District, developers demonstrate the availability of adequate water supplies for fire fighting purposes.	Planning Board/ Selectmen	Immediate

<b>Goal: Machias will plan for, finance and develop an efficient system of public facilities and services to accommodate anticipated growth and economic development.</b>			
<b>Policy</b>	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Timeframe</b>
<b>Schools</b>			
Assure that school facilities are adequate to meet the community's needs over the next decade.	Maintain the Rose Gaffney Elementary School and Machias Memorial High School in good condition	School Committee/ Superintendent	On-going
	Plan for reconstruction of Machias Memorial High School in conjunction with available state funds	Town Manager/ School Board/ Superintendent	Short Term
<b>Cemeteries</b>			
Ensure that the Town has adequate cemetery space to meet the future needs of the community.	Continue to monitor the need for additional cemetery space and purchase land or transfer existing, Town-owned land to cemetery use, as appropriate.	Town Manager	On-going
<b>Education about Services</b>			
Local services will be visible and understood by Machias citizens.	The Town will continue to educate its citizens on the importance of recycling through the use of fliers, informational meetings and school programs.	Town Manager; Selectmen; Chamber of Commerce	On-going
	Literature on the local recycling program will be made readily available to residents at the Town office.	Town Manager and staff	On-going
	Work to increase volunteerism; encourage clean up of yards around homes, sidewalks and streets around businesses. Enforce the junk car/ junk yard and other applicable ordinances.	Selectmen; Code Enforcement Officer; Health Officer	On-going
<b>Regional Coordination</b>			
The Town will cooperate on the delivery of regional services and endeavor to achieve economies of scale where feasible.	Continue to provide 24 hour emergency services and support grant funding efforts for facility improvements and staff	Selectmen	Short term
	Cooperate with WCCOG to share Capital Improvement Program needs with neighboring communities and coordinate major purchases where feasible.	Town Manager; Selectmen	Short term
	Evaluation of and participation in regional efforts to address cooperative means of reducing regional administrative costs for the school district as well as exploring ways to reduce local costs.	Selectmen; Town Manager; Union 102- School Boards Other regional Unions	Immediate

## SUMMARY

Machias has a wide variety of facilities and services provided by the public and private sectors.

This is the heritage of a once much larger Town as well as a strong spirit of volunteerism and cooperation among citizens. It is also the result of prudent investments that will continue with the priorities set in this chapter and in the Capital Improvement Plan. Past efforts at regionalizing services will serve Machias well as costs drive towns to consider more cooperative ways to provide health care, education and emergency services to their communities.

## **J. FISCAL CAPACITY**

The purpose of this section is to:

1. Summarize recent changes in Machias' fiscal condition and predict how these changes might affect the Town in the future;
2. Project future revenues and expenditures trends;
3. Identify major capital expenditures projected for Machias over the next ten years; and
4. Assess Machias' capacity to pay for these expenditures.

### **Key Findings and Issues**

Machias tax rates are higher than most Washington County communities partially due to a very proportion of tax exempt properties (32 percent). These properties cause an extra burden that must be shifted to residential and commercial taxpayers.

Between 2000 and 2004, municipal general fund revenues increased from \$4,755,356.52 to \$5,748,405.00 and expenditures increased from \$4,490,429.05 to \$5,902,036.00. During that time, education showed the greatest dollar expenditure increase, an increase of over \$248,102.00.

Property tax revenue increased 12.7 percent between 2000 and 2005; valuation of the town rose 0.7 percent, and the property tax rate increased by 7.0 percent from \$0.01990 per \$1,000 in 2000 to \$0.02370 per \$1,000 in 2005. Part of the tax rate increase in 2005 was driven by the state mandate that towns must match the homestead exemption for resident homeowners.

## **VALUATION**

The primary method of generating revenue within the Town is through property taxes. These taxes are assessed on local property owners according to the value of their real estate and personal property. This assessment is known as the municipal valuation (the estimated value of all taxable property in Town) and is determined by the local tax assessor. According to the State of Maine Municipal Valuation Return Statistical Summary, Machias' total real and personal property valuation was \$54,291,400 in 1992, \$73,117,736 in 1996, and \$82,081,400 in 2005 representing an almost 35 percent increase from 1992 to 1996 and another 12 percent increase from 1996 to 2005. These increases were due to a re-evaluation in 1994, new construction, and higher property values.

State law provides for tax exemptions for certain types of property, such as: charitable and benevolent, religious, literary and scientific, and governmental. Generally, the previously mentioned properties would be totally non-taxable by exemption. Partial exemptions also exist for veterans of foreign wars or their widows that have not re-married; individuals who are legally blind and homestead exemptions for the homeowner's primary residence. The state does provide some reimbursement to the municipalities for veteran and homestead exemptions.

The state also places a total valuation on the city, known as the State Valuation. Every year the Maine Revenue Services Property Tax Division reviews all arms length sales<sup>1</sup> that have occurred in each community. These sales are compared to the town's local assessed values to determine the assessment ratio or the percentage of market value that the town is assessing. The state's valuation is used to determine the amount of revenue sharing the town will receive and the portion of the county tax that the municipality will pay.

The state indicates that a town should be revalued at least once in every 10-year period. However, they also indicate that a revaluation must be preformed when the assessment ratio falls below 70% of market value. The last town wide revaluation was conducted in 1995. The town's current state certified assessment ratio is 80 % of market value. Machias is therefore adjusting its Homestead Exemption to 90% for the 2005 tax year and revaluation of all properties is recommended as soon as possible.

### **Valuations and Taxes**

Machias' total valuation has increased 0.7 percent in the past five years from \$81,542,453 million to over \$82 million. Real estate and personal property taxes have increased 19.9 percent from \$1,622,694.81 million to \$1.9 million, with the largest single year increase between 2002 and 2003 at 8.1 percent.

**TABLE I-1 MACHIAS TOTAL VALUATION AND TAXES**

Tax Years	Total Valuation	% Change	Real Estate and Personal Property Taxes	% Change	Tax Rate	% Change	State Valuation Ratio (%)
2001	81,542,453	-	1,622,694.81	-	0.01990	-	100
2002	80,935,500	-0.7	1,610,616.45	-0.7	0.01990	0	100
2003	81,767,000	1.0	1,741,637.10	8.1	0.02130	7.0	100
2004	80,935,500	-1.0	1,712,509.00	-1.7	0.02130	0	100
2005	82,081,400	1.4	1,945,329.19	13.6	0.02370	11.3	90

Source – Machias Municipal Valuation Returns

### **MIL RATE**

After the town's budget has been approved and all applicable state and local revenues are deducted from the approved expenditures, the town arrives at the dollar amount that will be raised through tax revenues. This amount is called the net commitment or appropriation. The local assessor arrives at a valuation for each taxable property in the town and the taxpayers are assessed their share of the tax burden through a mathematical calculation. The total appropriation is then divided by the total taxable or assessed valuation of the town to arrive at the minimum tax rate. This rate is usually expressed in dollars per thousand-dollars of valuation, or in decimal form, commonly referred to as the mil rate. The difference between the amount that is actually

<sup>1</sup> A sale that occurs between a willing seller and a willing buyer without any extenuating circumstances. Examples of non-arms length sales could be estate sales, interfamily transfers, foreclosure sales and auctions.



committed to the collector and the total appropriation is called overlay. Overlay is commonly used to pay any tax abatements that are granted during that tax year. Any overlay that remains at the end of the year is usually placed into the general fund. The overlay cannot exceed 5% of the total appropriations. Since the mil rate is a direct result of a mathematical calculation, fluctuations in this rate will occur from year to year if there is a change in the total valuation or the tax commitment. The mil rate in 2001 was \$0.01990 and in 2005 was \$0.02370.

Maine Municipal Association (MMA) has ranked local property tax burden for all Maine municipalities. Their calculation considered municipal full value mil rate, commitment, median household income, median home value and property tax. The most recent data available is from 1999. The table below shows selected municipalities in Washington County, as well as the countywide average. A rank of 1 was the highest burden and 486 was the lowest. Machias was listed as number 35.

**Table I-2 TAX BURDEN RANKINGS**

Municipality	Tax Paid as % of Median Income	1999 Burden Rank
Lubec	6.61	15
Harrington	6.59	16
Eastport	6.56	17
<b>Machias</b>	<b>5.78</b>	<b>35</b>
Steuben	4.87	69
Jonesport	4.77	73
Milbridge	4.57	96
Addison	4.33	119
Columbia Falls	4.2	131
Calais	4.03	151
Cherryfield	3.66	202
Columbia	3.61	210
East Machias	3.34	259
Jonesboro	2.72	350
Beddington	1.32	468
Centerville	1.18	472
Deblois	0.89	479
Washington County Average	3.44	253
Source: Maine Municipal Association 1999		

## MUNICIPAL REVENUES AND EXPENDITURES

### Revenues

Table I-3 provides a summary of the combined general fund revenues for the town of Machias from 2000 through 2004. Total revenue rose from \$4.7 million in 2000 to \$5.7 million in 2004. The largest revenue increases were from intergovernmental revenues for education (29 percent increase), property taxes (12.7 percent increase) and other income (13.6 percent increase).

Intergovernmental revenues consist of road maintenance funds and state park, tree-growth, veteran and homestead reimbursements. Charges for services and other are those dollars that are

received through departmental user fees, photocopy charges and application fees. Other financing sources include transfers from other funds, interest and municipal revenue sharing.

**Table I-3 TOWN OF MACHIAS REVENUES 2000-2004**

Revenues	2000	2001	2002	2003	2004
General Property Taxes	1,519,140	1,606,189	1,595,827	1,592,872	1,712,509
Excise taxes, licenses, permits and fees	226,266	225,762	242,661	248,062	281,741
Intergovernmental - education	2,519,400	3,072,519	2,804,983	2,782,131	3,250,774
On behalf payments – State of Maine		411,816			
Intergovernmental - other	427,034	337,158	352,996	336,055	440,248
Charges for Services					22,085
Interest	48,078	93,373	37,989	20,124	4,525
Other income	15,436	31,512	136	8,442	36,523
<b>Total revenues</b>	<b>4,755,356</b>	<b>5,778,331</b>	<b>5,034,596</b>	<b>4,987,685</b>	<b>5,748,405</b>

Source: Machias Town Reports

### Expenditures

Expenditures in the same five year period climbed from \$4.5 million in 2000 to \$5.9 million in 2004, an increase of 34.1 percent. Education, with a dollar increase of over \$248,102 represents the largest dollar expenditure increase. Even with this increase, education constitutes a smaller proportion of total expenditures, 65 percent, in 2004 than it did in 2000 when it constituted 80 percent of the total. The expenditures for town administration within this same period have risen by 17 percent. Police Department expenditures has increased by 22.4 percent reflecting the significant increase in demand on their services, see Chapter I - Public Facilities.

**Table I-4 TOWN OF MACHIAS EXPENDITURES 2000-2004 (includes capital expenditures)**

Expenses	2000	2001	2002	2003	2004
Current	186,094	197,226	209,790	218,239	208,090
General government					
Police department	149,798	150,953	157,761	174,286	183,345
Fire department	144,391	167,567	166,619	181,323	184,219
Highways and Streets	175,781	236,063	225,069	235,384	230,192
Library	26,000	26,000	26,000		
Education	3,587,377	4,312,571	3,861,302	3,854,171	3,835,479
On-behalf payments – State of Maine		411,816			440,248
Recreation	26,268	26,282	22,851	32,154	12,965
General Assistance	4,175	8,541	5,446	2,811	2,848
Airport	7,658	5,536	5,897	11,686	17,410
Public Safety Building	12,239	13,019	13,208	15,775	12,351
County tax	129,125	137,639	134,717	146,682	157,511
Third party Requests					32,010
Other	5,062	41,569	5,574	32,862	28,061
Debt service	36,454	59,195	52,227	68,889	
Principal					213,204
Interest and other Charges					41,512
Capital outlay		763,722			302,591
<b>Total expenditures</b>	<b>4,490,429</b>	<b>6,560,801</b>	<b>4,886,467</b>	<b>4,974,262</b>	<b>5,902,036</b>

Source: Machias Town Reports

The Fund Balance Reconciliation provided in Table I-5 provides an overview of the town's financial situation as presented in the annual audits.

**TABLE I-5 TOWN OF MACHIAS FUND BALANCES RECONCILIATION 2000-2004**

	2000	2001	2002	2003	2004
Total Expenditures	4,490,429.05	4,57,105.54	4,886,467.76	4,974,262.00	5,902,036.00
Excess (deficiency) of revenues over expenditures	264,927.47	(59,454.41)	148,128.70	13,423.00	(153,631.00)
<b>Other financing sources (uses)</b>					
Sale of Town owned property				26,917.00	45,130.00
Lease Proceeds			221,000.00		
Operating transfers in	21,843.10	15,000.00		100,997.00	
Operating transfers out	(122,389.93)	(62,344.26)	(432,521.62)	(20,025.00)	
Total other financing sources (uses)	(100,546.83)	(45,344.26)	(211,521.62)	107,889.00	134,000.00
Excess (deficiency) of revenues and other sources over expenditures and other uses	164,380.64	(106,798.67)	(63,392.92)	121,312.00	
<b>Fund balance-beginning</b>	970,480.16	1,144,944.07	1,037,049.06	1,103,157.00	1,220,786.00
Restate education for prior year unrecorded revenue			120,719.17		
<b>Fund balance-beginning, restated</b>			1,157,768.23		
Net increase in reserved fund balance	1,312.59	1,612.35	16,788.21	5,239.00	
Net increase (decrease) in designated fund balance	8,770.68	(2,708.69)	(8,006.25)	(8,922.00)	
<b>Fund balance-ending</b>	1,144,944.07	1,037,049.06	1,103,157.27	1,220,786.00	1,246,285.00

Source: Machias Town Reports

### Long Term Debt

Table I-6 lists the outstanding bonds which comprise Machias' long term debt, as well as total amounts and remaining balances. The total remaining balance as of June 2006 was \$1,197,330.13.

**TABLE I-6 TOWN OF MACHIAS MAJOR LONG TERM DEBT As of June 2006**

Lender	Purpose	Original Amount	Principal Balance 6/30/06
Bar Harbor Bank and Trust	Town Office Purchase	89,000.00	89,000.00
Machias Savings Bank	Fire Truck – Pumper	124,922.00	18,122.00
Bar Harbor Bank and Trust	Fire Truck Sterling 2005	147,000.00	147,000.00
Undesignated	Police Car – 2006	27,500.00	19,000.00
Machias Savings Bank	Public Works Equipment	134,000.00	95,700.00
Maine Municipal Bond Bank	Route One Loan	205,000.00	199,000.00
Maine Municipal Bond Bank	Route One Refinance	85,500.00	35,193.13
United States Department of Agriculture	Sewer Plant Original	138,700.00	49,000.00
Bar Harbor Bank and Trust	Sewer Design CSO	101,000.00	86,571.00
Bar Harbor Bank and Trust	Road Repair	500,000.00	428,744.00
DEP	Combined Sewer Overflow	30,000.00	30,000.00
<b>Total Town and Sewer</b>		<b>1,582,622.00</b>	<b>1,197,330.13</b>
Washington County Debt	Proportionate Share (4.0%)		29,576.00
Town of Machias School Debt	Proportionate Share (100%)	622,400.00	387,290.00
<b>Grand Total</b>			<b>1,614,196.13</b>

Table I-7 shows the ratio of long term debt to municipal valuation for the five year period from 2001-2005, as well as the debt per capita for those same years.

**TABLE I-7 RATIO OF LONG TERM DEBT EXPENDITURES TO ASSESSED VALUE**

Year	Population	Long Term Debt	Assessed Value	Ratio of Debt to Assessed Value	Debt per Capita
2001	2300	1,350,727.26	\$81,542,453	1.66%	\$587.27
2002	2300	1,446,773.23	\$80,935,500	1.79%	\$629.03
2003	2300	1,269,231.00	\$81,767,000	1.55%	\$551.84
2004	2300	1,162,677.00	\$80,935,500	1.44%	\$505.51
2005	2300	1,197,330.13	\$82,081,400	1.46%	\$520.58

State law limits the amount of debt a municipality may incur. This cap is set at seven (7) percent of the municipality's State valuation. In addition, a 15 percent limit is applied to the combined total of the town's debt plus all overlapping debt from quasi-municipal districts, including the school district, water and sewer districts, and county government. When the amount of the town's overlapping debt to the County and the School is added to the long term debt (\$1,197,330.13 + 387,290.00 = 1,614,196.13) the ratio of debt to assessed value is 1.46%, well under both debt caps established by state law.

The following is a listing of the debt issued in the various municipal and quasi-municipal entities for the year 2005 which impact the legal borrowing limitations placed on the town.

**Table I-8 TOTAL DEBT ISSUED TO MUNICIPAL AND QUASI-MUNICIPAL ENTITIES**

Entity	Total Debt Issued
Town	\$1,031,759.13
Water	\$307,970.00
School	\$387,290.00
Sewer	\$165,571.00
County	\$29,576.00
<b>Total</b>	<b>1,922,166.13</b>

The total debt issued to all municipal and quasi-municipal entities in Machias is \$1,922,166.13 which is well below the town's allowable debt of \$5,171,128.20.

## CAPITAL IMPROVEMENT PLAN

The comprehensive plan recognizes planned growth and a diverse mix of land uses within the town as an important aspect of fiscal planning. The primary implementation strategy for the fiscal capacity section is the development of a capital improvement plan (CIP). The purpose of a CIP is to establish a framework for financing needed capital improvements. A CIP guides budgeting and expenditures of tax revenues and identifies needs for which alternative sources of funding such as loans, grants or gifts will be sought.

Capital improvements are investments in the repair, renewal, replacement or purchase of capital items which can include equipment and machinery, buildings, real property, utilities and long-term contracts. Capital improvements differ from operating expenses or consumables which are ordinarily budgeted as operations. Capital improvements are funded through the establishment of financial reserves and generally have an acquisition cost of \$5,000 or more; usually do not recur annually; have a useful life of 3 or more years; and result in fixed assets.

For the purpose of this plan, the total costs have been recognized with an indication of the expected time frame for each item that is desired based on priority ratings. Each year the town Manager and the town Selectmen review and approve the funding requests.

### ***Past and Current Capital Expenditures***

The town has a centralized sewage treatment and water system and operates a solid waste transfer station. Several projects have been funded (\$1,600,00.00) through federal sources (STAG and CDBG) in recent years to correct combined sewer overflow problems and treatment plant capacity issues. There will be an ongoing need to make capital improvements to the town's sewer and water systems.

The town needs to continue to maintain and improve its buildings, its street and roadways, its underground infrastructure, its vehicle fleet and equipment. This plan recommends that the town have an ongoing program to make capital improvements to roads and to continue the street improvement program. The annual State Highway Grant should be dedicated to the street improvement program.

Several projects were completed in 2005 including the new Maine Veterans Home, the Machias River Bridge, resurfacing and sidewalks at the Water Street parking lot, reconstruction of one-half mile of the East Kennebec Road, and reconstruction and installation of sidewalks as well as sewer replacement on Route 1 from Kennebec Road to the bridge. The town recently hired a consultant to develop a Downtown Revitalization Plan with the support of a CDBG Planning Grant, the Machias Bay Area Chamber of Commerce and local businesses.

Since 2000 the town also constructed the Telecommunications Center and the UMM Child Care Center, purchased a new Town Office building, all of which are handicapped accessible, completed restorations at the Porter Memorial Library, and improved accessibility to Bad Little Falls Park.

The town has also taken the lead on efforts to ensure the current airport is maintained and obtained grants and regional support to find a new site that will allow development of a business class facility with sufficient capacity and services to support regional economic growth.

Several pieces of equipment were purchased in the past several years including 2003 Backhoe, 2003 Skid Steer, a 2003 pickup, a 2003 riding lawn mower and a utility trailer. More equipment is needed as described in the Capital Investment Plan below.

**Recommended Capital Expenditures**

Projects previously mentioned and identified throughout this comprehensive plan and existing reserve accounts are the basis for this capital improvement plan and have been incorporated into Table I-8 below.

The town has established several capital reserve accounts in anticipation of future capital expenditures. Future capital equipment needs for the foreseeable future are listed in Table I-8. Given these anticipated needs, it is in the town's best interest to continue to make significant yearly contributions to all capital reserve accounts. Table I-8 should be evaluated as the town considers future yearly contributions. It is also recommended that the town keep significant balances within the reserve account to cover the cost of any unauthorized capital needs.

**Table I-8 CAPITAL IMPROVEMENT PLAN – Machias**

DEPARTMENT/ AREA	ITEM	COST	PRIORITY <sup>2</sup>	RESPONSIBLE PARTY(ies)	FUNDING SOURCES
Machias Police Department	Police Cruisers Equipment	\$10,000/year \$5,000/year	A	Police Department/town Selectmen	Taxes
Public Safety	Fire House reconfiguration	\$50,000	A	Fire Department	Taxes, USDA, CDBG, taxes, fundraising
	“Quint” ladder/pumper truck	\$40,000	C	Machias Ambulance Service	
	Box style ambulance	\$130,000	A		
All Departments	Computers and E	\$10,000/year	A	town Departments	taxes
Public Facilities	Sand/salt shed	\$100,000	A	Town Selectmen	CDBG; Maine State bond funds; Taxes, DEP
	Public Safety Building – new wing	\$75,000	B	School Board Public Works	
	Machias Memorial High School	\$500,000	A		
	Transfer Station upgrades and modernization	\$130,000	A		
	Community and recreation center	\$200,000	B		

<sup>2</sup> The capital improvements identified in Table J-8 were assigned a priority based on the listed rating system. Logically, "A" improvements would be implemented prior to "B" and so on. A lower priority item may be funded ahead of schedule if higher priority items have already been funded or are prohibitively expensive, or if other sources of revenue (such as donated funds) become available. In order to fund some capital improvements projects, it may be necessary to begin to identify funding sources and set aside funds in advance of the projected time of funding.

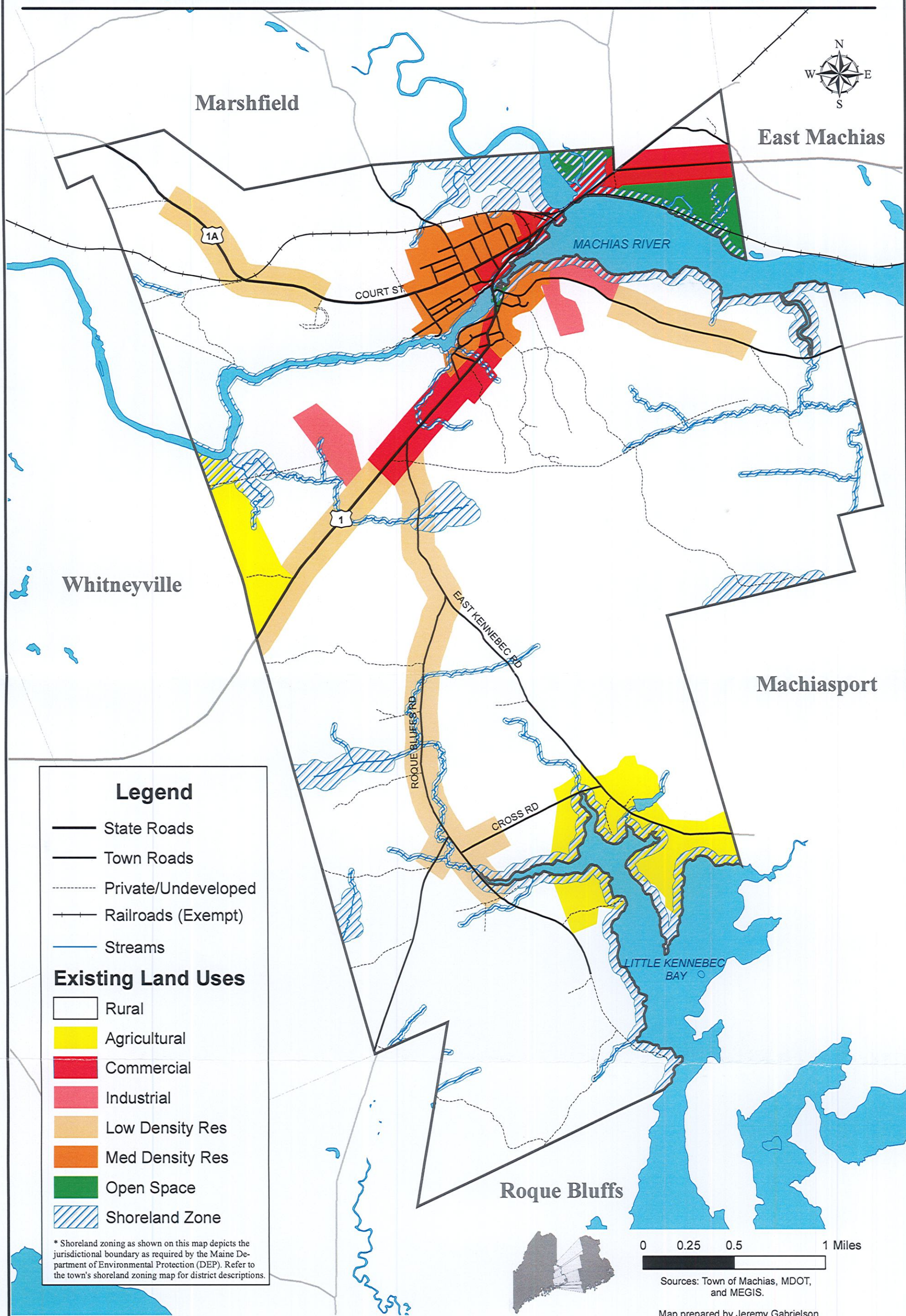
A - Immediate need. A capital improvement rated in this category would typically remedy a danger to public health, safety and welfare.

B - Necessary, to be accomplished within two to five years. A capital improvement rated in this category would typically correct deficiencies in an existing facility or service.

C - Future improvement or replacement, to be accomplished within five to ten years. A capital improvement rated in this category would be desirable but is of no urgency. Funding would be flexible and there would be no immediate problem.

D - Desirable, but not necessarily feasible within the ten year time frame of the current plan.







DEPARTMENT/ AREA	ITEM	COST	PRIORITY <sup>2</sup>	RESPONSIBLE PARTY(ies)	FUNDING SOURCES
Public Works	Replace highway equipment (2 anticipated)	\$15,000/unit/year	B	Public Works	Financing; Competitive bid/cooperative purchase/taxes/ State Highway Grant
	Bituminous Road Reconstruction and resurfacing	75,000/year	A		
Sewer System	Sewer Treatment Plant upgrade including on-going modernization and upgrades	\$1.2 million	A	Sewer Department	USDA, DEP, EPA, CDBG
Water System	Pipe replacement	\$1 million	A	Water Department	USDA, CDBG
Waterfront Development	Phased implementation	\$200,000	B	Economic Development	CDBG, TIF, USDA
Downtown Revitalization	Façade improvements, sidewalks, utility upgrades	\$200,000	B	Economic Development	CDBG, TIF
Planning and Economic Development	Digital parcel mapping	\$6,000-8,000	A	Community Development	OGIS grant
Economic Development/ Public Facilities	Downeast Regional Airport	\$22.7 million	A	Economic Development	FAA; State of Maine, taxes; bonds, donations, land sales
Recreation	Access	\$25,000-\$100,000	B	Public Works	DoC

CDBG: Community Development Block Grant

MITE: Municipal Investment Trust Fund (capital investments that support growth)

MDOT: Maine Department of Transportation

USDA: United State Department of Agriculture (Rural Development Grants)

DART: Downeast and Acadia Regional Tourism

DEP: Maine Department of Environmental Protection

EPA: Environmental Protection Agency

OGIS: Maine Office of Geographic Information Systems

TIF: Tax Increment Financing

SHIP: Small Harbor Improvement Program

Doc: Department of Conservation

## SUMMARY

Machias has managed its finances well over the last five years and the mil rate has remained within a consistent range. Over the years, the town has dedicated reserves to cover new capital projects as well as maintenance and repairs on community facilities. This will provide a long-term commitment to preserving improvements through sustained, designated funding for maintenance of the downtown public infrastructure.

Through this Comprehensive Plan, the town is revising and updating a Capital Improvement Plan, as shown in Table I-8 above, to guide the town's capital investments. Infrastructure improvements are needed to upgrade public safety equipment, a new high school, water and sewer facilities, a regional airport, and to support downtown revitalization and waterfront development plans. These are included in the CIP.

## **K. LAND USE**

The Purpose of this section is to:

1. Identify and understand the amounts and location of various land uses in Machias;
2. Identify and understand changes in land use patterns;
3. Identify land areas suitable and unsuitable for growth and development predicted for the next ten years;
4. Identify and describe the purpose and location of the proposed land use districts; and
5. Identify growth and rural areas.

### **Key Findings and Issues**

Much of the land in Machias consists of relatively inhospitable soils; however the Town has undergone increased residential growth in outlying areas over the past twenty years, primarily along major roadways along the shore. The commercial growth, for the most part, has been spread out along Route 1, rather than concentrated in the traditional village areas of Town.

The Town has made some efforts to place some control on unrestricted development through compliance with the State mandated subdivision law and the revision of its Shoreland Zoning Ordinance in 1995. Some changes in local land use regulations will be necessary to address concerns raised in this comprehensive plan and any new state requirements.

### **PAST DEVELOPMENT TRENDS**

Machias is located strategically at the confluence of three rivers - the Machias, the Middle, and the East Machias. There is a total of 9,200 acres in Machias and nine miles of shoreline. Machias developed around natural resource industries, primarily the lumber industry. Dams were built at both Whitneyville and Machias to aid economic growth.

Historically, Machias was settled in several distinct village areas. These neighborhoods still exist at Hoytown, Kennebec, and Machias village. Growth occurred along natural harbors and the major roads leading in and out of Town. Since the Town was economically oriented toward the sea growth continued along the coast and roads developed from interconnecting pathways between the various communities. It is along these same roadways today that development is occurring.

As the county seat for Washington County, Machias provides services for much of the county through the University of Maine at Machias and many government offices. From the 1920s to the 1940s developments in transportation shifted the focus from water to land, in particular, construction of the Rim Bridge in Machiasport restricted ship passage up to Machias in the 1930s. What had once been an ideal location became remote, and the economy suffered.

The economy in coastal Washington County has changed considerably in the last 25 years. Economic activity has shifted from locally owned businesses located in the downtown to corporately owned businesses located primarily along Route 1 outside of the Main Street downtown corridor. Natural resources industries were formerly the foundation of the economy, but government services, social services and health care are more significant employers today. Several efforts are currently underway to diversify the base to provide stability including downtown revitalization, nature based tourism and business services.

## EXISTING LAND USE PATTERN

Existing land use patterns in Machias are summarized in the descriptions of Land Cover shown in Table 1 and are illustrated on several Maps in this document including Map 2, Machias Streets, Public Facilities and Historic Structures; Map 6, Land Cover (from which the data in Table 1 is derived); and Map 11, Existing Land Use and Shoreland Zoning, located at the end of this section. The source data for Map 6 is 1993 satellite imagery and is not entirely accurate with respect to farmland and development. It should be used as a general depiction of forestland, the larger blueberry barrens and wetlands.

**Table K-1 – EXISTING LAND COVER**

Land Cover	Acreage	Percentage
Forest	6,536	71%
Open Ground	933	10%
Swamps/Wetlands/Open Water	1,145	13%
Cultivated Land	147	2%
Developed Land	391	4%
<i>Total</i>	9,152	100%

Source: Land Cover and Wetlands of the Gulf of Maine. U.S. Fish and Wildlife Service, Gulf of Maine Program and MEGIS

Machias is struggling with its downtown area, which is located right on Route 1, and situated on the banks of the Machias River. The downtown is limited in its ability to attract businesses and customers by blighted buildings and lack of investment. This has impeded development in a town with 53% of its population low to moderate income and an unemployment rate that hovers around 9%.

Business expansion and development that has occurred has been outside the downtown, especially toward the east on land that was a former dairy farm, and toward the west where vacant land around an existing shopping center has been developed for office space. This trend of retail and service sprawl will continue until reversed by improvements to the downtown including better parking and completion of on-going renovations. Recent investment in several buildings, including the Crane building facing the river, the one adjacent to it and the Machias Savings Bank, are beginning a downtown revitalization process.

The 1980s revitalization efforts developed a waterfront park, installed upgraded sidewalks, parking areas and streetlights, and helped with façade improvements. Since then, the town's

recreation committee and the Chamber of Commerce have installed banners and devised several seasonal promotions designed to bring people downtown. A small committee formed two years ago to help make the riverside Bad Little Falls Park universally accessible, and had designers and engineers work with community members to develop site plans for improvements. Maine DOT helped with traffic flow and congestion when they widened the bridge coming into the downtown last year.

The Downtown is home to the headquarters of Machias Savings Bank, which purposely remained in the Downtown when it expanded its main branch and restored an historic building, with the hope of encouraging more investment. The bank also owns another building on the river side of the street and has been willing to help make it affordable for redevelopment. Machias Savings Bank has developed a special loan program to encourage private investment in downtown buildings and businesses.

The town successfully obtained a CDBG Planning Grant in 2005 and is developing a Riverfront Downtown Master Plan.

## **DEVELOPMENT PRESSURE**

In 2000, there were 1,043 year-round homes in Machias. The town expects a modest increase to 1,058 homes by 2015. The number of seasonal homes in Machias is small, representing approximately three percent of the housing stock. The number of year-round housing units increased at a higher pace than population growth between 1990 and 2000. Falling household size is the principal reason for this difference in growth rates

There are two public schools in Machias. Grades K-8 attend the Rose Gaffney Elementary School and grades 9-12 attend the Machias Memorial High School, both located on outer Court Street. There is also one private school, the Machias Valley Christian School (K-8), located on Broadway. Overall enrollment has fluctuated in the last several years with a 16.7% increase at the elementary level in 2005 (see Public Facilities Chapter).

New residential development is occurring in a somewhat random lot by lot fashion throughout the town. No new subdivisions have been approved in the past 5 years and the pace of residential renovation is double that of new residential construction (see Table F-15 in Housing Chapter).

Commercial redevelopment is taking place in the downtown as noted above and a residential health care facility is being added to the industrial park. New commercial development is also occurring at an increasing pace in both directions along Route 1. Several new applications for building permits were filed in the last 10 months including Rite Aid (new building), Family Dollar (two buildings including video rental), St. Croix Federal Bank, recreational vehicle sales and service, dental offices, JC Penney expansion, and The Inn at Schoppee Farm has renovated a former house into an inn and restaurant. Another renovation on Route 1 and Hudson Blvd. is the site of two businesses that have relocated from the center of town.

## **ANTICIPATED FUTURE DEVELOPMENT TRENDS**

The town's growth rate has fluctuated over the past several decades. The population of Machias in the 2000 census was 2,353. The State Planning Office predicts that the population of Machias will decrease to 2,297 in 2010 and then to remain the same by 2015. The State Planning Office projects that the total number of housing units in Machias will rise from 1023 (551 owner<sup>1</sup>; 472 renter<sup>2</sup>) in 2005 and to 1058 (572 owner; 486 rental) in 2015. This is consistent with the decreasing trend in household size over the same time period.

With current building activity the town anticipates continued commercial development pressure on both sides of Route 1 to the Whitneyville and East Machias town lines. Developing incentives and controls to influence this development is a critical component of the Comprehensive Plan.

## **PRESENT LAND USE REGULATIONS**

Apart from the State required minimums, the Town of Machias has a limited set of regulatory measures to affect the nature and pattern of development. Building permits are required and the town has a local subdivision ordinance, a Mobile Home Park Ordinance, a Floodplain Ordinance, a Sewer Ordinance and a Shoreland Zoning Ordinance.

Several existing land use regulations that municipal boards and officials must follow are listed below. Regulations change over time and it is the responsibility of municipal officers to keep up with these changes.

MDOT Access Management - The Act specifically directs the MDOT and authorized municipalities to promulgate rules to assure safety and proper drainage on all state and state aid highways with a focus on maintaining posted speeds on arterial highways outside urban compact areas. The law also requires that the rules include standards for avoidance, minimization, and mitigation of safety hazards along the portions of rural arterials where the 1999 statewide average for driveway related crash rates is exceeded. Those rural arterials are referred to in the rules as "Retrograde Arterials". There are no such retrograde arterials in all of Washington County.

Shoreland Zoning Ordinance - Shoreland areas include those areas within 250 feet of the normal high-water line of any great pond, river or saltwater body, within 250 feet of the upland edge of a coastal or freshwater wetland, or within 75 feet of the high-water line of a stream. The purposes of these controls are to further the maintenance of safe and healthful conditions; to prevent and control water pollution; to protect fish spawning grounds, aquatic life, bird and other wildlife habitat; to protect archaeological and historic resources; to protect commercial fishing and maritime industries; to protect freshwater and coastal wetlands; to control building sites, placement of structures and land uses; to conserve shore covers, and visual as well as actual

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1 "Owner Units" presents the numbers of housing units in each municipality either owned on April 1, 2000 by their occupants or vacant and for sale on that date and the numbers projected for the years 2001 through 2015.

2 "Renter Units" presents the numbers of housing units in each municipality either rented on April 1, 2000 by their occupants or vacant and for rent on that date and the numbers projected for the years 2001 through 2015.

points of access to inland and coastal waters; to conserve natural beauty and open space; and to anticipate and respond to the impacts of development in shoreland areas. Machias last revised its Shoreland Zoning Ordinance in 1995 and it contains the following districts:

General Development (GD)  
Resource Protection District (RP)  
Limited Residential District (LR)  
Stream Protection District (SP)

The community also adheres to the Maine State Plumbing Code which requires that the installation of plumbing fixtures and septic systems be in accordance with the Maine State Law and the Subsurface Wastewater Disposal Rules and Regulations.

### **AREAS UNSUITABLE FOR DEVELOPMENT**

There are areas within Machias that require special consideration based on the potential environmental impact of land use activities. In these areas stricter regulation or, in some circumstances, prohibition may be called for to avoid problems for both people and the town's natural resources. These areas include:

Floodplains - Flood prone areas where flooding is frequent and can be severe. Use needs to be limited to activities unharmed by flooding, such as agriculture, forest and some types of recreation. By definition maritime activities and businesses locate in flood prone areas and construction standards must take these risks into account.

Water Resources/Wetlands - Areas that fall under the Shoreland Zoning Laws. Development in these areas is severely restricted and requires review and approval by the pertinent State Agencies.

Wildlife Habitat/Conservation - Areas that fall under the provisions of the applicable mandated legislation. Development in these areas is severely restricted and requires review and approval by the pertinent State Agencies.

Unsuitable Soils - Areas with limited development potential because of poor soils. Larger lot sizes would be required in order to meet the requirements of the Maine State Plumbing Laws.

Slopes - Areas that have a slope greater than 15 percent that preclude extensive development because of problems with erosion, runoff, and construction limitations such as allowable road grades, suitability for septic sewage disposal, and stability of foundation. Also, the Maine Plumbing Code does not permit septic systems on a slope greater than 25 percent.

### **PROPOSED LAND USE DISTRICTS**

Growth management legislation requires the designation of growth and rural areas in comprehensive plans.



**Growth Areas**

The Growth Areas are intended to direct development to areas most suitable for such growth and are therefore located close to municipal services to minimize the cost to the municipality for their delivery and maintenance. The proposed land use plan does not identify specific parcels. Only detailed site-specific analysis can determine land suitable for development and at what densities. In addition, the comprehensive plan has not assessed the individual landowner's desires to sell their land for development, to develop it or to leave it undeveloped.

**Rural Areas**

The Rural Areas consists of those areas in Machias where new development will be limited to support the town's important natural resources including its coastal areas, agricultural land, forested land, wetlands, scenic areas, and critical habitat. In these areas the town will use regulatory and non-regulatory means to place appropriate limits on incompatible development and uses.

**Selection Criteria**

The land use districts proposed in the growth and rural areas are described below and shown on the Proposed Land Use Map at the end of this section. The Comprehensive Plan Committee considered the following elements in its selection of areas most suitable for growth as well as those areas with resources that should be protected from intensive development:

1. The need to encourage but control growth and development.
2. Historic development patterns and land uses.
3. Recent development patterns and existing land use regulations.
4. Compatibility of present and future neighboring land uses.
5. Desire of residents to preserve and maintain the Town's character and historic resources.
6. The need for a pedestrian friendly downtown.
7. Complementary roles between the downtown and sprawling Route 1.
8. Natural features and resources including soils, slopes, water bodies, and wetlands.
9. Geographic location and role of Machias as one of Washington County's service centers.
10. The location of existing infrastructure, including water, sewer, electrical power, road system, and railroad line.
11. The Machias River.
12. The University of Maine at Machias.
13. US Route 1 as the spine of the community and state highway.
14. The importance of affordable housing.
15. Requirements of the Comprehensive Planning and Land Use Regulation Act requirements.

**Proposed Land Use Districts**

District	Purpose/Permitted Uses	Minimum Lot size
Downtown (D)	Purpose: to permit a wide variety of uses appropriate to a	■ No minimum lot size

District	Purpose/Permitted Uses	Minimum Lot size
	vital, pedestrian-friendly downtown. <ul style="list-style-type: none"> <li>Permitted uses will include offices, retail businesses, services, eating and drinking establishments and multi-family units.</li> </ul>	
Commercial (C)	Purpose: to provide for auto-oriented businesses that are not desirable in the downtown. <ul style="list-style-type: none"> <li>Permitted uses will include retail businesses, eating and drinking establishments, offices, services, motels and hotels, wholesale businesses, and recreational commercial.</li> </ul>	<ul style="list-style-type: none"> <li>20,000 square feet</li> </ul>
Mixed Use (MU)	Purpose: to provide for both pedestrian-friendly businesses and high density residential uses, where public sewer and water is available. <ul style="list-style-type: none"> <li>Permitted uses will include eating and drinking establishments, retail businesses, offices, recreational businesses, home-occupations, bed &amp; breakfasts and efficiency apartments, educational facilities, nursing homes, public buildings, single and multi-family dwellings, and mobile home parks.</li> </ul>	<ul style="list-style-type: none"> <li>4,000 square feet, with public sewer and water for single use projects</li> <li>20,000 square feet, with on-site sewer and water</li> </ul>
High Density Residential HDR	Purpose: To provide area for primarily residential uses at high densities in areas of traditional neighborhoods served by water and sewer. <ul style="list-style-type: none"> <li>Permitted uses will include residential, single and multi-unit dwellings educational facilities, assisted living/nursing homes, places of worship, schools, single and multi-family dwellings, and mobile home parks.</li> </ul>	<ul style="list-style-type: none"> <li>4,000 square feet, with public sewer and water for single use projects</li> <li>20,000 square feet, with on-site sewer and water</li> <li>20,000 square feet for multi-family dwellings with 5,000 square feet for each additional unit above the first unit</li> </ul>
Residential – Home Based Business (RHBB)	Purpose: to house residents in areas serviced by (or capable of being serviced by) central water and sewer facilities <ul style="list-style-type: none"> <li>Permitted uses will include single or multi-family dwellings, home occupations, mobile home parks, schools, and not for profit recreation</li> </ul>	<ul style="list-style-type: none"> <li>10,000 square feet for single family dwelling with sewer and water</li> <li>20,000 square feet, with on-site sewer and water</li> <li>20,000 square feet for multi-family dwellings with 5,000 square feet for each additional unit above the first unit</li> </ul>
Commercial Industrial (CI)	Purpose: to provide for low impact wholesale commercial and industrial development, as well as service activities. <ul style="list-style-type: none"> <li>Permitted uses will include any manufacturing, processing, packing or warehousing of goods, transfer station, public buildings as well as limited institutional</li> </ul>	<ul style="list-style-type: none"> <li>2 acres, with public sewer or water</li> <li>5 acres, with on-site sewer and water</li> </ul>
Limited Residential/Aquifer Protection	Purpose: to provide for limited residential use, agriculture and aquifer protection. <ul style="list-style-type: none"> <li>Permitted uses will include single-family dwellings, home occupations (that pose no threat to underlying aquifer), agriculture and forestry</li> </ul>	<ul style="list-style-type: none"> <li>10 acres</li> </ul>
Rural Residential (RR)	Purpose: to maintain the rural character of Machias. <ul style="list-style-type: none"> <li>Permitted uses will include single-family dwellings, home occupations, agriculture, forestry, golf courses,</li> </ul>	<ul style="list-style-type: none"> <li>3 acres</li> <li>Residential density bonus provisions to induce</li> </ul>

District	Purpose/Permitted Uses	Minimum Lot size
	stables, and public and non-profit recreation. Stand alone business/industry will not be permitted	development design that can be serviced efficiently

Note that the above districts have placed the Commercial-Industrial district designation in areas where Pine Tree Zones are designated (see Maps 12 and 2). However the Comprehensive Plan Committee chose not to designate as Commercial-Industrial the Pine Tree Zone area south of Route 1 and west of Roque Bluffs Road as it includes an aquifer, streams and wetlands. In addition if the airport is relocated to Jonesboro this amount of Pine Tree Zone designated land could move to Jonesboro and be placed on land that could serve as an industrial park associated with the airport. Moving some of the Pine Tree Zone designated land from Machias to the area where the airport was to be sited was anticipated when the Pine Tree Zones were proposed in Machias.

### **GENERAL RECOMMENDATIONS FOR DEVELOPMENT ORDINANCES AND LAND USE PERFORMANCE STANDARDS**

The town should consider development of a zoning ordinance. A zoning ordinance might require all developments provide a detailed site plan, set forth restrictions to minimize conflicts, focus specifically on certain businesses (e.g. campgrounds), and increase set-back distances from bodies of water and streams.

The Comprehensive Planning Committee is aware that Machias is a service center community but that does many do not uniformly embrace restrictive regulations. Machias' Zoning Ordinance, when developed, will be consistent with the intent of this comprehensive plan and cognizant of this reluctance to infringe on the rights of landowners.

Thus, land use regulations will be kept to the minimum necessary to achieve the goals of the comprehensive plan and to reduce the number of non-conforming properties. It is not the intent of the Comprehensive Planning Committee to impose burdensome requirements on the everyday activities of the town's residents or to create costly enforcement issues for town government. The ultimate goal of growth management is to regulate land use development to the extent necessary to protect natural resources, property values, and public safety. However, the imposed regulations should not make the town's residents feel that they have lost their freedom as landowners. Therefore land use regulation should not be so restrictive that they have negative impacts on existing land use practices.

The intent of the proposed ordinance is to provide "good neighbor" standards through which we can minimize conflict that is often associated with unrestrained development.

Ordinances also need specific standards and clear definitions. They must also meet the minimum requirements of state law and be consistent with the recommendations of the comprehensive plan. The comprehensive plan provides the legal basis for enacting the ordinances, and their consistency with the plans, goals, and policies will be a major consideration in the event that the ordinances are subject to a legal challenge.

Therefore the land use ordinance will: (1) create a user friendly application and permitting process; (2) assign more responsibility for review and approval to code enforcement; and (3) develop clear and consistent guidelines for obtaining approval.

## LAND USE ORDINANCE PERFORMANCE STANDARDS

The town of Machias will develop a Zoning Ordinance consistent with the identified needs of the town. In order to protect and preserve natural resources, property values, public safety including fire protection, health and welfare, provide for affordable housing and ensure the proper future development of the town, the following performance standard topic areas should be considered when developing the town's zoning ordinance.

<b>Public Issue or Concern</b>	<b>Performance Standard</b>
<i>Access Requirements</i>	In keeping with state access management regulations (17-229 Maine Administrative Rules Chapter 299, Part A and B, and as subsequently amended), minimize the creation of strip development within the community, and minimize the creation of road hazards.
<i>Agriculture</i>	Minimize soil erosion to avoid sedimentation, non-point source pollution, and phosphorus and nitrogen levels of water bodies.
<i>Buffer Provisions</i>	Minimize the negative impacts of inconsistent development and protect water resources, wetlands, and wells
<i>Conversion</i>	Regulate the conversion of existing structures into multi-family dwellings, to ensure the health, safety, and welfare of citizens.
<i>Home Occupation</i>	Home occupations may be established to minimize their impact on existing neighborhoods.
<i>Industrial Performance Standards</i>	Ensure appropriate industrial development within designated areas of the community.
<i>Lighting</i>	Ensure that lighting will be directed downwards and not shine off the property.
<i>Manufactured housing</i>	Ensure the safety, health and welfare of mobile home occupants and mobile home owners regardless of the date manufactured
<i>Mobile Home Park</i>	Placement and design of mobile home parks within the designated growth areas in the town.
<i>Off Street Loading</i>	Minimize traffic congestion associated with commercial development.
<i>Oil and Chemical Storage</i>	Regulate the location and containment of combustible material that can migrate to surface and ground waters.
<i>Parking Requirements</i>	Establish and regulate the number of parking spaces to be provided for different types of development.
<i>Pesticide Application</i>	Protect the public from dangers associated with pesticides
<i>Refuse Disposal</i>	Regulate the disposal of solid and liquid wastes in relation to resources that can transport them or be contaminated by them; to protect public health.
<i>Road Construction</i>	In conjunction with the State Department of Transportation, regarding road construction in new developments.
<i>Sedimentation and Erosion</i>	Minimize the volume of surface water runoff during and after

Public Issue or Concern	Performance Standard
	development.
<i>Signs</i>	Placement of signs, sign size, and sign type.
<i>Soils</i>	Ensure development is located on appropriate soils.
<i>Storage Materials</i>	Orderly storage of material in residential areas to promote and preserve the character of the neighborhoods
<i>Topsoil and Vegetation Removal</i>	Prevent soil erosion and destruction of topsoil during construction.

## ENFORCEMENT AND EDUCATION

The value of an ordinance depends on how well it is enforced. To achieve better enforcement, two issues are important: (1) educating residents about the requirements of local and state regulations, and (2) providing adequate time for the code enforcement officer to ensure compliance. The zoning ordinance must provide the code enforcement officer with proper legal language and definitions, and management and elected officials also must support the code enforcement department.

The planning board, code enforcement officer, board of appeal, and board of selectmen will review annually the zoning ordinance, shoreland zoning ordinance, subdivision regulation, mobile home park ordinance, and floodplain management ordinance to determine any required changes and to ensure the ordinances and regulations are consistent with the Plan. In the review, they will determine whether changes in the minimum requirements of state or federal laws would require local amendment of the land use regulations.

In order to educate residents on local land use ordinances, a list of all local ordinances and when they are applicable should be developed and made available to the public at the town office. The town is required to notify and involve all citizens in the development and amendment of local ordinances, which must be voted on at a town meeting.

## REGIONAL COORDINATION

Comprehensive planning recognizes the importance of regional cooperation. The land uses in one community can impact another community, particularly when that land use is located near the boundaries of the town. As indicated in the natural resources section of the plan, the town should attempt to develop compatible resource protection standards with nearby communities. Machias has physical boundaries with the neighboring municipalities of Machiasport, East Machias, Marshfield, Whitneyville and Roque Bluffs. Development in these communities has impacted, and will continue to impact, Machias and our residents. None of these neighboring communities has adopted town wide zoning.

## POLICIES AND IMPLEMENTATION

Based on the concerns of Machias residents, as expressed through public meetings and town officials, the town of Machias has developed the following policies and implementation

strategies:

<b>Goal: Machias will preserve and protect the character of the town that is vital to the continued stability of the local and regional economy; Machias will continue to be a great place to live, work and recreate</b>			
<b>Policy</b>	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Timeframe</b>
<b>Encouraging Growth where Services Exist</b>			
Continue to encourage growth and development in and adjacent to the urban areas where there is, or likely to be, access to central water and sewer and adequate roads.	Permit infill development at similar densities and dimensions compatible with existing development within the growth district.	Selectmen	Short-term (within 2 years)
	Encourage pedestrian and vehicular connections between adjacent commercial sites during site plan review.	Planning Board	Immediate
	Make adequate land available for light industry and commercial uses in areas appropriate for such uses.	Selectmen; Planning Board	Immediate
	Encourage the construction of multi-family housing, affordable housing and cluster development that provide open space amenities.		
	Require growth related public facilities be located within growth areas.	Selectmen	Immediate
Strive to limit sprawl along Route 1 and other town roads where they extend into the outlying areas of Machias.	Concentrate expanded commercial or urban (high density) residential growth districts adjacent to existing commercial development.	Planning Board	Immediate
Reduce traffic congestion and improve traffic safety along Route 1.	Plan for parallel roads servicing new development to limit additional exits and entrances onto Route 1.	Planning Board	Immediate
<b>Transitional Growth Areas</b>			
Provide areas adjacent to existing urban area for future residential and light industrial growth.	Assign CI districts to existing Pine Tree Zone designated areas (where they are not coincident with aquifers and wetlands).	Selectmen	Immediate
	Extend water and sewer services to airport and high density residential areas south of Machias River (where affordable housing development is currently proposed).	Selectmen	Immediate
<b>Encouraging Resource Based Activities in Rural Areas</b>			
Allow and encourage existing land resource based industries to thrive in their current locations.	Provide large rural areas for agricultural and forestry uses.	Planning Board	Immediate
Maintain the open space and rural character of outlying areas.	Provide residential developers of 5 or more lots in rural districts with a the option for a density bonus for cluster development proposals.	Planning Board	Short Term (1-2 years)
	If additional protection of rural areas appears necessary in the future, consider the following options: <ul style="list-style-type: none"> <li>• Larger minimum lot size.</li> <li>• Change in district boundaries.</li> <li>• Requiring large road frontages on existing roads (i.e. Route 1)</li> </ul>	Planning Board	As needed



<b>Goal: Machias will preserve and protect the character of the town that is vital to the continued stability of the local and regional economy; Machias will continue to be a great place to live, work and recreate</b>			
<b>Policy</b>	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Timeframe</b>
<b>Mixed Uses</b>			
Permit a mix of compatible uses in a number of districts within the town, with the goal of reducing vehicle trips and vehicle trip lengths.	Permit corner grocery stores and other convenience stores within the town with additional standards to require sufficient parking and traffic flow as well as limiting the total number of such businesses within a neighborhood.	Selectmen; Planning Board	Short Term
	Permit residential uses in the upper floors of commercial districts	Planning Board	On-going
<b>Ordinances and Regulation</b>			
Review and revise existing use regulations, consistent with the goals and guidelines of this Comprehensive Plan.	Prepare a zoning ordinance for review and approval by municipal vote consistent with the future land use designations in the Comprehensive Plan.	Planning Board	Short Term (1-2 years)
	Update the existing ordinances to ensure their consistency with state and federal laws and the local needs.	Planning Board; CEO	On-going
Adopt a goal to have 70% of new residential construction in the town to occur in the designated growth area.	Track building permits and report annually to Town Manager if the percentage of residential development in the growth area drops below this goal within any 24 month period.	Code Enforcement Officer; Town Manager	On-going
	If above goal is not reach appoint a committee to review the zoning ordinance, subdivision ordinance and other non-regulatory policies and make recommendations for changes to strengthen these items within 9 months of being appointed.	Code Enforcement Officer; Selectmen	As needed.
Ensure that road access to backland (land that does not have frontage on a public road) is retained as land is developed.	Require a minimum 50-foot right-of-way for access to backland and require that a right-of-way serving 3 or more dwelling units be built to town standards.	Planning Board	On-going
<b>Downtown Revitalization and Economic Development</b>			
Support downtown revitalization strategies for utilizing vacant downtown buildings.	Obtain permission from absentee landlords to allow empty windows to feature historic or artistic displays.	CEO; Selectmen	Immediate
Support retail and tourism based development in the downtown core and inhibit retail and "strip" development along Route 1 in compliance with state Access Management laws.	Expand the downtown TIF <sup>3</sup> district.	CEO; Planning Board; Selectmen	Immediate
	Support implementation of waterfront development plans.	Selectmen	On-going
	Consider development of an impact fee to	Selectmen;	Short Term

3 TIF – Tax Increment Finance District – a local economic development project financing program, that uses tax revenues generated from new capital investments, i.e. tax "increment," to reduce bond debt issues for a project, or to pay the investing company (developer) directly for project costs incurred. Works by "sheltering" real and property taxes against adverse adjustments to State subsidies and County taxes based on total valuation.

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	support the additional tax burden of new/expanded services for major developments if they cannot be accommodated by existing capacity.	Water and Sewer Departments	
<b>Economic Diversity/Traditional Use</b>			
Consider and incorporate diverse interests to whom marine resources are of critical importance including traditional fishermen, recreational boaters, and those who just love the view.	Develop waterfront facilities that serve recreational and commercial interests.	Planning Board; Selectmen	On-going
	Preserve options for mooring and anchoring areas.	Planning Board; Selectmen	On-going
	Consider development of fee structure from waterfront facilities to cover maintenance costs.	Selectmen	Short Term
Attract new commercial and industrial development in appropriate areas.	Implement, market and provide state of the art infrastructure and services to the city particularly in designated Pine Tree Zones.	Selectmen	Immediate
	Sell or lease suitable town-owned and private sites.	Selectmen	On-going
Retain affordable and adequate housing options for young people just starting families, elderly people, and low income people appropriate for their needs.	Encourage renovation and rehabilitation of existing properties and seek additional grant money for these purposes.	Selectmen; Town Manager	On-going
	Ensure town ordinances do not inhibit construction of affordable housing.	Selectmen; Town Manager	On-going
<b>Enforcement</b>			
Enforce ordinances fully and fairly.	Ensure ordinances contain proper legal language and definitions.	Planning Board; Selectmen	On-going
	Management and elected officials support the code enforcement department.	Planning Board; Selectmen	On-going
	Develop summary of regulations to meet in order to obtain a building permit.	Planning Board	Immediate
	Provide adequate time for the code enforcement officer to ensure compliance.	Planning Board; Selectmen	On-going
<b>Regional Coordination</b>			
Continue to cooperate and coordinate with neighboring communities on issues and opportunities which cross municipal borders.	Continue serving in a leadership role in regional groups and organizations including the Sunrise County Economic Council and the Washington County Council of Governments.	Selectmen	On-going
Support regional transportation enhancements (rail, air, bridge, road) that retain and develop the Machias industrial park and the Downeast Regional Airport	Participate in regional economic development effort to capitalize on positive impacts of the Downeast Regional Airport	State DOT; Selectmen; participating towns	On-going
	Work with other communities and legislators for continued (and accelerated)	Selectmen	On-going

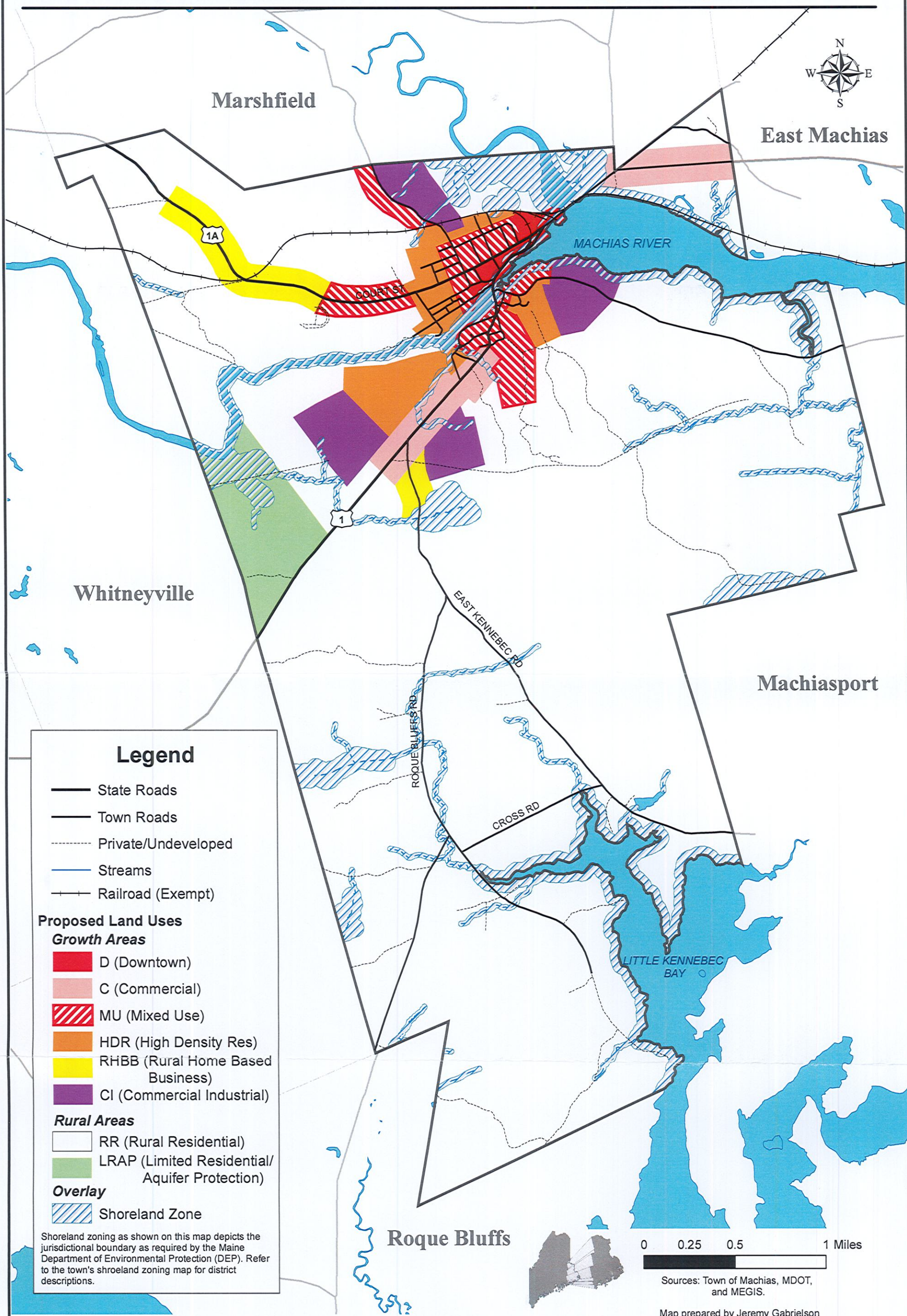
<b>Goal: Machias will preserve and protect the character of the town that is vital to the continued stability of the local and regional economy; Machias will continue to be a great place to live, work and recreate</b>			
<b>Policy</b>	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Timeframe</b>
	improvements by the Maine D.O.T. to Routes 1 and 9.		
<b>Education about Land Use</b>			
Educate residents about local and state regulations.	Provide a list of all local ordinances at the town office.	Town Clerk	On-going

## SUMMARY

Land use in Machias has changed significantly over the years. In 1900 the waterfront was active and the downtown was a vibrant part of the community. Main Street still exists as a commercial district and historical area, yet commercial activities have spread out along arterial streets. Most of the local population lives in a central district but subdivisions are developing outside of the traditional core.

The concentrated pattern of development, both commercial and residential, within the town center provides a walkable and accessible community. The proposed land use map in this Comprehensive Plan reflects existing patterns to a large degree. It also reflects the need to support downtown revitalization and development. This plan is intended to protect the town's character and to direct residential and commercial activities to appropriate areas. It also seeks to ensure that residents can continue to support themselves with a mixture of activities necessitated by seasonal and diverse rural livelihoods.





See map disclaimer at the end of Executive Summary.



The State policies that are found in the Comprehensive Planning and Land Use Regulation Act (30-A MRSA §4311 et seq.) are reproduced in this Appendix. The Act requires that a municipality will specify what approaches they will take to address them. The town of Machias has tailored these policies to the specific circumstances of Machias as they are raised in each of the major substantive areas (chapters) of this Comprehensive Plan. The town's policies can be found at the end of each chapter, in the body of the Capital Improvement Plan in the Fiscal Capacity chapter, and in the Land Use Plan that is mapped and described in the Land Use Chapter.

#### A. STATE POLICIES

1. to encourage orderly growth and development in appropriate areas of each community, while protecting the State's rural character, making efficient use of public services, and preventing development sprawl.
2. to plan for, finance, and develop an efficient system of public facilities and services to accommodate anticipated growth and economic development;
3. to promote an economic climate that increases job opportunities and overall economic well-being;
4. to encourage and promote affordable, decent housing opportunities for all Maine citizens;
5. to protect the quality and manage the quantity of the State's water resources, including lakes, aquifers, great ponds, estuaries, rivers, and coastal areas;
6. to protect the State's other critical natural resources, including without limitation, wetlands, wildlife and fisheries habitat, sand dunes, shorelands, scenic vistas, and unique natural areas;
7. to protect the State's marine resources industry, ports, and harbors from incompatible development, and to promote access to the shore for commercial fishermen and the public;
8. to safeguard the State's agricultural and forest resources from development that threatens those resources;
9. to preserve the State's historic and archeological resources and;
10. to promote and protect the availability of outdoor recreation opportunities for all Maine citizens, including access to surface waters.

#### B. STATE COASTAL MANAGEMENT POLICIES

1. to promote the maintenance, development, and revitalization of the State's ports and harbors for fishing, transportation, and recreation;
2. to manage the marine environment and its related resources to preserve and improve the ecological integrity and diversity of marine communities and habitats, to expand our understanding of the productivity of the Gulf of Maine and coastal waters, and to enhance the economic value of the State's renewable marine resources;

6. to protect and manage critical habitats and natural areas of state and national significance, and to maintain the scenic beauty and character of the coast, even in areas where development occurs;
7. to expand the opportunities for outdoor recreation, and to encourage appropriate coastal tourist activities and development;
8. to restore and maintain the quality of our fresh, marine, and estuarine waters to allow for the broadest possible diversity of public and private uses; and
9. to restore and maintain coastal air quality to protect the health of citizens and visitors, and to protect enjoyment of the natural beauty and maritime character of the Maine coast.



**The following is excerpted from the Coastal Washington County Affordable Housing Study and is not the work of the Comprehensive Plan Committee:**

***Machias***

The Town of Machias is the county seat. It had a total population of 2,353, according to the 2000 Census, which was 8% less than in 1990. According to Doug Guy, the Machias Assessor, a housing market that had relatively stable prices in the 1990s is now appreciating with housing prices rising between 2000 and 2005. Despite the population loss, it is harder to find rental housing in Machias, he said. Guy said the town office receives many inquiries from people looking for housing.

According to Town Manager Christine Therrien, Machias is an elderly community with smaller household sizes as the result of fewer children being born. Further, those raised in Machias are leaving as soon as they graduate from high school. “Do young people leave because there is no affordable housing,” she asks, “or is there no affordable housing because they left?” Town Manager Therrien said rentals are hard to find in the town regardless of range of income.

Noting that Machias has always been a “tight” housing market, Housing Developer Jack Marshall said request for affordable housing is up and the waiting lists are high. He, like Therrien, noted that younger people are leaving the town and those that stay are often social services and government employees. Lower income families are nearly always seasonal or migrant workers, he observed.

As for the impact of rising real estate prices, particularly for waterfront properties, Machias is being largely affected by people being priced out of coastal markets and seeking housing in the Washington County shiretown. Town Councilor and landlord Ed Pellon noted that Machias has little waterfront and few available building lots. Prices have increased but not much residential real estate is being sold, he said. Commercial lots are being sold more quickly, he said.

Jack Marshall said rising waterfront property prices have not affected real estate prices away from the coast. The housing market in Machias, he said, will not bear the cost of new construction. Additionally, it is difficult to find lots with town water and sewer. It is also difficult to find reliable and competent construction workers and companies, he noted.

The average household size in Machias declined from 2.31 in 1990 to 2.10 in 2000. Assessor Guy does not think this factor has had any impact on the housing market in the town. Most new building is for seasonal/high end housing, he observed. Developer Marshall had not experienced any change in average household size in his units, noting that he always has a lot of single mothers with more than one child in his available housing units.

The number of affordable rental units in Machias was deemed inadequate by a number of local housing experts. Assessor Guy noted that the University of Maine at Machias adds an element of demand to the rental market. Low and very low-income people have trouble finding housing in Machias, he said. Developer Marshall said he could fill another complex or two with the current wait for subsidized rental units. Noting there are more elderly subsidized projects in

Machias than family projects, fewer and fewer families who need affordable rentals are filling out applications because of the long waiting lists. Town Manager Therrien agreed that not only could Machias use more subsidized rental units, but also more market rate rental apartments. Councilor Pellon observed that there appeared to be sufficient affordable rental units in the town, but that there was a need for seasonal townhouses or condominiums for the “snowbirds.”

As in other Washington County towns, mobile homes continue to play a significant role in providing affordable housing in Machias, according to Doug Guy. The two mobile home parks located in the town are completely rented. There are other mobile homes scattered throughout the town, he said, and they range in condition from very poor to pretty good. If the public infrastructure were available, said Guy, another mobile home park might be successful. Town Manager Therrien estimated about two-thirds of all mobile homes located in Machias are rental units. She suggested there may be a role for newer mobile homes to play in providing affordable housing in the town. Both Councilor Pellon and Developer Marshall noted that mobile homes are no longer a low-cost alternative to a traditional house when you factor in land and utilities costs. First-time homebuyers programs often provide new homeowners the opportunity to purchase a traditional home at a cost that compares favorably to buying a new mobile home, they noted.

Asked about the role of subsidized housing units in meeting the housing needs of low-income residents, Town Manager Therrien said there would always be a need for subsidized units in Machias. She worried, however, about the impact that proposed cuts to federal subsidized housing programs might have on the 300+ units in place in Machias. Assessor Guy said the town could use another 12 to 24 additional subsidized units, but, if those were constructed it could stress the town’s budget as more people moved in from outlying communities. Jack Marshall agreed there was a need for more subsidized units, particularly for families. He also noted that there was not enough housing for students. Councilor Pellon said he thought that Machias had an adequate supply of subsidized housing.

In terms of housing policies, Machias has a comprehensive plan that addresses housing issues, according to Guy, Pellon and Marshall. There are no ordinances that prohibit affordable housing in Machias, and, said Marshall; the town has been very cooperative and supportive of his affordable housing projects over the years.

Looking ahead, Councilor Pellon said the town needed more housing in the Downtown area in the form of second and third floor housing units. Town Manager Therrien said the town should encourage housing development by private investors and should establish minimum quality standards for mobile homes. Assessor Guy warned that the town should be careful not to adopt restrictive ordinances or requirements on housing. Developer Marshall noted that businesses are looking for workforce, transportation and housing in Machias and that the town lacks in all three of these areas.

### ***University of Maine at Machias***

As noted above, the presence of UMM in Machias complicates the town’s housing picture. UMM has two on-campus dormitories capable of housing about 350 students, according to Kim

Page, UMM's Director of Student Life. About 250 of the 600 full-time UMM students currently live in the residence halls, she said, and the rest live in Machias or surrounding towns. Those off-campus students who do not live at home with their parents need affordable and decent rents, she said, but finding such units has become increasingly difficult in the last few years. "I personally spent days here looking for an apartment when I first came here," she said, "and I was shocked at what people would show me."

Houses for faculty and staff also are a challenge, she said, particularly for new faculty. "There are a lot of houses on the market, but, if you go by what they look like on the outside, you have to question the quality of the interior," she said. Page noted she had a number of faculty planning to move here soon and she does not know what to tell them about rental units or houses. For the next four to five staff/faculty hires from away, said Page, UMM will be getting to the point of not being able to find housing for them in the Machias area.

Page predicted that within three years, UMM will face a major housing crunch because enrollment is expected to rise after the 2005-2006 academic year. Page listed addressing the housing issue as one of the priorities for UMM's new president who is expected to be on board by mid-summer 2005.